RE-ENGINEERING BUSINESS CONTINGENCY PLAN TO BUILD A RESILIENT COMPANY

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Key words: re-engineering, resilient, contingency plan, business continuity, knowledge management

Abstract

According to the statistics of U.S. Department of Labor, over 40% of companies never reopen after suffering a disaster attack and over 25% of the remaining companies close within two years. Indeed, after terrorists' attack on September 11, 2001, this event evoked all companies to focus on business continuity. Sequentially, this attack also tested the business contingency plan of the disaster-affected companies. **PURPOSE:** the purpose of this paper is re-engineering the business contingency plan to build a resilient system to ensure business continuity. **GENERAL APPROACH:** A resilient system is a sustainable network of physical facilities and intellectual assets. Physical facilities are the tangible components of companies which are buildings, computer and communication equipment, and office merchandise. Intellectual assets are the intangible components of companies which are computer data, employees, and clients. **METHOD:** This research describes a combinative model for business contingency plans. Reviewing past and present literatures show that emergency managers should re-engineering business contingency plans to build a resilient system to respond an emergency. **FINDING:** The strategies for business continuity are protecting intellectual and tangible facilities, employees, and customers.

Introduction

"According to the statistics of U.S. Department of Labor, over 40% of companies never reopen after suffering a disaster attack and over 25% of the remaining companies close within two years."[13] Indeed, after terrorists' attack on September 11, 2001, this event evoked all companies to focus on business continuity. Sequentially, this attack tests the business contingency plans of the disaster-affected companies. [2][4][5][8][11] Of course, this attack also shows the importance of a Business Contingency Plan (BCP) to ensure the business continuity of an enterprise.

Knowledge consists of skills and understanding that people have gained through learning or experience to solve problems.[10][14] Today, how to manage knowledge becomes a hot topic in corporate business. A Company's process and its employee's experience are regarded as intangible and important assets in a company. Therefore, Knowledge Management (KM) is a process that people identify, acquire, develop, share, distribute, utilize, and preserve knowledge in order to improve the capability of organizations.[10]

The key concept of KM is how to get the right information to the right people at the right time.[6] Further, BCP provides the right directions to rebuild or recover the business continuity in disasters.

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Both concepts, BCP and KM, address critical issues for organizations. In order to improve the capability of business continuity, applying KM concept to re-engineering BCP is necessary for BCP managers to consider.

Purpose

The models of BCP are initiation, requirement, designing, implementation, exercising, and updating.[9] [12] In each phase, the project will produce a mountain of data and information. To link each phase as an integration task, figure 1 shows that BCP managers should transfer data and information to become knowledge. Indeed, to get the right information to the right people at the right time, the BCP managers should process knowledge in order to identify, acquire, develop, share, distribute, utilize, and preserve knowledge. To improve the effectiveness of BCP, the purpose of this paper is applying knowledge management concepts to re-engineer business contingency plans to build a resilient system to ensure business continuity.

Figure 1: Knowledge and Business Contingency Plan
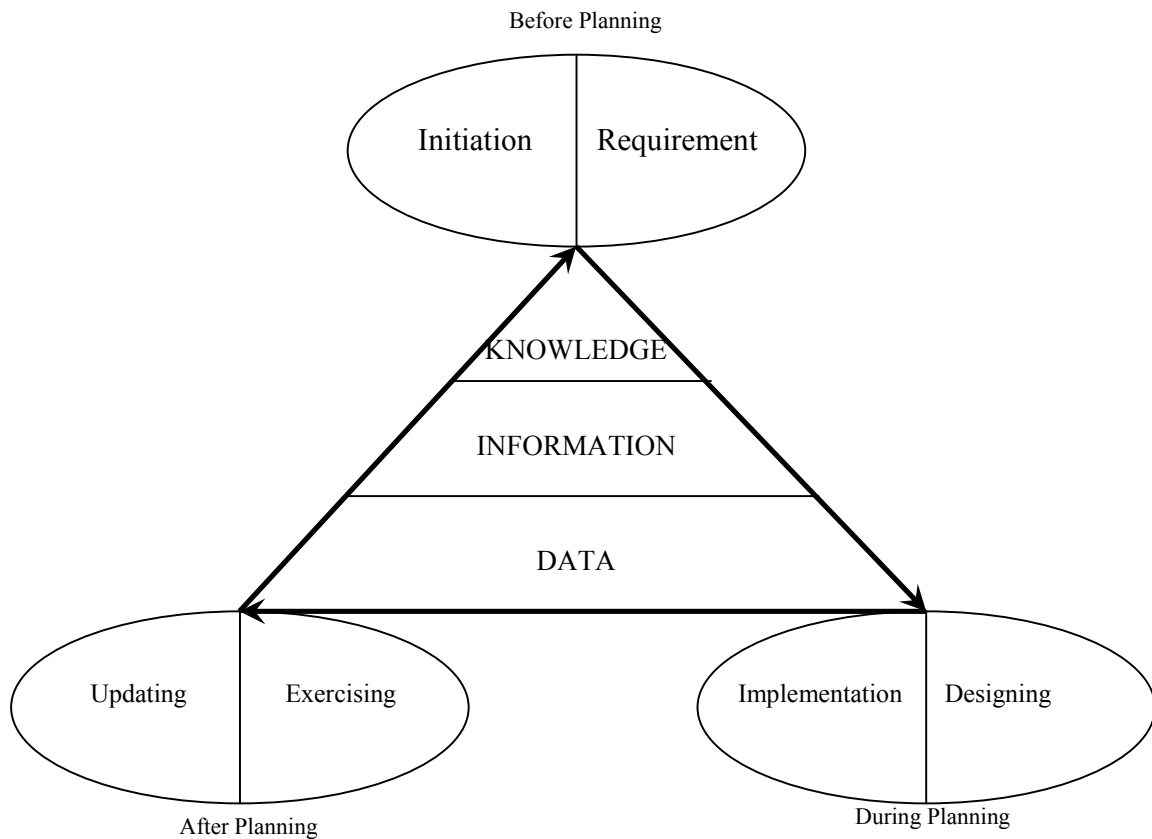
General approach

A resilient system is a sustainable network of physical facilities and intellectual assets. Physical facilities are the tangible components of companies which are buildings, computer and communication equipment, and office merchandise. Intellectual assets are the intangible components of companies which are computer data, employees, and clients.[7] In an emergency,

the tangible and intangible assets will be damaged or affected by natural disasters or man-made hazards.[3] The purpose of BCP is building a resilient system that a company can rebuild and restore the normal business in a short time. For this reason, how to create an effective, efficient, and efficacious BCP is a challenge for BCP managers to address. Figure 2 illustrates a resilient system.

<u>Figure 2: A Resilient System</u>
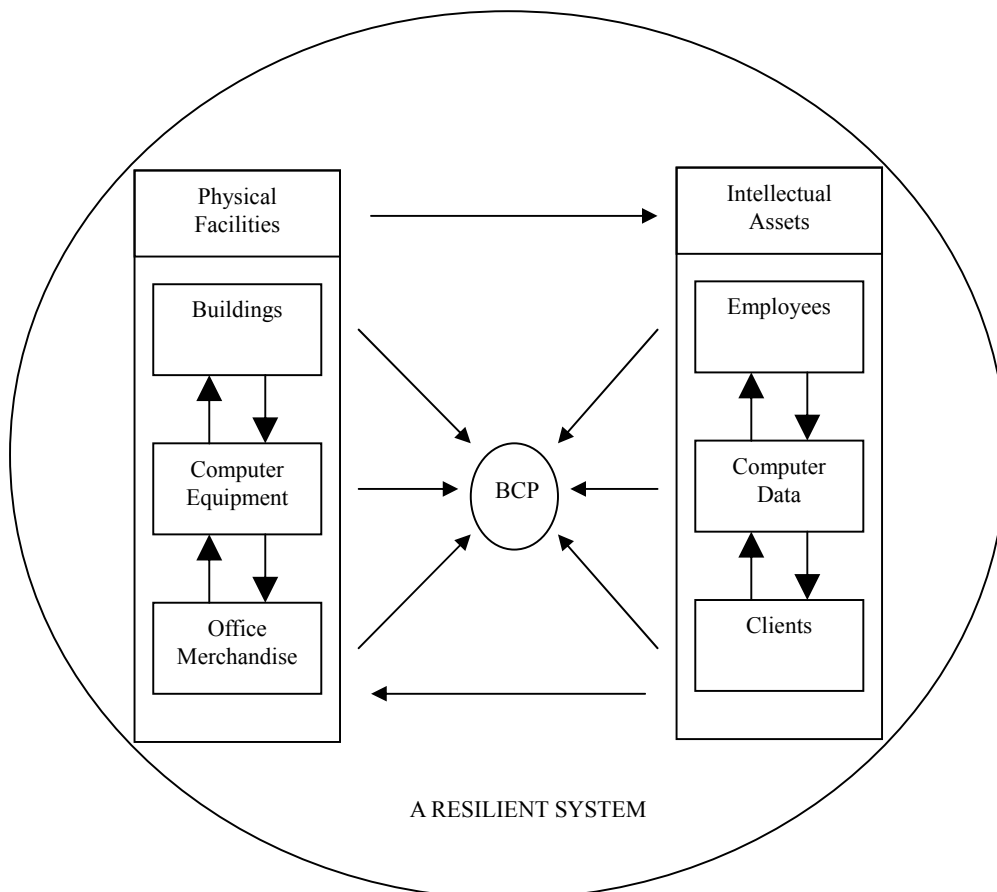
Method

After September 11, 2001, the contingency plan of a company gathers all attention from management. Suddenly, business continuity becomes a hot topic in the business administration. A large number of articles show the importance of business continuity and the consequence of an ineffective, insufficient, and inefficient contingency plan. [1][2][4][5][8][11] Thus, to accomplish this study, the author uses the ABI/Inform and Google search engines to conduct a literature and web site review with the keywords: "business continuity" and "contingency plan". Indeed, to find applicable articles and web information, the author used expert judgment to screen titles and abstracts. The process of reviewing past and present literatures focuses on the importance of business continuity and how to conduct business contingency plans. Moreover, the author analyzed the articles, gathered findings, and developed conclusions. Therefore, this research describes a combinative model for business contingency plans.

Discussion

The models of BCP

In order to understand and develop the model of BCP, people need to know what kind of risk will break the business continuity. These risks include natural disasters and man-made hazards that cause loss, damage or denial of access to infrastructure services, information systems, and key staffs and political actions that cause sabotage, extortion or commercial espionage.[9] Further, BCP managers can use a development life cycle to create a BCP as figure 1. [12] The following table 1 demonstrates the detail model of BCP. [3][9][12]

Table 1: The Detail Model of Business Contingency Plan (BCP)

Initiation Phase	Set Planning Policy and Form Steering Committee
Requirement Phase	Risk, Business Impact, and Cost-Benefit Analysis
Designing Phase	Scope and Objective
	Risk Reduction Measure
	Disaster Recovery Strategy
Implementation Phase	Procedure Development
	Command, Control, and Communication
	Delegation and Resource
Exercising Phase	Education and Awareness
	Training and Plan Testing
Updating Phase	Review and Change Plan

The process of KM

Knowledge is a valuable asset for a business. Certainly, the right utilization of knowledge can improve the function and capability of BCP to guarantee that companies survive in disasters or terrorist's attacks. To achieve this goal, BCP managers should understand what is knowledge management. Knowledge management includes: (cf. Fig. 3)[10][14]

> **Knowledge base:** The knowledge base is a repository that consists of individual and organizational knowledge to assist the organization to accomplish its tasks. The individual and organizational knowledge can come from internal employees or external consulting companies. Meanwhile, this knowledge base includes data and information which organizations create.

> **Identify knowledge:** Knowledge is not visible. How can we expose the existing knowledge? Further, people face overwhelming information today. To find and locate the

right knowledge, managers need to explore the unknown experts, map the knowledge assets, and build the expert networks in the internal and external environment of organizations.

Acquire knowledge: Knowledge exists not only inside organizations, but also as outside resources. Of course, research and development can be done internally to improve and update knowledge. However, the potential knowledge providers may come from customers, suppliers, competitors, and partners. Therefore, managers should involve stakeholders' knowledge into knowledge management.

Develop knowledge: A genius is ordinarily 10% inspiration and 90% perspiration. Traditionally, companies use the department of research and development to create new procedures, new products, and more efficient management. In fact, knowledge exists in all areas of the company. High performance teams can bring new management procedures during their problem-solving processes. An employee can bring new and better ideas by his/her creativity. Because of this, companies need to stimulate internal experts' knowledge in order to build new expertise.

Share and distribute knowledge: Sharing and distributing knowledge is getting the knowledge to the right place. In an organization, knowledge sharing is a crucial part of knowledge management to achieve a successful business. Of course, managers should encourage employees to share the knowledge. Indeed, using an electronic device to create knowledge networks can improve the capability of knowledge distribution.

Use knowledge: One of the purposes of knowledge management is utilizing knowledge to benefit the organization. "Knowledge is of no value if it is not applied." For this reason, managers should inspire employees to use knowledge. Further, eliminating the organizational boundary and individual barrier also increases the utilization of knowledge.

Preserve knowledge: Knowledge is an important asset as memory of a company. While employees or experts leave companies, they will take their knowledge and experience away. Consequently, companies will lose employees' skill and experts' knowledge. Therefore, organizations need to find an effective and efficient method to preserve knowledge.

Figure 3: The Process of Knowledge Management
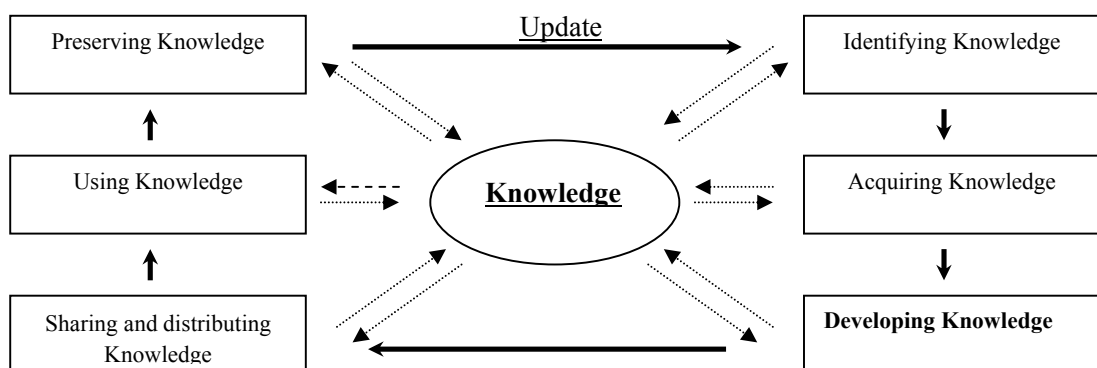
Findings

The combinative model of BCP

To develop a comprehensive BCP, the first challenge is to get the right information. The knowledge base is a good resource that includes individual and organizational knowledge. To

create a knowledge base of BCP, companies should set contingency planning policy, form a contingency steering committee, map the existing knowledge of BCP, and involve senior management. Surely, using outside experts and involving stakeholders in BCP are also good ways to develop a knowledge base. Moreover, to find and locate the right knowledge, companies should analyze the existing infrastructure to determine what is the business impact and what is the cost-benefit of counter measures.

The second challenge for developing BCP is getting the information to the right people. To accomplish this task, organizations need to know how to share the knowledge of BCP in order to determine what is the scope and objective of BCP, to develop risk reduction measures and a disaster recovery strategy, and to create emergency response procedures. Further, applying collaborative technology such as a message system and a video-conferencing network can improve the implementation of command, control, and communication in organizations. Of course, delegating the right person to handle an emergency is also a key issue for BCP to address. As a result, a knowledge network from internal employees or external consulting companies can improve the distribution and implementation of BCP.

The final challenge for BCP is getting the right information to the right people at the right time. Certainly, training, exercising, and testing can evaluate BCP to make sure that the right information sends to the right people at the right time. Indeed, they also can increase the utilization of knowledge of BCP to benefit the organization. In order to increase the utilization of knowledge managers should eliminate the organizational boundary and individual barrier. In addition, to prevent BCP to become outdated and to protect the loss of valuable assets, managers should preserve, update, and maintain BCP by using a wide range of storage media.

Figure 4 shows the combinative model of BCP. Table 2 shows the detail of the combinative model of BCP.
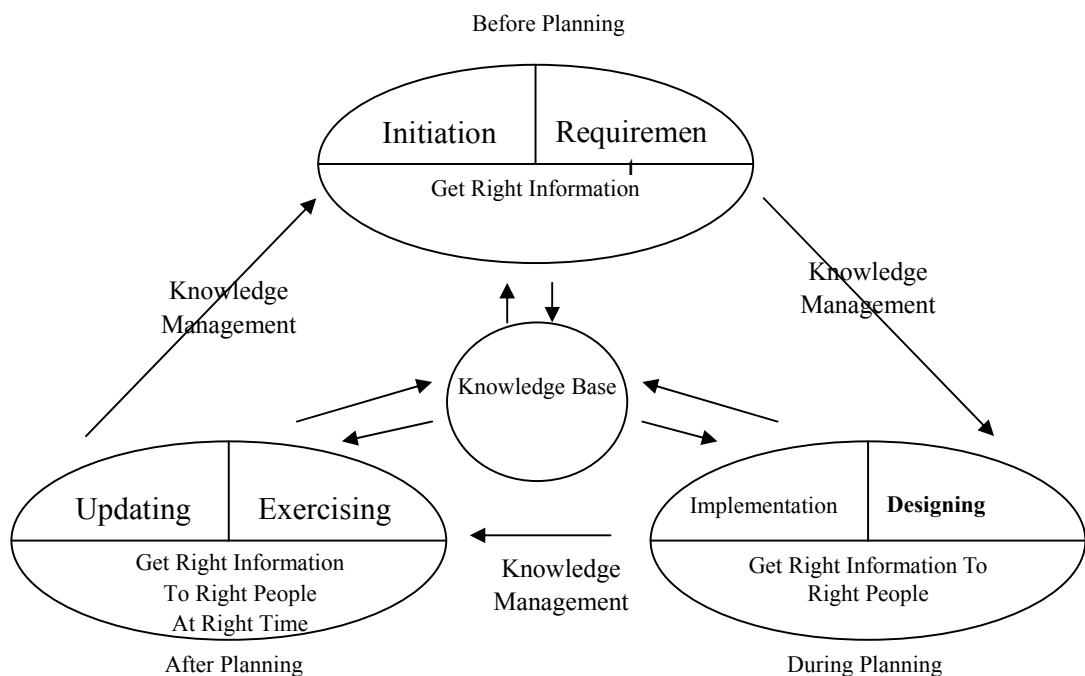
Figure 4: The Combinative Model of BCP

Table 2: The Detail of the Combinative Model of BCP

Get the Right Information	
Initiation Phase	Create Knowledge Base of BCP
	Set Planning Policy
	Form Steering Committee
	Map the Existing Knowledge of BCP
	Involve Senior Management
Requirement Phase	Risk, Business Impact, and Cost-Benefit Analysis
Get the Right Information to the Right People	
Designing Phase	Scope and Objective
	Risk Reduction Measure
	Disaster Recovery Strategy
Implementation Phase	Procedure Development
	Command, Control, and Communication
	Delegation and Resource
Get the Right Information to the Right People at the Right time	
Exercising Phase	Education and Awareness
	Training and Plan Testing
	Eliminate Organizational Boundary and Individual Barrier
Updating Phase	Preserve, Review, and Change Plan

Conclusion

The strategies for business continuity that involves organization, process, and technology are protecting intellectual and tangible facilities, employees, and customers. In a business, organization, process, and technology are three key elements. Building a successful business requires managers to form these elements. Certainly, knowledge management can achieve this goal to integrate organization, process, and technology as a circle.[6] Likewise, to provide business continuity, a good BCP will apply technologies to rebuild and restore organizational processes in order to recover organizations. As a result, applying knowledge management to BCP is a method to ensure business continuity, to improve the capability of emergency response, and to secure the company's intellectual assets.

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Acknowledgments

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