



Visible Truths And Learning Sheet

Enterprise Architecture : An Overview

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An enterprise is a business or organization formed to produce a product or provide a service. An architecture is the design of any type of structure, whether physical or conceptual, real or virtual. A framework is a set of assumptions, concepts, values and practices that constitutes a way of viewing reality. Enterprise Architecture (EA) is all about interrogatives and perceptions. Interrogative means a word or form used to ask a question. The 6 interrogatives in the Zachman Framework for EA (hereafter referred to as the ZF) are : what ,how, where, who, when and why. The ZF differs from the other architectural framework tools in its independent holistic view of the enterprise.

The ZF is: a tool, a schema, a vehicle. The ZF is **NOT** : a methodology, a cookbook, a technology, a programming language, a coding style. The starting point is that people, not technology are the lynch pins that create a successful enterprise. The purpose of the ZF is to provide a classification schema for artifacts that describe the various types of designs used to create and deploy anything, but more commonly information systems. The ZF is organized as 36 cells arranged in a 6 by 6 matrix. It is a two dimensional schema.

Q and A

How can EA and the ZF help keep a business 'healthy' ?

They do this by learning and understanding each cell in the framework. When you do this you can reason why things work and why things fail. More importantly you can help prevent or minimize failure. The cause and prevention of this business 'disease' involves the ability to communicate and understand the basics of science, humanity, business and technology. These are the primary ingredients of a happy and healthy business life.

	DATA	FUNCTION	NETWORK	PEOPLE	TIME	MOTIVATION
BUSINESS MODEL (conceptual) Planner	 Total of Things Represented in the Business Entry = Case of Business Thing Exit = Case of Business Process	 Total of Processes in the Business System Entry = Case of Business Process Exit = Case of Business Process	 List of Elements to Which the Business Operates Entry = Major Business Location Exit = Major Business Location	 List of Organizations Important to the Business Entry = Major Department/Unit Exit = Major Department/Unit	 List of Events of Significant Importance to the Business Entry = Major Business Cycle/Year Exit = Major Business Cycle/Year	 List of Values/Reasons for Business Existence Entry = Reason for Business Existence Exit = Reason for Business Existence
BUSINESS MODEL (conceptual) Owner	 Business Model Entry = Business Entity Relationship to Business Relationship Exit = Business Entity Relationship to Business Relationship	 Business Process Model Entry = Business Process Exit = Business Process	 Business Location Model Entry = Business Location Exit = Business Location	 Business Organization Model Entry = Business Organization Exit = Business Organization	 Business Cycle Model Entry = Business Cycle Exit = Business Cycle	 Business Reason Model Entry = Business Reason Exit = Business Reason
SYSTEM MODEL (logical) Designer	 System Model Entry = System Entity Relationship to System Relationship Exit = System Entity Relationship to System Relationship	 System Process Model Entry = System Process Exit = System Process	 System Location Model Entry = System Location Exit = System Location	 System Organization Model Entry = System Organization Exit = System Organization	 System Cycle Model Entry = System Cycle Exit = System Cycle	 System Reason Model Entry = System Reason Exit = System Reason
TECHNOLOGY MODEL (physical) Builder	 Physical Data Model Entry = Physical Data Relationship to Physical Relationship Exit = Physical Data Relationship to Physical Relationship	 System Design Entry = System Design Exit = System Design	 Technology Location Model Entry = Technology Location Exit = Technology Location	 Technology Organization Model Entry = Technology Organization Exit = Technology Organization	 Technology Cycle Model Entry = Technology Cycle Exit = Technology Cycle	 Technology Reason Model Entry = Technology Reason Exit = Technology Reason
DETAILED REPRESENTATIONS (out-of-context) Subcontractor	 Data Definition Entry = Data Relationship to Data Exit = Data Relationship to Data	 Program Entry = Program Relationship to Program Exit = Program Relationship to Program	 Network Relationship Entry = Network Relationship to Network Exit = Network Relationship to Network	 Security Relationship Entry = Security Relationship to Security Exit = Security Relationship to Security	 Timing Definition Entry = Timing Relationship to Timing Exit = Timing Relationship to Timing	 Role Specification Entry = Role Relationship to Role Exit = Role Relationship to Role
FUNCTIONING ENTERPRISE	e.g. DATA	e.g. FUNCTION	e.g. NETWORK	e.g. ORGANIZATION	e.g. SCHEDULE	e.g. STRATEGY

To download a full-size pdf of this diagram go to <http://www.zifa.com/framework.pdf>. The copyright is held by the developer John Zachman.

This sheet is based on a summary of the first chapter of "Enterprise Architecture Using the Zachman Framework" 2003, O'Rourke.C et.al, publ.Thomson Learning. This book is available at www.amazon.com.

Q and A

Why classify things ? Why is the ZF a classification tool ?

The ability to think and reason is helpful when learning EA. To make thinking and reasoning about something easier, it helps to classify what you are learning or discovering. Classification is something we all learned in kindergarten.

The most complex problems in the world can be reduced to a total of 36 abstract issues. EA teaches you the rules of those issues. John Zachman's Framework for EA also called 'the framework' is a classification schema made up of 6 rows and 6 columns. Each intersecting row and column identifies a primitive topic. When combined, these topics include every detail a business needs in order to make decisions that create wealth and values for the organization.

Conclusion

The Framework (ZF) is not a "silver bullet". But if the schema enables you to be better, faster and cheaper than your competition then you are better off and you will not get fired!.

Quote from John Zachman "I would argue, we are never going to solve the enterprise problems of dealing with orders of magnitude increases in complexity and orders of magnitude increases in the rate of change unless we not only believe that architecture is practical but we actually change our behavior and DO it".