The
Architected
Business Energy
Compendium
of
Ripose

Charles Meyer Richter

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17 Apr 2022 – Work In Progress

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Chapter 1 - Natural Energy and Business Energy

Preamble

After 50 years (starting in 1969) of experience and research dedicated to my chosen field of endeavour (Information Technology) I am now able to make the following declaration about the relationship between a number of subject areas, namely:

1. Natural Energy and Business Energy both of which can be further subdivided into:

   - Natural energy is subdivided into:
     - Potential Energy and
     - Kinetic Energy

   - Business Energy can be subdivided into:

     - Information – therefore the equivalent of Potential Energy and
     - Solutions – therefore the equivalent of Kinetic Energy

2. Information and Natural Intelligence (NI)
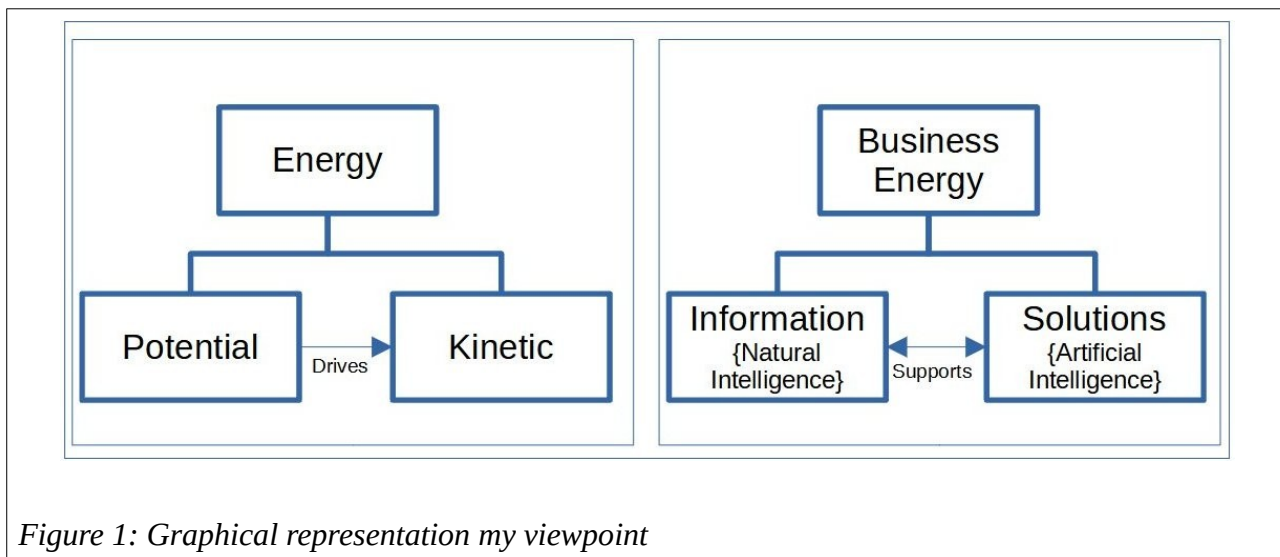
3. Solutions and Artificial Intelligence (AI)

Figure 1: Graphical representation my viewpoint

With natural energy the flow between potential energy and kinetic energy is straightforward. Both are governed by the laws of energy.

In terms of physical energy:

- "Potential energy is essentially stored energy that has the ability to do work because of the position or state of the object in question"

- "Kinetic energy is a form of energy that an object or a particle has by reason of its motion. If work, which transfers energy, is done on an object by applying a net force, the object speeds up and thereby gains kinetic energy"

Hence potential energy can be converted into kinetic energy (that is potential energy drives kinetic energy) but not the other way round.

In the case of business energy the flow between Information and Solutions is not straightforward. However each is governed by its own set of laws. The following is my interpretation of the two business energy forms:

- Information is merely a form of potential stored in the minds of business operatives

- Solutions are a form of motion in that the computer carries out a series of instructions simulating the work contained in the minds of human beings

Hence information supports solutions and solutions supports information.

Having deduced the above I am now in the position to declare that Natural Intelligence drives Artificial Intelligence. This now enables me to provide my definition of what Information means to me and how it is used to deliver my definition of a Solution:

- Information is the potential energy that drives Natural Intelligence to produce Solutions

- Solutions drive Artificial Intelligence to realise the potential of Natural Intelligence

Without extensive/explicit Information AI is as useless as trying to use a hammer to drive a screw into any surface and expect it to perform efficiently and effectively.

I will now begin my compendium ("a collection of concise but detailed information about a particular subject, especially in a book or other publication") by providing you with my Ripose Manifesto.

The Ripose Manifesto

<u>Definitions</u>:

Ripose – Rapidly Integrates Patterns of Strategic Elements

Manifesto - "A published declaration of the intentions, motives or views"

The following dissertation is the manifesto of Charles Meyer Richter (the founder and developer of the Ripose Technique also known as Information Architecture) and Caspar (the software compilers that implements the Ripose Technique. An acronym for Computer Assisted Strategic Planning and Reasoning).

My Ripose Manifesto is a set of 22 principles (also known as regulation governing actions, arrangements, conduct, directives, mandates, procedures, rules or statutes) of Information Architecture.

<u>1. 22 Rules</u>

These 22 Rules govern the way in which Ripose defines and manages business energy.

<u>2. Information and Solutions</u>

The first sub principle of rule number 1 is that there are 2 sub rules, namely Information and Solutions.

<u>3. Information</u>

Information provides business operatives (Chief officers and their first reports) and data technologists (database designers and computer systems designers) with potential. Just as Potential Energy is a form of physical energy so too is Information the Potential of every enterprise. Note: Potential is not the same as capability. Potential drives capability.

4. Potential

The potential that Information provides is to enable database designers and computer language coders to convert the Potential Energy of Information into Kinetic Energy known as Solutions. Just as Kinetic Energy is the result of Potential Energy so too are Solutions the result of Information. Therefore the Ripose Technique defines Information as the Potential Energy that drives Natural Intelligence to produce Solutions that drives Artificial Intelligence (AI) to realise the potential of Natural Intelligence.

5. Viewpoints of Potential

The potential of Information (the driver of Natural Intelligence) is sub-divided into 2 viewpoints, namely, Conceptual (rule 7) and Logical (rule 18).

6. Solutions

The second sub principle of rule 1 is that Solutions are the physical manifestations created from the potential of Information.

7. Conceptual Information

The first sub rule of rule 5 (Conceptual Information) is that it is sub-divided into Objectives (rule 8), Knowledge (rule 14) and Policies (rule 15).

8. Objectives

Objectives are sub-divided into Goals (rule 9) and Measures (rule 13). Objectives are managed by a Grade 1 Information Architect (RA1) who will be taught how to identify and define Objectives.

9. Goals

Goals are behaviours that are either good or bad.

10. Good Behaviour

There are 16 Good Behaviour (Goals) which are either a single Purpose, 4 Benefits or 11 Values. These goals will result in the survival of the enterprise and its stakeholders. The adult human being aspires towards and is capable of teaching others to behave well.

11. Bad Behaviour

The 16 Bad Behaviour (Goals) are either a single Counter-Purpose (opposing others and their purposes), 4 Hardships or 11 Disrespects (De-valuing others). These goals may result in the apparent survival of the enterprise but will cause the demise of its stakeholders. This is the basis of greed and results in bullying. Adolescent delinquents use bad behaviours to force others to behave badly.

12. SWOT

A Strengths, Weaknesses, Opportunities and Threats (also known as SWOT) analysis is carried out on the 11 Values to determine the priorities in which the Information, contained in the Measures, are identified. There is no sense in carrying out a SWOT analysis on Disrespects.

13. Measures

Measures are sub-divided into Key Performance Indicators (KPIs) and their relevant Performance Indicators (PIs) to determine how Values are evaluated.

14. Knowledge

Knowledge is identified by asking and answering 23 fundamental questions using the identified Measures and prioritised starting from the Weakest Value(s). This will prevent any further degradation of the Value and assist in identifying any Threats. This is followed by using the Measures identified by the Strongest Values which will help identify the Opportunities:

14.1. Knowledge Management

Knowledge is managed by a Grade 2 Information Architect (RA2) who will be taught how to define the types of all the classes.

14.2. Fundamental Knowledge

There are 3 types of Fundamental Knowledge Classes.

14.3. Secondary Knowledge

Further Knowledge is acquired by identifying Secondary Knowledge Classes.

14.4. Secondary Knowledge Types

There are 4 types of Secondary Knowledge Classes.

15. Polices

Polices (aka Actions and/or Systems) are the Strategies and Tactics resulting from the discovery of Knowledge:

15.1. Core capabilities

These are also known as the core and ancillary business capabilities.

15.2. Policy Management

Policies are managed by a Grade 3 Information Architect (RA3) who will be taught how to identify said Policies.

16. Strategies

There are only 5 Strategies (also known as business systems or core business capabilities:

16.1. Strategy determination

These are determined from a selection of 5 (or groups of) the 23 Fundamental knowledge classes (also known as entities)

16.2. 5 Core Strategies/Systems

The 5 Core Strategies are Information Technology Categories, Identities, Offerings, Work Flows and Finances

17. Tactics

Tactics (also known as sub systems or ancillary business capabilities) are determined from examining the secondary knowledge classes. Their priorities are established by examining the relationships between every Secondary Knowledge Class.

18. Logical Information

Logical Information is sub-divided into Facts (rule 19), Projects (rule 19.3) and Applications (rule 20). These provide additional potential.

19. Facts

The first sub rule of Logical Information are Facts. These are sub-divided into:

19.1. Data attributes

Data attributes which are managed by a Grade 4 Information Architect (RA4) who will be taught how to identify data-items

19.2. Logical database designs

Logical database designs (also known as the Logical Data Model – LDM) are managed by a Grade 5 Information Architect (RA5) who will be taught how to use the relative application of Caspar to develop it.

19.3. Projects

Projects (also know as Subject Areas) are managed by a Grade 3 Information Architect who will be taught how to use the priorities established by using Rule 17

20. Applications

Applications are developed using pseudo code and managed by a Grade 6 Information Architect who will be taught how to write pseudo code.

21. Artificial Intelligence

Solutions (the driver of Artificial Intelligence) are developed in priority sequence based on the Projects produced in Rule 19. The Logical database designs (from Rule 19.2) are converted into physical database management engines and the pseudo code converted into a physical computer programming language. Solutions therefore drives Artificial Intelligence to realise the potential of Natural Intelligence.

22. Possible outcomes

There are 4 possible outcomes:

1. The right Information producing the right Solutions

2. The right Information producing the wrong Solutions

3. The wrong Information (Misinformation) producing the right Solutions

4. The wrong Information (Misinformation) producing the wrong Solutions

The first outcome can only be achieved using Information Architecture. No other approach has the potential to achieve this result.

The second outcome is highly unlikely. Information Architecture is an exact (explicit) technique.

The third outcome is doubtful. None of the existing approaches (or proposed approaches) will ever succeed.

The fourth outcome is highly probable.

Summary

The following figure shows all the links between the 7 Ripose elements and the Ripose Manifesto:

1. Business energy (Information and solutions)

2. Requirements (aka deliverables/outputs or the effect of a process)

3. Process needed to create the requirement

4. Input into the process (aka the cause that will create the effect)

5. From (the Process that produces the requirement)

6. Actors (the people, with capabilities, involved in the process)

7. The solutions produced by the Caspar engine

Energy [1, 2 & 22]	Requirement (Effect)	Process	Input (Cause)	From	Actors (Capabilities)		Caspar Engine (Solutions)		
Potential (Information) [4 & 5]	Business objectives [4 & 5]	Goals & Measures	Business documents	Existing	CxOs [3]	RA1 [8]		Objectives [8]	Conceptual Compiler [7]
			1-4-11 Generic Goal Model	1-4-11 Generic model					
		Goal modeling		Business objectives					
	Purpose	Purpose statement	Goals	Goal modeling			Goals [9, 10 & 11]		
	Benefits	Benefit modeling	Purpose						
	Values	Value modeling	Benefits						
	Organisation	Enterprise architecture	Goals				Orgn		
	SWOT [12]	SWOT analysis	Values	Value modeling			SWOT		
	Measures [13]	Business indicators		SWOT analysis	1st Rep [3]		Measures		
	Knowledge [14]	Knowledge modeling	Measures	Business indicators		RA2 [14]	Knowledge		
			SWOT	SWOT analysis					
	Strategies [15,16 & 17]	System modeling	Knowledge			RA3 [15]	Actions		
	Data items [19.1]	Attribute definition		Knowledge modeling	Ops Mgr	RA4 [19,1]	Data	Facts [19]	Logical Compiler [18]
			Strategies	System modeling					
	Logical Data Model (LDM) [19.2]	LDM modeling	Knowledge	Knowledge modeling		RA5			
			Data	Attribute definition					
	Projects [19.3]	Project planning	Logical data model	LDM modeling	Proj Mgr	RA3 [15]	Projects		
	Processes & Applications [20]	Pseudo code	Projects		Logician	RA6 [20]	Programs	Apps	
				Project planning					
Kinetic (Solutions) – 4, 6 & 21	Database definitions	DB generation	Logical data model	LDM modeling	DBA	RA5	Implemented business systems (future Caspar development)		
	Solutions	Coding	Database definitions	DB generation	Coder	RA6			
			Processes	Pseudo code					

Notes:
a) Requirements are the Caspar solutions
b) Grey area: These are the super set and are delivered in the order below the grey areas
c) CxO = The 5 Chief officers where the x stands for Executive; Financial; Operational; Resources; Information
d) RA = Ripose Architect
e) 1st Rep = 1st reports - middle management
f) The solutions produced in the Kinetic section are the business solutions aka Business Systems
g) [1-22] cross reference to the Ripose Manifesto rules

Figure 2: My Table of links

The Actors

Perhaps it in now time to discuss who actually provides the business with energy. Businesses are comprised of people. Therefore it is the 'actors', with their respective capabilities, who provide the energy (see column 6 in the above figure). They include both business operatives, technical practitioners and the people capable of translating the disparate experiences between the two. These are the 6 grades of Ripose Information Architects (RAs).

Requirement dependencies

As the business energy types are Information and Solutions (see column 1 in Figure 2) and as every requirement (see column 2) depends on these it is misInformation that will ultimately lead to the failure of the Solutions. Therefore it is essential that this does not happen.

An analogy

I appreciate that looking at the image in Figure 2 seems an almost impossible task for anyone to achieve any result I would like to provide you with an analogy of a real life situation.

Imagine if you were a mountain climber about to tackle Mount Everest.

Figure 3: Mount Everest

The task of climbing the mountain seems daunting until you break the climb into several achievable steps.

Figure 4: Climbing steps

Historical milestones

For a history of the changes I made to my 2022 viewpoint please refer to the entries starting on page 24.

The Journey to Integrate Solutions and Information

I will now explain how Information is converted into Solutions in a step by step description. I will explain (explicitly) how:

- Ripose defines each requirement
- Each Actor participates and contributes:
  - Business and technical people
  - Ripose Architect including the training each needs to undergo in order to deliver each requirement
- Caspar produces each requirement by describing the operating instructions

For alternatives to my approach please refer to the entries starting on page 41.

Chapter 2 – Information > Business Objectives

Information > Goals & Measures

Energy [1, 2 & 22]	Requirement (Effect)	Process	Input (Cause)	From	Actors		Caspar Engine (Solutions)		
	Business Objectives	Goals & Measures	Business documents	Existing	CxOs [3]	RA1 [8]			
			1-4-11 Generic Goal Model	1-4-11 Generic model					
	Goals	Goal modeling		Business objectives					
	Purpose	Purpose statement	Goals	Goal modeling			Goals [9, 10 & 11]		
	Benefits	Benefit modeling	Purpose						
	Values	Value modeling	Benefits					Objectives [8]	Conceptual Compiler [7]
	Organisation	Enterprise architecture	Goals				Orgn		
	SWOT [12]	SWOT analysis		Value modeling			SWOT		
	Measures [13]	Business indicators	Values	SWOT analysis	1st Rep [3]		Measures		
Kinetic (Solutions) [4, 6 & 21]									

Figure 5: Business Objectives

Information > Goals

Information > Organisation Structure

Information > SWOT

Information > Measures

Chapter 3 – Information > Knowledge

Figure 6: Business Knowledge

Chapter 4 – Information > Policies

Figure 7: Policies

Chapter 5 – Information > Facts

Chapter 6 – Information > Applications

Chapter 7 – Solutions > Database Design

Chapter 8 – Solutions > Program Code

Appendices

Alternate views of The Ripose Technique

1990 View

In 1990 I decided to develop an approach which would I believed obviated all the errors that I found in the many disparate approaches that I had been exposed to from 1969 to 1989. These included:

- Program design – which I learnt in 1970
- Systems Thinking – W Ross Ashby (c1946) which I was exposed to in 1975
- Normalisation of data – Ted Codd (c1960) which I learnt in 1976
- Program structuring – Michael A Jackson (c1970s) which I learnt in 1978
- Structured Analysis – Ed Yourdon (c1970s) which I learnt in 1978
- Information Engineering – Martin and Finklestein (c1979) which I learnt in 1983. See the history of Information Engineering (Sep 2021) in the Appendix
- Object Orientation – GradyBooch, IvarJacobson, and Jim Rumbaugh (c1986) which I was exposed to in 1987
- Data management – DAMA (c1980s) which I was exposed to in 1984

The following 2 figures reflect how I decided to implement my approach (1990) based on the approaches that I learnt, experienced and researched over the course of the previous 19 years. My approach included the Idea processor and the Thought Processor as depicted in the following 2 figures.

My Idea Processor
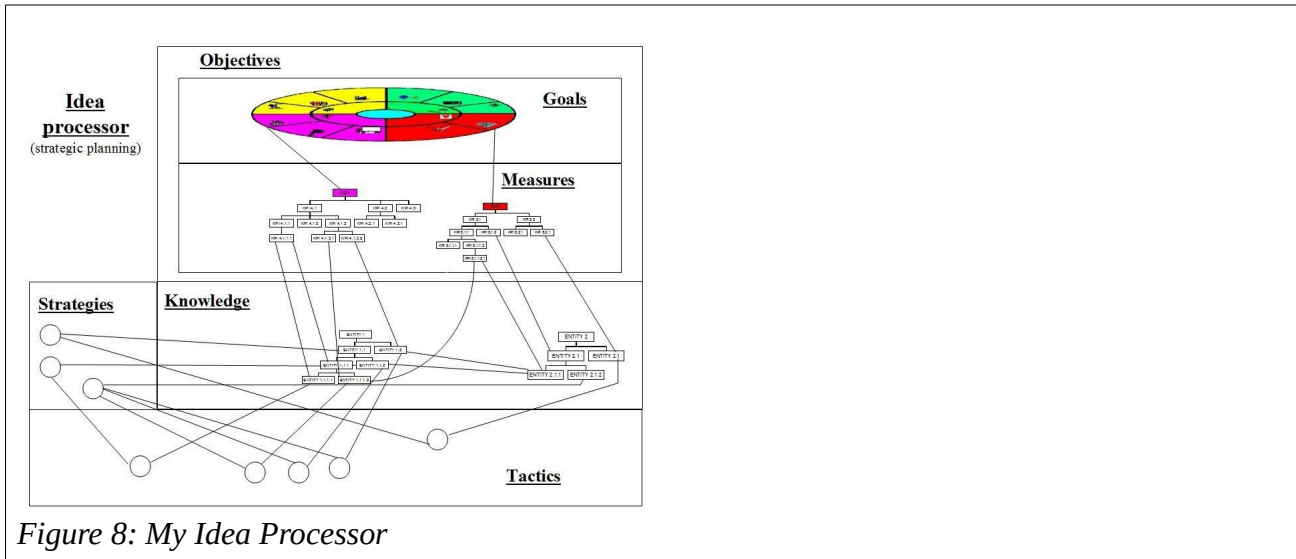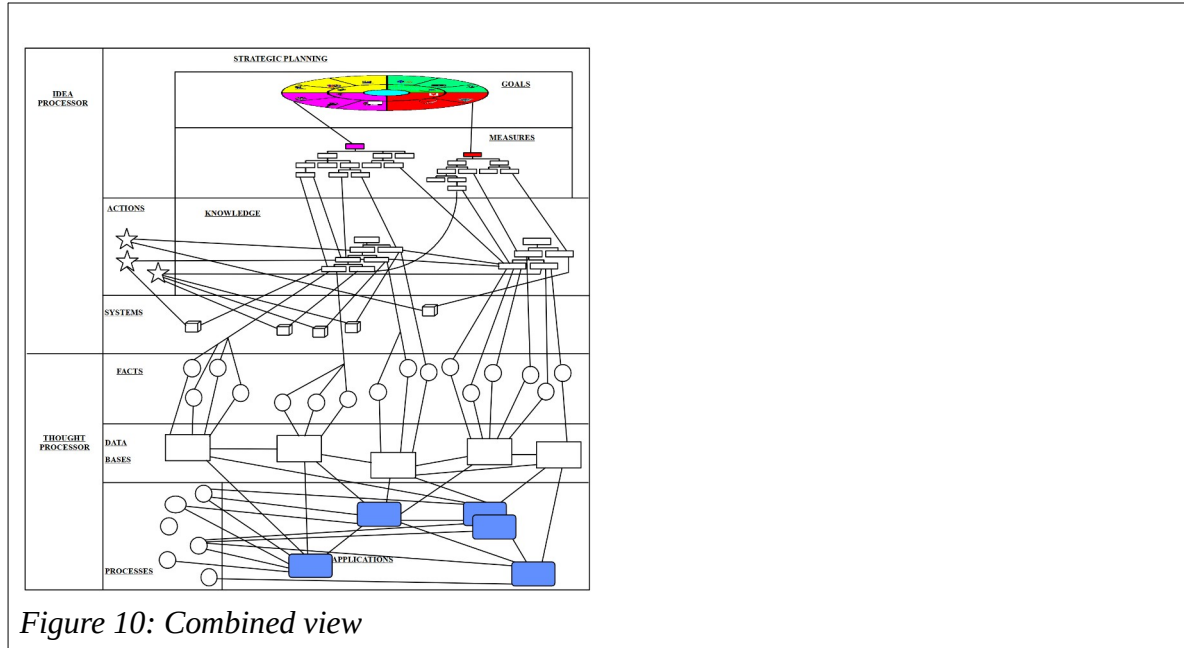

Figure 8: My Idea Processor

My Thought Processor
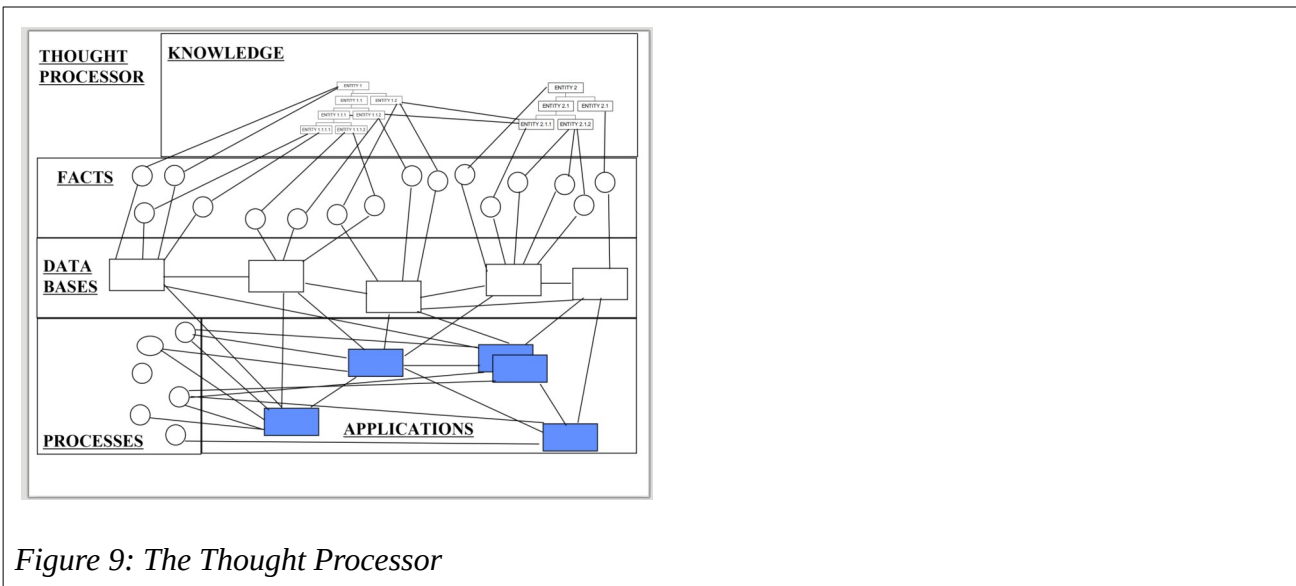
Figure 9: The Thought Processor

Combined Views of both Processors

Figure 10: Combined view

To implement the 2 processors required me to come up with a systematic viewpoint of the 2. The following figure shows the 9 business energy classes encapsulating the conceptual and logical view of Information and the 7 business energy classes encapsulating the physical view of Solutions.
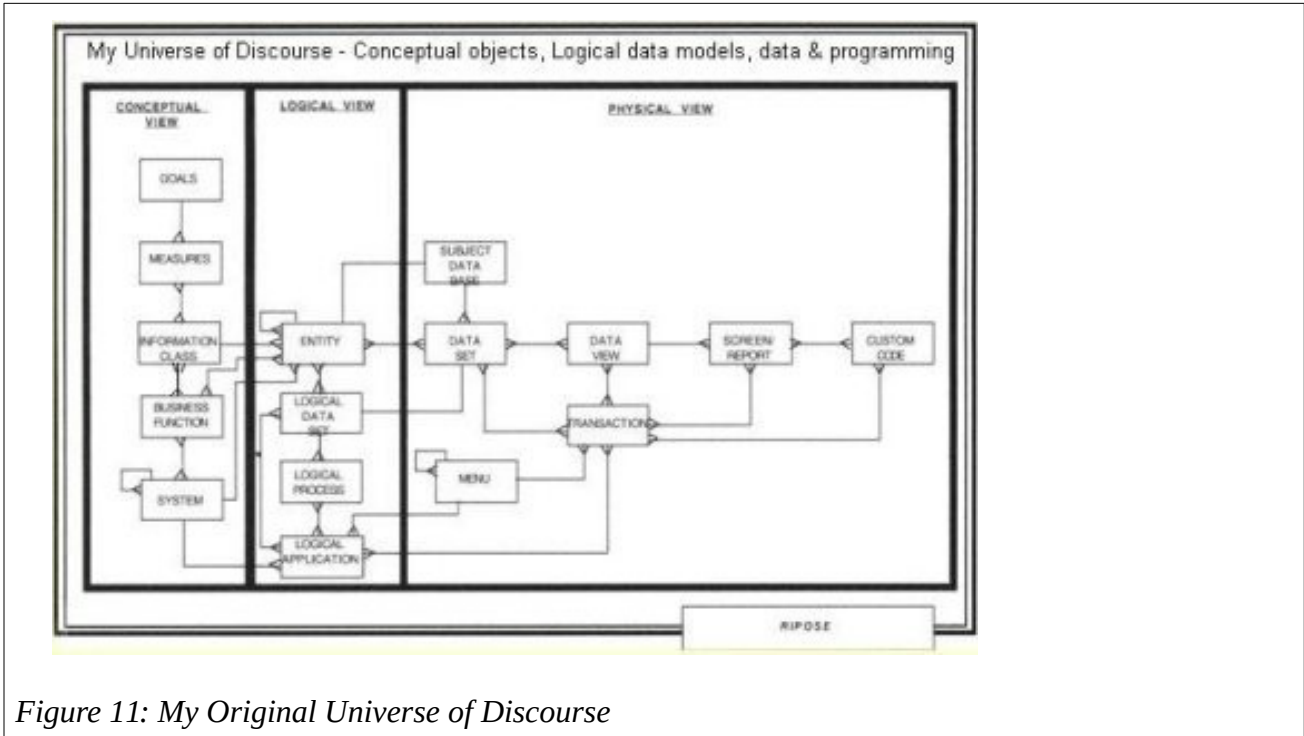
My Universe of Discourse

Figure 11: My Original Universe of Discourse

I hypothesised that the universe that I had created and titled My Universe of Discourse could be described in three segments, namely, the:

1. Conceptual view – describing the conceptual business objects

2. Logical view – describing the logical objects including the logical data model and applications

3. Physical view – describing the data bases and programs

Thus far I have managed to create an AI engine which implements the Conceptual and Logical views of business energy, namely, Information.

Should I be able to live long enough (and obtain the necessary funds) I hope to be able to employ programmers, experienced in writing computer code, to write a number of code generators that will semi-automatically convert the pseudo code (that is produced in the Caspar application engine) into a number of computer languages in order to speed up the production of computer systems. This will then complete my work and prove that business energy can be delivered efficiently, effectively, ethically and easily.

1990: Version 1 of the Ripose Compilers

During the same year as I developed the concept of my approach (1990) I used a Mac Plus computer with a software product (Omnis 7) to produce my first version of the Ripose Compilers which implemented the solutions contained in both the conceptual and logical viewpoints. The following figure is a screen shot showing the main menu of my software:
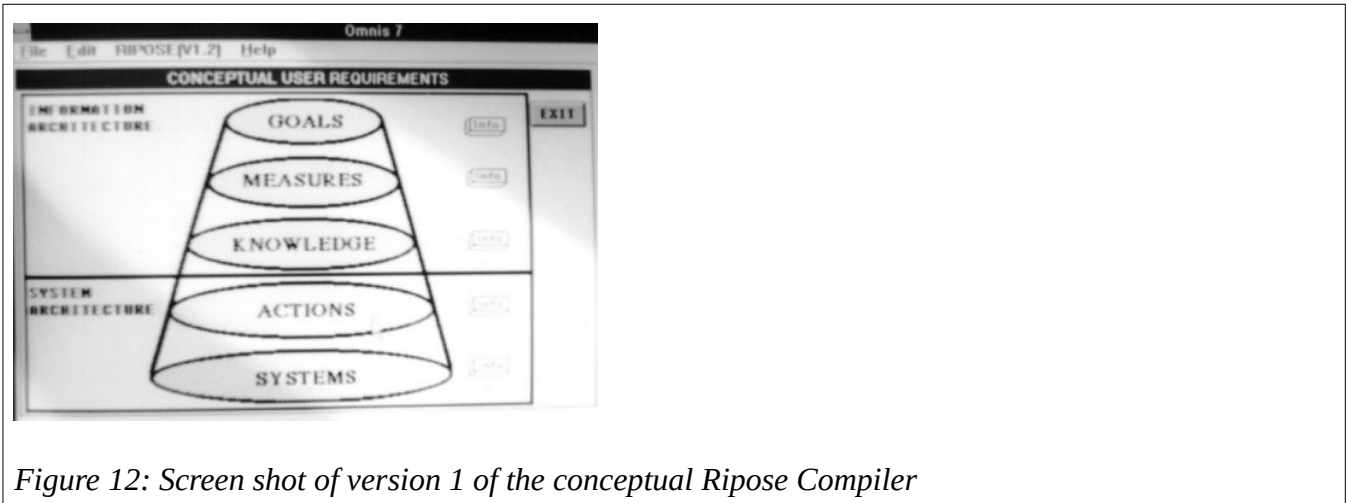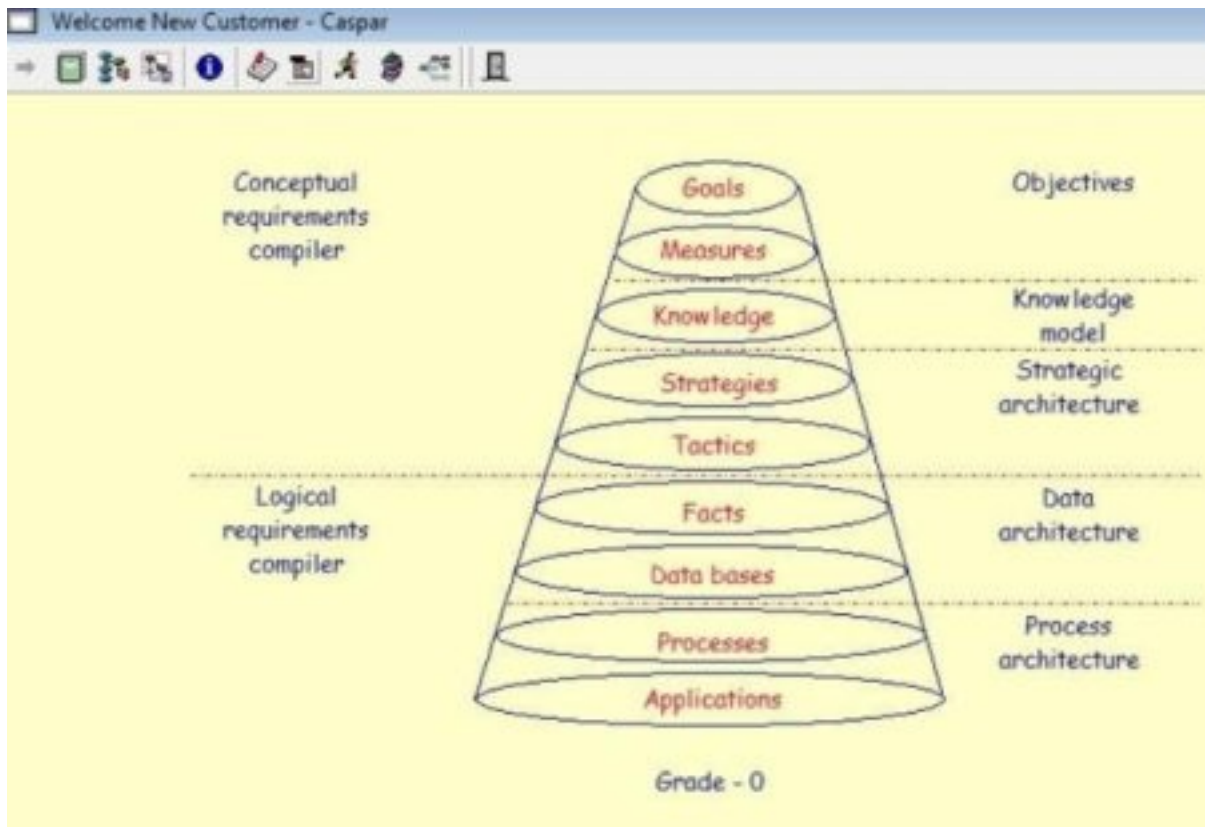

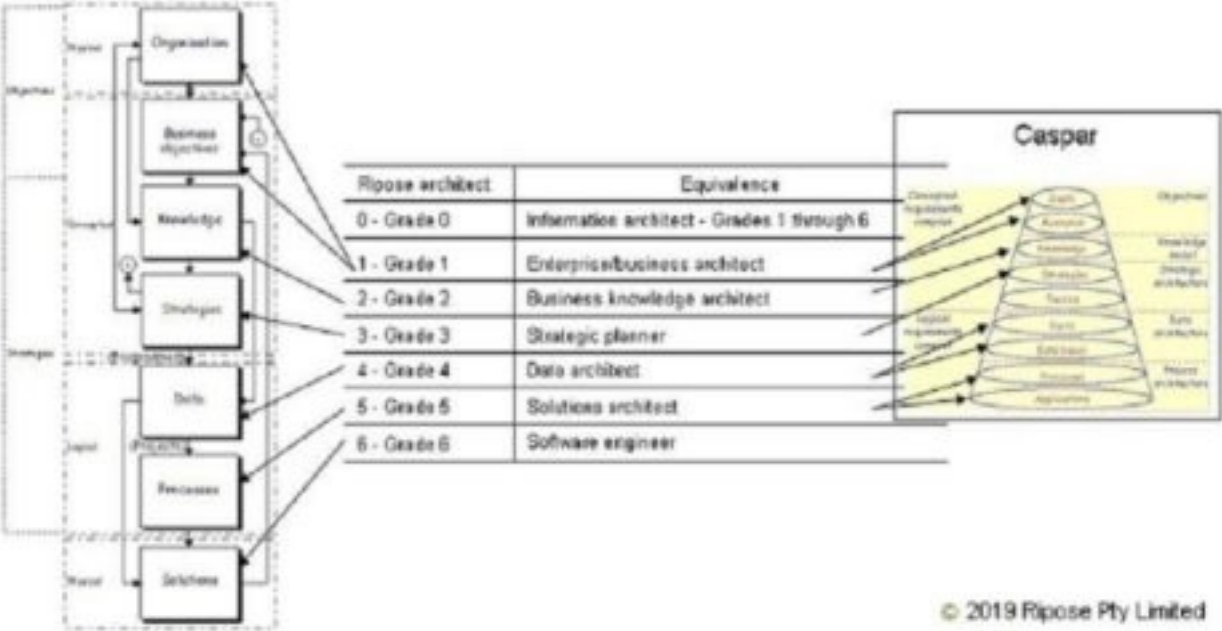*Figure 12: Screen shot of version 1 of the conceptual Ripose Compiler*

1994: Breaking the Systems Barrier

See entry on Page 40 for more details.

2000: Version 2 of the Ripose Compilers

2008: Due Diligence

Information architecture

Ripose architect	Equivalence
0 - Grade 0	Information architect - Grades 1 through 6
1 - Grade 1	Enterprise/business architect
2 - Grade 2	Business knowledge architect
3 - Grade 3	Strategic planner
4 - Grade 4	Data architect
5 - Grade 5	Solutions architect
6 - Grade 6	Software engineer

2016: Ripose Periodic Table

2017: Ripose and the human anatomy

Human anatomy				Ripose Business Energy			
Cranium	Skull			Objectives	Goals	Concepts	Information (Potential)
					Measures		
Vertebrae	Spine			Knowledge	Entities		
Coxa	Hips			Strategies	Processes		
Crus	Armis	Legs	Arms	Data	Facts	Logic	
					Databases		
					Projects		
Petibus	Manus	Feet	Hands	Applications	Programs		
Humanis		Human form		Systems	Solutions	Physical	Solutions (Kinetic)

Figure 13: Ripose and the human anatomy

2020: Ripose and WKID

Ripose & WKID
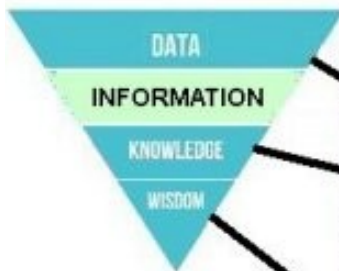
Requirement	Process	Input	From
Solutions	Coding	Database definitions	DB generation
		Processes	Pseudo code
Database definitions	DB generation	Logical data model	LDM modeling
Processes	Pseudo code	Projects	
			Project planning
Projects	Project planning	Logical data model	LDM modeling
Logical data model	LDM modeling	Knowledge	Knowledge modeling
		Data	Attribute definition
Data	Attribute definition	Knowledge	Knowledge modeling
		Strategies	System modeling
Strategies	System modeling	Knowledge	Knowledge modeling
Knowledge	Knowledge modeling	Measures	Business indicators
		SWOT	SWOT analysis
Measures	Business indicators	Values	
SWOT	SWOT analysis		Value modeling
Organisation	Enterprise arcitecture	Goals	Goal modeling
Values	Value modeling	Benefits	
Benefits	Benefit modeling	Purpose	
Purpose	Purpose statement	Goals	
Goals	Goal modeling	1-4-11 Generic model	Business objectives
Business objectives	Goals & Measures	Business documents	Existing
		1-4-11 Generic model	1-4-11 Generic model

DATA

INFORMATION

KNOWLEDGE

WISDOM

2022: Ripose, Calculus and Energy

Slides from my presentation:

The 4 Factors

The four factors behind my theory:

1) Limits
2) Differentiation
3) Integration
4) Focus

Definitions:

Word	Class	A Definition
limit	noun	"a point or level beyond which something does not or may not extend or pass"
	verb	"to control something so that it is not greater than a particular amount, number, or level"
differentiate	verb	"to show or find the difference between things that are compared"
integrate	verb	"to combine two or more things into one"
focus	noun	"the main or central point of something, especially of attention or interest"
	verb	"to direct attention toward something or someone"
		"to adjust something in order to see more clearly"

My Theory – Universe of Discourse

How applying these four work:

My Universe of Discourse

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	3 sections
differentiate	Separate sections into appropriate classes or phases	Concept
		Logical
		Physical
integrate	Ensure all phases are fully aligned	All
focus	Prioritise the work	Concept

My Theory – Conceptual Information

How applying these four work:

Concept

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	3 sections
differentiate	Separate sections into appropriate classes or phases	Objectives
		Knowledge
		Strategies
integrate	Ensure all phases are fully aligned	All
focus	Prioritise the work	Objectives

My Theory - Conceptual Objectives

How applying these four work:

Objectives

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	2 sections
differentiate	Separate sections into appropriate classes or phases	Goals
		Measures
integrate	Ensure all phases are fully aligned	All
focus	Prioritise the work	Goals

My Theory – Objective Goals

How applying these four work:

Goals

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	3 sections
differentiate	Separate sections into appropriate classes or phases	Purpose (1)
		Benefits (4)
		Values (11)
integrate	Ensure all phases are fully aligned	All
focus	Prioritise the work	Values

My Theory – Goals Values

How applying these four work:

Values

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	Values (11)
differentiate	Separate sections into appropriate classes or phases	None
integrate	Ensure all phases are fully aligned	SWOT
focus	Prioritise the work	Measures

SWOT: Strengths, Weaknesses, Opportunities & Threats

My Theory – Objectives Measures

How applying these four work:

Measures

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	11 values
differentiate	Separate sections into appropriate classes or phases	KPI
		PI
integrate	Ensure all phases are fully aligned	With Values
focus	Prioritise the work	Knowledge

KPI: Key Performance Indicator
PI: Performance Indicator

My Theory – Conceptual Knowledge

How applying these four work:

Knowledge

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	From SWOT
differentiate	Separate sections into appropriate classes or phases	Entity types
		Not Data
integrate	Ensure all phases are fully aligned	With Measures
focus	Prioritise the work	Strategies

My Theory – Conceptual Strategies

How applying these four work:

Strategies

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	5 Strategies
differentiate	Separate sections into appropriate classes or phases	Strategies
		Tactics
integrate	Ensure all phases are fully aligned	With Knowledge
focus	Prioritise the work	Logic

My Theory – Logical Information

How applying these four work:

Logic

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	3 sections
differentiate	Separate sections into appropriate classes or phases	Data
		Projects
		Applications
integrate	Ensure all phases are fully aligned	Objectives
		Knowledge
		Strategies
focus	Prioritise the work	Data

My Theory – Logical Data

How applying these four work:

Data

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	Data items
differentiate	Separate sections into appropriate classes or phases	Data from an Entity
integrate	Ensure all phases are fully aligned	Knowledge
		Strategies
focus	Prioritise the work	Projects

My Theory – Logical Projects

How applying these four work:

Projects

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	Subject Areas
differentiate	Separate sections into appropriate classes or phases	Clusters
integrate	Ensure all phases are fully aligned	Knowledge
		Strategies
		Data
focus	Prioritise the work	Applications

My Theory Physical Solutions

How applying these four work:

Physical

Factor	Activity	Class
limit	Keep things as small as possible for as long as possible	Subject Areas
differentiate	Separate sections into appropriate classes or phases	Clusters
integrate	Ensure all phases are fully aligned	Objectives
		Knowledge
		Strategies
		Data
		Projects
		Applications
focus	Prioritise the work	Computer solutions
		Artificial Intelligence

Conclusion
"A place for everything, everything in its place"
Benjamin Franklin

Now try this with your approach!

Breaking the Systems Barrier

This is the book I wrote in 1994 which can be purchased as a separate item.

Alternatives to Ripose

Enterprise Architecture

- TOGAF

- The Zachman Framework

- FEAF (Federal EA Framework)

- DoDAF (Department of Defense Architecture Framework

Thinking Approaches

- Systems Thinking

- Design Thinking

- Lateral Thinking

- Architecture Thinking

Miscellaneous Approaches

- Balanced Scorecard

- Business Canvasses

- Risk Analysis

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Alphabetical Index