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IDENTIFYING KEY FACTORS FOR EFFECTIVE IMPLEMENTATION OF BUSINESS CONTINUITY MANAGEMENT IN GOVERNMENT SERVICE INSTITUTIONS IN OMAN: A CONCEPTUAL PERSPECTIVE THROUGH SYSTEMATIC LITERATURE REVIEW

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Abstract
The current research aims to conduct a systematic literature review to identifythe influencing factors on the effective application of Business Continuity Management (BCM) in Oman's government service institutions.This research employs aqualitative methodology, initially gathering 373 documents from various databases using primary and secondary keywords related to BCM in Omani government service institutions, resulting in a total of 629,307 citations' identification. A mid-filtering process removed 71 documents published prior to 2014, leaving 302 documents from 2014 and later. Finally, after filtering the dataset with the inclusion criteria (English language, full-text PDF journal articles, and BCM relevance) and the exclusion criteria (non-English and non-journal literature), in its final stage, the method reads systematically 14 peer-reviewed articles with 1,276 citations and concludes that drivers to effective BCM implementation in Omani government service organizations are (a) Knowledge on BCM, (b) Resource Allocation, (c) Institutional Readiness, (d) Leadership and Management Approach and (e) Government Support and Response.
To managers and leaders,involvement and the inclusion of AI applications in BCM plans can enhance readiness and risk management for erratic incidents. Further, performance of routine drills and practical training exercises for government officials and incorporation of sustainability values into institutional frameworks is necessary in ensuring financial and operational stability in the achievement of BCM objectives.

Keywords: Business continuity Management, Crisis Management, Risk Management, Organizational Resilience, Government Service Institutions, Oman

1. Introduction:

Within the last few decades, the world has been subject to a series of disasters and crises that led to the emergence of severe long-term consequences. It is unfortunate that the Sultanate of Oman was one of these countries that witnessed such crises and consequences (AL Abri, 2018). While Oman acknowledges the significance of Business Continuity Management (BCM), the current situation reveals constraints and irregularities in both the thoroughness and uniformity of emergency preparedness and effective BCM execution (Al-Manji et al., 2021).

It is worth noting that the connection between BCM and risk management lies in the fact that BCM provides the manner through which responses to incidents are prepared so that they can support risk-reduction initiatives and set forth lessons that can help risk-prevention approaches to be formulated. Moreover, BCM is also connected to risk management in the evaluation phase as the former provides recovery while the latter assists managers in implementingrisk-monitoring procedures (Hudáková, 2019; as cited in Mošková & Buganová, 2023).

Accordingly, in order to establish an effective BCM system, it is advisable to integrate various management systems like risk, quality, environmental, employee health and safety, and information security systems. Having a strategic plan that outlines measures to eliminate

threats is becoming crucial for nearly all organizations even though, in practice, many organizations fail to develop adequate plans to eliminate dangers and ensure continuity (Buntak et al., 2019).

This concept can be implemented within governments at all levels through public service, bearing the dual responsibility of delivering essential services to the community and exemplifying leadership during natural disasters and crises. This leadership role involves coordinating emergency response efforts, providing clear communication and guidance to the public, and ensuring that resources are effectively allocated to mitigate the impact of such events. Therefore, governments help ensure the continuity of such services and maintain public welfare and long-term development on all levels (Segovia, 2017).This study intends to determine the factors that can help the effective implementation of BCM in government service institutions in Oman.

2. Research Background:

BCM, which emerged in the early 1970s, is a comprehensive managerial approach addressing potential threats to an organization's operations with the aim of maintaining essential functions, enhancing institutional resilience, and improving response capabilities before, during, or after incidents (Elliott et al., 2010; International Organization for Standardization, 2019).

It wasn't until the early 2000s that BCM began to encompass both internal and external organizational contexts (Hassel & Cedergren, 2019). BCM offers numerous benefits, including establishing a solid framework for managing business risks, defining strategies to protect vital functions, recognizing potential threats and their impacts, assigning roles transparently in the risk management process, reducing financial losses during disruptions, and leveraging favorable business practices (Paunescu &Argatu, 2020).

Despite its importance, BCM adoption has been significantly slow, indicating that its acceptation is still in its early stage. Swalha and Anchor (2023) concluded in their study that the implementation of BCM is still in its infancy and the vast majority of business sectors still do not use BCM in a practical manner within their business procedures. This notion was confirmed by Radjenovic & Zivkovic (2022) who indicated that there is still a shortage of studies and reports which do not reveal the manner through which BCM can be implemented in expansive and effective ways. This highlighted the need to further explore BCM (Fani &Subiadi, 2019).The BCM implementation faces challenges despite of its recognized value in risk management.

3. Research Problem:

Crises and disasters, especially the climate-related risks surrounding the Sultanate of Oman, affect how its governmental bodies and public sector facilities conduct their operations while sustaining BCM practices. Al-Manji et al. (2021) concluded that while Business Continuity Management (BCM) is widely recognized in Oman as a vital strategy for navigating diverse crises and disturbances, many government service institutions still lack adequate preparedness for unforeseen disruptions.

Abu Bakar et al. (2015) earlier stated that government service institutions encounter difficulties in effectively implementing BCM measures. The involvement of executive managers (leaders) in embracing BCM practices, especially in ensuring effective implementation during uncertain circumstances, is pivotal for achieving institutional resilience, aligning with the principles outlined in Contingency Theory.Yet, the presence is ambiguous.

Fahdi et al. (2021) further indicated that the external risks, suchas the COVI-19 pandemic, should force the Sultanate to re-define their BCM implementation strategies. The pandemic has actuallyemphasized the importance for Omani workplaces to be adequately prepared to handle such crises, necessitating proactive strategies and actions to ensure business continuity.The challenges posed by the Covid-19 pandemic have reinforced the imperative for the Sultanate of Oman to implement business continuity measures across various sectors(Alharthy & Ajina, 2023).

In addition to the above, climate-related risks can also play a role in the manner through which the Sultanate's institutions implement BCM. For instance, events like the 2021 tropical cyclone Shaheen, which caused extensive damage to electricity substations and power disruption for 120,000 customers, highlight the need for resilient energy systems. The cyclone also halted oil and LNG shipping operations, prompting the government to activate its Emergency Response Plan to maintain energy supply continuity (International Energy Agency, 2024).

These disruptions compel Omani authorities to fortify infrastructure against natural disasters, enhance emergency response capabilities, and ensure that energy supply chains are robust and adaptable to severe weather events. This reflects how such risks can force Omani public-sector facilities to shut down and bring its procedures to a halt, which in turn stagnates its business continuity levels and overall BCM effectiveness levels (International Energy Agency, 2024).

To further elaborate on this notion, it can be concludedthat the Sultanate of Oman faces significant shocks and crises, particularly climate-related risks, such as sea level rise and tropical cyclones, which have a profound impact on how its governmental institutions and public sector facilities operate and ensure business continuity(International Energy Agency, 2024).

Further, government service institutions in Oman also reveal a lack of comprehensive understanding regarding effective Business Continuity Management (BCM) implementation, alongside inconsistencies in emergency management practices (Al-Manji et al., 2021; Al Kurdi, 2021). There is a deficiency in the literature regarding the critical factors that affect the implementation of BCM, especially within government agencies that deliver public services.Therefore, the factors that determine the manner through which this level of effectiveness is garnered should be outlined in order to define the factors that can be enhanced to raise levels of BCM effectiveness.

4. Research Question:

The research question that this study intends to address is Whatare the key factors that may contribute to the effective implementation of BCMin government service institutions in Oman. Inother words, the current study aims to identify the specified key factors and their role in altering and shaping effective implementation of BCM in government service institutions in Oman.

4.1. Research Methodology:

The current study is qualitative in its nature and Systematic Literature Review (SLR) method was used to extract the data for analysis. Furthermore, the literature will serve as the main study population and all relevant studieswill serve as the targeted sample for the study as well.

4.1.1. Research Design:

The current study aims to identify the factors that contribute to the effective implementation of BCM in the government service institutions ofSultanate of Oman. This wasachieved through the utilization of systematic literature review (SLR) which is considered one of the

most prominent qualitative approaches through which researchers can gather, collate, and analyze evidence-based and scientific data in order to find decisive answers to research question (Supangat et al., 2023).This study employs the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework, which is essential for systematic literature reviews. It offers a structured methodology through a checklist and flowchart, ensuring transparency and accuracy in the identification, screening, and reporting of studies (Page et al., 2021). This approach improves the quality of systematic literature reviews by standardizing themethodology and thoroughly documenting the review process.

4.1.2. Search Strategy:

The search strategy for this systematic review is well planned for identifying and gathering relevant studies in the field of BCM with a strong emphasis on its efficient application in government service institutionsinOman. The inclusion and exclusion criteria wereused cautiously so that only the most suitable studies are being considered, providing a clear picture of the topic (Table1). Inclusion criteria narrowed down the focus to peer-reviewed articles published in English after 2014, thus ensuring that the review reflects recent innovations and advancements in the field. Focus wasgiven to those studies carried out among employees, managers, and leaders in full-text PDF journal articles. These studies usually looked into factors crucial for theeffective implementation of BCM,hence guaranteeingdirect links to the purpose of the review.

The exclusion criteria excluded any studies that fall outside the specific scope of the review. Studies conducted before 2014 wereexcluded to guarantee a contemporary perspective of BCM practices. Non-English studies werealso excluded to guarantee consistency in language throughout the reviewed literature. Additionally, non-academic journal sources like books, documents, manuscripts, theses, dissertations, government reports, and other resources not provided in full-text PDF format wereexcluded to have a consistent, high-quality review format with only academic journal articles. Researches without the aforementioned research variables linked to BCM critical factors were also excluded, so only those researches directly applicable to BCM implementation among Oman government service institutions wereconsidered.

The search scope utilized a broad set of primary and secondary keywords, along with suggested search strings to retrieve academic databases in an efficient manner. The primary keywords are "Business Continuity Management (BCM)", "Effective Implementation", "Government Service Institutions", "Oman", and "Systematic Literature Review." These keywords are extremely crucial in narrowing the search into studies that specifically focus on BCM's effective implementation in Oman. Secondary keywords such as "Key Factors", "Conceptual Perspective", "Public Sector", "Risk Management", "Crisis Management", "Disaster Recovery", and "Organizational Resilience" further limit the search by calling on related concepts and practices within BCM.

Table 1: Inclusion and Exclusion Criteria

Code	Criteria
	Inclusion Criteria
IC1	Articles containing one of the keywords in either title, abstract, or keywords. **Primary keywords** include"Business Continuity Management (BCM)", "Effective Implementation", "Government Service Institutions", "Oman", and "Systematic Literature Review." **Secondary keywords** include "Key Factors", "Conceptual Perspective", "Public Sector", "Risk Management", "Crisis Management", "Disaster Recovery", and

	"Organizational Resilience"
IC2	Documents written in the English language.
IC3	Articles in journals
IC4	Subject areas in Business Continuity Management (BCM), BCM Key Factors and Government Service Institutions in Oman.
IC4	Articles that are available in full-text PDF format
Exclusion Criteria	
EC1	Published articles before 2014.
EC2	Non-English studies
EC3	Literature forms include Books, documents, manuscripts, theses, dissertations, governmental reports, and non-PDF

4.1.3. Data Extraction:

The literature systematic review enables the researchers to consolidate the latest empirical, review, and conceptual research, thus it is a fitting qualitative research methodology for researchers who are unable to conduct empirical studies on a topic (Mydske & Thomassen, 2020). To ensure a comprehensive and systematic literature review, the researcher employed multiple academic databases like ResearchGate, Google Scholar, Semantic Scholar, Mendeley, Emerald Insight, ScienceDirect, and Scopus as sources for acquiring related studies on Business Continuity Management (BCM). The search process strictly followed the pre-determined inclusion and exclusion criteria outlined in the "Search Strategy" section.

The PRISMA framework delineates four primary steps for executing a systematic review as shown in Figure (1): Identification involves the initial gathering of relevant studies (373 studies); Screening consists of reviewing titles and abstracts to exclude studies that are not pertinent (71 studies). Eligibility involves the assessment of full-text articles against established inclusion criteria (302 studies), while Inclusion finalizes the studies that will be incorporated into the review (14 studies). The outlined steps facilitate a transparent and rigorous evidence synthesis process.

As shown in Table 2, the time scope of the study was ten years, and therefore only recent and modern literature was used. It began with a broad search using both primary and secondary keywords and yielded 373 documents with a total of 629,307 citations. The availability of the obtained documents across databases aredistributed as follows: 119 studies are available in Google Scholar, 97 studies are available in ResearchGate, 95 studies are available in Semantic Scholar, 56 studies are available in Mendeley, 18 studies are available in Emerald Insight, 12 studies are available in ScienceDirect, and 48 studies are available in Scopus. These documents were made up of various publication forms, i.e., 218 journal papers, 37 books, 26 conference reports, 41 reports, 19 theses, and other miscellaneous types of studies. But subsequent application of the inclusion and exclusion rules - filtering out only those from the year 2014 onwards and rejecting non-English research articles, non-peer-reviewed articles, and off-topic studies - the narrowed pool comprised only 14 peer-reviewed articles with 1,276 citations.

A range of search terms were developed to cover different aspects of BCM under the specified context in an effort to provide a selective and relevant list of studies. These were: "Business Continuity Management in Government Service," "Effective Implementation of BCM in Oman," "Key Factors for Business Continuity in Public Sector," "Systematic Literature Review on BCM," "Business Continuity in Oman Government Service Institutions," "Organizational Resilience and Crisis Management in Oman," "Disaster Recovery Strategies in Government Service," and "Risk Management in Omani Public Sector." These search terms were strategically crafted to comprehensively capture BCM-

related studies so that the review would encompass studies that satisfy the review's objectives.

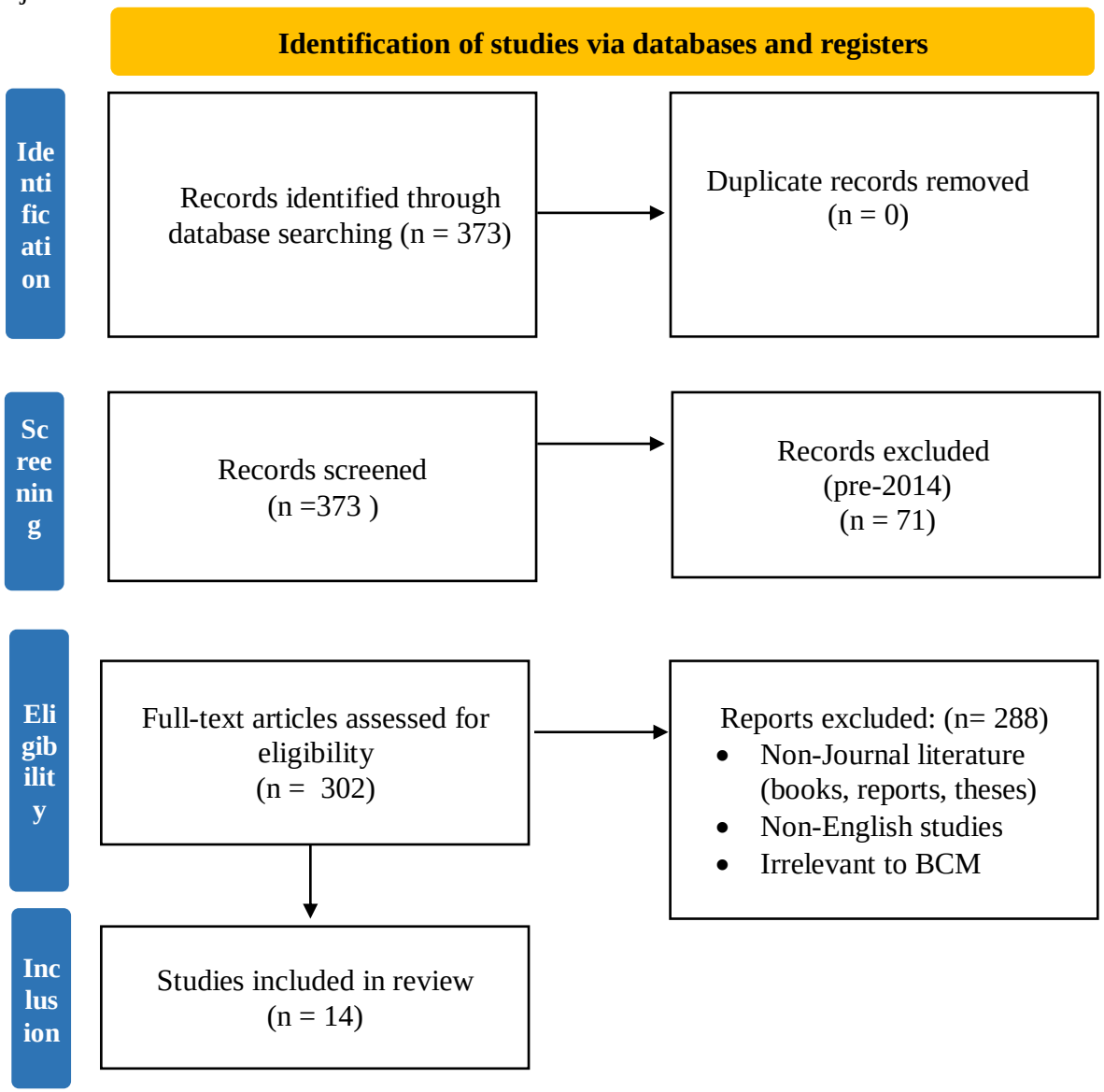

Figure 1: PRISMA flow diagram

Table 2: Data Synthesis Indicating Primary and Secondary Information and Summary of The Datasets

Description	**Results**
Main Information About Data	
Timespan	10 years
Sources: databases; including ResearchGate, Google Scholar, Semantic Scholar, Mendeley, Emerald insight, ScienceDirect and Scopus.	7
Initial Findings (Applying Primary & Secondary keywords)	
Number of Documents	373
Number of Citations from Documents	629,307
Databases: Sources of Document	
ResearchGate	97

Google Scholar	119
Semantic Scholar	95
Mendeley	56
Emerald insight	18
ScienceDirect	12
Scopus	48
Document Types	
Book	37
Conference Proceedings	26
Journal Article	218
Newspaper article	4
Report	41
Statute	2
Thesis	19
Webpage	23
working paper	3
Documents Published before 2014	71
Documents Published from 2014 onwards	302
Final Findings (Applying all inclusion & Exclusion criteria)	
Number of Documents (Articles only)	14
Number of Citations from Documents	1,276
Databases: Sources of Document	
ResearchGate	11
Google Scholar	13
Semantic Scholar	10
Mendeley	6
Emerald insight	2
Scopus	4

The systematic review provided 14 studies (Table 3) that met all the criteria. These 14 studies together identify five most significant factors influencing BCM effectiveness in Omani government service institutions:

1. **Knowledge on BCM:** Highlighted by Albulushi et al. (2020) and Abu Bakar et al. (2015), institutional knowledge of BCM principles and regulation systems is a key requirement.
2. **Resource Allocation:** Financial, human, and ICT resources were consistently linked with resilience (Al-Manji et al., 2021; Meechang & Watanabe, 2022).
3. **Institutional Readiness:** Effective continuity plans, and disaster recovery plans were instrumental (Corrales-Estrada et al., 2021; Sawalha, 2020).
4. **Leadership and Management Approach:** Leadership commitment and clearly delineated policy frameworks resulted in effective implementation (Paunescu & Argatu, 2020; Radjenovic & Zivkovic, 2022).
5. **Government Support and Response:** Fiscal incentives and regulatory guidance facilitated preparedness (Al Kurdi, 2021; Al Azzawi et al., 2023).

Table 3 summarizes the 14 studies, detailing their publication years, databases, and citation counts. For instance, Corrales-Estrada et al. (2021) received 377 citations across five databases, underscoring its influence.

Table 3: Summary of Articles That Fulfilled the Criteria

No.	Studies	Publication Year	Database	No. of Citations
1	Corrales-Estrada et al. (2021)	2021	ResearchGate Google Scholar Semantic Scholar Scopus Mendeley	377
2	Albulushi et al. (2020)	2020	ResearchGate Google Scholar	14
3	Abu Bakar et al. (2015)	2015	ResearchGate Google Scholar Semantic Scholar Mendeley Scopus	153
4	Paunescu & Argatu (2020)	2020	ResearchGate Google Scholar Semantic Scholar Scopus Mendeley	212
5	Meechang & Watanabe (2022)	2022	Google Scholar Semantic Scholar Scopus Mendeley	34
6	Radjenovic & Zivkovic (2022)	2022	ResearchGate Google Scholar	5
7	Al Kurdi (2021)	2021	ResearchGate Google Scholar Semantic Scholar Emerald insight	187
8	Al Azzawi et al. (2023)	2023	ResearchGate Emerald Insight	118
9	Ambu Saidi et al. (2021)	2021	Google Scholar Semantic Scholar ResearchGate	6
10	Al-Manji et al. (2021)	2021	Google Scholar Mendeley Semantic Scholar ResearchGate	39
11	Almufarji & Husin (2022)	2022	ResearchGate Google Scholar Semantic Scholar	27
12	Fani & Subiadi (2020)	2020	ResearchGate Google Scholar Semantic Scholar	11
13	Al Ameri M & Musa M (2021)	2021	Google scholar Mendeley	18
14	Sawalha (2020)	2020	ResearchGate Google scholar Semantic Scholar	75

5. Literature Review:

5.1 Business Continuity Management (BCM):

BCM is a strategic process designed to mitigate the impact of potential threats on an organization's operations. It involves a comprehensive framework of policies, procedures, guidelines, resources, roles, responsibilities, authorities, and planning activities that enable an organization to continue functioning during unexpected disruptions (Stojanović &Vasović, 2022).

BCM provides a structured approach for enhancing resilience and ensuring an effective response to protect key stakeholders and maintain value-generating activities. Disruptions can pose significant challenges, and an organization's ability to manage these effectively is crucial. The success of BCM is linked to maintaining smooth business processes and involves identifying potential threats and assessing their impact on operations (Mošková&Buganová, 2023).

BCM adopts a proactive stance to protect business operations and minimizes potential damage from disruptions. It includes protection, mitigation, emergency response, and recovery tactics. Prioritizing these measures appropriately is essential for developing effective BCM plans (Zeng & Zio, 2017). Effective BCM can be ensured through adherence to specific standards, such as the ISO 22301 standard. This standard is valuable for various professionals, including risk managers, supply chain leaders, and audit supervisors, providing a framework for implementing and evaluating BCM practices (International Organization for Standardization, 2019).

The success of BCM depends on clearly defined strategic plans developed by management in alignment with the organization's leadership. These plans incorporate key elements based on the organization's structure, style, systems, and resources (Marisa& Oigo, 2018). BCM has its roots in Cold War-era continuity planning and evolved significantly post-9/11 to address the specific needs of private companies. This evolution underscores its critical role in risk management, particularly in the financial sector (Folkers, 2017).

The development of BCM over the decades can be traced through various laws and standards since the 1970s. Initially emerging as disaster recovery planning among information systems practitioners, its primary goal was to minimize disruptions to a company's ability to meet customer needs during unexpected events, a purpose that has since expanded to encompass broader organizational operations (Dahlberg & Guay, 2015; Suresh et al., 2020).

5.2 Dimensions of Business Continuity Management:

The authors hypothesize that there are a specific number of BCM key contributing factors that help enhance governments' service institutions, especially in the Sultanate of Oman, by enabling the effective implementation of BCM in such institutions.

Moreover, the concept of Effective Implementation of BCM refers to the capability of an organization to sustain major operations during crisis periods through structured planning, efficient utilization of resources, and continuous improvement. Effectiveness is gauged in four major BCM dimensions:

The **Analysis** aspect is the recognition of probable disruptions and Business Impact Analysis (BIA) to study their impact. The **Design/Plan** phase addresses creating continuity policies and strategies to optimize readiness. **Implementation** is where continuity plans are activated through allocated resources. Finally, the **Evaluation** aspect involves testing, modification, and the integration of lessons learned from disruptions to improve future resilience.

Business Continuity Management (BCM) is critical in minimizing disruptions to key operations through documented contingency arrangements, duplicate systems, and disaster recovery procedures (Păunescu et al., 2018; Stojanović & Vasović, 2022). Effective BCM also manifests itself in an organization's ability to sustain services amidst crises, successfully

recover from interruptions, and incorporate lessons from previous experiences into future planning (Business Continuity Institute, 2022; International Organization for Standardization, 2019). Table 5 shows illustration of BCM' dimensions and the alignment with the key factors.

Accordingly, BCM dimensions encompass financial, administrative, resource-based, and human-resource-based capabilities to manage business continuity effectively. The Business Continuity Institute (2022) outlines the BCM lifecycle in several phases, supported by studies from Trucco (2019) and Malachová&Oulehlová (2017). These phases include analyzing the organization, determining the BCM strategy, implementing the strategy, and evaluating the strategy post-implementation.

- **Organization Analysis:** This phase involves a comprehensive understanding of the organization's operations by identifying primary processes and the resources utilized. Conducting a business impact analysis (BIA) is a crucial component of this stage, helping to pinpoint critical functions and their dependencies (Business Continuity Institute, 2022).
- **Planning/Designing the BCM Strategy:** The BCM strategy establishes the framework for minimizing losses during emergencies. This involves creating processes and concrete actions for crisis management based on the organization's material and human resources. The goal is to ensure that operations and service delivery continue uninterrupted during emergencies or disasters (Business Continuity Institute, 2022).
- **Implementation:** The Business Continuity Plan (BCP) is a key deliverable in this phase, detailing the actions and processes needed to maintain operations. It addresses potential threats and includes instructions for restoring services swiftly. This comprehensive plan is designed to safeguard against operational disruptions (Trucco, 2019).
- **Evaluation:** Evaluation involves testing and practicing various scenarios to ensure that BCM tactics and plans are current and effective. Regular testing helps employees adapt to unforeseen circumstances and optimizes recovery resources. These evaluations ensure the organization is prepared to handle disruptions and continue functioning efficiently (Malachová&Oulehlová, 2017).

5.3 Factors Contributing to the Effective Implementation of Business Continuity Management:

Crisis management significantly enhances business continuity by acting as an emergency response team, providing the flexible skills needed to manage emerging crises. It utilizes existing continuity plans, specialized communication strategies, and resource prioritization to mitigate immediate damage and restore essential operations swiftly. This transforms static continuity plans into dynamic responses during major disruptions (Mwaiwa&Odiyo, 2015). The implementation of BCM is positively influenced by crisis awareness, especially through the impact of social media on public perception and behaviour. Crisis awareness encourages the adoption and execution of BCM strategies by highlighting their importance in real-time situations (Kurniawan & Tambunan, 2023).

Factors such as relative advantages, compatibility, organizational size, and governance regulations positively impact the adoption rate of BCM. Organizations' willingness to adopt BCM reflects their understanding of the importance of securing their post-disaster operations. Government regulations often mandate preparedness to minimize economic losses and ensure rapid recovery from disasters (Kim & Amran, 2018). The effectiveness of BCM is closely linked to business continuity planning, which ensures that businesses can maintain service levels to customers and partners during disruptions. This planning process aims to protect

assets and sustain operations despite any interruptions (Nar &Yüreğir, 2017; Husin et al., 2018).

Strong collaboration within the supply chain acts as a critical buffer against disruptions, enhancing overall resilience. Transparent communication and joint planning with suppliers, logistics partners, and competitors enable early threat detection, expand sourcing options, and develop shared contingency plans. This collaborative approach helps maintain a steady flow of materials and resources, allowing for quick recovery and continued operations during disruptions (Montshiwa et al., 2016).

Prioritizing risks, whether human-caused or natural, has a significant impact on BCM. Different areas have varying vulnerabilities, making it crucial to understand and rank these risks to guide BCM effectively. Awareness of risk rankings helps organizations prepare and respond appropriately (Montshiwa et al., 2016). In modern industrial plants, the interplay between safety systems and information technology networks directly influences BCM. Thoroughly analyzing these interactions is essential for identifying all potential risks and developing effective action plans to ensure business continuity (Kosmowski et al., 2022).

6. Systematic Operationalization of Concepts:

6.1. BCM Key Contributing Factors:

Effective implementation of BCM depends on several key Factors (Table 4). A comprehensive grasp of the organization and BCM principles is vital for identifying weaknesses and crafting effective strategies. Allocating sufficient financial, human, and technological resources ensures the robustness of BCM plans. Institutional readiness, involving the preparedness of infrastructure and processes, significantly reduces the impact of disruptions. Strong leadership and management are crucial, as effective leaders can promote the BCM agenda, instill confidence among employees, and coordinate unified actions during crises. Additionally, government support and response, through regulatory frameworks, financial aid, and coordinated emergency services, bolster an organization's BCM efforts, ensuring institutions are not left to prepare alone.

Table 4: Summary of BCM Key Contributing Factors and Justifications

Key Factors	Justifications
Knowledge on BCM	- Crisis preparedness requires organizations to plan inadvance and develop strategies for crisis management (Koronis & Ponis, 2018). - Institutional knowledge of BCM principles, including risk assessment and business impact analysis (BIA), is crucial for aligning strategies with organizational goals (Mošková & Buganová, 2023; International Organization for Standardization, 2019). - Strategic management and intellectual capital play a foundational role in crisis management, with employees and leaders leveraging their skills to implement BCM plans (Mirzapour et al., 2019; Marzouq Alnassafi, 2022).
Resource Allocation	- The Resource-Based Theory (Wernerfelt, 1984; Barney, 1991) highlights the importance of both tangible (financial, ICT infrastructure) and intangible (human capital, organizational culture) resources in sustaining competitive advantage during disruptions. - Effective BCM requires financial investment in training, technology, and recovery solutions (Mwaiwa & Odiyo, 2015; Al-

Key Factors	Justifications
	Manji et al., 2021). - Human resource development and ICT infrastructure are directly linked to institutional resilience (Al-Khrabsheh et al., 2022; Kosmowski et al., 2022).
Institutional Readiness	- The BCM lifecycle (Business Continuity Institute, 2022) highlights organizational analysis, strategy formulation, implementation, and evaluation as key elements of readiness. - Disaster recovery planning and risk mitigation are essential for operational continuity during crises (Suresh et al., 2020; Trucco, 2019). - Regular testing of continuity plans, and employee training enhance adaptability to unforeseen circumstances (Malachová & Oulehlová, 2017).
Leadership and Management Approach	- Leadership styles (charismatic, transformational) significantly influence crisis management effectiveness by fostering communication and decision-making (Alkhawlani et al., 2019; Coccia, 2020). - Top management support plays a crucial role in resource allocation, policy formulation, and fostering a culture of preparedness (Meechang & Watanabe, 2022; Järveläinen, 2013). - Assigning clear roles, responsibilities, and communication strategies ensures coordinated crisis responses (Radjenovic & Zivkovic, 2022; Paunescu & Argatu, 2020).
Government Support and Response	- Government regulations and fiscal incentives (e.g., ISO 22301 compliance) strengthen BCM adoption (Kim & Amran, 2018; International Organization for Standardization, 2019). - Public-sector reforms and e-government initiatives in Oman, such as the National Data Center, enhance institutional resilience (Zadjali, 2021; Al Sulaimani & Ozuem, 2022). - Collaborative frameworks between government and institutions, such as post-cyclone recovery plans, highlight the role of state support in crisis mitigation (International Energy Agency, 2024; Ibrahim et al., 2022).

6.2. Effective Implementation of BCM:

The effective implementation of BCM is influenced by the interplay of several factors. Institutions that have a comprehensive understanding of BCM and their own operational intricacies are better positioned to develop effective continuity plans. Adequate resource allocation ensures that there are sufficient means to implement and sustain BCM strategies. Service Institutional readiness reflects an organization's capability to adapt and respond swiftly to disruptions, thereby enhancing BCM efficacy.

Table 5: Summary of BCM Key Factors, BCM Dimensions and Justifications

BCM Key Contributing Factors	BCM Dimension	Justifications
Knowledge on BCM	Analysis Design/Plan	"Strategic planning and risk analysis are foundational to identifying critical threats" (Yousef Aljuhmani & Emeagwali, 2017). "BCM requires understanding organizational workflows and dependencies to prioritize continuity efforts" (Mošková & Buganová, 2023).
	Evaluation	"Post-crisis reviews and learning from errors refine future preparedness" (Adele & Fouda, 2013; Paunescu & Argatu, 2020).
Resource Allocation	Implementation	"Financial and human resources enable the deployment of IT systems, training, and recovery protocols" (Mwaiwa & Odiyo, 2015; Al-Manji et al., 2021).
	Design/Plan	"Resource scarcity hinders the development of robust continuity strategies" (Kosmowski et al., 2022).
Institutional Readiness	Design/Plan	"Pre-defined recovery tactics and disaster simulations ensure alignment with organizational priorities" (Trucco, 2019; Business Continuity Institute, 2022).
	Evaluation	"Regular testing of BCPs optimizes recovery time and resource use" (Malachová & Oulehlová, 2017).
Leadership and Management Approach	Implementation	"Leadership commitment ensures cross-departmental coordination during crises" (Meechang & Watanabe, 2022; Coccia, 2020).
	Design/Plan	"Decision-making styles shape policy frameworks and communication strategies" (Alkhawlani et al., 2019).
Government Support and Response	Implementation	"Oman's e-government initiatives (e.g., National Data Center) provide centralized systems for continuity planning" (Zadjali, 2021).

7. Systematic Review:

Based on the aforementioned, the table below displays the database search timeline that leads to the finalized number of the selected studies for the systematic review, including the key factors for the effective implementation of BCM in enhancing the institutional resilience:

Factors	Sub-Factors	Description	Reference
Knowledge on Business Continuity Management	Work Nature, Culture, Structure, and Awareness	An organization's environment includes Work Nature, which refers to the characteristics of job roles and tasks; Culture, which encompasses shared values and behaviors; Structure, which outlines the framework of roles and communication; and Awareness, which involves understanding internal and external contexts. Together, these elements shape how an organization operates and responds to challenges.	Albulushi et al. (2020) Fani & Subiadi (2019) Corrales-Estrada et al. (2021) Abu Bakar et al. (2015) Paunescu & Argatu (2020) Meechang & Watanabe (2022) Almufarji & Husin (2022) Ambu Saidi et al. (2021) Meechang & Watanabe (2022)
	Regulatory Frameworks, Internal and External Circumstances	A Regulatory Framework includes the laws and guidelines that govern an organization's operations, while Internal and External Circumstances refer to the conditions inside and outside the organization that influence its functioning. Together, these elements shape how an organization operates and adapts.	Paunescu & Argatu (2020) Meechang & Watanabe (2022) Al Azzawi et al. (2023)
	Stakeholder and Community Involvement	Stakeholder and Community Involvement refers to the engagement and participation of individuals or groups who are affected by or can affect an organization. It includes actively seeking input from stakeholders - such as employees, customers, and investors -and engaging with the broader community to address concerns, build relationships, and enhance social responsibility.	Meechang & Watanabe (2022) Al Kurdi (2021) Al-Manji et al. (2021)
	Importance of BCM	Business Continuity Management (BCM) is crucial for ensuring that an organization can continue operating effectively during and after disruptions, such as natural disasters, cyber-attacks, or other crises.	Meechang & Watanabe (2022) Al Kurdi (2021) Al-Manji et al. (2021) Fani & Subiadi (2019) Paunescu & Argatu (2020) Radjenovic & Zivkovic (2022) Almufarji & Husin (2022)

Factors	Sub-Factors	Description	Reference
	Effect of BCM	The effect of Business Continuity Management (BCM) is to enhance an organization's resilience by ensuring it can maintain critical operations and recover quickly during disruptions.	Abu Bakar et al. (2015) Paunescu & Argatu (2020) Meechang & Watanabe (2022) Radjenovic & Zivkovic (2022) Al Azzawi et al. (2023) Al Kurdi (2021) Al-Manji et al. (2021) Fani & Subiadi (2019)
Resource Allocation	Financial Resources	Financial Resources refer to the funds and assets available to an organization for managing operations, investing in projects, and covering expenses. They include cash, investments, and credit lines, and are essential for sustaining and growing the organization's activities.	Al Kurdi (2021) Al-Manji et al. (2021) Al Ameri & Musa (2021)
	Human Resources	Human Resources refers to the personnel and workforce within an organization, encompassing their skills, knowledge, and abilities, as well as the management and development practices that support and maximize their contributions to the organization's goals.	Ambu Saidi et al. (2021) Al-Manji et al. (2021) Paunescu & Argatu (2020) Al Ameri & Musa (2021)
	ICT Resources	ICT Resources refer to the information and communication technology assets, including hardware, software, networks, and data, used to support and enhance an organization's operations and communication.	Almufarji & Husin (2022) Fani & Subiadi (2019) Al-Manji et al. (2021) Meechang & Watanabe (2022) Al Azzawi et al. (2023) Ambu Saidi et al. (2021)
	Logistics and Supply Chain Resources	Logistics and Supply Chain Resources refer to the systems, processes, and assets involved in the movement, storage, and management of goods and services from suppliers to consumers.	Ambu Saidi et al. (2021) Radjenovic & Zivkovic (2022) Albulushi et al. (2020) Fani & Subiadi (2019) Corrales-Estrada et al. (2021)

Factors	Sub-Factors	Description	Reference
Institutional Readiness	Business Continuity Plans	Business Continuity Plans are comprehensive strategies designed to ensure an organization can maintain essential functions and recover quickly during and after a disruption or crisis. They outline procedures for handling emergencies, protecting assets, and resuming normal operations.	Fani & Subiadi (2019) Abu Bakar et al. (2015) Corrales-Estrada et al. (2021) Albulushi et al. (2020) Radjenovic & Zivkovic (2022) Al Kurdi (2021) Al-Manji et al. (2021) Sawalha (2020)
	Business Impact Analysis (BIA)	Business Impact Analysis (BIA) is a process that identifies and evaluates the potential effects of disruptions on an organization's critical functions and operations. It helps determine the impact of various risks and guides the development of strategies to mitigate those impacts.	Fani & Subiadi (2019) Paunescu & Argatu (2020) Meechang & Watanabe (2022) Radjenovic & Zivkovic (2022) Sawalha (2020) Al Ameri & Musa (2021)
	Risk Assessment (RA)	Risk Assessment is the process of identifying, analyzing, and evaluating potential risks or threats that could negatively impact an organization. It involves assessing the likelihood and impact of these risks to prioritize and develop strategies for managing and mitigating them effectively.	Corrales-Estrada et al. (2021) Fani & Subiadi (2019) Paunescu & Argatu (2020) Radjenovic & Zivkovic (2022) Al-Manji et al. (2021) Sawalha (2020) Al Ameri & Musa (2021)
	Disaster Recovery Plan (DRP)	Disaster Recovery Plan is a structured approach that outlines procedures and resources needed to restore an organization’s critical operations and IT systems following a disaster or major disruption. It focuses on minimizing downtime and data loss to ensure a swift recovery and continuity of business functions.	Fani & Subiadi (2019) Abu Bakar et al. (2015) Paunescu & Argatu (2020) Radjenovic & Zivkovic (2022) Sawalha (2020) Al Ameri & Musa (2021)
	Maintenance and Testing	Maintenance and Testing refer to the regular activities and evaluations required to ensure that systems, processes, or plans remain effective and reliable.	Fani & Subiadi (2019) Abu Bakar et al. (2015) Paunescu & Argatu (2020) Meechang & Watanabe (2022)

Factors	Sub-Factors	Description	Reference
			Radjenovic & Zivkovic (2022) Ambu Saidi et al. (2021) Sawalha (2020)
	Training Employees, Updating and Evaluation	Training Employees involves providing staff with the skills and knowledge necessary to perform their roles effectively and adapt to new technologies or processes, along with updating their skills on a regular basis and evaluating the performance of their efforts.	Corrales-Estrada et al. (2021) Abu Bakar et al. (2015) Paunescu & Argatu (2020) Meechang & Watanabe (2022) Radjenovic & Zivkovic (2022) Ambu Saidi et al. (2021) Sawalha (2020)
Leadership and Management Approach	Commitment and Support from Management	Commitment and Support from Management refer to the dedication and active involvement of leadership in providing the necessary resources, guidance, and encouragement to ensure the successful implementation and execution of organizational initiatives.	Corrales-Estrada et al. (2021) Albulushi et al. (2020) Fani & Subiadi (2019) Abu Bakar et al. (2015) Paunescu & Argatu (2020) Meechang & Watanabe (2022) Radjenovic & Zivkovic (2022) Al Azzawi et al. (2023) Almufarji & Husin (2022 Ambu Saidi et al. (2021) Al-Manji et al. (2021) Al Ameri & Musa (2021)
	Establishing Policies and Strategies	Establishing Policies and Strategies involves creating formal guidelines and plans that outline an organization's approach to achieving its goals and managing its operations. Policies provide the rules and procedures for consistent decision-making and behavior.	Corrales-Estrada et al. (2021) Albulushi et al. (2020) Paunescu & Argatu (2020) Al Azzawi et al. (2023) Almufarji & Husin (2022 Ambu Saidi et al. (2021) Al-Manji et al. (2021) Fani & Subiadi (2019)

Factors	Sub-Factors	Description	Reference
	Assigning Roles, Responsibilities and Authorities	Assigning Roles, Responsibilities, and Authorities involves clearly defining and allocating specific tasks, duties, and decision-making powers to individuals or teams within an organization.	Radjenovic & Zivkovic (2022) Sawalha (2020) Meechang & Watanabe (2022)
	Forming Teams for Business Continuity Management	Forming Teams for BCM involves creating specialized groups responsible for developing, implementing, and maintaining continuity plans and strategies.	Fani & Subiadi (2019) Abu Bakar et al. (2015) Paunescu & Argatu (2020)
	Communication	Communication within organizational contexts involves the structured exchange of information and messages among members of an organization to support effective functioning and decision-making.	Al-Manji et al. (2021) Meechang & Watanabe (2022) Abu Bakar et al. (2015)
	Documentation	Documentation within organizational contexts refers to the systematic recording and storage of information related to processes, procedures, decisions, and activities.	Almufarji & Husin (2022)
Government Support and Response		Government Support and Response to Organizations refers to the assistance and actions provided by government entities to help organizations manage and overcome challenges, such as economic downturns, natural disasters, or public health crises.	Albulushi et al. (2020) Meechang & Watanabe (2022) Al Kurdi (2021) Almufarji & Husin (2022)

Table 6: Key Factors for The Effective Implementation of BCM in Enhancing the Institutional Resilience of Government Service Institutions inOman.

8. Findings and Discussion:

Upon reviewing the previously selected studies, it can be concluded that the effective implementation of BCM in government service institutions in Oman does indeed depend on a number of key contributing factors. This requires the identification of these factors that can be outlined upon extracting them from the findings of such studies as follows:

8.1. Knowledge on Business continuity management (BCM):

Knowledge on BCM is crucial for an organization's resilience and effectiveness in handling disruptions. This knowledge encompasses understanding howwork-nature, culture, structure, and awareness impact BCM efforts. Work nature involves the specifics of job roles that need continuity plans, while culture shapes how employees perceive and support BCM initiatives. Structure determines how roles and communication are organized to implement BCM strategies effectively, and awareness ensures understanding of both internal and external contexts that influence continuity planning.

Additionally, awareness of regulatory frameworks and internal and external circumstances helps in aligning BCM strategies with legal requirements and environmental factors. Stakeholder and community involvement emphasizes the importance of engaging with those affected by or influencing the organization to establish support and address concerns. Ultimately, BCM enhances organizational resilience by maintaining critical operations and facilitating quick recovery during disruptions, thus underscoring its importance in ensuring stability and continuity in the face of crises.

This was confirmed by various studies in the systematic review; including Abu Bakar et al. (2015); Al Kurdi (2021); Albulushi et al. (2020); Al-Manji et al. (2021); Almufarji & Husin (2022); Ambu Saidi et al. (2021); Corrales-Estrada et al. (2021); Fani & Subiadi (2019); Al; Azzawi et al. (2023); Meechang & Watanabe (2022); Paunescu & Argatu (2020); Radjenovic & Zivkovic (2022). The authors of these studies indicated that this factor involves grasping the nature of the organization's work, which includes its core activities, operational workflows, and business processes. Recognizing the culture and structure of the institution is essential, as it influences how BCM strategies are adopted and implemented. This includes understanding the values, norms, and organizational hierarchy that drive employee behavior and decision-making. Awareness of regulatory frameworks, both internal policies and external laws, ensures that BCM plans are compliant with legal requirements and industry standards.

Additionally, considering internal or external circumstances, such as market conditions and economic factors, helps in identifying potential risks. Engaging stakeholders and the community is also crucial, as their support and cooperation can significantly enhance the resilience and effectiveness of BCM efforts. Understanding BCM itself is equally important; because being mindful of the importance of BCM means recognizing its role in ensuring that critical business functions continue during and after a disruption.

This involves understanding the comprehensive nature of BCM, which covers risk assessment, business impact analysis, and recovery strategies. The effect of BCM is profound as it prepares the organization to handle unexpected events, minimizing downtime and financial loss. Effective BCM safeguards the institution's reputation, maintains customer trust, and ensures regulatory compliance. By comprehensively understanding BCM, an organization can develop robust plans that not only address immediate threats but also enhance long-term resilience. Combining an in-depth understanding of both the institution and BCM provides a solid foundation for developing effective continuity strategies. This integrated approach ensures that BCM plans are tailored to the specific needs and characteristics of the organization, aligning with its culture, structure, and regulatory environment.

Consequently, in the context of Omani government service institutions, understanding the institution is crucial for effective BCM. This involves comprehending the organization's core activities, workflows, and business processes, which are essential for tailoring BCM strategies. Recognizing the institution's culture and structure is vital, as it shapes the adoption and implementation of BCM plans, including the values, norms, and organizational hierarchy that influence employee behavior and decision-making.

Moreover, awareness of regulatory frameworks ensures compliance with legal requirements and industry standards. Considering both internal and external circumstances, such as market conditions and economic factors, aids in identifying potential risks. Engaging stakeholders, and the community, enhances the resilience and effectiveness of BCM efforts.

8.2. Resource Allocation:

Resource Allocation is a critical factor for organizational success, encompassing the effective distribution and management of various assets essential for operations. Financial Resources provide the necessary funds for daily operations, investments, and growth, including cash, investments, and credit lines, ensuring the organization can sustain and expand its activities.

Human Resources focus on leveraging the skills, knowledge, and abilities of the workforce through effective management and development practices to achieve organizational goals. ICT Resources includes the technological infrastructure, such as hardware, software, networks, and data, crucial for supporting and enhancing operations and communication. Logistics and supply chain resources involve managing the systems and processes for the efficient movement, storage, and management of goods from suppliers to consumers. Effective allocation of these resources ensures an organization can operate smoothly, adapt to changes, and achieve its strategic objectives.

Such factor was outlined by different authors; including Al Ameri & Musa (2021); Al Kurdi (2021); Albulushi et al. (2020); Al-Manji et al. (2021); Almufarji & Husin (2022); Ambu Saidi et al. (2021); Corrales-Estrada et al. (2021); Fani & Subiadi (2019); Al Azzawi et al. (2023); Meechang & Watanabe (2022); Paunescu & Argatu (2020); Radjenovic & Zivkovic (2022)as the factor was proven to include investing in risk assessments, training programs, and recovery solutions. Human resources are equally important, as a well-trained and prepared workforce can effectively respond to disruptions.

This involves not only having the right personnel in place but also ensuring they are equipped with the necessary skills and knowledge through regular training and drills. In addition to financial and human resources, Information and Communication Technology (ICT) resources play a pivotal role in BCM. This encompasses robust IT infrastructure, secure data management systems, and reliable communication tools, which are essential for maintaining operational continuity during crises. Ensuring the availability and security of critical information can prevent data loss and facilitate swift recovery. Logistic and supply chain resources are also crucial, as they ensure the smooth flow of goods and services even in adverse situations.

When it comes to Oman, it can be indicated here that effective resource allocation is essential for the successful implementation of BCM. Financial resources are the foundation of BCM efforts, enabling the development, implementation, and maintenance of comprehensive continuity plans. Investing in risk assessments, training programs, and recovery solutions ensures preparedness for potential disruptions.

Furthermore, human resources are equally vital, as a well-trained and prepared workforce can effectively respond to emergencies. Additionally, Information and Communication Technology (ICT) resources are crucial, providing robust IT infrastructure; secure data management systems, and reliable communication tools necessary for maintaining operational continuity during crises.

8.3. Institutional Readiness:

Institutional Readiness is vital for ensuring an organization can effectively handle disruptions and recover swiftly, and it involves several key components. Business Continuity Plans (BCP) provide comprehensive strategies for maintaining essential functions and resuming operations after a crisis, while Business Impact Analysis (BIA) assesses the potential effects of disruptions on critical functions, guiding the development of mitigating strategies.

Moreover, risk assessment identifies and evaluates potential threats, helping prioritize and address risks proactively. Disaster Recovery Plans (DRP) outline procedures to restore operations and IT systems, minimizing downtime and data loss. Maintenance and testing ensure that systems and plans remain effective through regular evaluations. Lastly, Training employees, updating, and evaluation involve equipping staff with necessary skills, keeping their knowledge current, and assessing their performance to ensure readiness and resilience in the face of disruptions.AccordinglyAbu Bakar et al. (2015); Al Ameri & Musa (2021); Al Kurdi (2021); Albulushi et al. (2020); Al-Manji et al. (2021); Ambu Saidi et al. (2021); Corrales-Estrada et al. (2021); Fani & Subiadi (2019); Meechang & Watanabe (2022); Paunescu & Argatu (2020) Radjenovic & Zivkovic (2022); Sawalha (2020)proved this when they indicated that these plans are informed by a thorough Business Impact Analysis (BIA) that identifies critical business functions and the potential consequences of various disruption scenarios. Complementing the BIA, a detailed risk assessment is conducted to evaluate the likelihood and impact of different risks, helping prioritize the allocation of resources and the development of mitigation strategies. A crucial component of institutional readiness is having a robust Disaster Recovery Plan (DRP), which focuses specifically on the restoration of IT systems and data critical to business operations.

However, plans alone are not sufficient; they must be regularly maintained and tested to ensure their effectiveness. This involves periodic reviews and updates to the BCP and DRP to reflect changes in the business environment, as well as conducting regular drills and simulations to test the plans under realistic conditions. Training employees is essential to ensure they understand their roles and responsibilities during a disruption. Continuous evaluation and improvement of these plans and processes help ensure that the organization remains prepared to respond swiftly and effectively to any crisis.

On the other hand, and as far as the Omani context is concerned, it can be indicated that government service institutions can activate readiness as a cornerstone of effective BCM. This begins with the development of comprehensive Business Continuity Plans (BCPs), which detail the procedures and resources necessary to maintain and restore operations during and after disruptions. These plans are informed by thorough Business Impact Analysis (BIA) that identify critical functions and potential consequences of various scenarios.

Accordingly, complementing the BIA, detailed risk assessments evaluate the likelihood and impact of different risks, guiding resource allocation and mitigation strategies. A crucial component is a robust Disaster Recovery Plan (DRP), which focuses on the restoration of IT systems and data essential to operations.

8.4. Leadership and Management Approach:

Leadership and Management Approach plays a critical role in the effectiveness of organizational operations and crisis management. Commitment and support from management ensure that leaders provide the necessary resources, guidance, and encouragement for successful implementation of initiatives and continuity plans. Establishing policies and strategies involves developing formal guidelines and plans that align with organizational goals and ensure consistent decision-making and operations. Assigning roles, responsibilities, and authorities involves defining specific tasks and decision-making powers to ensure clarity and accountability.

Accordingly, forming teams for BCM is crucial for creating specialized groups that develop and execute business continuity strategies. Effective communication within the organization supports collaboration and informed decision-making, while documentation ensures systematic recording and storage of critical information, facilitating transparency and consistency in operations. Together, these elements help create a robust leadership framework that supports organizational resilience and operational efficiency.

Abu Bakar et al. (2015) Al Ameri & Musa (2021), Albulushi et al. (2020), Al-Manji et al. (2021), Almufarji & Husin (2022, Almufarji & Husin (2022), Ambu Saidi et al. (2021), Corrales-Estrada et al. (2021), Fani & Subiadi (2019), Al Azzawi et al. (2023), Meechang & Watanabe (2022), Paunescu & Argatu (2020), Radjenovic & Zivkovic (2022), Sawalha (2020) identified these policies as they should outline the organization's approach to risk management, continuity planning, and recovery procedures, providing a structured path for the institution to follow in times of crisis. In addition to strategic planning, effective leadership involves assigning specific roles, responsibilities, and authorities to ensure accountability and clarity. Forming dedicated teams for BCM is essential, as these teams are tasked with developing, implementing, and maintaining continuity plans.

Consequently, Abu Bakar et al. (2015), Paunescu &Argatu (2020) and Meechang& Watanabe (2022) indicated that effective communication is another critical aspect, ensuring that all employees are aware of their roles in BCM and are kept informed about policies and procedures. Proper documentation supports this process by providing detailed records of BCM plans, procedures, and training activities, ensuring that everyone in the organization can access the necessary information when needed. In essence, a strong leadership and management approach provides the backbone of an effective BCM program, establishing a culture of preparedness and resilience.

For the Oman context, Omani leadership and management approach in government service institutions can play a pivotal role in the successful implementation of BCM. The commitment and support from top management are fundamental, as these leaders set the tone for the entire organization, signaling the importance of BCM and ensuring that adequate resources are allocated.

Moreover, establishing clear policies and strategies is crucial, as these frameworks guide the development and execution of BCM initiatives, outlining the organization's approach to risk management, continuity planning, and recovery procedures. Effective leadership involves assigning specific roles, responsibilities, and authorities to ensure accountability and clarity.

8.5. Government Support and Response:

Government Support and Response to organizations involves the critical role that government entities play in providing aid and resources to help organizations navigate and recover from various challenges, including economic downturns, natural disasters, or public health crises. This support can include financial assistance, regulatory adjustments, emergency services, and strategic guidance, all aimed at mitigating the impacts of disruptions and establishing organizational resilience. By offering such resources and interventions, governments help stabilize affected organizations, maintain essential functions, and facilitate a quick recovery, ultimately contributing to broader economic and social stability.

Albulushi et al. (2020), Meechang& Watanabe (2022), Al Kurdi (2021) and Almufarji& Husin (2022),all indicated that government support significantly enhances the implementation of effective BCM by providing a robust regulatory framework, financial assistance, and coordinated emergency services. Regulatory frameworks set clear guidelines and standards for BCM practices, ensuring organizations adhere to best practices and maintain preparedness.

Various financial assistance tools, such as grants or subsidies, help organizations invest necessary resources, from technology to training programs, which are crucial for developing and maintaining BCM plans. Additionally, coordinating emergency services ensures organizations can rely on swift, organized responses during crises, reducing downtime and mitigating impacts.

For Omani government service institutions, government support is a significant requirement as it can enhance the implementation of effective BCM by providing a robust regulatory framework, financial assistance, and coordinated emergency services. Regulatory frameworks set clear guidelines and standards for BCM practices, ensuring organizations adhere to best practices and maintain preparedness. Through grants or subsidies, financial assistance helps organizations invest in necessary resources, such as technology and training programs, crucial for developing and maintaining BCM plans.

9. Implications and Recommendations:

Based on the aforementioned, and upon extracting the findings that were capable of achieving and answering the study's main objective and its core question, the authors provide the following implications and recommendations for Omani government service institutions' leaders and managers and future researchers as well:

- For Omani government service institutions' leaders and managers, there is a possibility of leveraging AI applications in creating readiness and risk-management plans for uncertain events. Moreover, they can also conduct routine drills and practical training courses for government personnel and employees, along with the necessity to instill the principles of sustainability within the institutions' system to sustain financial and operational resources and procedures towards achieving BCM.
- For future researchers, insightful studies using future studies' method as main researchmethodology, such as the Voros Scope, can help them analyze different scenarios about events and risks that might occur in the future; in order to create prospected conditions where each type of scenario can be handled using a series of strategies. To further elaborate on this notion, it can be indicated that the Voros Scope, often visualized as the Futures Cone, is an expanded model for categorizing potential futures beyond the traditional classes of possible, probable, and preferable. The Futures Cone was further adapted by futurist Joseph Voros. Voros's adaptation identifies up to eight distinct types of futures: Potential, Preposterous, Possible, Plausible, Probable, Preferable, Projected, and occasionally Predicted. These categories represent subjective judgments about future possibilities, with the boundaries between them reflecting our evolving understanding of future events (Voros, 2017).

10. Conclusion

Based on the aforementioned literature-based and methodological procedures that have been conducted above, it can be concluded that the effective implementation of BCM ~~in~~forthe institutional resilience of government service institutions in the Sultanate of Oman is affected by a number of factors, outlined by the International Organization for Standardization (ISO, 2019), which include knowledge on BCM, resource allocation, institutional readiness, leadership and management approach, and government support and response.

Knowledge on BCM ensures that institutions understand the critical strategies and practices required for resilience, enabling them to anticipate and address potential disruptions effectively. Resource Allocation is crucial for providing the financial, human, and technological assets needed to support BCM efforts and maintain operations during crises.

Institutional Readiness, including robust Business Continuity Plans (BCPs), risk assessments, Business Impact Analysis (BIA), Disaster Recovery Plan (DRP), regular training, prepares institutions to manage emergencies and recover swiftly. Leadership and ManagementApproach plays a pivotal role by establishing clear policies, assigning responsibilities, and establishing a culture of preparedness and communication.Lastly, Government Support and Response provides essential assistance, such as financial aid and emergency services, to help institutions overcome challenges and enhance their overall resilience. Together, these factors contribute to a comprehensive BCM framework that strengthens institutional resilience in the face of various disruptions.

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