

Analyse, Improve and Innovate (AII)

When we look out of a window one doesn't just see the trees, the people passing on the street or the birds on the lawn, you make a judgement on the weather, is it sunny, or windy, will it be good or bad weather all day. You can tell how many people are out and about by the hum of the traffic and your perspective is affected by these and many other social and physical factors and how you feel that day. This epitomises all that is in human nature. Within this brief moment you have a predefined thought about whether your day will be a good or bad day before your mind moves onto the tasks for the day.

This is how AII has evolved though cognitive abstract thought in a virtual world. We make all these decisions in an instant and this how the systems, a recognisable whole which consists of a set of inter dependant parts, and boundaries extended further than I first thought. The ontology of AII was to holistically look at a chaotic system of a thing, a process for wanting to analyse a problem, a doubtful or difficult question or an inquiry starting from given conditions to investigate, to improve by fixing something that was broken or to create an opportunity where by epistemological awareness allowed a possibility to foster innovation. Reflection and iteration are key elements to this overarching method which uses a collection of paradigms and tools. The acquisition of many data artefacts are essential to this deterministic methodology. Implementing the change allows various events to be tested and results reflected upon. These changes to the system can exhibit properties and outcomes which are sometimes unpredictable and emergence occurs. I decided to use a storyboard as this brings structure with an easy to follow method.

Analyse is to ascertain the elements or structure of a thing. The AII Periodic table follows:-

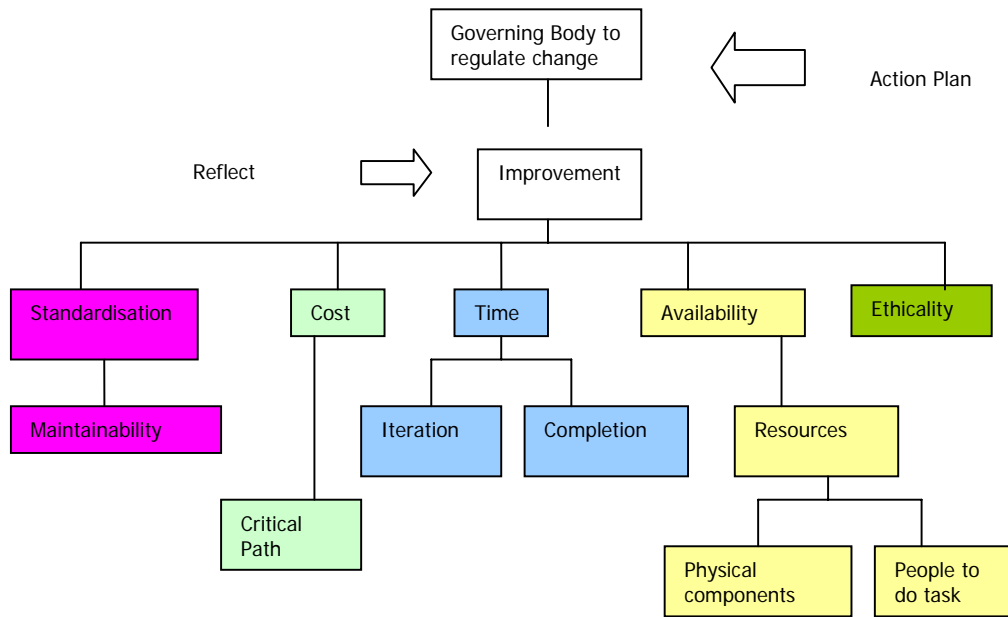
Problem	Spray Diagram	Kepner Tregoe	Cost	Solution
Opportunity	Rich Picture	Data Driven Troubleshooting	Time to complete objective	Reflect
Viewpoint /Perspective	System Map	Soft System Methodology	Time to redo work/iterate objective	Innovation
Audience - owner	Influence Diagram	Hard System Methodology	Action Plan	Iterate
Audience - customer	Ishikawa Diagram	Security intrusion	Availability of persons	Transformation
Audience business needs	Multiple Cause Diagram	Failures Methodology	Availability of physical components	
Audience access and control	Persistent Data	SWOT	Implement Changes	
The System	Transient Data	Plan Do Act Check	Governing body	
The Wider System	Systemic Data	Benchmarking	Ethicality	
Environment destruction	Holistic Data	Process Mapping	Quality Control	
Environment influences		Problem Methodologies	Critical Path Analysis	
Environment dependency		Forensic Methodologies	Model the opportunity / Reproduce the problem	
Environment architecture		Improvement Methodologies	Forecasting and Planning	
Environment location		Systems Methodologies	Performance measures and monitoring	

Key

	Input
	Diagram
	Paradigms
	Methodologies
	Improvement

- Modelling
- Output
- Data Artefacts

Improve is to make or become better through iteration. The anatomy of improvement are ethical, systemic, data-guided activities designed to bring about change which it is hoped will mean improvements.



Innovation is the introduction of something new or making changes to an existing thing. The extent of the innovation could metaphorically change the world for example: the flap of a butterfly's wing in Brazil could set off a tornado in Texas.

However this deterministic behaviour proposes that all events are the results of previous causes.

Without innovation encapsulating the birth of new ideas throughout history, the world as we know it would not exist.

Thus innovation can be of two types



- A simple small thing or
- Very complex and radical

You can't predict the result from innovation as man made systems behave chaotically. Organisations and people strive to innovate to keep at the top and have the next best idea as it could be life changing, financially rewarding or enhancing.

The All storyboard sets out the progression of the story of this methodology drawing holistically on well known paradigms and tools.

ANALYSE, IMPROVE AND INNOVATE STORYBOARD PAGE 1

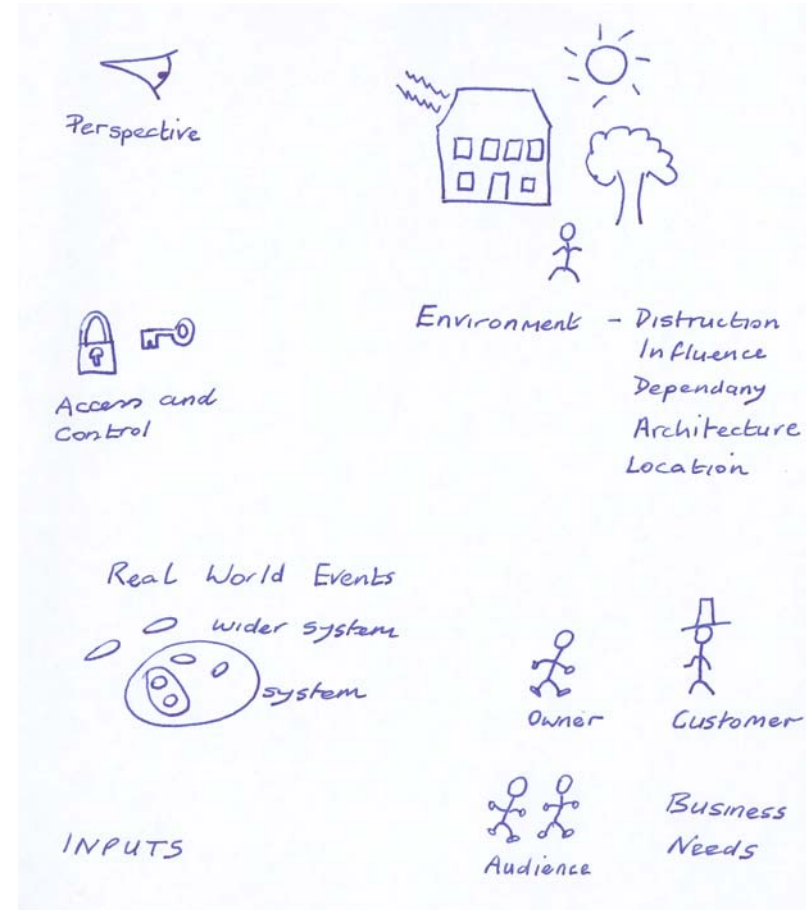
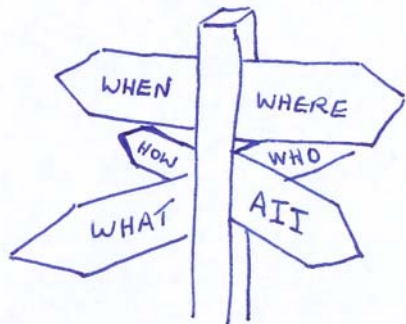
ANALYSE, IMPROVE and INNOVATE

A storyboard to help bring structure with an easy to follow method.

Deterministic - showing all events are the results of previous causes

Paradigms - to give examples and patterns to follow

Linear or NonLinear - $x = 2y + z$
 $A = 3y^2 + 4z^3$ or
what it is not



ANALYSE, IMPROVE AND INNOVATE STORYBOARD PAGE 2

1. Define the Problem or Opportunity for Innovation



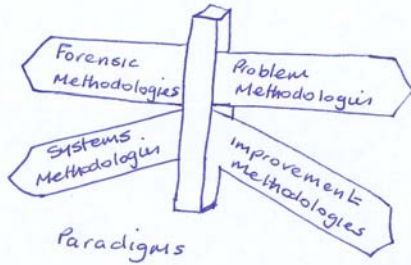
2. Describe the Scope of the Problem or Opportunity



3.



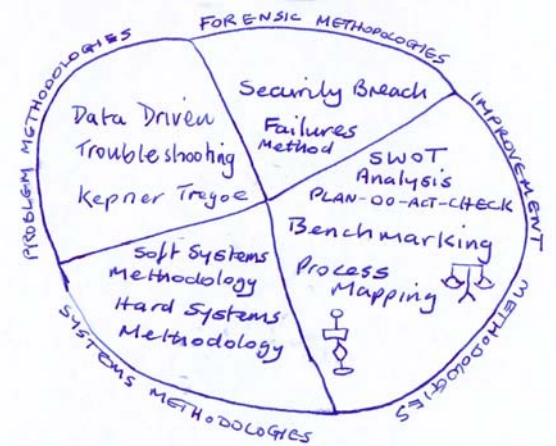
4. Routes to objectives



5. Acquisition of Data Artefacts



6.



ANALYSE, IMPROVE AND INNOVATE STORYBOARD PAGE 3

7. Model

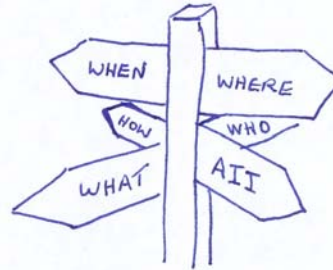
- Reproduce the Problem

$$A + B \neq C$$

- Forecasting for Innovation Opportunities



8. Data artefact analysis



9. Solution

- Action Plan

- Ethical

- Availability

- of persons to do task
- of physical components

⌚ Time to complete objective
Time to redo work iterate through process

cost

- critical Path Analysis

10. Implement Change

governing body
to regulate change
for Quality



standardisation for Maintainability

11. Reflect on Solution



was transformation desired
was iteration required
was desired effect produced.

12.



Forecasting and planning

CHAOS
small change → global effect