

WEAKNESSES OF ZACHMAN FRAMEWORK

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OVERVIEW

DEFINITION

“The theory of the existence of a structured set of elemental components from which complex objects can be created.”

-John Zachman CAEAP Summit 2009

ZACHMAN FRAMEWORK

ENTERPRISE ARCHITECTURE: A FRAMEWORK™



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	WHAT DATA	HOW FUNCTION	WHERE NETWORK	WHO PEOPLE	WHEN TIME	WHY MOTIVATION	
SCOPE (contextual) Planner	List of Things Important to the Business Entity = Class of Business Thing	List of Processes the Business Performs Process = Class of Business Process	List of Locations to Which the Business Operates Node = Major Business Location	List of Organizations Important to the Business People = Major Organizational Unit	List of Events/Cycles Significant to the Business Time = Major Business Event/Cycle	List of Business Goals/Strategies End/Mean = Major Business Goal/Strategy	SCOPE (contextual) Planner
BUSINESS MODEL (conceptual) Owner	e.g., Semantic Model Entity = Business Entity Relationship = Business Relationship	e.g., Business Process Model Process = Business Process IO = Business Resources	e.g., Business Logistics System Node = Business Location Link = Business Linkage	e.g., Work-Flow Model People = Organization Unit Work = Work Product	e.g., Master Schedule Time = Business Event Cycle = Business Cycle	e.g., Business Plan End = Business Objective Means = Business Strategy	BUSINESS MODEL (conceptual) Owner
SYSTEM MODEL (logical) Designer	e.g., Logical Data Model Entity = Data Entity Relationship = Data Relationship	e.g., Application Architecture Process = Application Function IO = User Views	e.g., Distributed System Architecture Node = I/S Function (Processes, Storage, etc.) Link = Line Characteristics	e.g., Human Interface Architecture People = Role Work = Deliverable	e.g., Processing Structure Time = System Event Cycle = Processing Cycle	e.g., Business Rule Model End = Structural Assertion Means = Action Assertion	SYSTEM MODEL (logical) Designer
TECHNOLOGY MODEL (physical) Builder	e.g., Physical Data Model Entity = Segment/Table/etc. Relationship = Pointer/Key/etc.	e.g., System Design Process = Computer Function IO = Data Elements/Sets	e.g., Technology Architecture Node = HW/System Software Link = Line Specifications	e.g., Presentation Architecture People = User Work = Screen Formats	e.g., Control Structure Time = Execute Cycle = Component Cycle	e.g., Role Design End = Condition Means = Action	TECHNOLOGY MODEL (physical) Builder
DETAILED REPRESENTATIONS (out-of-context) Subcontractor	e.g., Data Definition Entity = Field Relationship = Address	e.g., Program Process = Language Statement IO = Control Block	e.g., Network Architecture Node = Address Link = Protocol	e.g., Security Architecture People = Identity Work = Job	e.g., Timing Definition Time = Interrupt Cycle = Machine Cycle	e.g., Role Specification End = Sub-condition Means = Step	DETAILED REPRESENTATIONS (out-of-context) Subcontractor
FUNCTIONING ENTERPRISE	e.g. DATA	e.g. FUNCTION	e.g. NETWORK	e.g. ORGANIZATION	e.g. SCHEDULE	e.g. STRATEGY	FUNCTIONING ENTERPRISE

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THE ZACHMAN FRAMEWORK FOR ENTERPRISE ARCHITECTURE

PERIODIC TABLE

Periodic Table of Elements

1	IA	1	H	IIA	2	He	0																													
2	3	Li	4	Be	5	B	6	C	7	N	8	O	9	F	10	Ne																				
3	11	Na	12	Mg	13	Al	14	Si	15	P	16	S	17	Cl	18	Ar																				
4	19	K	20	Ca	21	Sc	22	Ti	23	Y	24	Cr	25	Mn	26	Fe	27	Co	28	Ni	29	Cu	30	Zn	31	Ga	32	Ge	33	As	34	Se	35	Br	36	Kr
5	37	Rb	38	Sr	39	Y	40	Zr	41	Nb	42	Mo	43	Tc	44	Ru	45	Rh	46	Pd	47	Ag	48	Cd	49	In	50	Sn	51	Sb	52	Te	53	I	54	Xe
6	55	Cs	56	Ba	57	*La	72	Hf	73	Ta	74	W	75	Re	76	Os	77	Ir	78	Pt	79	Au	80	Hg	81	Tl	82	Pb	83	Bi	84	Po	85	At	86	Rn
7	87	Fr	88	Ra	89	+Ac	104	Rf	105	Ha	106	106	107	107	108	108	109	109	110	110																

* Lanthanide Series

58	59	60	61	62	63	64	65	66	67	68	69	70	71
Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu

+ Actinide Series

90	91	92	93	94	95	96	97	98	99	100	101	102	103
Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

Legend - click to find out more...

H - gas

Li - solid

Br - liquid

Tc - synthetic

Non-Metals

Transition Metals

Rare Earth Metals

Halogens

Alkali Metals

Alkali Earth Metals

Other Metals

Inert Elements

MEET THE JEFFERSONS



Luxury Dry Cleaners



Each location has a computer for inventory management, accounting, and logistics that communicates to the regional warehouse computer.

Jefferson Cleaners Has Expanded!



Purchased successful cleaners in every
several metropolitan areas.

Zachman: “KNOW YOUR ENTERPRISE” (ontology)



Miami



Chicago



Los Angeles

GEORGE KNOWS THE ZACHMAN FRAMEWORK



GEORGE KNOWS HIS BUSINESS



Miami:
No Frills



Chicago:
Each Garment
Same Price



Los Angeles:
Go **Green!**

PROBLEM

How Do We Unite?

Each chain follows a different scheme

PROBLEM

“After all this time and effort, where do I go from here?”



Zachman Framework provides:

- No step-by-step procedure for creating a new architecture.
- No help in deciding if the future architecture is the best for an organization.

Framework Model Rating

(according to Rogers Sessions, ObjectWatch, Inc.)

Criteria	Ratings			
	Zachman	TOGAF	FEA	Gartner
Taxonomy completeness	4	2	2	1
Process completeness	1	4	2	3
Reference-model guidance	1	3	4	1
Practice guidance	1	2	2	4
Maturity model	1	1	3	2
Business focus	1	2	1	4
Governance guidance	1	2	3	3
Partitioning guidance	1	2	4	3
Prescriptive catalog	1	2	4	2
Vendor neutrality	2	4	3	1
Information availability	2	4	2	1
Time to value	1	3	1	4

Process completeness: can be used as a step-by-step guide

Business focus: technology used to drive business (reduced expenses & increased profits).

Partitioning Guidance: used to guide effective partitioning of enterprise (important for managing complexity).

Time to value: duration before a solution built upon the methodology delivers business value.

GARTNER

Described as a 'practice.'

Decisions are made based on the experience of well-known practitioners.

Focuses on where the organization is going and how it will get there versus where it is now.

Unlike Zachman, the concept of architecture not fixed, but a continual process of creating, maintaining and leveraging the enterprise.

CONCLUSION

Zachman Framework:

An excellent tool for determining the taxonomy of an enterprise.

Falls short at prescribing detailed solutions for enterprise problems

Often implies solutions that are idealistic at best.

Works best when combined with other methodologies

RHETORICAL QUESTIONS

Does Warren Buffet's approach to investment represent Zachman?

Is Jim Cramer's approach feeding into the "tyranny of the urgent?"

Is the Zachman Framework an enterprise version of Marxism?