

# Ripose conceptual modelling

Based on

- Taxonomy
  - Encapsulation
  - Extended polymorphism
  - Inheritance
  - Relationships
- Ontology
  - Synonyms – 'Two words that can be interchanged in a context'
  - Hyponyms - 'A word that is more specific than a given word'
- Heuristics/rule based
  - Built on the anatomy of information

# Conceptual modelling training course

This course is designed to teach how to identify the fundamental classes of business objectives and the relationships that exist between their artifacts.

Who should attend:

Any person interested in seeking how to full express their business objectives and a way to categorise what they discover. They include all levels of business managers [especially the chief (x) officers namely the executive (CEO), finance (CFO), operational (COO), Information (CIO), human resources (CHRO)], strategic planners, project managers, enterprise architects, business architects and business analysts.

## **Content:**

1. Conceptual conventions
2. The Generic Goal Model
3. Workshop
4. How to undertake a successful strengths, weakness, opportunities and threat (SWOT) analysis
5. Workshop
6. How to develop a sound key performance indicator structure fully integrated with the lowest level artifact in the goal model and produce a more thorough cost benefit analysis
7. Workshop

What you will learn:

1. What a goal is
2. A better SWOT approach based on goals
3. How to build a cost benefit analysis

The first 2 questions that you need to get answered are:

- 1) What exactly is a 'Concept'? Slides 4 to 10
- 2) What are 'Objectives'? Slides 11 to 14

# Conceptual conventions

Answers to question 1 What exactly is a 'Concept'?

One definition of a 'concept' is “An abstract or general idea inferred or derived from specific instances”.

So, putting concepts into perspective I will now parse or “Analyze syntactically by assigning a constituent structure to (a sentence)” as my preferred method of reasoning throughout my lectures as my preferred analytical method used to prove (or disprove) a thesis (“An unproved statement put forward as a premise in an argument”). Parsing is similar to a technique of proving a mathematical theorem which is “An idea accepted as a demonstrable truth” or “a general proposition not self-evident but proved by a chain of reasoning; a truth established by means of accepted truths”.

I will use parsing to further define some of the words in a sentence until all phrases are either a) Identified as synonyms and hence redundant and at that point the thesis is reduced to a single idea and hence proven true or b) That the thesis requires additional work to be proven as true.

# Conceptual conventions

Answers to question 1 What exactly is a 'Concept'?

Putting concepts into perspective.

Assume that definition of a 'concept' is “An abstract or general idea inferred or derived from specific instances”. Let me prove this definition by identifying the synonyms and hence remove the redundancies. The table below shows how this is done.

Word/phrase	Meaning	Synonym
Concept	An abstract or general idea inferred or derived from specific instances	
Abstract	A sketchy summary of the main points of an argument or theory	General idea
Inferred	Believe to be the case	Derived
	Guess correctly	
	Solve by guessing	
	Reason by deduction	
	Establish by deduction	

Since the word 'abstract' and the phrase 'general idea' and the words 'inferred' and 'derived' are synonymous, I can reduce the original definition of a 'concept' to “A general idea derived from specific instances”. Now to tackle the phrase 'specific instances'. What does this mean?

# Conceptual conventions

Answers to question 1 What exactly is a 'Concept'?

Putting concepts into perspective.

Definition of a 'concept' is now “A general idea derived from specific instances”.

So what is/are the “specific instances” mentioned in the definition and how does the “general idea” get derived?

I will start by defining each word:

Specific - “Stated explicitly or in detail”. As the word 'explicitly' and the phrase 'in detail' can be proven to be synonymous, I will use the word 'explicit'

Instances - “An item of information that is typical of a class or group”.

I can now further extrapolate (“estimate or conclude (something)”)“ that the phrase 'general idea' and 'item' are synonymous.

So what is an instance. Well a class or group are synonymous and an item is a single thing and finally I am left to define the phrase 'an item of information that is typical' in the definition of 'instances'.

# Conceptual conventions

Answers to question 1 What exactly is a 'Concept'?

Putting concepts into perspective.

Definition of a 'concept' is “A general idea derived from specific instances ('an item of information that is typical')”

Specific - “Stated explicitly”

Instances - “An item of information that is typical of a class/group”

Item - “A small part that can be considered separately from the whole”

So now what does the word 'information' mean?

Definition - “Knowledge acquired through study or experience or instruction” or “A collection of facts from which conclusions may be drawn”

Unfortunately this does not really help! So it is left up to the individual to interpret the meaning. This is achieved by finding out the derivation of where the word.

It is “derived from the Latin stem (information-) of the nominative (informatio): this noun is derived from the verb informare (to inform) in the sense of "to give form to the mind", "to discipline", "instruct", "teach”.

# Conceptual conventions

Answers to question 1 What exactly is a 'Concept'?

Putting concepts into perspective.

Definition of a 'concept' is “A general idea derived from specific instances ('an item of information that is typical')”

Specific - “Stated explicitly”

Instances - “An item of information that is typical of a class/group”

Item - “A small part that can be considered separately from the whole”

Information - “Knowledge acquired through study or experience or instruction”  
or “A collection of facts from which conclusions may be drawn”

But wait. Is not “A collection of facts from which conclusions may be drawn”  
and a 'general idea' (see slide 6) basically synonymous?

Therefore I can now make my final assertion that 'information' is the 'specific instances' and could be described as **the** 'overarching artifact' of all the 'general ideas'!

QED (quod erat demonstrandum, a Latin phrase meaning "what was to be demonstrated", or, less formally, "thus it has been demonstrated").

Answers to question 1 What exactly is a 'Concept'?

Finally I can assert that a 'concept' is a 'general idea' that is encapsulated (grouped) under the overarching artifact called 'information'

It has taken me a while to get you here but unless we are on the same 'page' the rest of the courses that I have to offer will be worthless to you.

# Conceptual conventions

If you refuse to accept this assertion as to what information is and believe that information is either:

- 1) Processed data
- 2) Facts provided or learned about something or someone
- 3) A message received and understood
- 4) A type of input to an organism or system

rather than what I have previously asserted or disagree with the following definition that 'information' is “what is conveyed or represented by a particular arrangement or sequence of things”, then I am afraid we might as well part company right here and now, as this course (along with those that follow seamlessly on from one to the other) are not what you are looking for and will not help you.

If on the other hand you are willing to accept my assertion, then I can help you overcome the hurdle of identifying exactly what the building blocks of 'information' are and how to build a conceptual, logical and physical framework that will explain the anatomy of information.

To fully immerse yourself in the structure of the anatomy of information, please see my body of work on <http://www.ripose.com.au/li/ia101/>.

# Conceptual conventions

If you are reading this slide then you have overcome the prejudices and the misinformation surrounding the use of information, so I will proceed with explaining the 2 simple constructs that embody the entire discipline of 'objectives'.

One definition of the word 'objective' is “The goal intended to be attained (and which is believed to be attainable)”. From this definition I will assert that an objective, encapsulates/groups two conceptual artifacts, namely:

- 1) Goals – because the word 'goal' appears in the definition
- 2) Measures – to satisfy the capability of a goal being attainable

To attain a goal, you will have to be able to somehow measure whether it can or cannot be achieved.

So what is a goal and what is a measure?

# Conceptual objectives

Exercise: Let us assume that you do not want to believe that an objective can be subdivided as previously stated. I will now provide you with a series of 33 sentences, which a number of business operatives 'brainstormed' and regarded as being 'objectives'. Your task is to decide whether you are able to determine what is a goal and what is a measure.

Keep costs down - we will achieve this by increasing our membership base and by automating some of the processes

Have a good quality data base to automate our dealings with members

Uncover the many different channels we can find to advertise the LDAA: these include The number of fliers we distribute; Number of times member talks to others about the LDAA

The enterprise looks after the needs of its members by ensuring it delivers great benefits to them

Look after the communication between members by providing a notice board and/or chat capability

Steps are needed in order to ensure they use the latest methods and resources in producing and handling their wares, members and resources

Establish the methods or procedures by which things are to be done whether they be pro-active - future events or re-active - historical events

Acquire and maintain members and these include instructors as well as associated members

Processes to ensure the profitability of LDAA

Ensure that we have money in the bank at the end of the membership year after achieving all our goals

Deliver information quickly and provide the ability to disseminate the data to associates rapidly

Ensure that the highest possible performing and most efficient products and services reach the marketplace

Keep track of the number of courses a person attends

Ensure that we utilise our limited resources effectively

Better utilise the internet and mail

Organise special deals for members

Enable the spread of information about the organisation's products and services

Processes to ensure that LDAA has sufficient assets to produce and support its wares

Ensure that money comes in on a regular basis

Apply the latest techniques eg methodologies, computers, communication's equipment etc

Follow the way we move our wares to our members

Processes to demonstrate how we will gain and grow its client base

Keep track of money being spent

We are the only organisation of this kind in Australia

Processes in order to ensure its wares are in good working order

Set up a long range view and procedures that LDAA needs in order to survive

Maintain high quality and reliable information as well as gaining the respect of members by delivering factual information rather than gossip

To obtain more members

Processes to ensure we have sufficient wares for the market place

To measure the efficiency of the person using the equipment

Keep track of the number of people leaving the organisation

Record an indication of what capabilities a person has

Track the number of hours a piece of equipment is used

# Conceptual objectives

Too hard?

Indeed it is!

However I will now provide you with [a pdf file](#) containing all the words to enable you to copy and paste the words into a spreadsheet program.

Will this help?

Yes! I appreciate your candor, but please humor me and try to create the spreadsheet as I suggest you do.

No! Proceed to the next slide

# Conceptual objectives

Step 1 in determining whether a statement is a goal or a measure, or nothing of interest.

Open a spread sheet program and in row 1 create the following column headings:

Col 1: A number starting from 1

Col 2: Objective – which will be either a 'goal' or a 'measure'

Col 3: Type – used to determine the type of goal – I will explain the use of this later

Col 4: #Tag1 – used to provide a single word to describe the objective

Col 5: #Tag2 – used to provide a single word to describe the subordinate of #Tag 1 (if applicable)

Col 6: #Tag3 – used to provide a few keywords to summarise the objective

Col 7: Description of the objective

Copy and paste each statement into column 7 of a spreadsheet

Now examine each statement and determine if you think it best describes the objective as a 'goal' or a 'measure'.

Try this now. [Email your spreadsheet](#) to me so that I can assess your grasp of the subject matter.

Hint: Statements that are far too implicit could be a goal (example 'we aim to be the best possible hotel in the northern hemisphere'), otherwise it is more than likely a measure (example 'to ensure an occupancy rate of at least 75% at all times').

# Conceptual objectives

At this point you should now have the capability to distinguish a 'business rule/statement' as being either a 'goal' or a 'measure'.

If you are unable to accomplish this initial step and are unwilling to, then we might as well part company now. So thank you for your interest in attempting to master a better way of planning.

If you are still reading this and have any problems, please see my comments on the spreadsheet that you submitted. It is no small feat to be able to master this technique but consider the statements I made in slides 3 through 7 in the introduction.

Once you have mastered this objective [email me](#) for the next lecture – Identify the purpose statement