A STRUCTURED CRITICAL SUCCESS FACTORS MODEL FOR BUSINESS CONTINUITY MANAGEMENT IMPLEMENTATION IN MALAYSIA SMEs

MUHAMAD DANIAL 'ATIF BIN NASIREN

UNIVERSITI TEKNOLOGI MALAYSIA

A STRUCTURED CRITICAL SUCCESS FACTORS MODEL FOR BUSINESS CONTINUITY MANAGEMENT IMPLEMENTATION IN MALAYSIA SMEs

MUHAMAD DANIAL ATIF BIN NASIREN

A thesis submitted in fulfilment of the
Requirements for the award of the degree of
Master of Science (Facilities Management)

Faculty of Geoinformation and Real Estate
Universiti Teknologi Malaysia

FEBRUARY 2017

For my beloved family

ACKNOWLEDGEMENT

Alhamdulillah….

This work would not have been possible without the never-ending love of my mother, Siti Mariam bte Haji Yusof and my father, Nasiren bin Sarip whom have dedicated their whole life in raising me as who I am today.

I am very grateful to Dr Mat Naim for his never ending assistance and support as supervisor for my thesis which he is always accommodating and read successive draft with infinite patience.

Many thanks also to the Maroons, BFTs, Revogrades, and Squad Platoon Commanders 1/2015 that have mould me into a stronger man physically and mentally.

Last but not least, to my fiancé Lia Juliana, for being a wonderful companion to me, thank you.

ABSTRACT

Business Continuity Management is an essential Facilities Management strategic tool that able to help in ensuring the survivability of any business in times of disruptions. Accordingly, Small and Medium Enterprises that make up the largest business sector of world economy need to be protected from disruptions and provide fast and uninterrupted recovering system. However, while BCM has been in Malaysia for decade, most of the SMEs have low level of knowledge towards the existence of BCM and its importance towards their business organisations. They are also confronting difficulties in implementing BCM systemically. The success factors for the implementation of BCM in SMEs in the current academic resources are limited. There are objectives of this research intended to determine the CSFs and to describe the structural relationship between the CSFs for the successful BCM implementation on Malaysia SMEs. Based on literature review, 16 CSFs were identified as Top Management Commitment and Support, Industry Focus, Key Stakeholders, Human Resources, Cultural Changes, Ownerships, BCM Organisation, Financial and Budget, Effective Communication, Education and Training of BCM, Legislation, Participation of Facilities and Staff, BCP Committees, Awareness Campaign, Leadership, and Input of BCM Programme. Expert's opinion interview through Interpretive Structural Modelling were sought to confirm the literature findings. The expert's opinion were also sought to develop the relationship between the CSFs by converting the opinions into an ISM-based model through a step-by-step procedure of developing ISM-based model. The model revealed that, Top Management Commitment and Support is the major driving factor, followed by Industry Focused, Key Stakeholders, Human Resources, Cultural Changes, Ownership and Financial Budget respectively. Input of BCM Program is the most dependent factor followed by Effective Communication, Participation of Facilities and Staff, BCP Committees, Awareness Campaign and Leadership accordingly. The BCM Organisation and Education and Training of BCM were deduced as unstable for having strong dependency and driving power. Legislation was found to be disconnected because it does not influence other factors much for the successfulness of BCM implementation in Malaysia SMEs. A feasibility study was then conducted to compare the ISM-based model with the actual implementation in the aspects of social, technical and economic aspects hence empirically confirmed the established ISM-based structural model. In summary, this research has accomplished its objectives by providing the lists of CSFs required and consequently developing the structured relationship model between the CSFs that is essential in developing the strategies for the successful BCM implementation in Malaysia SMEs.

ABSTRAK

Pengurusan Kesinambungan Perniagaan (PKP) adalah alat strategik penting di dalam Pengurusan Fasiliti yang dapat membantu dalam mengekalkan kelangsungan perniagaan dan memastikan kemandirian perniagaan semasa bencana berlaku. Oleh itu, industri kecil dan sederhana (IKS) yang membentuk sektor perniagaan yang paling besar di dalam ekonomi dunia perlu dilindungi daripada bencana dengan satu sistem yang dapat memulihkan keadaan sesuatu perniagaan dengan cepat dan tanpa gangguan. Walaupun PKP telah wujud di Malaysia hampir sedekad, majoriti IKS Malaysia mempunyai tahap pengetahuan yang rendah terhadap kewujudan dan kepentingan BCM kepada organisasi perniagaan IKS. Mereka juga mempunyai masalah dalam melaksanakan BCM secara sistematik. Kekurangan perbincangan ilmiah di dalam bidang akademik berkaitan PKP terutama yang menjurus kepada Faktor Kejayaan Kritikal (FKK) bagi perlaksanan PKP di dalam IKS telah mendorong bagi menyiapkan kajian ini. Objektif kajian ini pula adalah untuk menentukan FKK yang terlibat dan untuk menggambarkan hubungan antara struktur FKK bagi mejayakan perlaksanaan PKP untuk IKS di Malaysia. Berdasarkan kajian literatur menyeluruh yang telah dibuat, 16 FKK telah dikenal pasti bagi melaksanakan PKP di IKS Malaysia. Oleh yang demikian, sesi temubual telah diadakan bersama dengan pakar PKP melalui kaedah *'Interpretive Structural Modelling'* (ISM) bagi mengesahkan dapatan kajian literatur yang telah dibuat dan seterusnya membangunkan hubungan struktur di antara FKK yang telah dikenal pasti. Hasil temubual telah diubah kepada satu model yang berasaskan ISM melalui beberapa prosedur untuk membangunkan model berasaskan ISM. Berikutan hasil temubual, Komitmen dan Sokongan Pengurusan Tertinggi merupakan faktor penggerak utama diikuti oleh Industri Fokus, Pihak Berkepentingan Utama, Sumber Manusia, Perubahan Budaya, Pemilikan dan Anggaran Kewangan. Manakala, Input Program adalah faktor yang paling bergantung dengan kuasa kebergantungan dan diikuti oleh Komunikasi Berkesan, Penyertaan Kemudahan dan Kakitangan, Jawatankuasa BCP, Kempen Kesedaran dan Kepimpinan. Terdapat dua FKK iaitu Pertubuhan PKP dan Pendidikan dan Latihan PKP telah disimpulkan sebagai tidak stabil kerana mempunyai nilai yang sama terhadap nilai penggerak dan kebergantungan. FKK Perundangan tidak mempunyai kaitan di dalam sistem kerana faktor ini tidak memberi banyak pengaruh terhadap faktor yang lain bagi memastikan kejayaan perlaksanaan PKPdi Malaysia. Kajian kebolehlaksanaan kemudiannya dijalankan untuk membandingkan model tersebut dengan keadaan sebenar dalam aspek sosial, teknikal dan ekonomi justeru mengesahkan secara empirikal model berasaskan ISM itu tadi. Secara ringkasnya, kajian ini telah mencapai objektifnya apabila senarai FKK telah ditemui dan seterusnya dibangunkan satu model hubungan berstruktur FKK bagi membangunkan strategi yang berkesan untuk perlaksanaan PKP di IKS Malaysia.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

FM	-	Facility Management
RICS	-	Royal Institute of Chartered Surveyor
IFMA	-	International Facility Management Association
BIFM	-	British Institute of Facilities Management
BCP	-	Business Continuity Planning
BCM	-	Business Continuity Management
BCI	-	Business Continuity Institute
SME	-	Small and Medium Enterprise
APEC	-	Asia-Pacific Economic Cooperation
SIRIM	-	Standards and Industrial Research Institute Malaysia
BNM	-	Bank Negara Malaysia
DRI	-	Disaster Recovery Institute
PwC	-	PricewaterhouseCoopers
ADRC	-	Asian Disaster Reduction Centre
TIER	-	Taiwan Institute of Economic Research
CSF	-	Critical Success Factors
CEO	-	Chief Executive Officer
DRP	-	Disaster Recovery Planning
BCMS	-	Business Continuity Management System
CM	-	Crisis Management

ICT	-	Information and Communication Technology
R&D	-	Research and Development
IMP	-	Industrial Malaysia Plan
ISM	-	Interpretive Structural Modelling
SEM	-	Structural Equation Modelling
IDEFO	-	Integrated Definition
DFD	-	Data Flow Diagram
SSIM	-	Structural Self-Interaction Matrix
MBCP	-	Master Business Continuity Professional Certificate
CBCP	-	Certified Business Continuity Professional Certificate
AFBCI	-	Associate Fellow of Business Continuity Institute
BCCP	-	Business Continuity Certified Planner

LIST OF APPENDICES

CHAPTER 1

INTRODUCTION

1.1 Introduction

This chapter composed of eight sections that narrate the overall picture of the research. The chapter also discussed on the background of the research subject, problem statement, research objectives, scope and limitation of research, the research methodology, the significance of the research, and organisation of the thesis is the last section for this chapter.

1.2 Research Background

Facilities Management (FM) is becoming an increasingly important factor in the built environment. Evolving from the above matters, as mentioned by Haris *et al*. (2008), FM in some Asian countries such as Japan has been accepted as an important area in business and the techniques of FM are increasingly being used. This is due to the facts mentioned by Hill & William (2013) that organisations of all kinds and different economies around the world recognised the rising costs of occupying buildings, providing services to support business operations and improving working conditions as important factors in profitability, and success depends upon reducing the costs of being in business.

The range of FM services is widely accepted as being broad and highly inclusive of a number of functions and roles performed by practitioners (Waheed & Fernie 2009), thus, making it difficult to determine the boundaries and to what extend they overlap with each other. According to Tay & Ooi (2001) in (Waheed & Fernie 2009), practitioners themselves struggle to find agreement on just exactly what constitutes FM.

Throughout the years, researchers and practitioners alike have provided many definitions that explained and specified the objectives and scope of FM. This can be seen in the sample of definitions in Table 1.1 on page 3 which illustrates that the issues confronting FM are all related to both the core and non-core services that support the primary business of an organisation.

Table 1.1: Definitions of Facilities Management

Author	Definition of FM
Tay & Ooi (2001)	FM is succinctly defined as the integrated management of the workplace to enhance the performance of the organization. FM also has evolved from an operational non-core business support services function to a strategic FM position which supports and enhances both the core and non-core activities of the organization.
Chotipanich (2004)	The support function coordinating physical resources and workplace, and support services to user and process of works to support the core business of the organization.
Tucker & Pitt (2009)	The integration and alignment of the non-core services, including those relating to the premises, required to operate and maintain a business to fully support the core objectives of the organization.
Royal Institution of Chartered Surveyors (2009)	A discipline that improves and supports the productivity of an organization's by delivering all needed appropriate services, infrastructure, etc. that are needed to achieve business objectives.
International Facility Management Association (2010)	FM is the profession that encompasses multiple disciplines to ensure functionality of the built environment by integrating people, place, process and technology.
British Institute of Facilities	FM is the integration of processes within an organization to maintain and develop the agreed services which support and improve the effectiveness of its primary activities.

Management (2010)	

Based on Table 1.1, it can be seen that the common theme from the meaning of FM are; (i) Integrated management, (ii) both core and non-core or appropriate services, (iii) to support the primary business, and can be briefly stated that FM is an integrated management of both core and non-core services that support the primary businesses of an organization.

In order to relate Business Continuity Management (BCM) with FM, Pitt & Goyal (2004) describe BCM as a new discipline that its root lie in information system protection and has evolved from a focused technical bias to a broader strategic organisational management such as FM. As to further understand BCM better, its definitions are provided below in Table 1.2.

Table 1.2: Definitions of BCM

Author	Definition of BCM
Business Continuity Institute (2002)	The act of anticipating incidents that will affect mission-critical functions and processes for the organization and ensuring that it responds to any incident in a planned and rehearsed manner.
Council on Corporate Disclosure and Governance (2005)	An integrated set of activities and assets that is capable of being conducted and managed for the purpose of providing either a return to investors or dividends, lower costs, or other economic benefits directly and proportionally to owners, members or participants.

Malaysian Standards BCM Framework (2007)	Management process that safeguards the interests of its key stakeholders, reputation, brand and value-creating activities by identifying potential impacts that threaten the organization and provides a framework for building resilience and the capability for an effective response.
Global Technology Audit Guide (2008)	BCM is the process by which an organization prepares for future incidents that could jeopardize the organization's core mission and its long term viability.
Business Continuity Institute (2011)	A holistic management process that identifies potential threats to an organization and the impacts to business operations that those threats – if realized-might cause, and which provides a framework for building organizational resilience with the capability for an effective response that safeguards the interests of its key stakeholders, reputation, brand, and value creating activities.

Based on Table 1.2, the common themes from the definition of BCM are; (i) integrated set of activities, (ii) holistic management process, (iii) safeguard the interests of its key stakeholders, reputation, brand and value-creating activities (iv) anticipate potential impacts and threats to organisation (v) provides framework for building resilience and capability of responding effectively.

Emerging from the common theme, BCM can be defined as a holistic management process that safeguard the interests of its key stakeholders, reputation, brand and value creating activities by anticipating the potential

threats to organisations and provides a framework for building resilience and capability of responding effectively. As far as in the case of strategic FM is concerned, BCM can be ideally incorporated in FM as an essential FM tool to ensure an integrated management of both core and non-core services that support the continuity of primary businesses of organisations in the times of disaster.

The above statement is further supported by the fact that Business Continuity emerged in response to the increased corporate realization that any disruption in the continuity of the business for an extended period of time will seriously affect the overall practicality of an organisation (Foster & Dye 2005). As stated by Moore (1995), he believe that it was not enough only by recovering the IT function, the business needed to resume as quickly and efficiently as possible since both functions of business and organisation nowadays, entails into numerous complex corporate objectives such as market share, cash flow, preservation of customer base, and corporate image that need to be constantly met.

Business strategists need to simultaneously shape the form of their organisations as well as the working environment through which that future can be achieved. Tay & Ooi (2001) suggested that the facilities managers are best placed in the organisations for this kind of business re-engineering or strategizing, as proven in many cases, architects and suppliers of physical space were not able to link the process of designing office space with such strategies. Hence, business continuity plan (BCP) was introduced to assist organization in re-engineering and strategizing their businesses. The inevitability of crises within the business environment suggests that the majority of the organisations should have a BCP (Pitt & Goyal 2004).

However, BCP is only part of the element that constitutes BCM as a whole. As explained by Jones (2011), BCP is part of a BCM process that identifies potential risks and vulnerabilities and their impact on an organization as it provides processes and procedures for mitigating the risks and effectively responding to a disruptive event in a way that safeguards the interest of the organisation's key stakeholders, reputation, brand and value-creating activities. The strategic contribution offered by both BCP and FM appears to be acknowledged and understood by the theorists, academics, professional bodies and key stakeholders (Pitt & Goyal 2004).

Nonetheless, a survey conducted on IT managers revealed that over 60% of the business surveyed did not have a basic plan to mitigate the effects of disaster. Furthermore, half of all business that are impacted by a disastrous event are out of business for two weeks and two out of five enterprises that experience a disaster will no longer be in business five years after the event (Momani 2010). Thus, it is difficult to under estimate the importance of having BCM in organization.

Accordingly, like any other organization in the world, Malaysia SMEs are susceptible to events of disaster in which can disrupts the normal business operation hours and also will result in loss of productivity, loss of revenue, and potentially loss of professional reputation. As a matter of fact, disaster that took place in neighbouring countries also has potential to disrupt the Malaysian business organisation. For instance, the earthquake in Taiwan has disrupted internet connections in several countries in Asia and had a large impact on Malaysia too (Nazri 2012).

In fact, Everest *et al*. (2008) highlighted that emergency preparedness is no longer the sole concern of businesses located in earthquake- or tornado-prone areas of the world as the preparedness must also take into account for man-made disasters, such as terrorist attacks as well as pandemics and natural

disasters. Moreover, natural disasters represents only 1% of all serious business jeopardized (Nemzow 1997).

In Malaysia, most of the threats towards organizations came from cyber space such as hacking, harassment, forgery, malicious worms/viruses, and threats on WLAN (NISER 2005). NISER (2005) also stated that the number of incidents reported was more than 12,000 cases and that mail spamming, intrusion and virus attacks are the most common threat to organizations in Malaysia. Furthermore, a survey on the current BCM adoption status of the Small and Medium Enterprises (SMEs) in the APEC region, revealed that flood, fire and blackout were chosen by the respondents as the major potential threats for private sector organizations in Malaysia (Asian Disaster Reduction Centre 2012).

Nevertheless, during the Conference for the 3rd Asian Ministerial Conference on Disaster Risk Reduction, Ai Lin (2008) from PriceWaterhouseCoopers (PwC) Malaysia pointed out that the implementation of BCM in Malaysia is not comprehensive as it varies by sector. Generally, sectors with comprehensive BCM program only covers financial services, telecommunication, multinational oil and gas corporations and the airline and aerodrome sectors while other sectors such as SMEs are more ad-hoc (Ai Lin 2008).

In fact, in a survey conducted by Asian Disaster Reduction Centre (ADRC) and Taiwan Institute of Economic Research TIER (2011), on BCM adoption status of SMEs industry among APEC, highlighted that 50% of the respondents from Malaysia answered that they did not know about BCM, thus indicating a low level of BCM development and awareness among the SMEs (Asian Disaster Reduction Centre 2012).

In further supporting the above, recent literature review has uncovered the issues and problems that lead to poor awareness and implementation of BCM among SMEs. The issues stated are; (i) lack of top management commitment and support, (ii) complexity of business plan, (iii) too costly for SMEs, (iv) lack of understanding and coordination in organisation, (v) financial performance, (vi) lack of BCM knowledge and expertise (vii) lack of information needed for BCM development and lacking of commitment on cultural changes in the organisation. (ENISA 2010; Botha & Von Solms 2004;)

Furthermore, until today, there is no academic research in Malaysia focussing on the BCM implementation in SMEs. There is only three study done by Mansol *et al*. (2014) that focused on the success factors of BCM implementation in Malaysia's organisation. In realising the research gap that existed, there is a need to study on the success factors of BCM implementation in Malaysia's SMEs as BC in SMEs is as important and critical as it is to the big organisations.

1.3 Problem Statement

Ideally, BCM is an organisation's last line of defence when all other controls have failed. BCM may prevent drastic events such as injury, loss of life or failure of an organisation. It ensures that the business will operate prior, during and after the disaster events (Gibb & Buchanan 2006; Conrad *et al*. 2012; ENISA 2010). BCM is also capable in minimising the time of interruptions of business operations, reducing the impact of disaster, enables rapid recovery, and resumptions of critical business functions for the fulfilment of business obligations (Botha & Von Solms 2004; Garrett 2012; Syrmoula 2010).

Nevertheless, despite realising the significant of BCM implementations to SMEs in Malaysia and all the effort by related authorities, most of the local SMEs still failed to understand what BCM is all about, let alone to implement it. The reason behind the failure lies much on the late awareness of the importance of BCM in Malaysia. On 2005, Shamsudin Jalil , a certified Cyber Defence Associate with Cyber Security Malaysia and also a ABCP certified with DRI Malaysia, started to discuss on how to raise the awareness of BCM importance in Malaysia by suggesting five crucial points. One of the point is to increase the number of certified BCM professional in the country. Hence, as a result, DRI Institute of Continuity Management for Malaysia chapter was established to promote BCM educational and certification programs in Malaysia. The second crucial point as suggested by Shamsudin Jalil was to develop a fast-track BCM national standards as a guide by the organisation. Consequently, in the year 2007, the first Malaysia Standard on BCM Framework was published by SIRIM. However, the new standard discusses and provides the end-users with a structured process of developing a BCM framework, but not a guideline on how to implement the BCM framework in organisations.

The failure to understand BCM is further highlighted in a survey by ADRC and TIER in 2011 that 50% of the respondents from Malaysia SMEs answered that they did not know about BCM and apart from that, recent study also showed that BCM in Malaysia is seldom discussed academically. Currently, in Malaysia there are only three academic papers published by researchers from USIM that discussed on BCM academically. It focused on public organisations but not on SMEs. Majority of the academic papers on BCM were published by international researchers and focused on the concepts of BCM only. There are 11 international academic papers that discussed BCM in SMEs.

In Malaysia, the first out of three studies mentioned above focused on exploring and identifying the success factors of the execution of BCM in the

organisation that had been carried out by Mansol *et al*. (2014). This study was carried out on local licensed public key infrastructure (PKI) authorities. The findings identified four success factors, namely; (i) management commitment, (ii) training and skills, (iii) awareness, and (iv) information and knowledge sharing.

The second study aimed to explore and identify the effects of organisational culture on the successful implementation of BCM in Malaysian organisations. It was carried out by Mansol *et al*. (2015) and 22 Malaysian IT organisations and departments were selected as the respondents. The study highlighted the organisations' employees' view on the importance and effect of organisational culture on BCM implementation and the results are very useful as guidance for organisations in Malaysia, specifically to monitor security incidents or threats.

As for the third study, it aimed to present the organisational culture metrics model using Goal-Question-Metric (GQM) approach in measuring the readiness of the organisation to implement BCM and its BCM compliance. The findings of this study would definitely help the organisation in terms of their readiness to set up BCM and its BCM compliance in the organisation.

In short, the review of the above literatures highlighted several salient points. Firstly, to successfully execute BCM in the Malaysian IT organisations, the four success factors namely; (i) management commitment, (ii) training and skills, (iii) awareness and (iv) information and knowledge sharing must be achieved. Secondly, organisational culture greatly impact and play an important role to organisations in terms of BCM readiness and implementation as organisational culture is the control mechanism to guide and bind employees to the organisation through the acceptance of defined standards and rules. The literatures also highlighted that GQM approach shall help to assist in developing the organisations so that they adapt to BCM culture and implementation. Thirdly, it clearly shows that there are no academic

researches so far, that focuses on BCM implementation in Malaysian SMEs. Hence, this proves that the research on the subjects is timely and called for.

Accordingly, the problem statement laid the foundation for the study to focus on answering the following research questions:

1. What are the CSFs for the BCM implementation in Malaysian SMEs?

2. What are the structural relationships between the critical success factors for successful BCM implementation in Malaysian SMEs?

1.4 Objectives of the Research

Based on the problem statements and research questions, this study focused to achieve the following objectives:

(a) To determine the CSFs for the BCM implementation in Malaysian SMEs.

(b) To develop the structural relationships between the CSFs for the BCM implementation in Malaysian SMEs.

1.5 Scope of Research

As the research encircled on the BCM and due to the rarity of BCM implementation on SMEs industry in Malaysia, the research covers the following scopes:

a) BCM Professionals, managers and consultants alike, that has been trained and credited with professional certification by DRI Malaysia Institute of Continuity Management.

The reason of choosing such scope is due to strong reason that the professional's skills, experiences and credibility are acknowledged and certified by non-profit world organisation such as DRI Malaysia Institute of Continuity Management. This is to prevent uncertainty and doubts over the professional's BCM experiences and of course the opinions that are stated during the interview, in which will dictate unfavorably over the outcomes of the research. Plus, DRI Malaysia Institute of Continuity Management certifications and credibility is recognised by BNM, SIRIM, UNISDR and ISO 27001.

1.6 Research Methodology

In achieving the research objectives, two (2) methodologies were applied throughout of this study. The two methods are:

1) Literature Review

2) Experts' Opinion Interview

The aims and techniques of each of these methods and consequently the relevant methodological issues on the data collection techniques are briefly discussed on the next page.

1.6.1 Literature Review

Literature review or archival research exists to report findings from individual studies, or a collection of studies so that it helps readers to appreciate and understand the quality of evidence supporting the research. It is divided into two, whether it is a primary or secondary data (Wayne & Menzer 2003) and influenced by different paradigms that affect the way research are designed, the findings, and the claims that the researcher might make (Crossan 2003; Brotchie *et al*. 2008).

The objective of reviewing is to provides an overview and a critical evaluation of related literature within prior BCM or SMEs researches in finding the literature gaps, methodology been used and the CSFs of BCM implementations in SMEs. Hundreds of articles from dozens of journals and database searches were explored using keywords identified from the literature reviews related with BCM regardless of the types of industry are included. This phase also enabled the researcher to design appropriate strategies in collecting and analysing the data.

1.6.2 Experts' Opinion Interview

Interviews can take many forms however as highlighted by Yin (2011), interviews may fall into two types; structured interviews and qualitative interviews. There are options within these two types on how to carry out the

interviews, the researcher is free to conducts face-to-face interviews with the participants, interview participants by telephone, or engaging them in a focus group interviews with six to eight interviewees in each group. Usually in qualitative research, the samples are purposively selected so that it will be best in helping the researcher understands the problem and the research questions (Creswell 2003).

In this study, the interactions between the interviewer and interviewee were carefully scripted into the ISM structured interview. The interviewer starts with a formal questionnaire that lists every question to be asked. Then, the interviewer formally adopts the role of an interviewer, trying to elicit responses from the interviewee. The interviewer then tries to adopt the same consistent behaviour when interviewing with every participants. Their demeanour will also be scripted, usually the result of some earlier and study-specific training aimed at conducting the data collection as uniformly as possible. As highlighted by Yin (2011) structured interviews also tend to favour certain kinds of questions; namely, questions where interviewees are limited to a set of responses predefined by the researcher.

Moreover, majority of the respondents are not available for face-to-face interview, thus, telephone interviews, Skype interviews and email conversations were also employed by the interviewer as to give more flexibility towards the interviewee. The ISM structured interview was constructed particularly to obtain the relationship between the CSFs so that the study can achieve its objectives. The sample was purposively selected from the list of BCM professional available in DRI Malaysia website and also in LinkedIn accounts.

Generally, experts' opinion interviews were sought for two main purposes. The first purpose is that the experts' opinions were sought to determine the structural relationships of the CSFs constructs for successful implementation of BCM in Malaysia SMEs using the ISM method. Meanwhile

for the second purpose, a second interview were done by gathering experts' opinion on the validity and feasibility of the CSFs model identified as a result obtained in the completed ISM method.

The flowchart for this study is shown in Figure 1.1 below.

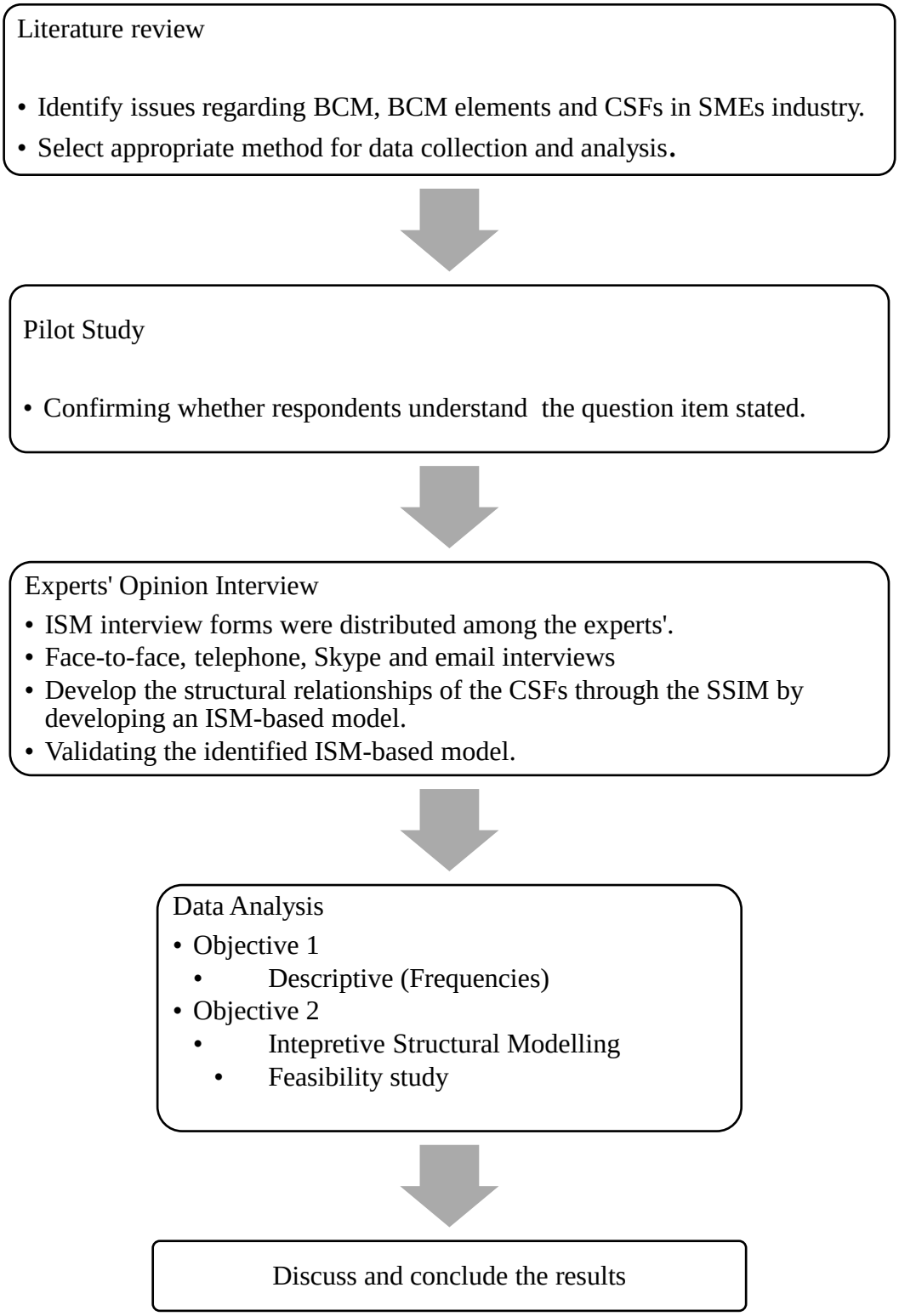

Figure 1.1: Study Flowchart

1.7 Significant of Research

The significances of this research can be seen in five aspects:

a) Lead the research in the area of BCM in SMEs;

b) Highlighting the importance of Facility Manager participation in governing BCM in an organisation and business;

c) Raising the awareness on the importance of BCM to local SMEs industry;

d) Highlighting the actual current scenarios and issues of BCM implementation in local SMEs industry as a lesson and learning process;

e) SMEs will benefit in improving business resilience, protecting its reputation, improving understanding of risk to organization;

f) The BCM CSFs will assist the Business Continuity Manager of the SMEs in initiating, developing, and implementing the BCM in the local SMEs.

1.8 Organisation of the Thesis

This thesis is divided into six (6) chapters as describes on the next page:

Chapter One (1) consists of the introduction which describes the aspects of research background, problem statement, research objectives, scope of research, research methodology, expected outcome, significant of study, and also the thesis organization.

Chapter Two (2) will discuss the definitions of Extreme and Disaster Events, BCP, DRP, BCM, and SMEs in Malaysia. The terms that constitute these elements will also be thoroughly explained, plus, the evolution of BCM will be included. It then gives a detail view of the current implementation of BCM in Malaysia with the emphasis given on the problems and issues and possible alternatives to overcome them. In this chapter too will be dedicated to discuss on the needs of BCM for SMEs in Malaysia. In between, the cause of the existence of the SMEs, the significant of its existence in Malaysia, its point of view from global market perspective on the development of SMEs and other important factors will be included in the discussion.

Chapter Three (3) describes the research methodology employed for the study and provides weight for the potential of the research to be conducted successfully. A number of data collections and analysis are discussed and finally appropriate research methods in conjunction with the conditions and environments surrounding the research are selected.

Chapter Four (4) discussed the result of the analysis on the experts' opinion interview regarding the CSFs of BCM implementation on SMEs in

Malaysia. The analysis focused on the experts' opinion upon the relationships between the CSFs identified for successful BCM implementation on Malaysia SMEs; and the feasibility study result in checking whether the ISM-based model of the CSFs is technically, operationally and economically feasible.

Chapter Five (5) covers a comprehensive analysis and highlights the discussion on the findings from the analysis of the interview in answering the objectives of the research i.e. to determine the CSFs for the BCM implementation on SMEs in Malaysia and to develop the structural relationships of the CSFs for the BCM implementation on Malaysia. SMEs.

Chapter Six (6) highlights the main conclusions and several limitations of the research. Several points for further investigation are also highlighted.

REFERENCES

ACI World Secretariat, 2012. *Best Practice Paper: BCM Framework and Case Studies For Health Related Disruptions at Airports*,

Agarwal, A., Shankar, R. & Tiwari, M.K., 2007. Modeling agility of supply chain. *Industrial Marketing Management*, 36(4), pp.443–457.

Ahmad, M.M. & Pinedo Cuenca, R., 2013. Critical success factors for ERP implementation in SMEs. *Robotics and Computer-Integrated Manufacturing*, 29(3), pp.104–111. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0736584512000658.

Alidrisi, H., 2014. Prioritizing Critical Success Factors for Six Sigma Implementation Using Interpretive Structural Modeling. *American Journal of Industrial and business Management*, 4(December), pp.697–708.

Amberg, M., Fischl, F. & Wiener, M., 2005. Background of critical success factor research. *Evolution*, 17(2), p.12. Available at: http://www.international-outsourcing.de/CSF-Tool/docs/WorkingPaper_BackgroundCSF_Ambergetal._FINAL.pdf.

Anderson, J.C. & Gerbing, D., 1988. Structural modeling in practice: A review and recommended two-steps approach. *Psychological Bulletin*, 103(3), pp.411–423.

Anker Jensen, P. et al., 2014. Reflecting on future research concerning the added value of FM. *Facilities*, 32(13.14), pp.856–870. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/F-09-2012-0070.

Asian Disaster Reduction Centre, 2012. BCP Status of the SMEs in the Asia-Pacific Region 2012. *Asian Disaster Reduction Center 2012*.

Attri, R., Dev, N. & Sharma, V., 2013. Interpretive Structural Modelling (ISM) approach : An Overview. *Research Journal of Management Sciences*, 2(2), pp.3–8.

Barbara, M., 2006. *Determining the CSFs of an Effective Business Continuity / Disaster Recovery Program in a Post 9/11 World: A Multi-Method Approach*.

Berg, B.L., 2004. *Qualitative research methods for the social sciences*,

Berman, A., 2014. Business Continuity for Small and Medium Sized Businesses. *DRI International*, pp.1–5.

Booty, F., 2010. Business Continuity. , pp.2009–2011.

Botha, J. & Von Solms, R., 2004. A cyclic approach to business continuity planning. *Information Management & Computer Security*, 12(4), pp.328–337. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/09685220410553541.

Bradley, J., 2008. Management based critical success factors in the implementation of Enterprise Resource Planning systems. *International Journal of Accounting Information Systems*, 9(3), pp.175–200. Available at:

http://linkinghub.elsevier.com/retrieve/pii/S1467089508000377.

Bruce, J.C., Langley, G.C. & Tjale, a a, 2008. The use of experts and their judgments in nursing research: an overview. *Curationis*, 31(4), pp.57–61.

Bullen, C. V & Rockart, J.F., 1981. A PRIMER ON CRITICAL SUCCESS FACTORS. *Center for Information Systems Research*, (69).

Burnett, J.J., 1998. A strategic approach to managing crises. *Public Relations Review*, 24(4), pp.475–488.

Business Continuity Institute, 2004. Business Continuity Management. , pp.1–4.

Business Continuity Institute, 2010. Good Practice Guidelines. *Practice*.

Calderon, T.G. & Dishovaska, M., 2005. Transitioning From Disaster Recovery Management To Business Continuity Management. *Internal Auditing*, 20(2), pp.21–28.

Cambridge Risk Solutions, 2010. Business Continuity : Getting Started for SMEs.

Carley, K., 1993. Coding Choices for Textual Analysis: A Comparison of Content Analysis and Map Analysis. *Sociological Methodology*, 23, p.75. Available at: http://www.jstor.org/stable/271007?origin=crossref.

Cerullo, V. & Cerullo, M.J., 2004. Business Continuity Planning: A Comprehensive Approach. *Information Systems Management*, 21(3), pp.70–78.

Chotipanich, S. & Nutt, B., 2008. Positioning and repositioning FM. *Facilities*, 26(9/10), pp.374–388. Available at: http://www.emeraldinsight.com/doi/10.1108/02632770810885733.

Conrad, E., Misenar, S. & Feldman, J., 2010. *Domain 6*, Available at: http://linkinghub.elsevier.com/retrieve/pii/B978159749563900007X.

Conrad, E., Misenar, S. & Feldman, J., 2012. Domain 8: Business Continuity and Disaster Recovery Planning. *CISSP Study Guide*, pp.343–387.

Creswell, J.W., 2007. *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*,

Creswell, J.W., 2009. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. *Research design Qualitative quantitative and mixed methods approaches*, p.398.

Creswell, J.W., 2003. Research design Qualitative quantitative and mixed methods approaches. *Research design Qualitative quantitative and mixed methods approaches*, pp.3–26.

Cronin, P., Ryan, F. & Coughlan, M., 2013. Undertaking a Literature Review: A step-by-step approach. *School of Nursing and Midwifery*, 53(9), pp.1689–1699.

Doom, C. et al., 2010. Critical success factors for ERP implementations in Belgian SMEs. *Journal of Enterprise Information Management*, 23(3), pp.378–406. Available at:

http://www.emeraldinsight.com/doi/abs/10.1108/17410391011036120.

Duncan, W.J. et al., 2011. Surviving organizational disasters. *Business Horizons*, 54, pp.135–142.

Elliott, D., Harris, K. & Baron, S., 2005. Crisis management and services marketing. , 5, pp.336–345.

ENISA, 2010. IT Business Continuity Management An approach for Small Medium Sized Organization. *ENISA: BCM: An approach for SMEs*, p.127.

Esteves, J.M., 2005. *Definition and Analysis of Critical Success Factors for ERP Implementation Projects*.

Everest, D. et al., 2008. Business Continuity Management. *Global Techonology Audit Guide*, pp.1–40. Available at: http://www.aicpa.org/InterestAreas/InformationTechnology/Resources/BusinessContinuityManagementandDisasterRecoveryPlanning/DownloadableDocuments/GTAG10BCM.pdf.

Finney, S. & Corbett, M., 2007. ERP implementation: a compilation and analysis of critical success factors. *Business Process Management Journal*, 13(3), pp.329–347.

Foster, S.P. & Dye, K., 2005. Building continuity into strategy. *Journal of Corporate Real Estate*, 7(2), pp.105–119.

Gallagher, M., 2003. *Business Continuity Management: How to protect your company from danger*,

Gallagher, M., 2005. The Road to Effective Business Continuity Management. *Accountancy Ireland*, 37(2), pp.66–68.

Garrett, D.N., 2012. *The Evolution of Business Continuity Management in Large Irish enterprises between 2004 and 2009*.

Gibb, F. & Buchanan, S., 2006. A framework for business continuity management. *International Journal of Information Management*, 26(2), pp.128–141.

Gill, T.J., 2006. Workplace Continuity: How Risk and Technology Will Affect Facilities Strategy. *Practice Briefing*, 4(2), pp.110–125. Available at: http://www.emeraldinsight.com/10.1108/14725960610651205.

Gneist, P., Kiersz, R. & Osman, O., 2009. *The Need For A Developed Business Continuity Plan*,

Guba, E.G., 1990. The alternative paradigm dialog. *The paradigm dialog*, pp.17–30. Available at: http://www.jstor.org/stable/3340973.

Hair, J.F. et al., 2010. *Multivariate Data Analysis*,

Haleem, A. et al., 2012. Analysis of critical success factors of world-class manufacturing practices: an application of interpretative structural modelling and interpretative ranking process. *Production Planning & Control*, 23(10–11), pp.722–734. Available at:

http://www.tandfonline.com/doi/abs/10.1080/09537287.2011.642134.

Haris, S.A., Adnan, H. & Jusoff, K., 2008. Facility Management Challenges and Opportunities in the Malaysian Property Sector. *Journal of Sustainable*, 1(2), pp.79–85.

Haron, H. et al., 2010. CASES OF SUCCESSFUL MALAYSIAN SMALL AND MEDIUM ENTERPRISES (SMEs): DOES BUSINESS ADVISORY SERVICES HELP ? , (September).

Henn, M., Weinstein, M. & Foard, N., 2006. A short introduction to Social Research. , pp.1–296.

Herbane, B., 2014. Small Business Journal.

Herbane, B., 2010. The evolution of business continuity management: A historical review of practices and drivers. *Business History*, 52(6), pp.978–1002. Available at: http://hdl.handle.net/2086/4288.

Herbane, B., Elliott, D. & Swartz, E.M., 2004. Business Continuity Management: Time for a strategic role? *Long Range Planning*, 37(5), pp.435–457.

Hiles, A., 2007. *The Definitive Handbook of Business Continuity Management*, Available at: http://www.amazon.co.uk/Definitive-Handbook-Business-Continuity-Management/dp/0470670142.

Hill, A. & William, A., 2013. Report Information from ProQuest. , (June).

Hooper, D., Coughlan, J. & Mullen, M., 2008. Structural Equation Modelling : Guidelines for Determining Model Fit Structural equation modelling : guidelines for determining model fit. *Dublin Institute of Technology ARROW @ DIT*, 6(1), pp.53–60.

Huckin, T., 2004. Content Analysis: What Texts Talk about. *What Writing Does and How It Does It. C. Bazerman & P. Prior (Eds.)*, pp.13–32.

IFAC, 2006. *Business Planning Guide : Practical Application for SMEs*,

Jagarajan, R., Mohd Asmoni, M.N.A. & Mei, J.L.Y., 2015. A review on critical success factors of sustainable retrofitting implementation. *Jurnal Teknologi*, 74(2), pp.109–116.

Jalil, S.A., 2003. Raising Business Continuity Management Awareness in Malaysia. *Business Continuity Management*, pp.1–8.

Jones, V.A., 2011. How to avoid disaster: RIM's crucial role in business continuity planning. *Information Management Journal*, 45(6), pp.36–40.

Kamaruzzaman, S.N. & Ahmad Zawawi, E.M., 2010. Development of facilities management in Malaysia. *Journal of Facilities Management*, 8(1), pp.75–81. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/14725961011019094.

Kaplan, B. & Maxwell, J.A., 2005. Qualitative Research Method for Evaluating Computer Information Systems. *Health Informatics System*, (2nd Edition),

pp.30–55.

Karim, A.J., 2011. Business Disaster Preparedness: An Empirical Study for measuring the Factors of Business Continuity to face Business Disaster. *International Journal for Business and Social Science*, 18(18), pp.183–192. Available at: http://ijbssnet.com/journals/Vol_2_No_18_October_2011/23.pdf%5Cnhttp://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=66726542&site=ehost-live.

Khandelwal, V.K. & Ferguson, J.R., 1999. Critical success factors (CSFs) and the growth of IT in selected geographic regions. *32nd Annual Hawaii International Conference on Systems Sciences. 1999.*, 0(c), pp.1–13.

Königová, M. & Fejfar, J., 2013. Role of Personnel Planning in Business Continuity Management. *World Academy of Science, Engineering and Technology*, 7(4), pp.176–181. Available at: http://waset.org/publications/7018/role-of-personnel-planning-in-business-continuity-management.

Leech, N.L., Barrett, K.C. & Morgan, G.A., 2004. SPSS for Intermediate Statistics : Use and Interpretation. , pp.1–255. Available at: papers2://publication/uuid/58353651-86A4-41EC-AA77-8DBCD07AF60C.

Lin, O.A., 2008. Business Continuity Planning : A Global Overview & Status in Malaysia. In *Pre-Conference for the 3rd Asian Ministerial Conference on Disaster Risk Reduction*.

Malone, D.W., 1975. An introduction to the application of interpretive structural modeling. *Proceedings of the IEEE*, 63(3), pp.397–404. Available at: http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=1451695.

Malone, D.W., 1975. An Introduction to the Application of Interpretive Structural Modeling. *Potraits of Complexity*, 9.

Mandal, A. & Deshmukh, S.G., 1994. Vendor Selection Using Interpretive Structural Modelling (ISM). *International Journal*, 14(6), pp.52–59.

Mansol, N.H., Hayaati, N., et al., 2015. Managing Organizational Culture Requirement for Business Continuity Management (BCM) Implementation Using Goal-Question-Metric (GQM) Approach. *2015 IEEE Conference on Open Systems (ICOS), August 24-26, 2015, Melaka, Malaysia*, pp.85–90.

Mansol, N.H. et al., 2014. Success Factors towards Implementation of Business Continuity Management in Organizations. *International Journal of Digital Society (IJDS)*, 5(1/2), pp.869–871.

Mansol, N.H., Alwi, N.H.M. & Ismail, W., 2015. Embedding organizational culture values towards successful business continuity management (BCM) implementation. *Conference Proceedings - 6th International Conference on Information Technology and Multimedia at UNITEN: Cultivating Creativity and Enabling Technology Through the Internet of Things, ICIMU 2014*, pp.31–37.

Mathiyazhagan, K. et al., 2013. An ISM approach for the barrier analysis in implementing green supply chain management. *Journal of Cleaner Production*,

47, pp.283–297. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0959652612005744.

Maxwell, J.A., 2005. *Qualitative Research Design: An Interactive Approach*, Available at: http://books.google.com/books?hl=en&lr=&id=XqaJP-iehskC&pgis=1.

Miles, M.B. & Huberman, A.M., 1994. Qualitative Data Analysis. In *Qualitative Data Analysis: An Expanded Sourcebook*. p. 278.

Momani, N.M., 2010. Business Continuity Planning : Are We Prepared for Future Disasters Naill M . Momani Faculty of Economics and Administration , KAU-Jeddah , Kingdom of Saudi Arabia. , 2(April 2005), pp.272–279.

Moore, P., 1995. Critical elements of a disaster recovery and business / service continuity plan. , 13(9), pp.22–27.

Msezane, T. & McBride, J., 2002. Corporate real estate and business continuity: An integrated enterprise conceptualisation. *Journal of Corporate Real Estate*, 4(4), pp.348–356. Available at: http://www.emeraldinsight.com/10.1108/14630010210811949.

Nah, F.F.H., Lau, J.L.S. & Kuang, J., 2001. Critical factors for successful implementation of enterprise systems. *Business Process Management Journal*, 7(3), pp.285–296.

Nazali, M.N. & Pitt, M., 2008. Defining Facilities Management (FM) in the Malaysian Perspective.

Nazri, N., 2012. Business Continuity Planning For All. *The Star InTech*, 53, p.160.

Nemzow, M., 1997. Business Continuity Planning. , 7, pp.127–136.

NISER, 2005. MyCERT Quarterly Summary. *2005*, 2, pp.1–16.

Noralfishah Sulaiman, Baldry, D. & Ruddock, L., 2008. The development of facilities management education in Malaysia: Universiti Tun Hussein Onn Malaysia (UTHM). *Proceedings of the BuHu 8th International Postgraduate Research Conference*, pp.315–328.

O'Regan, N. & Ghobadian, A., 2002. Effective strategic planning in small and medium sized firms. *Management Decision*, 40(7), pp.663–671. Available at: http://dx.doi.org/10.1108/00251740210438490.

Patton, M.Q., 1975. Alternative Evaluation Research Paradigm. *Rockefeller*, pp.1–51.

Patton, M.Q., 2002. *Qualitative Evaluation and Research Methods*,

Perwaiz, A. et al., 2013. APEC SME Monitor. *APEC SME Crisis Management Center*.

Pitt, M. & Goyal, S., 2004. Business continuity planning as a facilities management tool. *Facilities*, 22(3/4), pp.87–99. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/02632770410527824.

Por, J., 2008. The use of soft system methodology (SSM) in a serviced-focussed study on the personal tutor's role. *Nurse Education in Practice*, 8(5), pp.335–342.

Ram, J., Corkindale, D. & Wu, M.-L., 2013. Implementation critical success factors (CSFs) for ERP: Do they contribute to implementation success and post-implementation performance? *International Journal of Production Economics*, 144(1), pp.157–174. Available at: http://linkinghub.elsevier.com/retrieve/pii/S0925527313000509.

Ravi, V., Shankar, R. & Tiwari, M.K., 2008. Selection of a reverse logistics project for end-of-life computers: ANP and goal programing approach. *International Journal of Production Research*, 46(17), pp.4849–4870.

Sage, A.P. & Smith, T.J., 1977. On Group Assessment of Utility and Worth Attributes using Interpretive Structural Modeling. *Computer & Electrical Engineering*, pp.185–196.

Saleh, A.S. & Ndubisi, N.O., 2006. An evaluation of SME development in Malaysia. *International Review of Business Research Paper*, 2(1), pp.1–14. Available at: http://www.geasiapacifico.org/documents/IBRP1.pdf.

Salimifard, K. & Abbaszadeh, M.A., 2010. Interpretive Structural Modeling of Critical Success Factors in Banking Process Re-engineering. *Review of Business*, 6(2), pp.95–103.

Schumacker, R.E. & Lomax, R.G., 2004. *A beginner´s guide to structural equation modeling*, Available at: http://www.tandfonline.com/doi/abs/10.1080/10705511.2011.607726%5Cnhttp://www.tandfonline.com/doi/full/10.1080/10705511.2011.607726.

Sharma, H.D., Gupta, a. D. & Sushil, 1995. The objectives of waste management in India: A futures inquiry. *Technological Forecasting and Social Change*, 48(3), pp.285–309.

Shaul, L. & Tauber, D., 2013. Critical Success Factors in Enterprise Resource Planning Systems : , 45(4).

Silverman, D., 2000. Doing qualitative research: A practical handbook. *Organization*, 7, p.395.

Singh, M.D. & Kant, R., 2008. Knowledge management barriers : An interpretive structural modeling approach. *International Journal of Management Science and Engineering Management*, 9653(October), pp.37–41.

Singh, R.K., 2011. Analyzing the interaction of factors for success of total quality management in SMEs. *Asian Journal on Quality*, 12(1), pp.6–19.

Singh, R.K. et al., 2007. Modelling of critical success factors for implementation of AMTs. *Journal of Modelling in Management*, 2(3), pp.232–250. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/17465660710834444.

SMEWG, 2013. *Guidebook on SME Business Continuity Planning for Small , Medium Enterprises*,

Strauss, A. & Corbin, J.M., 1998. Open Coding. *Basics of qualitative research: …*, pp.101–121. Available at: http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Open+Coding#0.

Sudhakar, G.P., 2012. A model of critical success factors for software projects. , 25(6), pp.537–558.

Syrmoula, S., 2010. *Business Continuity*,

Tabachnick, B.G. & Fidell, L.S., 2007. Using multivariate statistics. *Using multivariate statistics 5th ed*, p.980.

Tammineedi, R.L., 2010. Business Continuity Management: A Standards-Based Approach. *Information Security Journal: A Global Perspective*, 19(1), pp.36–50. Available at: http://www.tandfonline.com/doi/abs/10.1080/19393550903551843.

Tay, L. & Ooi, J.T.L., 2001. Facilities management: a 'Jack of all trades'? *Facilities*, 19(10), pp.357–363.

Thomas, D.R., 2006. A General Inductive Approach for Analyzing Qualitative Evaluation Data. *American Journal of Evaluation*, 27(2), pp.237–246. Available at: http://flexiblelearning.auckland.ac.nz/poplhlth701/8/files/general_inductive_approach.pdf.

Thomas, D.R., 2003. A general inductive approach for qualitative data analysis. *Population English Edition*, 27(2), pp.237–246. Available at: http://tobermory.cc.strath.ac.uk/erica/module6_reader/unit2/thomas2003inductiveanalysis.pdf.

Tripathy, S., 2013. *Interpretive structural modelling for critical success factors of R&D performance in Indian manufacturing firms*, Available at: http://www.emeraldinsight.com/10.1108/JM2-11-2011-0061.

Tucker, M. & Pitt, M., 2009. Performance measurement and management in facilities management. *International Journal of Production Economics*, 41, pp.23–35. Available at: http://www.emeraldinsight.com/journals.htm?issn=0263-2772&volume=28&issue=5/6&articleid=1852668&show=html.

Waheed, Z. & Fernie, S., 2009. Knowledge based facilities management. *Facilities*, 27(7/8), pp.258–266.

Warfield, J.N., 1974. Developing Interconnection Matrices in Structural Modeling. *IEEE Transactions on Systems, Man and Cybernetics*, SMC-4(1), pp.81–87.

Warren, C.M.J., 2010a. The facilities manager preparing for climate change related disaster. *Facilities*, 28(11/12), pp.502–513.

Warren, C.M.J., 2010b. The role of public sector asset managers in responding to climate change: Disaster and business continuity planning. *Property Management*, 28, pp.245–256.

Wilson, D.C. et al., 2010. Extreme events, organizations and the politics of strategic decision making. *Accounting, Auditing & Accountability Journal*, 23(5), pp.699–721. Available at: http://www.emeraldinsight.com/doi/abs/10.1108/09513571011054945.

Yin, R.K., 1994. *Case study research: design and methods*, Available at: http://scholar.google.com/scholar?hl=en&btnG=Search&q=intitle:Case+study+research:+Design+and+Methods#0.

Yin, R.K., 2011. *Qualitative Research From Start to Finish*, Available at: http://www.americanbanker.com/issues/179_124/which-city-is-the-next-big-fintech-hub-new-york-stakes-its-claim-1068345-1.html.