Business Impact Analyst (BIA) session runner

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ABSTRACT

BUSINESS IMPACT ANALYST (BIA) is a system that has been essential in being a part of business continuity. As business continuity is management that have been taken over the company when emergency situations like fire, flood, and other similar incidents take place. This process, which is called business continuity plan, has been taken to recover the company’s normal flow to avoid massive loss in the incident. BIA is a part of the business continuity plan, which indicates the critical level of the department in the company so that Business Continuity Management (BCM) knows how to plan for the recovery in the limited time. In reality, the BIA process begins when BCM coordinator sets the survey questions and assigns one staff member from each department in the company. The staff members assigned are called Business Continuity Plan (BCP) coordinator units. BCP coordinator units will insert the required data into the survey. BCM coordinator will later analyze and determine which is the critical department. The system in this project will help BCM coordinator to set the template and questions in the form for gaining the required data and also help BCP coordinator units more easily to insert the data.
ABSTRAK

Table of Contents

DECLARATION iii
ACKNOWLEDGMENTS iv
ABSTRACT v
ABSTRAK vi
Table Of Contents vii
List Of Table ix
LIST OF FIGURE x
LIST OF ABBREVIATIONS xi

CHAPTER 1 1
  1.1 Project Background 1
  1.2 Problem Statement 2
  1.3 Objectives 2
  1.4 Review Of The Previous Work, Existing System 2
    1.4.1 The Sungard Business Impact Analysis 3
    1.4.2 RSA Archer Business Continuity Management 3
    1.4.3 The Revive Business Continuity Management System 4
    1.4.4 ISO 22301 BUSINESS CONTINUITY 4
  1.5 Terminology 4
  1.6 Method Of Approach 5
    1.6.1 Joint Application Development 5
    1.6.2 PHP 6
    1.6.3 HTML 6
    1.6.4 Mysql 6
  1.7 Scope And Limitation 7
  1.8 Outline Of Material 7

CHAPTER 2 8
  2.1 User Requirement 8
    2.1.1 Product perspective 8
    2.1.2 Product functions 10
2.1.3 User characteristics
2.1.4 Constraint
2.1.5 Assumptions and dependencies
2.1.6 Specific requirements
2.1.7 System Features
2.1.8 System Feature 2
2.1.9 System Feature 3
2.2 Design Description
  2.2.1. Preliminary Design
2.3 Method And Material

CHAPTER 3
  3.1 Physical design
  3.2 Database Design
  3.3 Program Structure Chart
  3.4 Interface Chart
  3.5 Detailed module
  3.6 System Architecture
  3.7 Test Plan
  3.8 Coding Approach
    3.8.1 Coding
  3.9 Testing Result
    3.9.1 Installing Xamp

CHAPTER 4
  4.1 Achievement
  4.2 limitation
  4.3 Future Work
List of table

TABLE 2.1: USER INTERFACE AND DESCRIPTION ................................................................. 8
TABLE 2.2: HARDWARE INTERFACE AND DESCRIPTION FOR BIA SESSION RUNNER ................. 9
TABLE 2.3: SOFTWARE INTERFACE AND DESCRIPTION FOR BIA SESSION RUNNER ...................... 9
TABLE 2.4: COMMUNICATION INTERFACE AND DESCRIPTION OF BIA .................................. 10
TABLE 2.5: USECASE AND FUNCTION .................................................................................. 10
TABLE 2.6: USER AND THE USER INTERFACES WHEN ACCESS TO BIA SESSION RUNNER ........... 12
TABLE 2.7: SOFTWARE INTERFACE SPECIFICATION FOR BIA .................................................. 16
TABLE 2.8: COMMUNICATIONS INTERFACES AND IT FUNCTION FOR BIA ................................. 16
TABLE 2.9: USE CASES FOR BIA SESSION ............................................................................ 24
TABLE 2.10: USE CASES FOR BIA REPORT ........................................................................... 27
TABLE 3.1: DETAIL DATABASE .............................................................................................. 39
TABLE 3.2: INTERFACE CHART .............................................................................................. 42
TABLE 3.3: TEST PLAN ............................................................................................................. 45
TABLE 3.4: TEST RESULT ......................................................................................................... 50
LIST OF FIGURE

FIGURE 2.1: USE CASE DIAGRAM FOR BIA SESSION RUNNER .......................................................... 10
FIGURE 2.2: STATIC ORGANIZATION OF BIA SESSION RUNNER ................................................... 33
FIGURE 2.3: STATE DIAGRAM FOR BIA SESSION RUNNER ............................................................ 34
FIGURE 2.4: STATE DIAGRAM FOR BIA CONFIGURATION ................................................................. 34
FIGURE 2.5: STATE DIAGRAM FOR BIA SESSION .............................................................................. 35
FIGURE 2.6: STATE DIAGRAM FOR BIA REPORT ................................................................................ 35
FIGURE 3.1: DATABASE DESIGN ......................................................................................................... 38
FIGURE 3.2: SYSTEM LOGIN PAGE INTERFACE CHART ................................................................. 40
FIGURE 3.3: STAFF PAGE INTERFACE CHART .................................................................................. 41
FIGURE 3.4: ADMIN PAGE INTERFACE CHART ............................................................................... 41
FIGURE 3.5: CLIENT-SERVER ARCHITECTURE .................................................................................. 43
**LIST OF ABBREVIATIONS**

<table>
<thead>
<tr>
<th>ABBREVIATION</th>
<th>FULL DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>BCM</td>
<td>Business Continuity Management</td>
</tr>
<tr>
<td>BCP</td>
<td>Business Continuity Plan</td>
</tr>
<tr>
<td>BIA</td>
<td>Business Impact Analysis</td>
</tr>
<tr>
<td>CBF</td>
<td>Critical Business Function</td>
</tr>
<tr>
<td>AWP</td>
<td>Alternate Workaround Product</td>
</tr>
<tr>
<td>VNCR</td>
<td>Vital Non-Computerised Record</td>
</tr>
</tbody>
</table>
CHAPTER 1

INTRODUCTION

1.1 PROJECT BACKGROUND

Since the September 2001 world trade center disaster, business continuity have becoming increasing commonly area of concern in which an unforeseen incident created a sudden and severe threat to crucial functions for a number of companies. Business continuity plan is a plan that ensures the functionality of important department in the company during and after the disaster. Business continuity plan also re-establishes full functioning as swiftly and smoothly as possible. According to many experts, the first step in business continuity planning is deciding which of the organization’s function are essential and apportioning the available budget accordingly.

By implementing a Business Continuity Plan your business will increase its recovery capabilities dramatically. And that means you can make the right decisions quickly, cut downtime and minimize financial losses. Preparedness is the key. It gives confidence. Having Business Continuity Management (BCM) in place demonstrates a duty of care to your customers and suppliers. It’s a visible way of meeting your customers’ expectations and emphasising due diligence to key stakeholders. It helps safeguard your company’s reputation. BCM will ensure you continue to operate and to meet legal, regulatory and contractual obligations. Through good BCM practice you can protect your business. Still not convinced? Think that a Business Continuity Plan is just for those rare incidents that will never happen to you..? Think again. What are you going to do if there is a power cut, a computer virus attack, equipment failure, theft, and flooding, accidental damage? And that’s naming just a few. Business Continuity is not just about the high profile disasters we hear about. It’s about being ready for any incident that may cause a disruption to your business.
The implementation show how important that is business continuity plan is needed in the business. The BCM includes all of your business and all of the risks that u business face.

1.2 PROBLEM STATEMENT

In business continuity plan there is important for a company to determine the critical level of each department when an emergency condition is happen. When to prepare the business impact analyst, a lot of information required when fill it manually which cause a lot of time waste to require back the information. The business impact analyst also needs a period of time to finalizing the summary of each critical level of department. There is no system implemented by the customer currently.

1.3 OBJECTIVES

The objective of this proposal is to:

1) To develop a system for managing business impact analyst session on the department level.
2) To increase the effectiveness of information management for Business impact analyst.
3) Time effectiveness to finalizing the summary

1.4 Review of the previous work, existing System

The system that developed is based on business continuity management (BCM). The BCM is a management that help the company to overcome the disaster in the company by ensure an effective way to minimize the loss and help to restore the company
operation to the normal. As being told by Elliot, D “identifies an organization's exposure to internal and external threats and synthesizes hard and soft assets to provide effective prevention and recovery for the organization, while maintaining competitive advantage and value system integrity”[1]. So it is important in business as the company have meet into the disaster.

1.4.1 The SunGard business impact analysis

The SunGard business impact analysis having intelligent survey to help company gather critical data. This system can then consolidate the information and generates a detail picture of company financial and operational vulnerabilities using more than 150 plans. In disadvantage this system is using survey data to gather the critical data, as the survey target is giving the wrong info will lead to ineffective plan in business continuity and another consent is the each department have a different type of critical data as same survey form is being used will be in appropriate. This system is using the same function as the current system developed but it’s have using a different method as this method disadvantage can affect the effectiveness of the plan

1.4.2. RSA archer business continuity management

RSA archer business continuity management is a full function software in business continuity management. This is a web-based solution combining the business continuity, disaster recovery and crisis management into a single management system. Apart of this software having business impact analyses which is measure the value of the business process and prioritise them according to the impact to you revenue, brand image, stakeholder confidence and customer loyalty in the event of process disruption or failure. This system having a similar function with the system that develops in this project. But this software having a more complex functioning in this system that need human resource to train staff to use the system whereby the current system being developed will be more simplify.
1.4.3 The revive business continuity management system

The revive business continuity management system is another powerful tool in business continuity management as this system having a complete solution as above software. This software can give the recovery target for all dependant resource when the time of event or disaster happens. It also dynamic to show what you need to do when you at the destination. This system has given a nice control to the situation to the situation that will be happen. This feature is nice to implement to the current system that will be developed because this feature will be make the user job become more systematic and have a target to the user.

1.4.4 ISO 22301 BUSINESS CONTINUITY

ISO 22301 is a management systems standard for BCM which used by organizations of all sizes and types. These organizations will be able to obtain accredited certification against this standard and so demonstrate to legislators, regulators, customers, prospective customers and other interested parties that they are adhering to good practice in BCM. ISO 22301 also enables the business continuity manager to show top management that a recognized standard has been achieved. ISO22301 emphasizes the need for a well-defined incident response structure. This ensures that when incidents occur, responses are escalated in a timely manner and people are empowered to take the necessary actions to be effective. Life safety is emphasized and a particular point is made that the organization must communicate with external parties who may be affected, for instance if an incident poses a noxious or explosive risk to surrounding public areas.

1.5 TERMINOLOGY

<table>
<thead>
<tr>
<th>WORD</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business impact analysis</td>
<td>Essential component of an organization's business continuance plan; it includes an</td>
</tr>
</tbody>
</table>
exploratory component to reveal any vulnerabilities, and a planning component to develop strategies for minimizing risk.

| **Business continuity management** | a compilation of processes that identifies, and evaluates potential risks to an organization, development of organizations resilience by make sure critical objectives are met by ensuring availability of organizational resources [2] |
| **Business continuity plan** | is a roadmap for continuing operations under adverse conditions such as a storm |

## 1.6 METHOD OF APPROACH

### 1.6.1 Joint Application Development

The method that I will be using in this system is Joint application development (JAD). JAD is a requirement-definition and software system design methodology in which stakeholders, subject matter experts (SME), end-user, software architects and developers attend intense off-site meeting to work out the a system detail. This methodology most applicable to this system because this methodology is focuses on the business problem rather than technical detail and better used in development of business. It produces its savings by shortening the elapsed time required to gather a system's requirements and by gathering requirements better, thus reducing the number of costly, downstream requirements changes.
1.6.2 PHP

PHP is an open source general-purpose server side scripting language to produce dynamic webpages. PHP offers many advantages as it is fast, stable, secure, easy to use and open source which is free. PHP doesn’t use up a lot of system resources. So it won’t tend to slow other processes down. PHP also is easy to understand and learn especially for those with background in programming. The purpose of choosing PHP is because of the PHP community as they are willing to share the code that you would need because of PHP being an open source project.

1.6.3 HTML

Html is a main mark-up language for displaying webpage and data that can display in the web browser. HTML has a loose syntax and is widely used and established on most websites. But HTML can’t produce dynamic output alone since it is a static language. The security feature offered by the HTML is limited. So because of that in this web system, we decided to use HTML for web design purpose and PHP for data management and functionality.

1.6.4 MySQL

MySQL is a database system used on the web. MySQL database allows you to create a relational database structure on a web-server in order to store data or automate procedures. MySQL Advantage is comprised of Enhanced MySQL, Apache, PHP, and Perl, to create an integrated Web development environment which suite delivers a complete, stable environment for building and deploying database-driven applications for the Internet. This flexible, multiple-platform environment brings unity and scalability to development and Web applications. MySQL acts as a database component for many languages such as BAMP, WAMP, LAMP and MAMP. PHP and MySQL are very much used for managing database and web applications which is the reason this system needs MySQL.
1.7 SCOPE AND LIMITATION

This project will be more concentrate in business impact analyst in business continuity plan

1) In term of user in this project will be business continuity management coordinator and business continuity plan coordinator.

2) The business continuity plan coordinator is to determine the critical level of each department. While the business continuity management coordinator will finalize and summarize all information to determine the critical level of each department.

3) The timeline on this project is 1 year.

4) This project only applicable for felda Prodata system.

1.8 OUTLINE OF MATERIAL

Part 1 is a part that introduce the system that will be create, its purpose, objective, and also the review and comparing of the current system and existing system.

Part 2 is a part that describe about the user requirement, architecture design, development plan and also testing technique that will be used.

Part 3 is a part for the developed system to conclude and summarize the final result.
CHAPTER 2

REPORT BODY

2.1 User Requirement

This section describes the general factors that affect the product and its requirements.

2.1.1 Product perspective

This section shows the product perspective with other related products. The BIA session runner is a system that associated to Business Continuity Plan (BCP) which is a part from BCP.

User interfaces

The table below (table 2.1) shows the user interfaces and descriptions for BIA session runner.

<table>
<thead>
<tr>
<th>User</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configure BIA</td>
<td>This function is to set the criteria of BIA and also assigned the BCP coordinator</td>
</tr>
<tr>
<td>BIA session</td>
<td>BIA session is the session for the BCP coordinator to complete the BIA information that needed to do report and analyst.</td>
</tr>
<tr>
<td>Report</td>
<td>A report will be done to show the analyst information of the BIA which will show the critical level of each department.</td>
</tr>
</tbody>
</table>
Hardware interfaces

The table below (table 2.2) shows the hardware interfaces and descriptions for BIA session runner.

Table 2.2: Hardware interface and description for BIA session runner

<table>
<thead>
<tr>
<th>Name</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laptop</td>
<td>Develop the system, session runner purpose and for documentation purpose</td>
</tr>
<tr>
<td>Printer</td>
<td>Print out the relevant documents</td>
</tr>
<tr>
<td>Server</td>
<td>To build the connection between the PC in the company, so that they are able to sharing or transfer the document.</td>
</tr>
<tr>
<td>Server Backup Tape</td>
<td>For Backup the server storage</td>
</tr>
</tbody>
</table>

Software Interfaces

The table below (table 2.3) shows the software interfaces and descriptions for BIA session runner.

Table 2.3: Software interface and description for BIA session runner

<table>
<thead>
<tr>
<th>Name</th>
<th>Version</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 7</td>
<td>Ultimate</td>
<td>Operating System for the software</td>
</tr>
<tr>
<td>Any browser</td>
<td>-</td>
<td>A platform to let BIA runner session to run</td>
</tr>
<tr>
<td>Zend studio</td>
<td>-</td>
<td>Development of functionality or applications</td>
</tr>
<tr>
<td>MySQL Database 11g</td>
<td>-</td>
<td>Database design and implementation</td>
</tr>
<tr>
<td>Adobe dreamweaver</td>
<td>-</td>
<td>Design the GUI of the system</td>
</tr>
</tbody>
</table>
Communications interfaces

The table below (table 2.4) shows the communications interfaces and descriptions for BIA session runner.

<table>
<thead>
<tr>
<th>Communication</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Router</td>
<td>Connect the LANs in the company</td>
</tr>
<tr>
<td>Switch</td>
<td>Provide a switching function in a data</td>
</tr>
</tbody>
</table>

2.1.2 Product functions

This section provides a summary of the major functions that the software will perform. The figure below (figure 2.1) shows the use case diagram for BIA session runner.

![Use Case Diagram for BIA session runner](image)

Figure 2.1: Use Case Diagram for BIA session runner

The table below shows the functions for each use case in BIA session runner:

<table>
<thead>
<tr>
<th>User cases</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configure BIA</td>
<td>This function is to set the criteria of BIA and also assigned the BCP coordinator</td>
</tr>
<tr>
<td>BIA session</td>
<td>BIA session is the session for the BCP coordinator to complete the BIA information that needed to do report and analyst.</td>
</tr>
</tbody>
</table>
A report will be done to show the analyst information of the BIA which will show the critical level of each department.

2.1.3 User characteristics

The general characteristics of the intended users for our system are listed as below:
1. Every user should be comfortable of working with computer and web browsing.
2. User must have basic knowledge of English too. Our system default language is English.
3. User knows knowledge about task to do with the system.
4. User should have general abilities e.g. literacy and vision.
5. User should have existing skills like using keyboard and mouse.

2.1.4 Constraint

The constraints for our system are listed as below:
1. GUI is only in English.
2. Login and password is used for identification user.
3. Frequency of use: amount of skills building that takes place and knowledge user can be expected to retain.
4. Poor knowledge of the task which the system will support: level of support at interface provided for how to complete tasks.
5. Poor knowledge of computers: level of guidance provided.
6. Experience of other similar systems: user expectations and use of familiar interface conventions.
7. Poor general abilities, e.g. Literacy, vision: assumptions made about presentation of text, motor skills, and intelligence.
8. Poor attitude towards computers: level of help and guidance and way in which system is introduced to users.
9. Poor existing skills (keyboard, mouse): choice of interaction style to use to exploit existing skills considerations.
10. Lower requirement for user support than with other user types.
11. Users probably have not read any documentation.
12. User lack patience.
13. Have high expectations of performance.

2.1.5 Assumptions and dependencies

The factors that affect the requirements being changed to the users are listed as below:
1. The end user should have a basic knowledge of English and computer usage
2. Application are already created and information’s available for use.
3. Roles and responsibilities are already established.
4. Administrator is already created.

2.1.6 Specific requirements

External interface requirements

User interfaces

The table below (table 2.6) show the user and the user interfaces when access to BIA session runner.

<table>
<thead>
<tr>
<th>User Interface</th>
<th>User</th>
</tr>
</thead>
<tbody>
<tr>
<td>Configure BIA</td>
<td>BCM coordinator</td>
</tr>
<tr>
<td>BIA session</td>
<td>BCP coordinator</td>
</tr>
<tr>
<td>Report</td>
<td>BCM coordinator</td>
</tr>
</tbody>
</table>

Hardware interfaces

There are several hardware interfaces we are using which includes laptop or computer, printer, server, and server backup tape.
The table below shows the hardware interfaces and its specification for BIA session runner respectively.

<table>
<thead>
<tr>
<th>Laptop/Computer- VAIO L Series VPCL116FX/B</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Laptop Image" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Processor</th>
<th>Processor Type: AMD Dual-Core Processor E1-1200</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAM</td>
<td>4GB DDR3</td>
</tr>
<tr>
<td>Storage</td>
<td>Speed: 5400rpm</td>
</tr>
<tr>
<td></td>
<td>Storage Capacity: 500GB</td>
</tr>
<tr>
<td></td>
<td>Storage Type: Serial ATA</td>
</tr>
<tr>
<td>Power</td>
<td>Input Voltage: 100-240V</td>
</tr>
<tr>
<td>Weights and Measurements</td>
<td>Dimensions (Approx.): 13.38 x 9.28 x 0.78 in</td>
</tr>
<tr>
<td></td>
<td>Weight (Approx.): 5.39 lbs</td>
</tr>
<tr>
<td>Display</td>
<td>Display Technology: Full HD</td>
</tr>
<tr>
<td></td>
<td>Resolution: 1366x768</td>
</tr>
<tr>
<td></td>
<td>Screen Size: 15.6” diagonal High Definition HP Bright View LED Display</td>
</tr>
</tbody>
</table>
Server - IBM System x3650 M4

| References: | http://www-03.ibm.com/systems/x/hardware/rack/x3650m4/specs.html |
| Processor | Up to two 8-core Intel Xeon E5-2600 series processors |
| Memory (std/max) | Up to 768 GB via 24 slots (UDIMM/RDIMM/LRDIMM/HyperCloud DIMM) |
| Internal disk storage | Up to 16 TB (2.5" model) or 18 TB (3.5" model) SAS/SATA |
## Printer - Canon PIXMA MP258 printer

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing Resolution</td>
<td>Up to 4800 x 1200 dpi</td>
</tr>
<tr>
<td>Interface</td>
<td>USB2.0, PictBridge</td>
</tr>
<tr>
<td>Dimensions</td>
<td>444mm x 331mm x 154mm</td>
</tr>
</tbody>
</table>

## Server backup tape - HP B6000 StoreOnce Backup Systems

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capacity</td>
<td>768 TB Raw, 512 TB Useable (Maximum)</td>
</tr>
<tr>
<td>Transfer Rate</td>
<td>28 TB/hr (Maximum)</td>
</tr>
<tr>
<td>Host Interface</td>
<td>10 GbE (16) Ports and 8 Gb Fibre Channel (16) Ports and 1Gb Ethernet (16) Ports</td>
</tr>
<tr>
<td>Maximum Number of Source Appliances</td>
<td>(384) Maximum</td>
</tr>
<tr>
<td>Form Factor</td>
<td>(2) 42U racks</td>
</tr>
</tbody>
</table>

Software interfaces

The table below shows the software interfaces and its specification for BIA session runner.

**Table 2.7: Software interface specification for BIA**

<table>
<thead>
<tr>
<th>Name</th>
<th>Version number</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 7 or above</td>
<td>Ultimate</td>
<td>Operating System for the software</td>
</tr>
<tr>
<td>Google chrome</td>
<td>25.0</td>
<td>A platform to let BIA runner session to run</td>
</tr>
<tr>
<td>Zend studio</td>
<td>9.0.3</td>
<td>Development of functionality or applications</td>
</tr>
<tr>
<td>MYsql Database 11g</td>
<td></td>
<td>Database design and implementation</td>
</tr>
<tr>
<td>Adobe dreamweaver</td>
<td>Cs5</td>
<td>Design the GUI of the system</td>
</tr>
</tbody>
</table>

Communications interfaces

The table below shows the communications interfaces and its function for BIA.

**Table 2.8: Communications Interfaces and its function for BIA**

<table>
<thead>
<tr>
<th>Communication Interface</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Router</td>
<td>Connect the LANs in the company</td>
</tr>
<tr>
<td>Switch</td>
<td>Provide a switching function in a data communications network</td>
</tr>
</tbody>
</table>