

Comparing approaches for Enterprise Architects

There are at least 21 different approaches to modeling a complex evolving object, such as a business. These range from brain storming to more structured and formalized approaches.

The following table provides a quick reference guide to the approaches an enterprise architect can use to assist business operatives describe the business under the 3 sub phases of information architecture:

Method	Information architecture										
	Conceptual architecture			Logical architecture			Physical architecture				
Bachman	*			Entities & associations	*DFDs	Application generator					
*Bal sc	Objectives		Strategies		Data			*			
*BPR 1	Vision and Objectives			Baselines		*			Prototype		
*BPR 2	Ontology	Information	Function		Data			*			
*BPR 3	Plan		Analyse		Design			Implement	Evaluate		
*BPR 4	Plan		Analyse		*			Plan	Evaluate		
*BPR 5	Business modeling		System design			Implementation					
*Br storm	7 rules			*			*				
CoPR	Transcendental doctrine of method			Transcendental Logic			Transc. doctrine of elements				
FEAF	Enterprise architecture			Segment architecture			Solution architecture				
Geram	Identification	Concept	Requirement		Design	Implementation		Build	Operate	Change	
I E	Plan		Analyse		Design			Construct			
*KM	*Story telling - sharing ideas			Expert systems			Knowledge repositories				
Macroscope	Strategy		Enterprise architecture		Enterprise value management			Busn transformation & change			
NIST EA	Business		Information		Data	Applications		Technical infrastructure			
PEAF	Foundation		Management		MetaModel	Governance		Communication			
Ripose	Strategic planning architecture			Logical architecture			Solutions architecture				
	Grammatical architecture		Systems architecture		Data architecture	Applications architecture		Prototype	Production		
	Objectives	Knowledge									
TOGAF	*F&p	*Arch vision	*Busn arch	*O&s	*Acm	Information systems			*Tech arch	*Migr plan	*I g
T&Q	Trivium						Quadrivium				
	Rhetoric		Grammar		Logic						
UML	Foundation						Behaviour				
	Core		Auxiliary		Data types						
Zachman	Contextual		Conceptual		Logical			*Phys	*A b	*F e	

How does one make up their mind as to which approach to use? Here are a few benefits you should look for in relation to the approach, namely the approaches:

- Effectiveness - capability; economic viability; unique features - Common wealth
- Efficiency - speed of deliver; how practical it is to apply; how streamlined it is - Common wellbeing
- Ethics - equitability; honesty; transparency - Common good
- Ease of use - fluency; simplicity; intuitive - Common sense

*Notes:

- If we have missed an approach and you would like us to analyse it for comparison's sake, please email us at info@ripose.com
- Each phase may have multiple sub phases. Examine the method in detail for more information. We have fact sheets on most of these approaches comparing them to our baseline, namely the Ripose Technique
- The grey area suggests no deliverable or phase could be identified
- Hyperlinks may or may not work - some approaches may have been removed
- Bal sc - Balanced scorecard
- There are about 5 different BPR (business process re-engineering) approaches
 - 1) Davenport & Short
 - 2) KBSI - Knowledge Based Systems, Inc
 - 3) ProSci - A BPR education series
 - 4) ECOPI - Electronic College of process innovation
 - 5) Proforma
- Br storm - Brain storming
- DFD - data flow diagram
- KM - Knowledge management
- TOGAF architectures - F&p = Framework & principles; Arch vision = Architecture vision; Busn arch = Business architecture
O&s = Opportunities & solutions; Acm = Architecture change management; Tech arch = Technology architecture;
- Migr plan = Migration planning; I g = Implementation governance
- Zachman scopes - Phys = Physical; A b = As built; F e = Functioning enterprise

A history of methodologies, frameworks and techniques

The following table shows a time line outlining the development of the approach:

Table 1: Developer by era

Era	Charlemagne	I Kant	Bachman	Codd	Dijkstra	MA Jackson	Drucker	Yourdon	Richter	Porter	Finklestein	Martin	Zachman	Fujitsu	BPR	Geram	Kaplan	NIST EA	TOGAF	UML
782	T&Q																			
1755		CoPR																		
1960s & 1970s			RDM	3NF	SP	JSD	BSP	SADT	JSD 3NF											
1980s									IA IE	BSP	IE	IE	ZF	P+						
1990s									Ripose		ZF			Macroscope	BPR	Geram	BS	Nist EA	TOGAF	UML

Table 2: Developer, method and description

Developer	Method	Description	Era
Bachman C	RDM	Role data model	Early 1970s
BPR	BPR	Business process re-engineering	1990s
Charlemagne	T&Q	Trivium and quadrivium	782
Codd E	3NF	Third normal form - normalisation	Late 1960s
Dijkstra E	SP	Structured programming	Early 1970s
Drucker P	BSP	Business strategic planning	Early 1970s
Finklestein C	IE	Information Engineering	Early 1980s
Fujitsu	Macroscope	Based on DMR's S+ P+ A+ B+	1987
Geram	Geram	Generalised Enterprise Reference Architecture and Methodology	1990
Jackson M A	JSD	Jackson system development	1974
Kant I	CoPR	Critique of pure reason	1755
Kaplan R	BS	Balanced scorecard	1992
Martin J	IE	Information Engineering	Early 1980s
NIST	NIST EA	National Institute of Standards and Technology	1990
Porter M	BSP	Business strategic planning	1980
Richter C	3NF	Learnt how to normalise	1975
	JSD	Learnt how to structure a program from data	1977
	SADT	Studied SADT	1978
	IE	Information Engineering	1982
	IA	Information architecture	1989
	Ripose	Ripose	1990
TOGAF	TOGAF	The open group architecture framework	1995
UML	UML	Unified modelling language	1994
Yourdon E	SADT	Structured Analysis and Design Technique	1975
Zachman J	ZF	Zachman framework	1982

The information architect

The following table shows the sub classifications of an information architect and the skills an information architect needs to be a virtuoso in:

Information architect									
Conceptual / enterprise/business architect			Logical architect			Physical /solutions architecture			
Business analyst	Knowledge architect	Systems architect	Data architect		Application architect	Data base admin	Programmer	Test architect	
			Data modeler	Data base designer				Systems tester	Deployment tester

The stakeholders, skills, inputs, processes and outputs are as follows:

Stakeholder	Skill	Input	Process	Output
Strategic mgt	Business analyst	Existing organisation chart	Refinement	Refined organisation chart
		Generic business statements	Facilitated sessions	Business objectives
Tactical mgt	Knowledge architect	Business objectives	Facilitated sessions	Knowledge model
Strategic mgt	Systems architect	Knowledge model	Facilitated sessions	Prioritised systems
				Business plan - proof of concept
Operational mgt	Data modeler	Prioritised systems	Facilitated sessions	Logical data model
		Knowledge model		
None	Data base designer	Logical data model	Rationalisation	Logical data base design Subject area design
Operational mgt	Application architect	Subject area design	Rapid application design sessions	Logical applications
None	Data base admin	Logical data base design	Data base generation	Physical data base
	Programmer	Physical data base Logical applications	Program code	Unit tested code
Operational mgt	Systems tester	Unit tested code	Systems testing	Error free code Operating instructions
	Deployment tester	Error free code	Stress testing	Production systems
		Target hardware & software platforms		
		Operating instructions		Update operating instructions

Output content:

Business objectives -	Purpose statement; Benefits; Values; Performance indicators
Business plan -	Financial budgets, risk analysis, production plan, quality assurance, governance, resource plan, project plan
Logical applications -	Screen designs, menus, reports, pseudo code