

Evaluating Disaster Recovery Readiness with Zachman Framework

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Abstract

This poster describes an implementation of Zachman Framework to evaluate readiness of an IT Infrastructure of a City Council in Bay of Plenty area for disaster recovery. Following an audit of the infrastructure a number of recommendations were proposed to help the Council to determine measures to be put into places ensuring continuity of business operations in case when a disruption or disaster occurred. These recommendations are then mapped out and evaluated using Zachman Framework to find out to what extend the recommendations have covered the IT infrastructure. Comparison with other evaluations using other IT Infrastructure frameworks is also given in the poster.

Keywords: Information Systems Infrastructure, Zachman Framework, Disaster Recovery.

1 Introduction

Disaster recovery which is a subset of business continuity planning is defined (Michigan Government, n.d.) as a coordinated activity to enable the recovery of IT/business systems due to a disruption. It can be achieved by restoring IT/business operations at an alternate location, recovering IT/business operations using alternate equipment, and/or performing some or all of the affected business processes using manual methods.

Zachman Framework (Harmon, 2003) is a foundational structure for enterprise architecture framework that can be used to provide a descriptive representation relevant for describing an enterprise. It was originally published as an article in the IBM Systems Journal (Zachman, 1987).

A local city council's IT Infrastructure had been audited and evaluated. The audit and evaluation were conducted in order to find out the readiness of its IT infrastructure to cope with natural and/or man-made disruptions and disasters. From the results of the audit several recommendations are proposed to the council's business solution unit. The recommendations emanating from the audit are then evaluated with the Zachman Framework.

Other enterprise architecture frameworks are then used to evaluate the audit recommendations. The results of the evaluation are then compared with each other.

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Table 1: Mapping Audit Recommendations in Zachman Framework

	Data (What)	Function (How)	Network (Where)	People (Who)	Time (When)	Reason (Why)
Scope (Contextual)						
Business Model (Conceptual)			R22, R24, R25			R26
System Model (Logical)		R7-10, R11, R13-19, R32	R6			
Technology Model (Physical)		R30, R31	R6			
Detailed Representation						
Functioning Enterprise		R23, R27	R5, R20, R21	R12, R28	R1-4	R29

2 Conclusion

Zachman Framework is found to be useful and sufficient for evaluating a number of recommendations given to help an organisation to determine measures to be put into places ensuring continuity of business operations in case a disruption or disaster occurred. Comparison with other available IT Infrastructure frameworks shows that Zachman Framework enables to help and support managers of IT Infrastructures to prepare a relatively comprehensive disaster recovery planning and management than others. The finding from the comparison exercises confirms earlier comparisons results between frameworks as stated by Urbaczewski & Mrdalj (2006).

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4 References

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