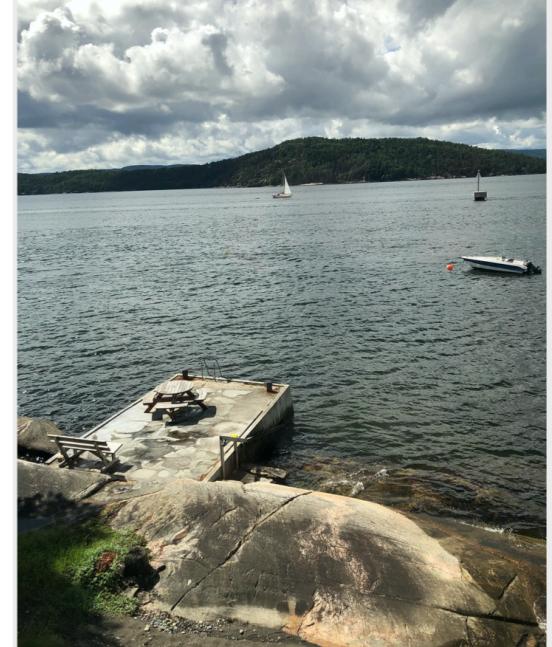


# Governeering

## Government Systems Engineering Planning



This photo has nothing to do with the subject (but I used it to color the title text.) of this book. But, it is where I am writing the book, it is literally the view I have now as I write, and in these times we need visuals like this.

The site is my Summer Cabin on the Oslofjord ('Digerud').

21c in water now, so we are swimming, and great social distancing too!

July 4th 2020

Independence,  
From bad plans!

# Table of Contents

## TOContent

### 0. Introduction

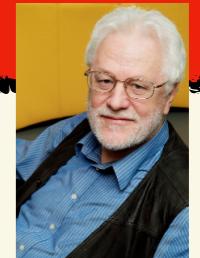
1. **Planalysis:** How to analyze plans. (See paper Design Evaluation), See PPPP slides 'Problems'
2. Planning QC: How to subject plans to rigorous quality control and review, BASED ON NEW PAPER 'DESIGN EVALUATION' PARTLY
3. Planning Standards
4. Stakeholder Analysis (Requirement Sources)
5. Objectives (and all notions of Requirements): Future States, Visions, Value, Qualities
6. Strategies:
7. Decomposition: Intelligible Value Increments:
8. Resources: costs, time, estimation, design to Cost
9. Evo: Agile Project Value and Cost Management
10. Risk Management
11. Ethical Planning
12. Motivation
13. Organization
14. Processes (theory of processes was dealt with in 3. Planning Standards) this must be content, real ones.

July 4 2020 A request for help from early readers.

I am on chapter 7, about a chapter a day, since 26 June book start. You can get incremental updates at the link, <https://tinyurl.com/Governeering>, which you can share with friends who might be interested. I would appreciate any feedback at this stage. Papers of 'Public Planning examples' or 'experiences'.

Typo corrections. Suggestions for topics or clarifications or illustrations. Competitive or complimentary ideas or methods. Anything. Don't be shy. It is really difficult to get any feedback. So authors are grateful. Besides, if we do not already know one another it is an opportunity to get acquainted. Tell me about yourself. If you do send me feedback, I'd like to reward you by sending any one of my digital books, (see [gilb.com](http://gilb.com)) if you request.

BTW I am interested in translations, and in paper editions, if you want to help make that happen. I also like to help people get started with better planning, like quantifying that first 'soft' value. I also like to spread the word, any way I can, so talks, courses, conference appearances, digitally, maybe in person, are part of what I like to do, to spread the good word.



PS I am experimenting with a book format which is epub friendly, and has 1-page modules, where I limit myself to a single page per subject.

Admittedly it allows me to reuse slides (which always have too much text anyway). But that has several advantages. I can draft the book faster.

The book is very well illustrated, and the book pages can be used as slides! Interesting, what do you think about that book style?

Tom

## What is this book about?

This book is about any class of government planning by politicians, and civil servants, for the public, media, civil servants.

This book is for areas like social services, health, military, police, urban planning, transport, recreation, museums, emergencies, 'UN Sustainability Goal' 17 areas of planning, development planning, environmental planning, contracting, bidding, reviewing, and *charities*.

We are particularly concerned with managing the non-financial services, the values, and the qualities expected by citizens and stakeholders, for example security, health and privacy. Because, if these values are not as clear and quantified as the associated budget numbers, we will not get the value levels delivered in practice. But we might blow the budget trying.

This book is for areas of planning which are not currently served by a well-developed engineering tradition. The book is for areas where highly-unstructured, badly-defined sentences are, unfortunately, the main means of communicating the planning ideas.

It is not for specialist disciplines such as road building, site construction, weapons development, etc., where well-developed engineering and scientific tradition, already supply the need for a rigorous discipline.

The purpose of this book is to define, present, and make credible, a better-structured discipline of planning, than is currently normal.

My hope is that YOU as an individual become a little more enlightened about planning, and that some of YOU are inspired to study these ideas more deeply, and that some of YOU will improve your own projects, and an amazing few of YOU will change your organization's planning culture, or 'the world'. I even wish well, those who can improve their career, their reputation, and their wealth using these ideas! Be greedy for better knowledge, share it freely, and hope you get even more in return. It is FUN, you know?

A big opportunity is staring you in the face. All you have to do is decide to learn more, try ideas out. The next bad plan you see is a golden opportunity. The bad plan might even be your own, so fix it before colleagues read this book. Be diplomatic about it! People who made that plan did the best they could, and they might like to make 'their plan' better, if you offer some humble help.

Don't criticize or change 'their' plan. Be there for them as friend and coach to help them do it themselves.

Improve your own plans first, and set a good example. Amaze colleagues with clear plans! Just one clear objective to start. Today?

The aim is that public planning will:

1. Be clear, more intelligible for all concerned
2. Be more complete, integrated, agile-friendly, and digital-friendly
3. Be more logical with regard to decision-making, traceability, priorities, risks, and the need to change.
4. Result in more 'stakeholder value', delivered earlier
5. And result in less costs of public money, time, and people - to build and maintain the planned systems.

# Chapter 1

## ‘Planalysis’

# How to analyze plans

# 1.0 Planalysis: Plan Analysis

## Some practical disciplines for analysing plans

There is an assumption that we want intelligible and useful, ultimately successful, plans. This requires explicit adoption of 'Rules' for planning specification. Planalysis is a process of discovering violations of these planning rules.

Here are some basics of analysis

1. Clarity
2. Completeness
3. Connections, Traceability
4. Value Quantification
5. Impact Analysis
6. Higher Level Values
7. Public Access, Accessibility
8. Stakeholder Mapping

- **The NHS will provide a comprehensive range of services**
- **The NHS will shape its services around the needs and preferences of individual patients, their families and their carers**
- **The NHS will respond to the different needs of different populations**
- **The NHS will improve the quality of services and minimise errors**
- **The NHS will support and value its staff**
- **Public funds for healthcare will be devoted solely to NHS patients**
- **The NHS will work with others to ensure a seamless service for patients**
- **The NHS will help to keep people healthy and reduce health inequalities**
- **The NHS will respect the confidentiality of individual patients and provide open access to information about services, treatment and performance**
-

## Example of practical planning rules for objectives

The 'Rules' (a standard for writing plans) here are short we try to keep to 1 page, for each type of specification. They are based on decades of practice, and similar rules are in my book Competitive Engineering (CE), 2005. Each rule is arguably powerful. That means it serves a serious definable purpose and if we fail to apply the rule, we have a serious specification defect, which can lead to serious faults in the system being planned.

### Some examples of why these rules are useful.

**Critical:** there are several rule ideas squeezed into this one rule. The critical requirements are few and cannot afford being unclear.

**Scale:** critical value objectives are variable (better, enhanced) and can and must be expressed quantitatively for clarity. Step 1 is defining a Scale.

**Target Levels:** are the numeric points on the defined Scale we need to reach in order to be successful. We need to document who says, and for which conditions (who, where, when, if)

**Feedback:** this rule makes it clear that these critical objectives are the primary basis for judging any results of the plan.

You might like to go back to the previous page, the NHS Objectives, and see that all these Rules are violated.

## TG Suggestion for planning 1998



AF OPERATIONAL TEST & EVALUATION CENTER

### AFOTEC PLANNING Rules for objectives

**PP1 (Critical)** All critical 'strategic' mission-level objectives shall be identified together, in an unambiguous, quantified, trackable, reportable and testable format. The top ten or twenty is sufficient at the first level. All others should be subsets or 'means objectives'.

**PP2 (Scale)** All objectives shall have a formally defined written 'scale of measure', directly, or in a set of their sub-objectives. All 'qualitative' aspects are quantifiable.

**PP3 (Meter)** All Objectives shall have at least an outline of the method or process by which we can track, test or estimate the numeric status of each defined objective, at any time from birth to death of the unit/project/system being tracked.

**PP4 (Benchmarks)** in setting objectives at least one, and possibly several, benchmark analytical levels shall be established; and kept together with the Objectives. These shall include Past systems, Competitors, State of the Art, and Trends, as appropriate background for Objective users. Use {Past, Record, Trend} parameters.

**PP5 (Stakeholders)** all critical stakeholders in the outcomes shall be explicitly identified and consulted. They shall, where appropriate, each have a separate, but related, set of Objectives, and if possible have explicit integration in the main set of objectives, and possibly distinct-for-stakeholder levels-of-performance specified, using [qualifiers] to identify stakeholders and their related {when, If} conditions.

**PP6 (Basic Categories)** Objectives/Requirements shall be defined in the following set of basic categories {Quality, Cost, Function, Constraints}. In addition, the following sections will appear, with appropriate supplementary information: {Stakeholders, Definitions, Assumptions, Risks, References, Strategies/Designs, Impact Analysis, Evolutionary Plans} in addition to other sections, which are deemed useful.

**PP7 (Target Levels)** Future target levels shall be specified as {Wish, Tolerable or Goal}, together with suitable [when, where, IF] qualifiers. Uncertainty shall be explicitly stated and detailed sources for the targets shall be given (using '←' or 'Source', or 'Authority').

**PP8 (Approval)** Approval of a set of objectives is dependent on at least two fundamental stages, (1) exit from a formal 'Inspection' at no more than 0.2 Majors per Page Maximum remaining. Then (2) Go/No-go approval by an authorized Review Panel.

**PP9 (Feedback)** The currently-approved objectives shall be the **fundamental basis** for reporting all progress; whether design, (Evolutionary) development, testing or operation of the organizational unit or system.

## The real example below is filled with nice sounding platitudes

But it does not commit to any specific improvements.

- It is not clear exactly what will happen (how much encouragement, earning how much more)
- It is worthless from the point of view of asking for funding (what is the point of the level of investment?)
- It is worthless from the point of view of deciding which strategies will be effective enough (to encourage, to avoid cheating, easier to earn more)

What is it (DWP New System) About?

- "Making it easier for people to earn more money, by scrapping the current benefit and tax credit system, and replacing it with a single credit for people in and out of work.
- Those who don't work are encouraged to have a go.
- Those in work are encouraged to earn more.
- There is now no excuse for cheating the system."

We (DWP managers and I) analysed the above statements.

We noted that it did not give us any quantified idea of the expected improvements.

We had a go at clarification, by quantification in Planguage.

## Benefit Dependency:

**Ambition** level: people will not have anywhere near the same level of benefits dependency as at present.

**Scale:** duration of defined Benefit Types for defined Claimant types under defined Circumstances

**Past** [2011, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 7 years ? ± 6 ? <- MW

**Goal** [Deadline = Next Election, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 4 years ? ± ? <- MW

## The objectives are a short sentence

There is no intent to add any additional information about that objective.

There is no footnote or cross reference to any additional information about the objective

But there are between 5 and 20 additional pieces of information relating each objective that we can argue should be included *somewhat*.

### Look at the NHS 'Objectives'

**And ask some of the many more questions we should ask, in order to understand and review the objectives.**

**1. Exactly which authority or stakeholders are behind each Objective?**

**2. How are these to be limited or prioritised (for example by % of total budget)**

**3. What if there is a conflict between these objectives?**

**4. Which instances are responsible for delivering these objectives?**

**5. How will these objectives be measured?**

### Appendix: Summary of NHS Improvement's 2020 objectives

Quality	Finance and use of resources	Operational performance	Strategic change	Leadership and improvement capability
<i>Continuously improving care quality, helping to create the safest, highest quality health and care service</i>	<i>Balancing the provider sector finances and improving provider productivity</i>	<i>Maintaining and improving performance against core standards</i>	<i>Ensuring every area has a clinically, operationally and financially sustainable pattern of care</i>	<i>Building provider leadership and improvement capability to deliver sustainable services</i>
1) Reduce to zero the number of providers in <b>special measures</b> 2) Two-thirds of inspected providers will be operating at CQC 'good' or 'outstanding' levels of quality 3) Support providers in the roll out of <b>seven-day hospital services</b> , working with NHS England 4) Implement <b>patient safety</b> initiatives in priority areas 5) Deliver guidance and tools for providers to make <b>safe staffing decisions</b>	6) Achieve and maintain sustainable <b>financial balance</b> for the provider sector from 2017/18 7) Deliver with providers a <b>2% efficiency</b> improvement year on year, including through implementation of the Carter Review recommendations	8) Consistently meet <b>NHS Constitution standards</b> over the period, with a particular focus on the aggregate A&E standard, while improving quality and efficiency 9) Deliver <b>mental health waiting standards</b> in aggregate every year	10) Implement <b>new care models</b> , including chains 11) Change to a <b>sustainable pattern of care</b> in the <b>most challenged health economies</b>	12) <b>Develop, maintain and enhance effective boards:</b> both people and ways of working 13) Expect every provider board to <b>reflect the diversity</b> of the people it serves, including gender-balanced boards 14) Expect every provider to implement effectively a recognised <b>continuous improvement approach</b> 15) Decision-makers in providers have access to <b>high quality information</b> (including on income and expenditure and benchmarks such as from the Carter Review recommendations) 16) Focus on <b>high value interactions with providers</b> , minimising any low value or disproportionate regulatory burden

[https://improvement.nhs.uk/documents/180/NHSI\\_2020\\_Objectives\\_13july.pdf](https://improvement.nhs.uk/documents/180/NHSI_2020_Objectives_13july.pdf)

# 1.3 Completeness: consequences of not including useful data

## What are the consequences of incompleteness? (Tom's List)

Incomplete information about planning objects, such as objectives and strategies, can directly lead to partial or total failure of the project.

- **Risk of total or partial failure**
- **Delays (years!)**
- **Cost Overruns**
- **Bad decision-making**
- **Bad service result to population**
- **Getting paid to redo the whole thing again**
- **Embarrassing public humiliation**
- **And more (Incomplete list here)**

### Summary of some Causes of Government Failure

Cause of government failure	Brief explanation of the problem caused	Examples of government failure to consider
• <b>Political self interest</b>	Government influenced by influential political lobbying	Farm support policies, the drinks industry, transport lobby
• <b>Poor value for money</b>	Low productivity / high waste makes spending less effective	Investment on IT projects in the NHS, poor record of PFI projects
• <b>Policy short-termism</b>	Governments often looking for a “quick fix” solution	Road widening to reduce congestion, ASBOs for offenders
• <b>Regulatory capture</b>	When Govt agency operates in favour of producers	Self-regulation on alcohol prices, powerful energy lobby
• <b>Conflicting objectives</b>	One policy objective might conflict with another	Minimum carbon price could damage UK competitiveness
• <b>Bureaucracy &amp; red tape</b>	Costs of enforcement may hurt enterprise & incentives	Costs of meeting health and safety and environmental laws
• <b>Unintended consequences</b>	Policies have unanticipated or unintended side-effects	Smoking ban – increased use of outdoor patio heaters

<https://www.tutor2u.net/economics/reference/government-failure>

## 1.4 Value Quantification

**Lack of quantification of critical values, qualities and degrees of success, failure and goodness.**

Here is a typical UN Sustainability Goal. And it is typical of public planning.

It is filled with words that are ambiguous, and not defined anywhere. The 'bold' words in my rendering of them at the right.

This kind of statement can be used as a vision statement, to inspire and simplify. I call that an 'Ambition Level' specification.

But for any serious practical use, such vision statements must be supplemented by additional statements, to make them clear and complete. [P3, VEng]

The primary clarification tactic is quantification. The secondary tactic is to structure the multiple conditions like 'situations', and 'shocks'.



**Vision**

“By 2030, build  
the **resilience** of the **poor**  
and those in **vulnerable situations** and reduce their  
**exposure**  
and **vulnerability**  
to **climate-related** extreme events and other economic, social  
and environmental **shocks and disasters**”

- \* The 'Disaster Protection Poverty' Target 1.5.
  - \* I have stated as an 'Ambition Level'.
- \* I have made **bold** or underlined above,
  - \* terms needing **definition**  
because of their **ambiguity**.

## 1.4 Value Quantification: How to define a structured Scale

**The Scale includes [Scale Parameters] for each set of conditions.**

Each [Scale Parameter] is defined by a set of conditions.

We can select combinations of these conditions when stating a Goal.

We can select high priority sets of conditions.

This is one type of *decomposition* of the problem.

“ By 2030, build  
the **resilience** of the poor  
and those in **vulnerable situations** and  
reduce their **exposure**  
**and vulnerability**  
to **climate-related extreme events and**  
**other economic, social and environmental**  
**shocks and disasters**”

- \* **The 'Disaster Protection Poverty' Target**  
**1.5.**

**Tag.Scale:**

% #Success Level# in [Building] [Resilience] for [Vulnerable] in [Situations] to [Shocks].

**Templates ▾**

**Building:** defined as:  
Economic Power, Health Power, Communications Ability, Recovery Speed, Relocation Capability, ...

**Resilience:** defined as:  
Avoiding, Escaping, Resisting, Recovering, ...

**Shocks:** defined as:  
Climate, Economic, Social, [Environmental]

**Environmental:** defined as:  
Earthquake, Flood, Avalanche, Fire

**Situations:** defined as:  
Individual Poverty, Family Poverty, Communal Poverty, National Poverty, Epidemic Hit, ...

**Success Level:** defined as:  
The attainment of Resilience for the defined circumstances. EG Avoided %.

**Vulnerable:** defined as:  
Poor, Physically Exposed, Weak Health, No Network Fallback, Insufficient Insurance, Insufficient Savings, Employment Problems, .

# 1.4 Value Quantification: UN-Clear Sustainability Goals

1. Notice 1.5 and 1.A 20 and 28 pitfalls. By my rough count these statements contain 20 (1.5) and 28 (1.A) ambiguous and undefined words.
  1. Like 'resilience', 'exposure', 'ensure', 'significant', 'dimensions'.
  2. There is **no hope of any 2 people on the planet understanding** all such terms as intended by the author (UN).
3. **Two 'Fuzzys'** (1.5 and 1.A) **do not make a Clear Idea** (SDG1), (End Poverty).
4. If all (48+) ambiguous terms were *somewhere* defined, it might *help* reduce ambiguity.
5. But there is **no** hint or pointer to such a **glossary** in the UN material. But there are some glossaries! See later.
6. So everyone is 'on their own'.
7. Dictionary definitions will not be helpful. Too general, and too many synonyms there.

2. In a **desperate attempt to clarify or define**, they (UN) **specify a few 'measures'**

(Indicators 1.5.1 etc, and 1.A.1 etc.).

But guess what? **Same ambiguity problem!** What is a '**disaster**'? What are '**resources**'?

If there were some UN statistics for *these* categories, they *should* be referenced, *right here*.

1. This is a **messy mixture of ends and means**, many levels of them.
2. Phrases like 'in order to' [1A] and 'to (end poverty)' [1A] are what I call '**link words**'. They link a suggested **means** (*strategy, solution*) to a specified **end**.
3. The situation is that **we have not defined 'end poverty' at all**.

We have suggested some **specific strategies** ('mobilization of resources' (1.A), 'predictable means') (1.A) to reach a **badly-defined goal** ('end poverty').

**Premature specification of strategies to solve badly-defined problems, is a bad planning idea.**

4. We *cannot know* if these various nice-sounding ambiguous strategies are **cost-effective**, because we do **not have a clear definition** yet of 'end poverty', **to judge them by**.



The screenshot shows the homepage of the Sustainable Development Goals Knowledge Platform. The header includes the UN logo, the text 'SUSTAINABLE DEVELOPMENT GOALS KNOWLEDGE PLATFORM', and a link to 'sustainabledevelopment.un.org'. Below the header is a navigation bar with links for 'HOME', 'SDGS', 'HLPF', 'STATES', 'SIDS', 'UN SYSTEM', and 'STAKEHOLDERS'. The 'ABOUT' section is currently selected. The main content area displays the UN's target 1.5 and its indicators: 1.5.1 (Number of deaths, missing persons and persons affected by disaster per 100,000 people), 1.5.2 (Direct disaster economic loss in relation to global gross domestic product (GDP)a), and 1.5.3 (Number of countries with national and local disaster risk reduction strategies). Below this, target 1.A is shown with its indicator 1.A.1 (Proportion of resources allocated by the government directly to poverty reduction programmes). At the bottom of the page, a red box features the text '1 NO POVERTY' and an illustration of four stylized human figures.

## A selection of The UN 'Targets' and Indicators for SDG1 (End Poverty)

- \* Let us take a look at the UN SDG 1 again.

- \* The Top Level says

- \* “End poverty in all its forms everywhere.”

- \* Indicators’ are

- \* an attempt to find,
- \* perhaps existing, statistical information,
- \* that can tell us about past levels, and future improvements or changes.

- \* Indicators are **not yet important enough** to ‘take a position on’ here,

- \* **because** we need *first* to sort out the **unclear Goal, and Target** statements themselves,
- \* **before** we can even discuss if the **indicators** actually reflect our Poverty Ideas.

- \* If we use these indicators **prematurely**, then we risk
  - \* **managing the wrong Poverty ideas.**

- \* So, we are now going to focus on **The Poverty definitions.**

- \* **What values are we actually trying to improve?**

**SUSTAINABLE DEVELOPMENT GOALS KNOWLEDGE PLATFORM**

HOME SDGS HLPF STATES SIDS UN SYSTEM STAKEHOLDERS TOPICS PARTNERSHIPS RESOURCES ABOUT

**TARGETS**

**INDICATORS**

**1.1** By 2030, eradicate extreme poverty for all people everywhere, currently measured as people living on less than \$1.25 a day **1.1.1** Proportion of population below the international poverty line, by sex, age, employment status and geographical location (urban/rural)

**1.2** By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions **1.2.1** Proportion of population living below the national poverty line, by sex and age **1.2.2** Proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions

**1.3** Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable

**1.4** Vague Values: Visions **1.4.1** Proportion of population living in households with access to basic services **1.4.2** Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive that they can use, control, manage, improve and dispose of their tenure **Muddled Measures**

**1.5** By 2030, build the resilience of the poor and the vulnerable to climate change, in particular the poor and the vulnerable, and halve the proportion of people living in poverty in all its dimensions **1.5.3** Number of countries with national and local disaster risk reduction strategies **1.5.3** domestic product (GDP) **1.5.3** Number of countries with national and local disaster risk reduction strategies

**1.A** Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions **1.A.1** Proportion of resources allocated by the government directly to poverty reduction programmes **1.A.2** Proportion of total government spending on essential services (education, health and social protection)





# 1.5 INCOMPLETE IMPACT ANALYSIS: analyze multiple effects

## What are the possible side effects

of a seemingly good idea

on other concurrent value objectives

## What are the possible impacts

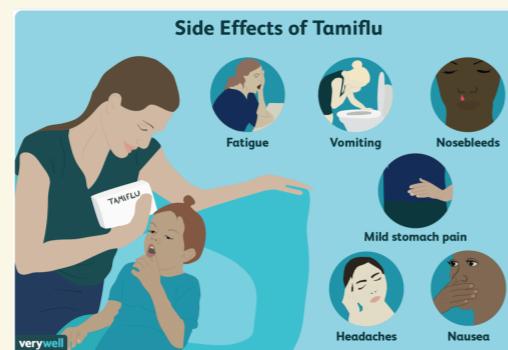
on

both short term resources

(people, time, money),

and long-term resources

(recurrent costs, maintenance costs, decommissioning costs)



The primary effects are just asserted vaguely. ('A Provides B').

And the side-effects are largely ignored.

Would this be acceptable for medical science? *do*?

*rugs, and procedures?*

What harm can hydroxychloroquine, do?

'Have a go now. I use it'. D.T.

The missing impact analysis does not have to be just here, in a short, summary, paragraph presentation.

But it must exist somewhere,

And be available to the taxpaying public and press, and be explicitly cross referenced from this paragraph.

Not just in some unattached 'References' at the end of a hundred pages.

- Pre-hospital urgent care
- 1.25. To support patients to navigate the optimal service 'channel',
- we will embed a single multidisciplinary Clinical Assessment Service (CAS) within integrated NHS 111, ambulance dispatch and GP out of hours services from 2019/20.
- This will provide specialist advice, treatment and referral from a wide array of healthcare professionals, encompassing both physical and mental health supported by collaboration plans with all secondary care providers.
- Access to medical records will enable better care.
- The CAS will also support health professionals working outside hospital settings, staff within care homes, paramedics at the scene of an incident and other community-based clinicians
- to make the best possible decision about how to support patients closer to home
- and potentially avoid unnecessary trips to A&E.

[www.longtermplan.nhs.uk/publication/nhs-long-term-plan/](http://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/)

Note the **bold, underline**, and \*bullets are part of my annotation to help me see the structure of this plan element.



# 1.5 INCOMPLETE IMPACT ANALYSIS: many other side

## Ask these questions of the plan->

- **What are the projected range, of capital costs, and annual costs, of any of the many assertions here?**
- **Is there any evidence, here (or cross referenced ) indicating experience in UK or elsewhere with such an organisation (CAS) and the results, side effects, problems and costs they experienced ?(= facts, experience)**
- **On what dates or time range will any stated effects occur, where and for whom?**
- **How many ambiguous and undefined words can you spot here?**
- **What are the known, expected, and theoretically possible negative side effects on any other health service values?**
  - **(as a result of these changes, for values mentioned in the long term plan)**
- **If anything fails to any degree in this plan, who is responsible, financially, politically, morally?**
- **Would you approve and publish this plan, if any failure to deliver, lost you your job and professional credibility forever?**

### • Pre-hospital urgent care

- 1.25. To support patients to navigate the optimal service ‘channel’,
- we will embed a single multidisciplinary Clinical Assessment Service (CAS) within integrated NHS 111, ambulance dispatch and GP out of hours services from 2019/20.
- This will provide specialist advice, treatment and referral from a wide array of healthcare professionals, encompassing both physical and mental health supported by collaboration plans with all secondary care providers.
- Access to medical records will enable better care.
- The CAS will also support health professionals working outside hospital settings, staff within ~~ambulance~~ paramedics at the scene of an incident, and ~~ambulance~~ based clinicians
- to **make the best possible decision** about how to support

[www.longtermplan.nhs.uk/publication/nhs-long-term-plan/](http://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/)

This sample is at random and typically representative of the whole. Check the link. See for yourself.

Note the **bold, underline**, and \*bullets are part of my annotation to help me see the structure of this plan element.



## 1.5 INCOMPLETE IMPACT ANALYSIS: many other side effects

Notice the following defects, wrt a 'reasonable standard of intelligibility' (my Rules, like AFOTEC above)

- **Absolutely no estimates of how much better anything will get by any date**
- **No definitions of dozens of concepts**
- **Glossary only decodes acronyms**
- **No cross references to more detail, or supporting data, or more formal plan specs.**
- **No reference to who is responsible for any result**
- **Seeming assumption of one technology will have one good effect**  
(no reference to a more **complex** technology - set of ideas)
- **There is no referenced or visible notion of quality control or review or responsibility for what is being written.**
- **And here is the side-effects analysis, according to my standards of side-effect specification. Below, next page analysis.**
- **Lacking all information about the priority of anything over competing demands in the larger plan**
- **Lacking any information about risks and uncertainties**
- **Lacking any information about side effects on any other value, here or in any other part of the larger plan**
- **Lacking any information about resources**

No  
good  
plans  
here

### • Pre-hospital urgent care

- 1.25. **To support** patients to navigate the optimal service 'channel',
  - we will embed a single multidisciplinary Clinical Assessment Service (CAS) within integrated NHS 111, ambulance dispatch and GP out of hours services from 2019/20.
  - This will provide specialist advice, treatment and referral from a wide array of healthcare professionals, encompassing both physical and mental health **supported by** collaboration plans with all secondary care providers.
  - Access to medical records will **enable** better care.
  - The CAS will also **support** health professionals working outside hospital settings, staff within care homes, paramedics at the scene of an emergency, and community-based clinicians.

This sample is at random and typically representative of the whole.  
Check the link. See for yourself.

[www.longtermplan.nhs.uk/publication/nhs-long-term-plan/](http://www.longtermplan.nhs.uk/publication/nhs-long-term-plan/)

Note the **bold, underline**, and \*bullets are part of my annotation to help me see the structure of this plan element.



## Total Misinformation to the NHS, the government and the public.

Notice the following defects, with regard to a reasonable standard of intelligibility

- **Absolutely no estimates, of how much better, anything will get, by any date**
- **No definitions of dozens of concepts**
- **The Glossary only decodes acronyms**
- **No cross-references to more detail, or supporting data, or any more formal plan specs. No Tags, just floating bullet-points.**
- **No reference to who is responsible for any result**
- **Seeming assumption of one technology will have one good effect**
- **(no reference to a more complex technology - set of ideas)**
- **There is no referenced or visible notion of quality control or review or responsibility for what is being written.**
- **And here is the side-effects analysis, according to my standards of side-effect specification. My Rules, like AFOTEC Rules above.**
- **Lacking all information about the priority of anything over competing demands in the larger plan**
- **Lacking any information about risks and uncertainties**
- **Lacking any information about side effects on any other value, here or in any other part of the larger plan**
- **Lacking any information about resources budgeted and expected consumed initially and in the operational long term.**

## Bad Practice Planning

### • Pre-hospital urgent care

- **1.25. To support patients to navigate the optimal service ‘channel’,**
- **we will embed a single multidisciplinary Clinical Assessment Service (CAS) within integrated NHS 111, ambulance dispatch and GP out of hours services from 2019/20.**
  - This will provide specialist advice, treatment and referral from a wide array of healthcare professionals, encompassing both physical and mental health supported by collaboration plans with all secondary care providers.
  - Access to medical records will enable better care.
  - The CAS will also support health professionals working outside hospital settings, staff within care homes, paramedics at the scene of an incident and other community-based clinicians
  - to make the best possible decision about how to support patients closer to home
  - and potentially avoid unnecessary
  - This includes using the CAS to simplify the process for GPs,



This sample is at random and typically representative of the whole. Check the link. See for yourself.

Planalysis: how is this particular plan detail (an 'objective' for example) connected to a higher level of concern?

In addition to clarity and completeness of the current project (like Brexit, Covid-19, etc.) value objectives; we need a clear acknowledgement of the higher set of values, which we acknowledge as a guiding framework.

### What is the objective for our objectives?

For example

(Human survival, freedom of movement and expression, economics, employment, International relations, Agreements, Policies)

These Fundamental Values need to be clearly and completely specified and explicit.

Not just political slogans.

They need to be clearly and directly linked to the current project plan.

### Why is the clear explicit connection to Higher level objectives, so important?

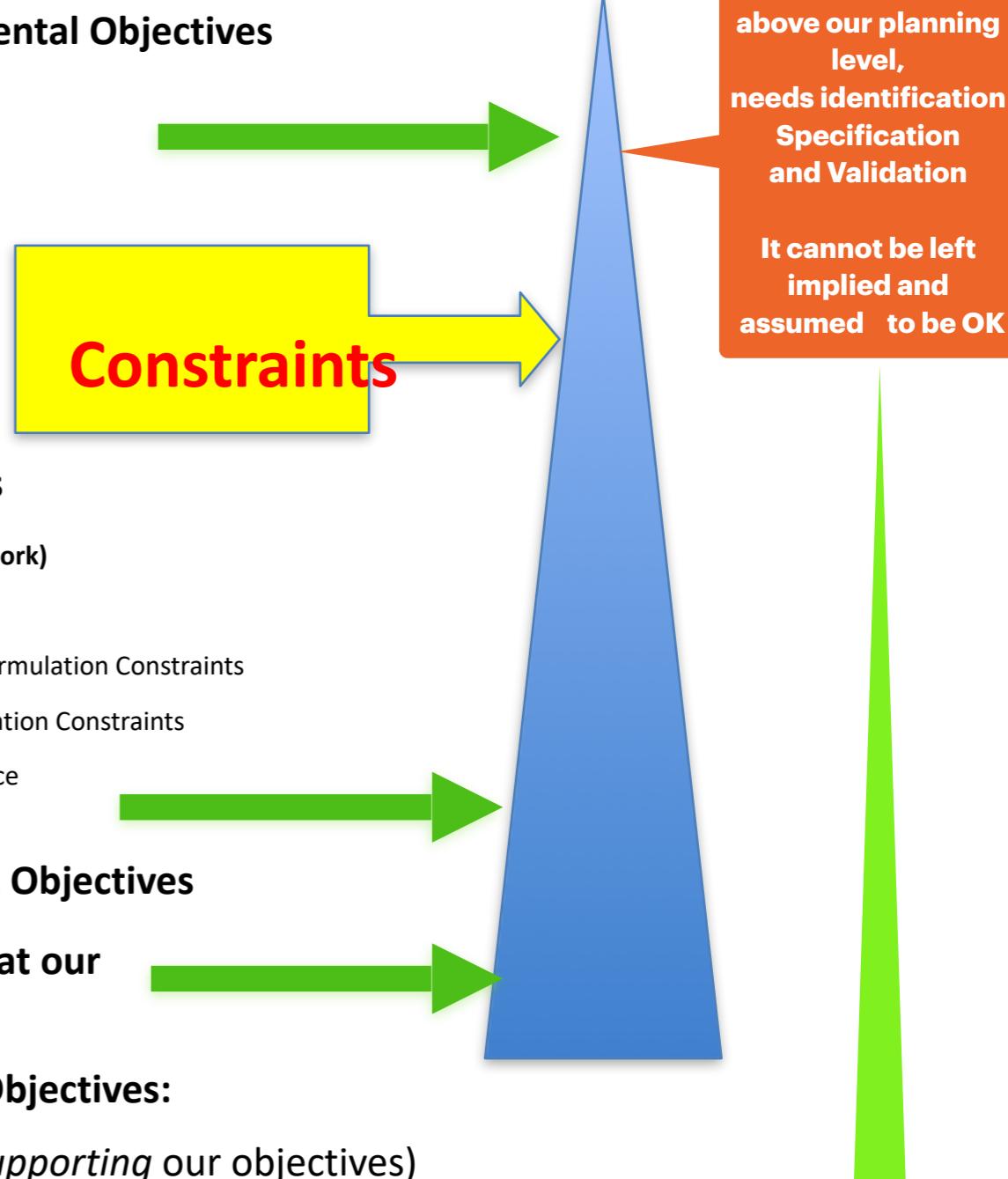
Because super-ordinate objectives and strategies determine the validity or relevance of all objectives and strategies below them.

If we do not know the entire set of higher objects, and if they are not clearly specified, then the more-detailed planning we do risks being wrong, or irrelevant to the higher purposes.

Notice that the plans we use as examples here (NHS, UN) have little or no information about the directly super-ordinate objectives or strategies. And when they do point to something, it is so badly defined as to be useless. We do not know exactly what it is. Therefore we cannot logically judge how relevant our 'strategic' objective actually is.

Reference: Ralph Keeney: Value Focussed Thinking. (3 level idea), F, S, M.

- 1. Fundamental Objectives
- (above us)
- 2. Generic



This level, above our planning level, needs identification Specification and Validation  
It cannot be left implied and assumed to be OK

**Identification:** specific reference from the Strategic level to the Fundamental level tags

**Specification:** definition of the Fundamental level, so that it is unambiguously clear, and quantified if variable

**Validation:** our strategic objectives need to clearly support the Fundamental level, and the way to show that is Impact Estimation Tables

Planalysis: Are related plans clear and complete sets?

Can we get a clear traceability chain from lowest means to highest ends?

This is a reasonable attempt to connect 5 things (are they strategies or objectives, or both ?) to a higher level (Challenges)

But here are some problems, areas where it could have been clearer

There are no unique 'Tags' on the objectives, to give clear stable cross-references, to full detailed objectives. Headings are not guaranteed same in future or past references to these specs.

There is no explicit reference to all the objectives Above the 5, Below the 5, Included in each of the 5

There is no explicit and clear categorisation to distinguish between results objectives (how much we plan to improve a value), and strategies (ideas for improving values). If is just 'plan-stuff'.

There is even such a thing as a Means Objective: a 'value improvement objective' which serves as a *strategy* to improve a higher-level objective. See Keeney-Means Objective (op. cit.)

I underlined the link words. ENDS link MEANS. Proving both ends and means are in each specification; both 'poorly defined', tt as usual.

What are we looking for? Explicit ends-means relations: no guessing or misunderstanding. Perhaps Impact Estimation Tables to show two levels of relations Digital intelligible connections, so we can generate diagrams, and keep updated.

Why is this important? Because

- Position in hierarchy determines priority
- Sub-elements can be changed to serve better upwards.
- Sub-elements must be QCed to check they fully deliver upwards. i.e. to fully deliver required value levels.

### How we will deliver the ambitions of the NHS Long Term Plan



To ensure that the NHS can achieve the ambitious improvements we want to see for patients over the next ten years, the NHS Long Term Plan also sets out how we think we can overcome the challenges that the NHS faces, such as staff shortages and growing demand for services, by:



**1. Doing things differently:** we will give people more control over their own health and the care they receive, encourage more collaboration between GPs, their teams and community services, as 'primary care networks', to increase the services they can provide jointly, and increase the focus on NHS organisations working with their local partners, as 'Integrated Care Systems', to plan and deliver services which meet the needs of their communities.

**2. Preventing illness and tackling health inequalities:** the NHS will increase its contribution to tackling some of the most significant causes of ill health, including new action to help people stop smoking, overcome drinking problems and avoid Type 2 diabetes, with a particular focus on the communities and groups of people most affected by these problems.

**3. Backing our workforce:** we will continue to increase the NHS workforce, training and recruiting more professionals – including thousands more clinical placements for undergraduate nurses, hundreds more medical school places, and more routes into the NHS such as apprenticeships. We will also make the NHS a better place to work, so more staff stay in the NHS and feel able to make better use of their skills and experience for patients.

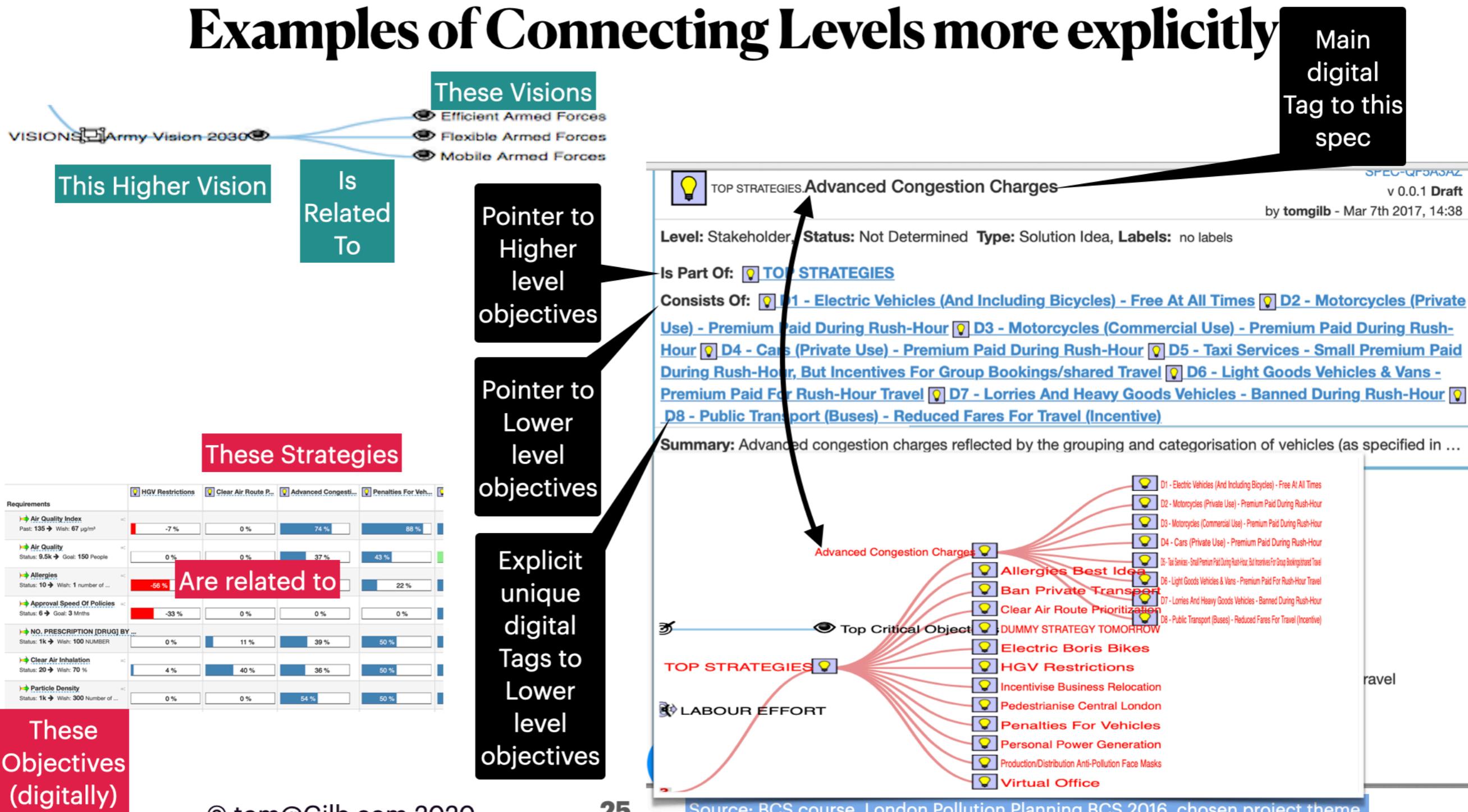
**4. Making better use of data and digital technology:** we will provide more convenient access to services and health information for patients, with the new NHS App as a digital 'front door', better access to digital tools and patient records for staff, and improvements to the planning and delivery of services based on the analysis of patient and population data.

**5. Getting the most out of taxpayers' investment in the NHS:** we will continue working with doctors and other health professionals to identify ways to reduce duplication in how clinical services are delivered, make better use of the NHS' combined buying power to get commonly- used products for cheaper, and reduce spend on administration.

# 1.8 Connecting to Fundamental Values

Here is an example, Using 'ValPlan.net' tool, of being explicit about related levels of concern. The interesting thing here is that the digital tool keeps track of these levels, and can display them in different graphical and textual formats as needed. The basic underlying information about the hierarchical relation is kept by the app, and can easily be changed when needed.

## Examples of Connecting Levels more explicitly



Planalysis: the public and media need digital access to details, such as source references, justifications and minority opinions, as well as other outside critical reports. The planning agency should be ethically and legally compelled to capture and give access to such data, to enable democratic criticism or understanding.

## Access to the details and background?

Not just announced as 'here is our strategy'. But with detailed systematic information as to the background, and justifications for suggesting such strategies.

- **Some form or summary of most public plans is generally published, and web available to the public.**
- **The problem is that there is probably a lot of background plan detail, and incremental change history which is NOT digitally available.**
- **And there is rarely any direct reference to its existence.**
- **Did you see any such sources and background in the plans shown in this book? (non-existent)**
- **The problem being that**
  - **We cannot get the details, to understand the summaries**
  - **We cannot see the process, or the reasoning, which led to the published plans.**

Covert Schools      0.0.1 (by gilbguest4 - 22 days ago)

Is Stakeholder Of: Educational Safety  Affordability Of Education 

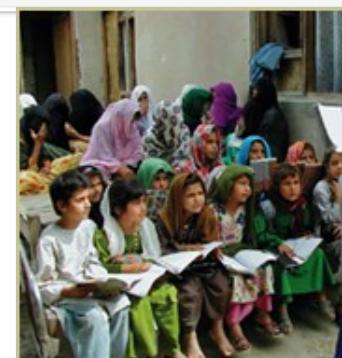
Summary:  (by gilbguest4 - 22 days ago) 0

Groups of learners and teachers that are in danger when found to be in a locally unacceptable form of education as well as those prevented from attending schooling by family members.

Source:

Malala - the girl who was shot for going to school  
<http://www.bbc.com/news/magazine-24379018>

Acid attacks, poison: What Afghan girls risk by going to school  
<http://edition.cnn.com/2012/08/02/world/meast/cnnheroes-jan-afghan-school/>



[https://www.unicef.org/mena/Education\\_Under\\_Fire.pdf](https://www.unicef.org/mena/Education_Under_Fire.pdf)  
<http://reliefweb.int/report/afghanistan/girls-attacked-attending-school>  
[https://www.unicef.org/somalia/SOM\\_resources\\_situationalysissummary.pdf](https://www.unicef.org/somalia/SOM_resources_situationalysissummary.pdf)  
<http://www.theverge.com/2015/2/11/8014563/bill-gates-education-future-of-online-cou>

Stakeholder Value: Their set of Interests

Stakeholder Deeper sources

## 1.8 Stakeholder Mapping:

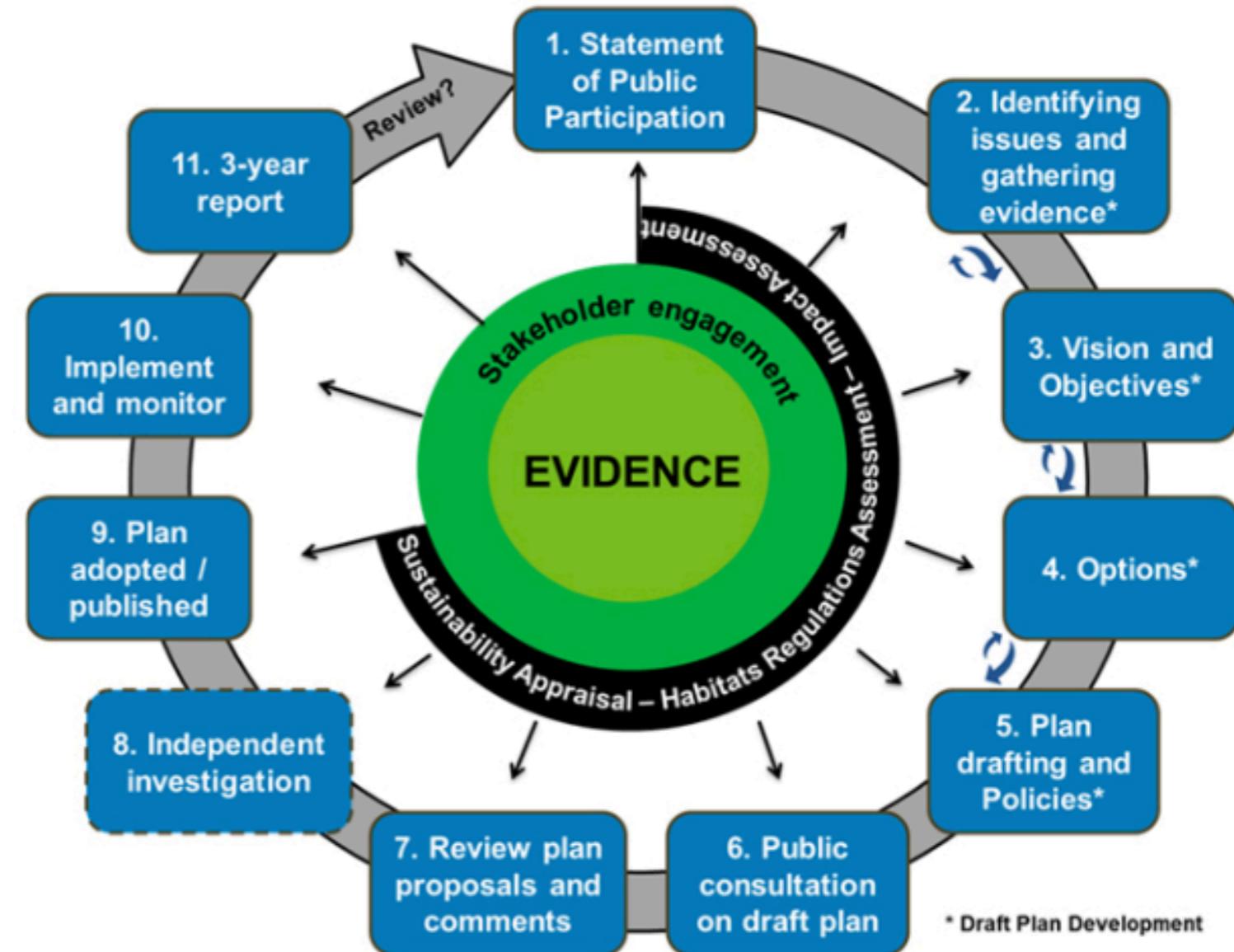
Planalysis: ask, who are the critical stakeholders for this objective?  
Do different stakeholders have different needs at different times in different areas?

**STAKEHOLDER MAPPING:**  
**formal specification of acknowledged stakeholders, and their acknowledged values, is usually not complete enough, public enough, and not connected explicitly enough to the plan.**

**We cannot easily see which stakeholders have been ignored**

**We cannot see which stakeholder concerns have been included, and considered.**

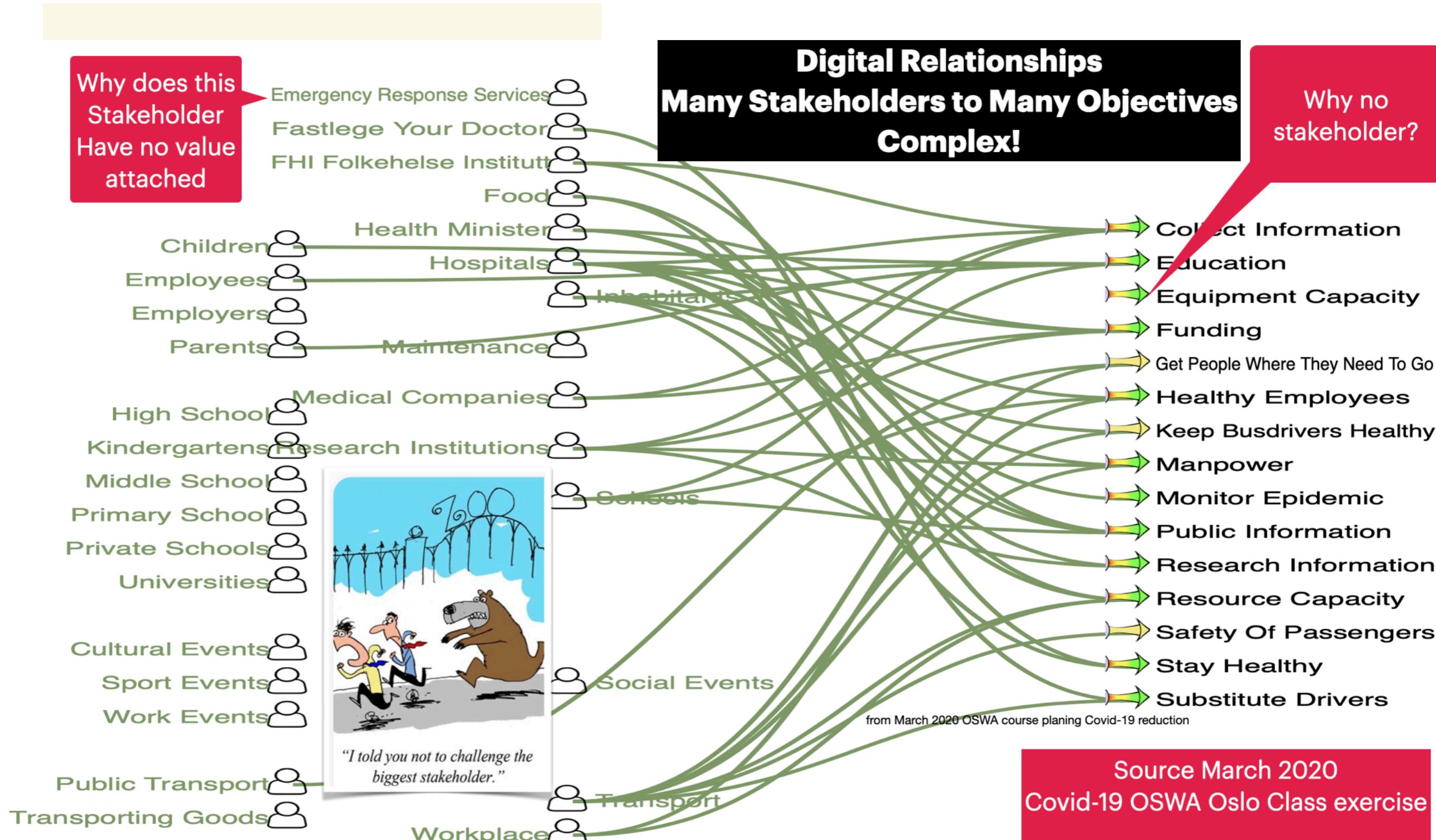
**Thorough stakeholder analysis is a key part of planning *transparency*, and a key component for review, quality control and change control.**



Planalysis: do you know all critical stakeholders? Do you know all critical Values for each stakeholder?

Have you really consulted or analyzed the stakeholders, and kept up to date with changes?

Are all these stakeholder value data available as background to you?



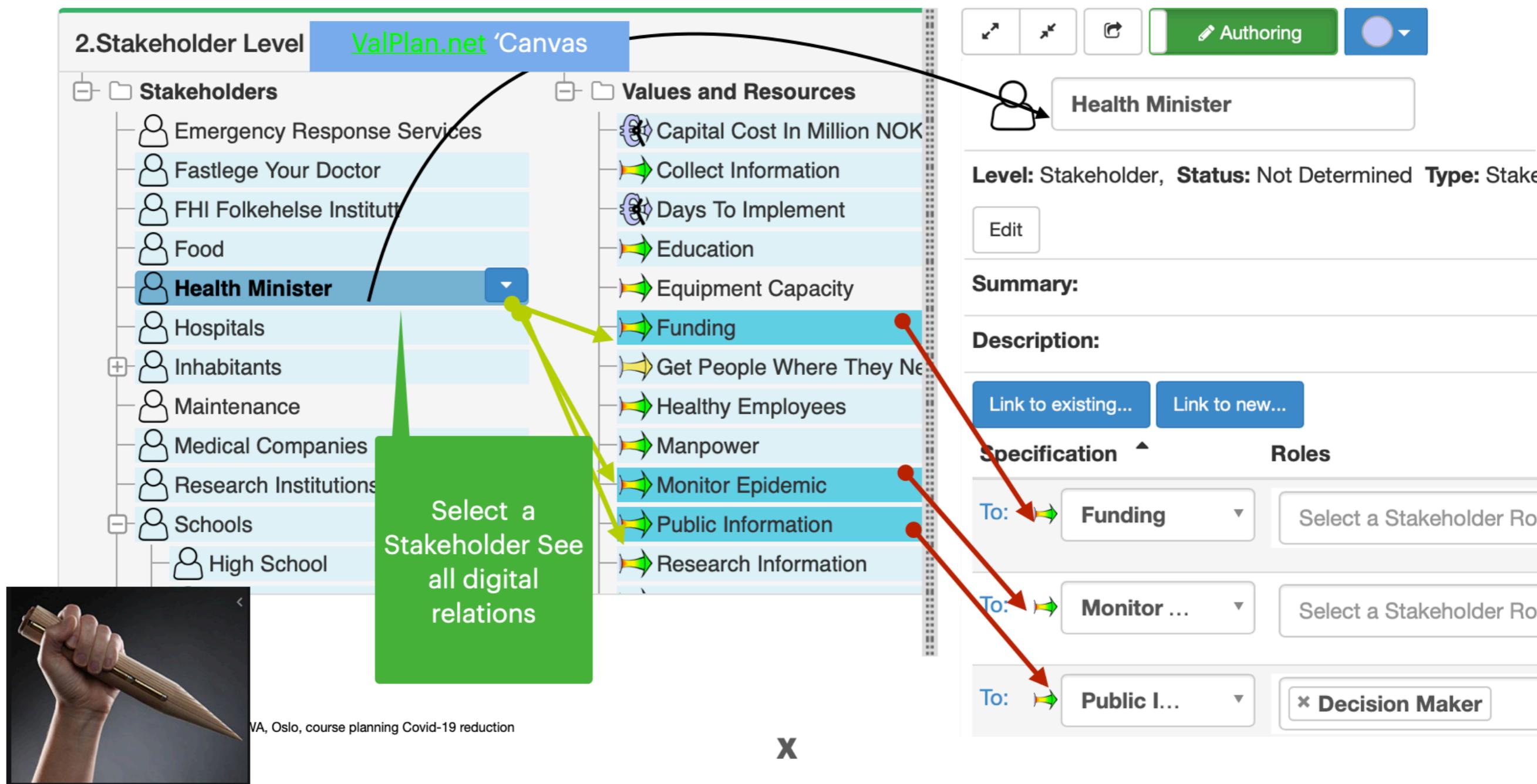
## 1.8 Stakeholder Mapping: digital multiple views

**Once the digital connections are made,**

**You can access them in a variety of ways, as needed.**

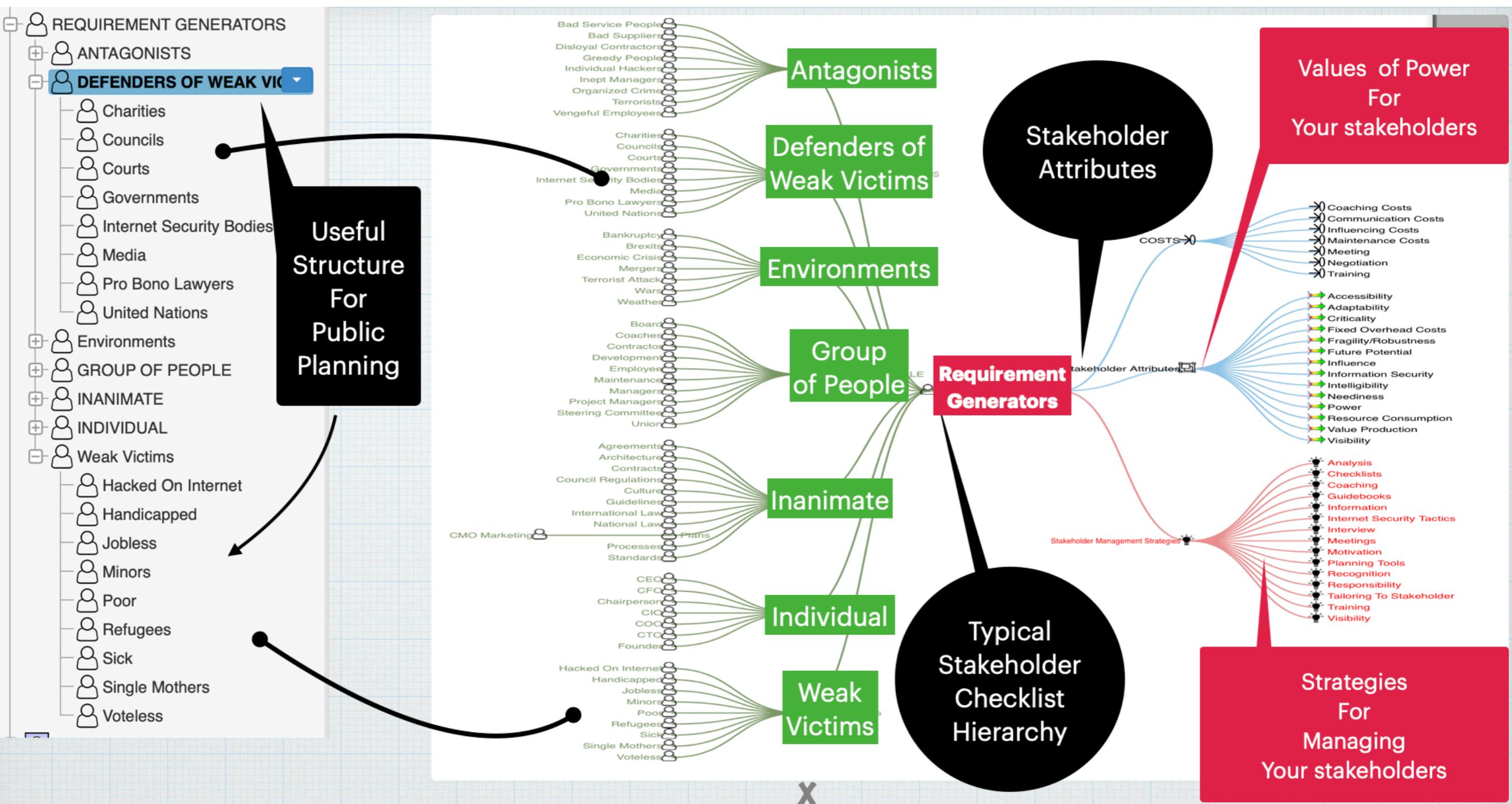
**The relationships are baked into the plan for everybody, including the public and media (Transparency)**

# Stakeholder <-> Value Digital relation. Covid-19 Planning



# 1.8 Stakeholder Mapping:

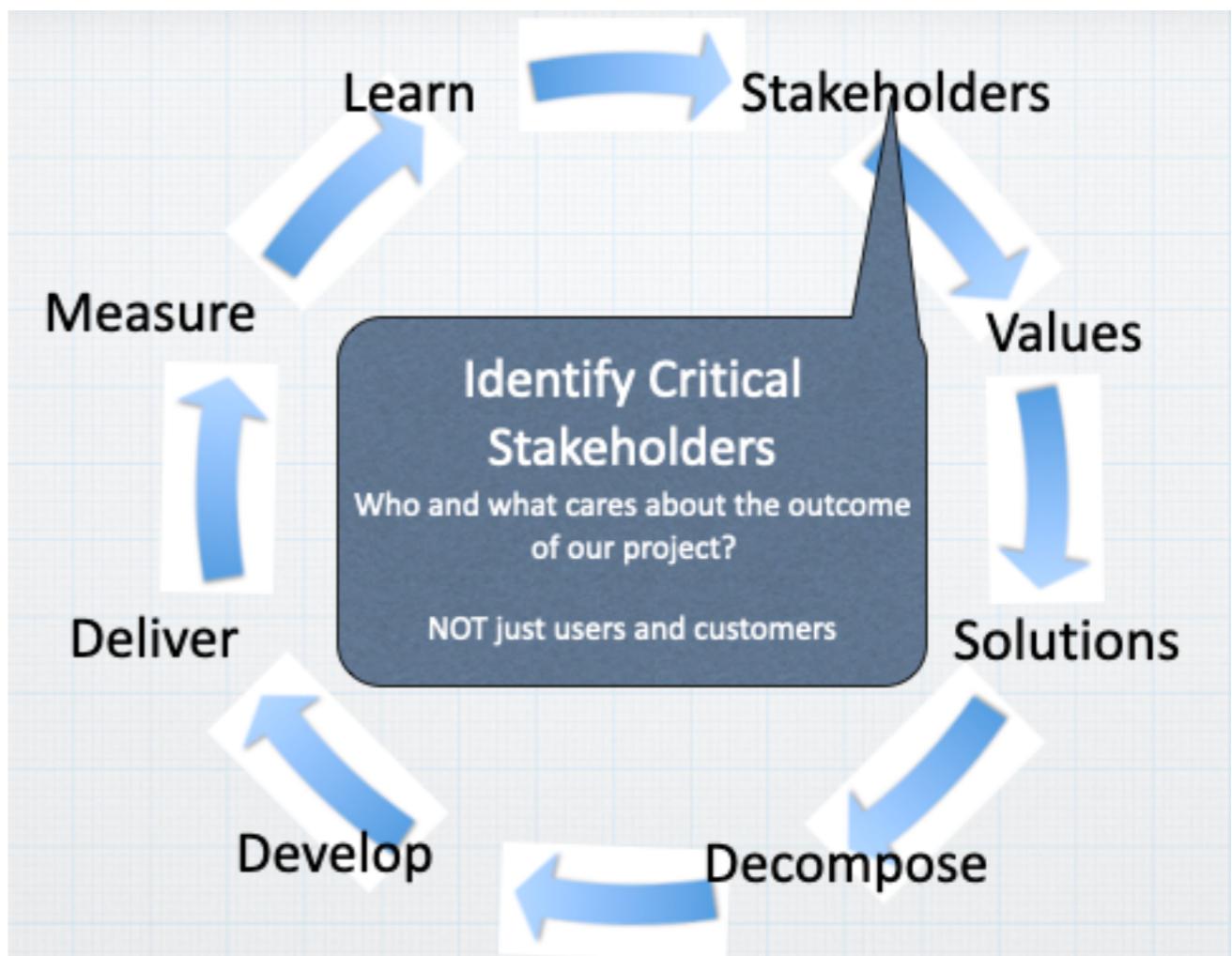
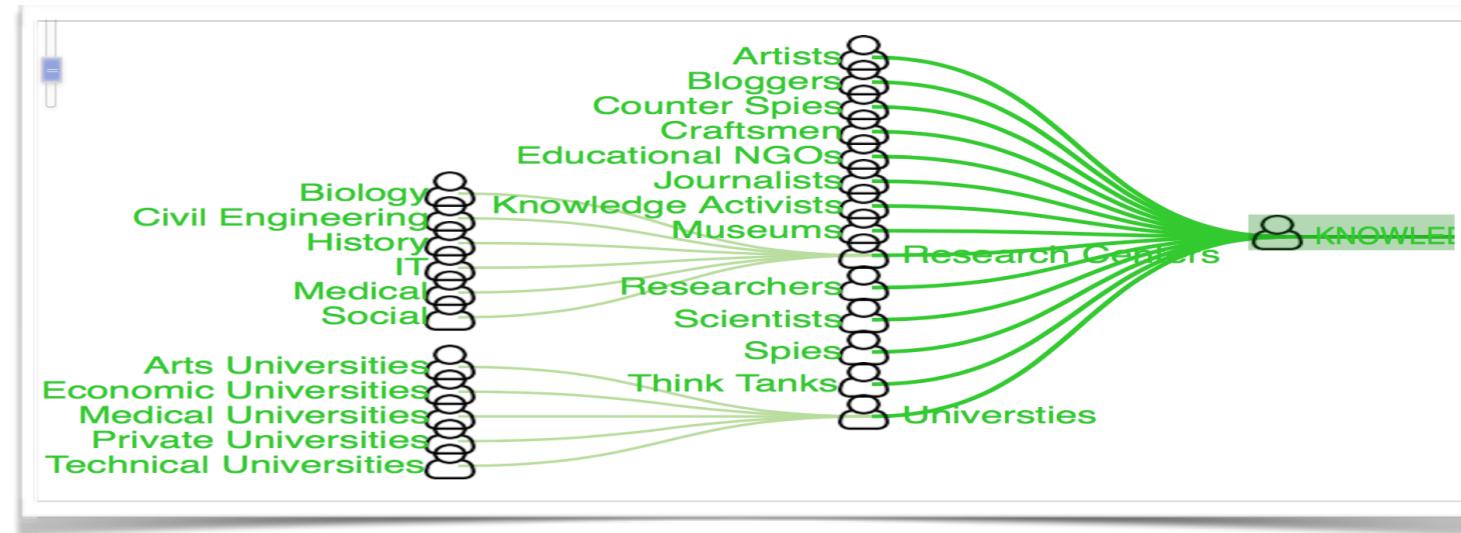
Planalysis: with a checklist like this, of about 50 stakeholders, you can remember to check for stakeholders which you otherwise would forget, at your peril.



Stakeholder Types: a much richer picture than 'Users'

Planalysis: My Stakeholder Principles so you have a realistic view, of what you can learn about Stakeholders.

1. Some stakeholders are *more critical* to your system than others.
2. Some stakeholder needs are *more critical* to your system than others.
3. Stakeholders are *undisciplined*: they may not know all their needs, or know them precisely, or know their value. But they can be analyzed, coached, and helped to get the best possible deal.
4. Stakeholders may be *inaccessible*, unwilling, inanimate, oppositional, and worse: but we need to deal with them intelligently.
5. Stakeholders might well ask for the *wrong thing*, a 'means' rather than their real 'ends'. But they can be guided to understand that. Or their requests can be interpreted in their own, real, best interests.
6. Stakeholders do *not want to wait years, get delays, invest shitloads of money, and then get little or no value*. They want as much 'value improvement' of their current situation, as they can get, as fast as they can get it. For as little cost as possible,
7. Stakeholders *cannot have any realistic idea* of what their needs and demands will *cost to satisfy*. So their adopted (by you) requirements need to be based on *value for costs*, not on *value alone*. Delivering small increments, based on high value-to-cost, is one smart way to deal with this.
8. If you think you have found 'all critical stakeholders', I think you should assume there is *at least one more*, and when you find that one, .... . New Stakeholders will emerge, and they are not all identified at the beginning.
9. If you think you have found all critical needs of a stakeholder, there will *always be at least one more need*, hiding.
10. If you do not understand, and act on the principles above; you will blame your failure on 'system complexity', and the unexpected and wicked problems. But in reality it is *your own fault* and responsibility; deal with it - up front and constantly thereafter.



## 2.0 Plan QC: Plans needs to be subject to a wide variety of Quality Control

PlanQC: Measure conformance to good planning practices,

Motivate planners to plan properly

### 10 Principles of Plan Evaluation

1. A Plan will have complex and dynamic relations with all other Plans, past present and future: and is dependent on multiple requirements and constraints, present and future, and is also dependent on actual Plan *implementation* practice. So, plans must be evaluated by a variety of Plan Evaluation Methods throughout their effective life-span. Even after planned system decommissioning, the plan-stakeholders might want a retrospective analysis to discover causes of its effects ('Plan Archeology')

2. There are two basic Plan Evaluation Situations: a *Theoretical* Evaluation, based on the Specified Plan itself; and a Plan *Implementation* evaluation, based on 'real implementation' experiences of the Plan.

3. *Theoretical Evaluation of Plan (TEP)* processes can include:

1. Superficial Personal Opinions, based in a poor plan draft (without even realizing it is a poorly crafted plan).
2. Expert Opinions based on a good Plan Specification (looking at content, and using rules of good practice, SpecQC).
3. Quantitative Estimates of Strategy Impacts on Requirements (Value Objectives, Resources, Constraints), with Evidence, Evidence Sources, and uncertainty estimation (Impact Estimation Tables method).
4. Formal Quantified Reviews and Quality Control, with respect to Planning Rules (Standards, numeric exit levels) and related-to-plan Documents (Requirements, Contracts, Policies, Political Promises, etc.)
5. Research on other experiences, or studies, of same or similar plans and strategies, used elsewhere. Inference.

4. *Plan-Implementation Evaluation (PIE), real system test and measurement, can include:*

1. Prototypes, Experiments, Small-Scale Plan measurements, and Tests.
2. Evolutionary Incremental delivery of Plans and Sub-plans to a real system.
3. Fixed Event (handover, contract evaluation) Systems Testing, of Attributes and costs.
4. Real-time continuous measurement, of critical properties, for the lifetime of the planned system.
5. Studies of our plan strategies, in *multiple* systems (multiple geography, multiple organisations, multiple customers)
6. Plan Archeology: analysis, measurement, studies of the past of systems, which *might* no longer be in operation.

5. **Complex effects**, like a side-effect of a side-effect, will generally not be known, for many plans, in advance of observing and measuring them, in real systems. This failure to know is because we do not always collect the data about them, and make it available, and obligatory, as some disciplines do (Pharma, air disaster investigation, engineering). Our knowledge culture is not mature enough, or the planned strategies are new, and untried. Little data is yet collected.

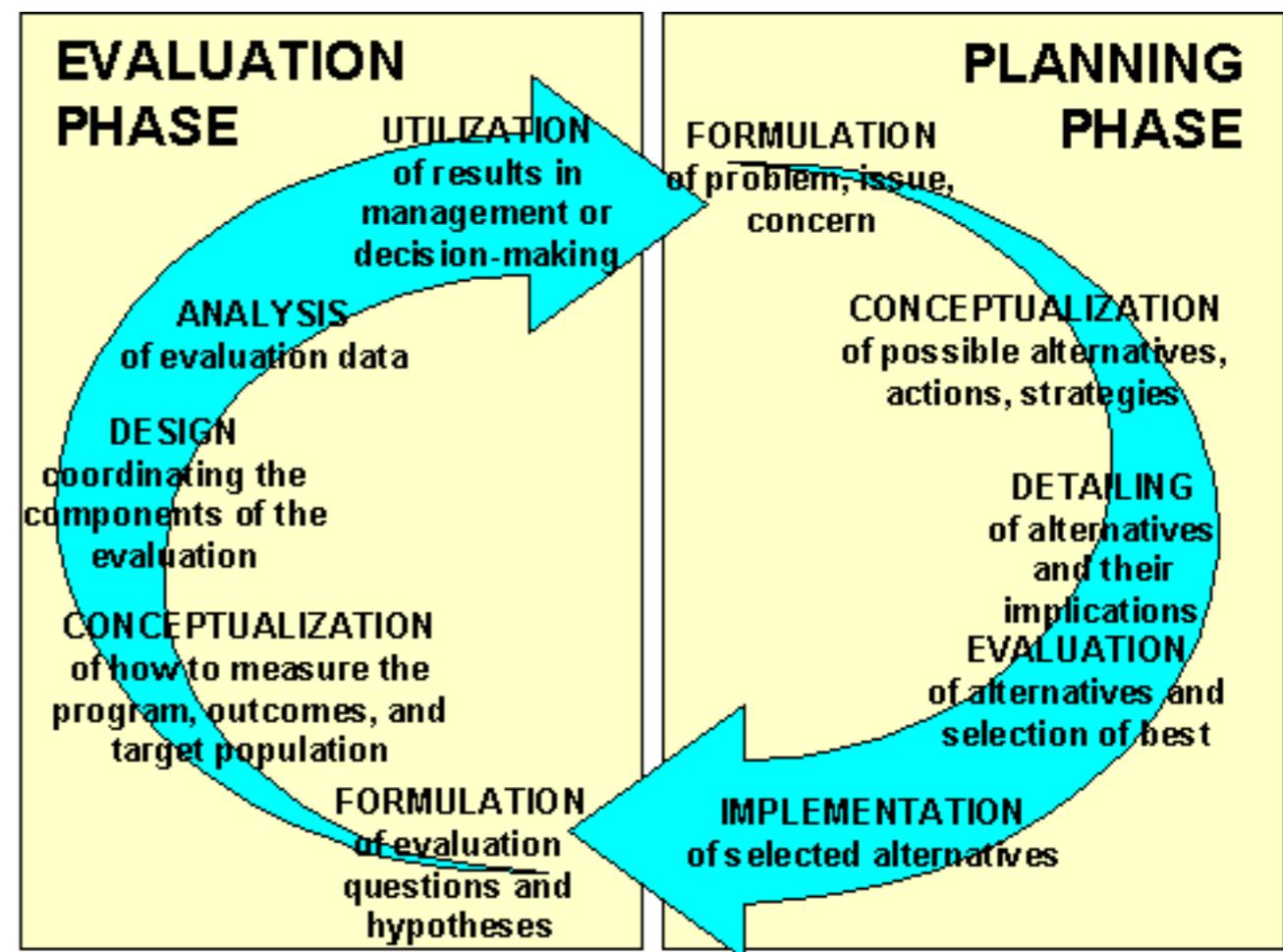
6. In **large scale and long term planning** situations (Covid-19, AI systems, Brexit, UN Sustainability Goals) it is probable that all these theoretical-and-real plan evaluations will be needed.

7 The selection of Plan Evaluation Methods (PEM) should be based on **cost-effectiveness** of the available Methods. So, as to reduce the total costs of successful planning efforts.

8. An organization should be able to build a Plan Evaluation Method **culture**, by training people in the methods; budgeting for their use, and supplying people with tools to do the methods.

9. Tactics which can be used to '**guarantee**', that a plan will ultimately have quality or cost properties that are desired, include 'Plan to Attribute', 'Dynamic Planning to Attribute', Contracting, Insurance, and critical Stakeholder Prioritization. Don't estimate: plan to get what you want.

10. A plan idea cannot be correctly evaluated unless it is specified with **sufficient clarity and detail**. A planning idea will not work as evaluated, if there is any corruption in the translation of the Plan, into reality, intended or accidental. Rules and Standards must be used, to insure good enough specification, as high Qualiy planning speciification does not happen without standards and motivation to use them..



<https://conjointly.com/kb/planning-evaluation-cycle/>

## Chapter 2

# Plan Quality Control

## 2.1 Plan QC: simple example, count Rule violations, = 'Plan Defects'

PlanQC: a simple count of 'bad terms' is quite helpful as Quality Control, if you refuse to accept defect-polluted plans. = 'No Exit' of plan

### Simple Plan QC Process.

'Count all words in Dept. Works and Pensions System plan example at right' :

'Which probably violate this Rule:'

**CLEAR: all words must be ambiguous, clear, well defined, with no possibility of different interpretations.**

### Exit Condition

If more than 1 violation of this rule, the entire plan must be re-written

Apply  
'CLEAR' Rule

### What is it About?

- "Making it easier for people to earn more money, by scrapping the current benefit and tax credit system, and replacing it with a single credit for people in and out of work.
- Those who don't work are encouraged to have a go.
- Those in work are encouraged to earn more.
- There is now no excuse for cheating the system."

### HINT:

Making, easier, people, earn, more, money, scrapping, current, benefit, tax credit, system,

## 2.3 PlanQC: a real result of acknowledging a vague plan

### Draft clarification of what DWP means by Reducing Benefit Dependency

#### Benefit Dependency:

**Ambition** level: people will not have anywhere near the same level of benefits dependency as at present.

**Scale:** duration of defined Benefit Types for defined Claimant types under defined Circumstances

**Past** [2011, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 7 years ? ± 6 ? <- MW

**Goal [Deadline = Next Election, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 4 years ? ± ? <- MW**

**Goal [Deadline = Next Election + 5 years, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 2 years ? ± ? <- MW**

• :

○

- **Stakeholders**

- Taxpayer Disposable Income
- Earning Ease “taxing them less”
- Claim Ease
- Equitable Treatment (under the law)
- Tailored Responsiveness
- Rights Clarity “what, why”

#### What is it About?

- **“Making it easier for people to earn more money, by scrapping the current benefit and tax credit system, and replacing it with a single credit for people in and out of work.”**
- **Those who don’t work are encouraged to have a go.**
- **Those in work are encouraged to earn more.**
- **There is now no excuse for cheating the system.”**

The ‘Benefit Dependency’ Objective, implied in this original DWP (UK Department for Work and Pensions) formulation, was re-planned as a quantified objectives

## 2.4 PlanQC: checking you are not mixing ends and means

### Can the UN mix Strategies in with their unclear Goals?

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries

8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

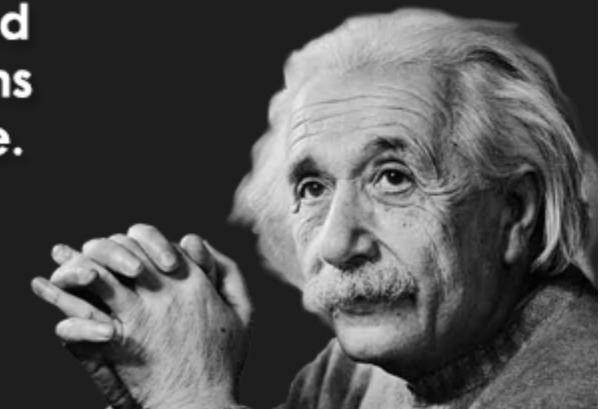
8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

#### Planning Rule

**NoMix:** Goals and Objectives, Future planned states, must not be mixed up with their Strategies. Keep these types of plan clearly separate, with separate identities.

Perfection of means and confusion of ends seems to characterize our age.

Albert Einstein



**Have a go!**

**Can you identify the strategies, here , which ARE NOT the Objectives or Goals or Outcomes**

## 2.4 PlanQC: Planalysis, using 'link words' to spot a bad mix

These are headlined as “Goal 8 Targets”,  
NOT ‘Strategies for meeting the targets’

### “Goal 8 Targets”

8.1 Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries

8.2 Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

8.3 Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

So, about 5 defects here (8.2), from Rule NoMix (below), and many more from CLEAR (2.1)

8.2 Achieve higher levels of economic productivity

Target

through

Link

diversification, technological upgrading and innovation,

Strategy (3 !)

including through a

Link

focus on  
high-value added and  
labour-intensive sectors

Strategy (2 !)

## 2.5 PlanQC:

8 DECENT WORK AND ECONOMIC GROWTH



### BE CAREFUL TO ASK FOR WHAT YOU REALLY WANT:

You need to be very conscious of the difference between 'Ends' (Value Goals) and 'Means' (Strategies for delivering the Ends), so that you really get your intended sustainability value improvements.

Even when your 'best strategies' turn out surprisingly bad, and even deliver results later, than your initial goal planning specified.

"In April 2020, the United Nations released a [framework for the immediate socio-economic response to COVID-19](#), as a roadmap to support countries' path to social and economic recovery.

It calls for an extraordinary scale-up of international support and political commitment to ensure that people everywhere have access to essential services and social protection.

The socio-economic response framework consists of five streams of work:

1. Ensuring that essential health services are still available and protecting health systems;

2. **Helping people cope with adversity, through social protection and basic services;**

3. Protecting jobs, supporting small and medium-sized enterprises and workers through economic response and recovery programs;

4. Guiding the necessary surge in fiscal and financial stimulus to policies work for the most vulnerable and strengthening multilateral and regional responses; and

5. Promoting social cohesion and investing in community-led resilience and response systems.

These five streams are connected by a strong environmental sustainability and gender equality imperative to build back better.

The UN Secretary-General has stressed that the recovery from the COVID-19 crisis must lead to a different economy."

<https://www.un.org/sustainabledevelopment/economic-growth/>

X

\* This example is from recent COVID-19 updates to UN Goal 8 'Decent Work and Economic Growth'

\* The underlined and bold words are 'link words'

\* They link 'ends' and 'means'

\* This helps us see the difference between UN Goals (ends) and suggested UN Strategies

\* Notice that both of these are badly defined, ambiguous,

\* Goals are not quantified

helping people cope with adversity,

\* Strategies have no estimate impact on the bad goals  
social protection and basic services;

\* This is one of the 17 goals

\* And there are 7 link-word cases, in this Goal alone.

\* And dozens of unclear words, political slogans. So this is not a basis for serious planning and economic decisions, and prioritization.

\* Simple question: which one of the 7 or so strategies, at left, would you do in the short term, and why? (difficult to answer because of fuzziness)



Link words detect  
'means' in the 'ends'

MEDIAN HOURLY PAY OF  
MEN IS 12% HIGHER  
THAN THAT OF WOMEN



ONE FIFTH  
OF YOUNG PEOPLE

ARE NOT IN  
EDUCATION,  
EMPLOYMENT  
OR TRAINING



## 2.6 PlanQC: We need 2 review phases, is it clear? Is it effective?

### A 'Plan Review'

1. Make 'Clear' plans first.
2. Then make sure they are really effective plans.

= Right Values, budgets, strategies, priorities

**The plan, in any section of the plan, at any time may be reviewed by any capable group of stakeholders,**

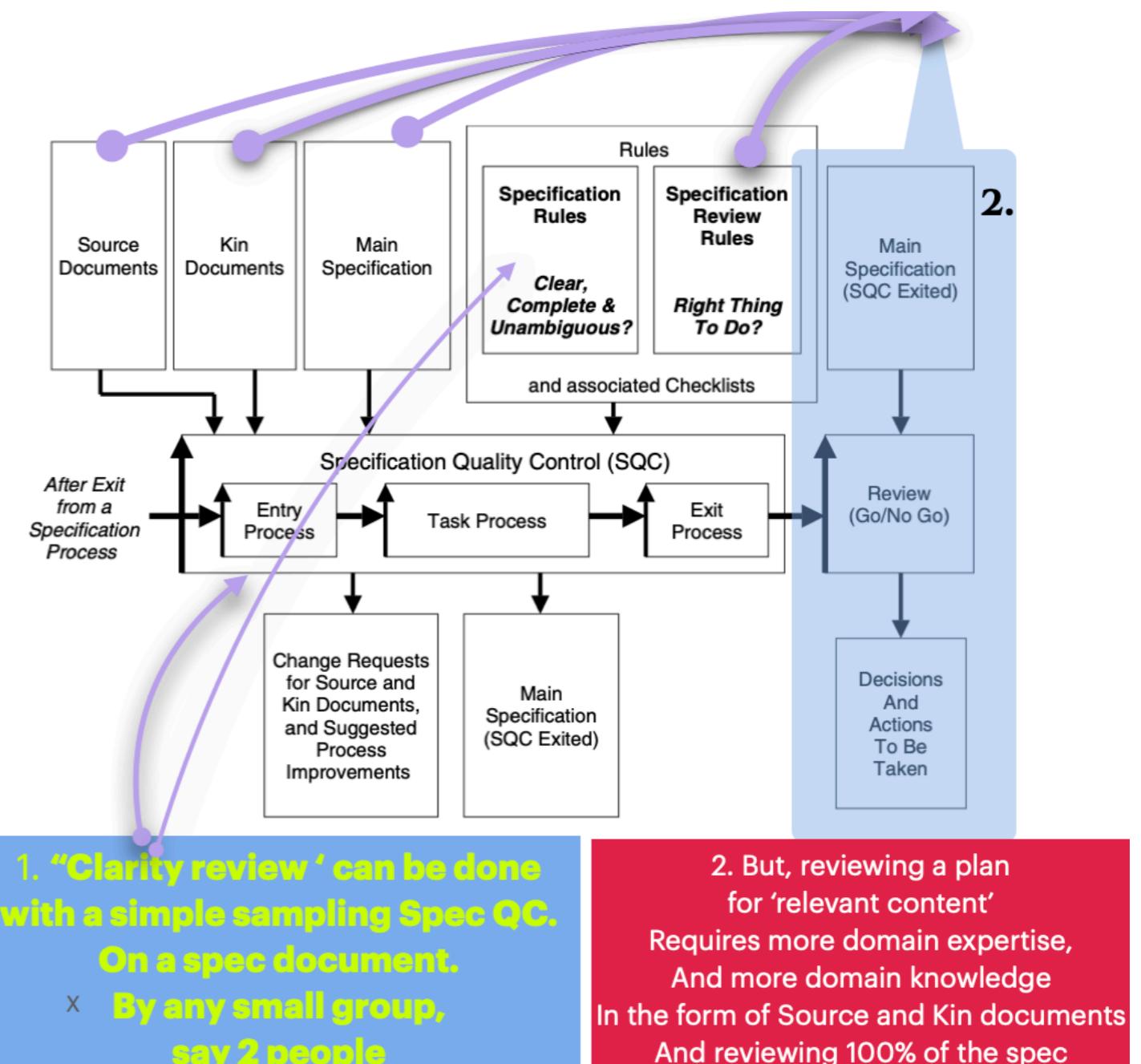
**against any interesting set of criteria.**

**Review Criteria Examples:**  
**stakeholder agreement, economics, estimation credibility, completeness.**

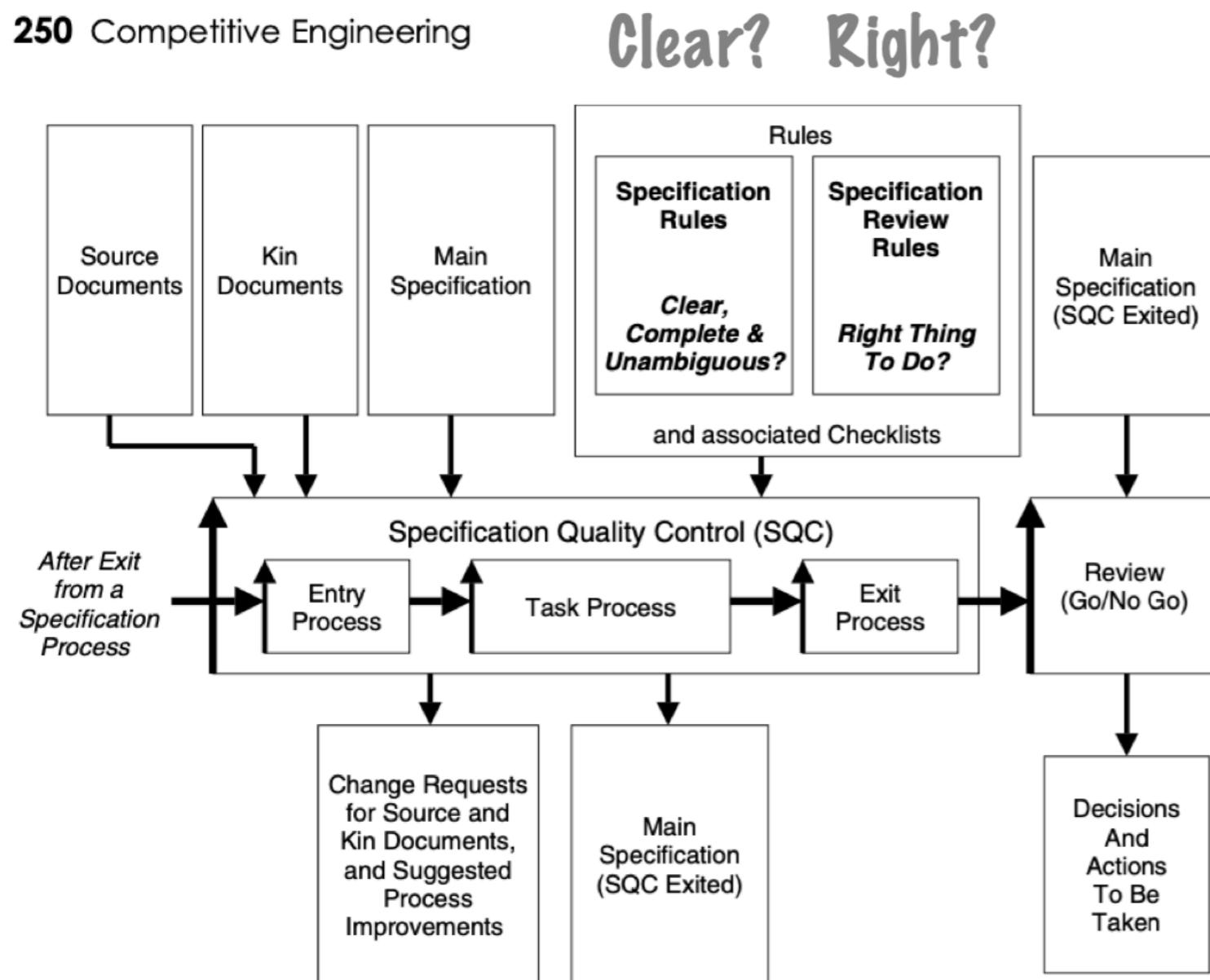
**All reviews will be published together with the level of the plan reviewed.**

**All follow up actions agreed by a review will be incrementally published with that review.**

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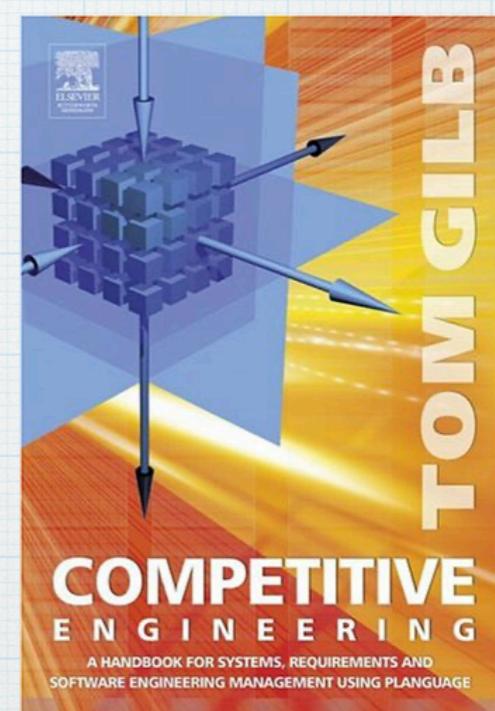
250 Competitive Engineering



**Figure 8.8**

Overview of the SQC process showing how Specification Review Rules fit alongside Specification Rules.

# Spec QC Process



<https://www.gilb.com/p/competitive-engineering>  
(free pdf)

If you sign up with [gilb.com](http://gilb.com)

## 2.6 PlanQC: a more-detailed view of the 2 types of Plan QC

Plan Clarity	Plan Effectiveness
Clear	<b>Main impact on Goals is estimated</b>
Unambiguous	<b>Side effects are estimated</b>
Complete	<b>Costs are estimated</b>
Consistent	<b>Constraint violations are specified</b>
Variables quantified	<b>Risks, threats, mitigations, assumptions are specified</b>
	<b>Issues not resolved are specified</b>
	<b>Potential conflicts are specified</b>

*Table 2 A. The two classes of standards for checking a plan. First it needs to be intelligible. If it passes that test, we are then 'enabled' to judge its effectiveness for purpose (for our objectives). Both classes of reviews here, result in an objective and quantitative evaluation of a plan's suitability for purpose. Very few businesses today have this rigor in their review process. Few seem aware that they could have such a process.*

**'Vision Engineering'**  
**concepts.gilb.com/**

**Quality Control for Clarity**  
**Is a prerequisite process**  
**For Review for valid content**

### The UN Goal, 8.2, is not ready for review

#### UN SDG 8.2

*“Achieve higher levels of economic productivity*

*through diversification, technological upgrading and innovation, —< hidden strategy!*

*including through a focus on high-value added and labour-intensive sectors.” < priority signals*

1. It has a strategy which *needs to be removed totally* (to a potential strategy specification status,

- o which needs *clarification*, then *estimation of impacts*, then *decomposition*, then *prioritisation* for delivery.

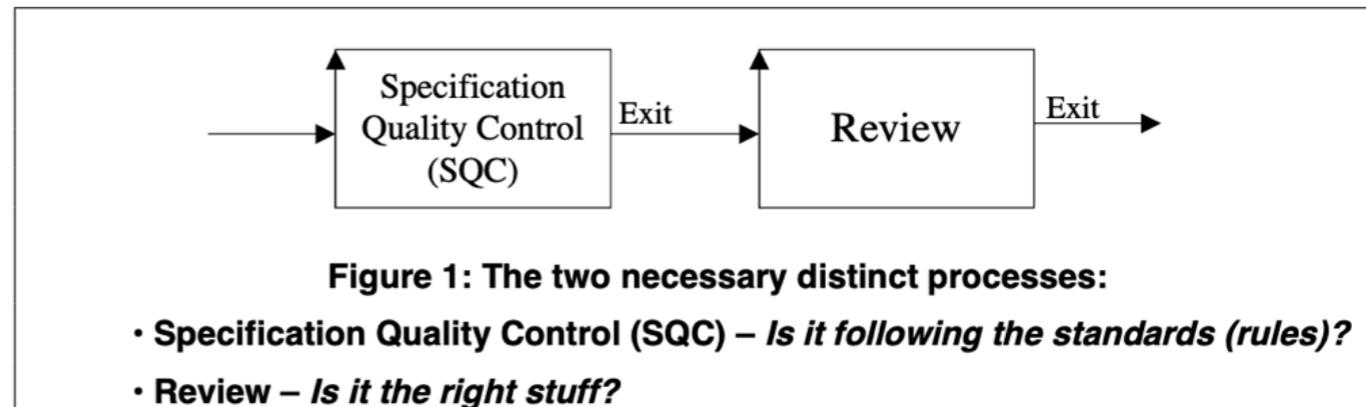
#### 2. The Objective

*“Achieve higher levels of economic productivity”*

- o needs considerable *quantified* and *structured* specification, before anyone can decide if it is valid, by a review.

The review could be carried out by any one of a number of levels, such as UN, Country, County, Council, Organization

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#### Note

a focus on “high-value added and labour-intensive sectors”.

Can be alternatively viewed as part of a prematurely selected strategy, or it can also be handled as a prioritization of Conditions, articulated in a Scale Parameter.

#### Viz:

**Scale: %[Productivity Levels] for [Sectors].**

#### Where

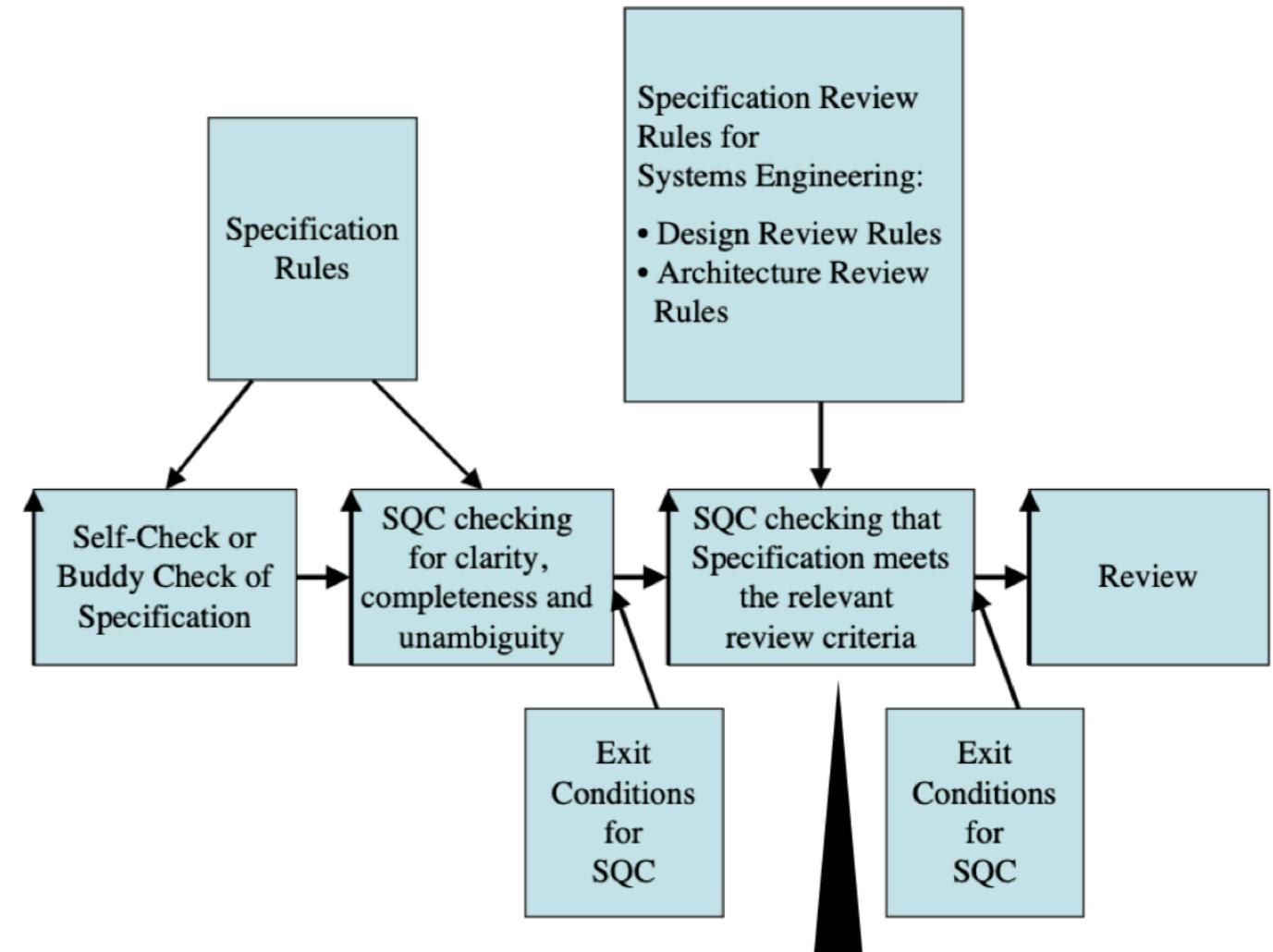
**[Sectors] = {High Value-Added, Labour-Intensive, Others}**

**Goal 42% [2030, Productivity Levels = GNP, Sectors = High Value-Added.**

## 2.8 PlanQC: several different formality levels QC necessary

**Several levels of QC  
Might be necessary  
Before a content review  
Is worthwhile  
It is a matter of economics**

- You could theoretically use SQC to sample a larger specification against Review Rules, but you will then never spot the non-reviewed parts of the spec, and defects could be quite dangerous to the project.
- You would however be able to judge that the specification process was working pretty well, or not.



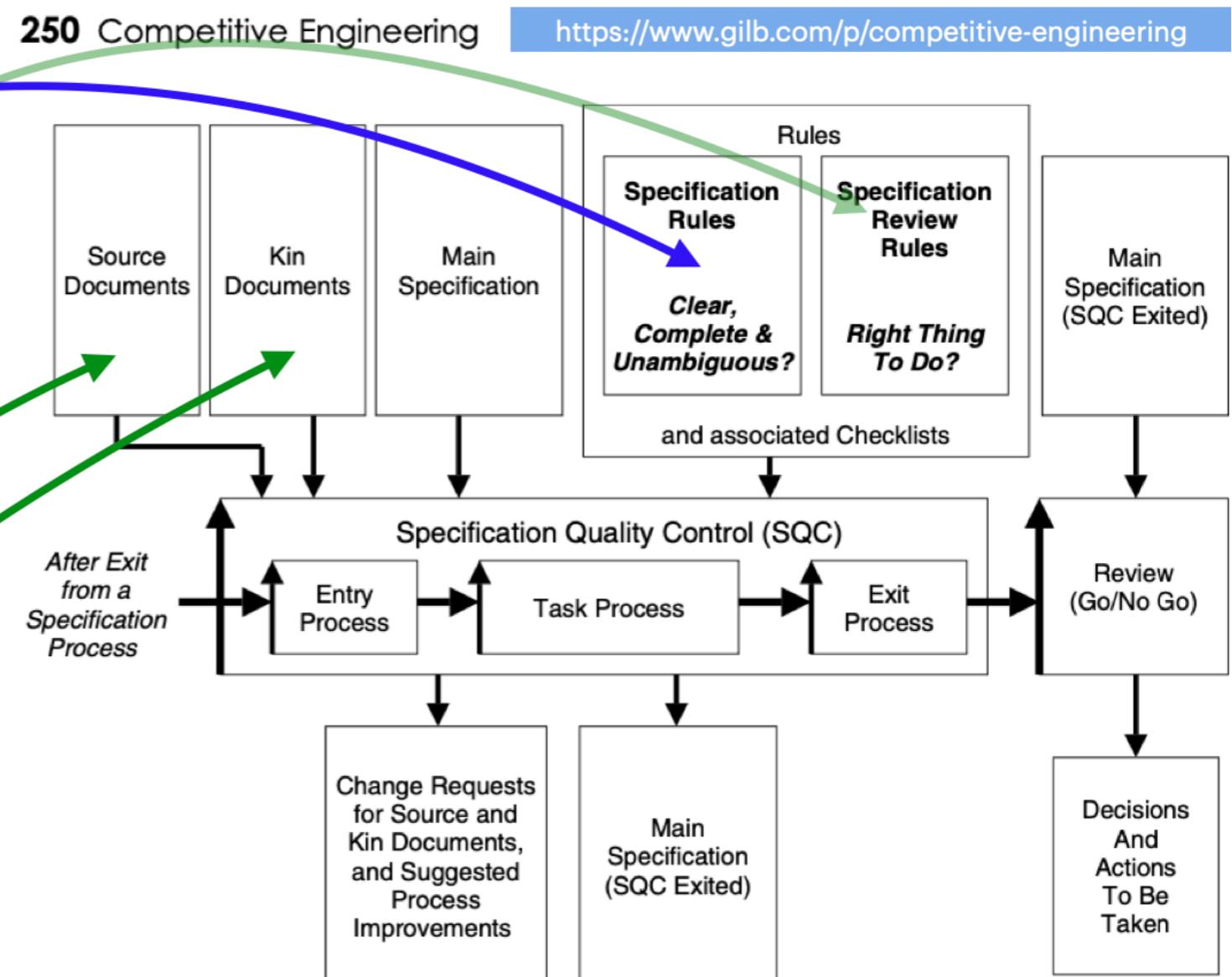
SQC checking is based on sampling representative parts of a large spec  
(say 3 of 500 pages)

To decide if a full review (all 500 pages) would be worth it.  
This might be part of the Entry process to the review process

# Review Tools

**Several extra documents:**  
**Do not rely on personal knowledge, opinion, memory!**

- While an intelligibility Spec QC against rules like 'unambiguous' can be done with one Main Document sample, quickly.
- Review for useful content, requires
  - A special set of Rules
    - Like: *"is Main Doc consistent and complete with the Source Document?"*
  - Source Documents (loyalty test)
    - Like: *UN level Goals, Contracts, Policies*
  - Kin Documents (consistency check)
    - Like Test Planning, Implementation Planning, Impact Estimation Tables



**Figure 8.8**

Overview of the SQC process showing how Specification Review Rules fit alongside Specification Rules.

## 2.9 PlanQC: changing vague terms into structured defined

This example shows you what we need to do, when we identify an unclear term in a PlanQC. We need to define it unambiguously, and if it is a value objective, we need to quantify it, by initially defining a Scale of measure, then Scale parameters, and Parameter Conditions as shown here.

UN Goals **Example of a review**: process subset  
Source Doc:  
"Ensure access to affordable, reliable, sustainable and modern energy"  
**Is used to review the Scale specification: 1. Yes it is required, 2. It is a reasonable interpretation**

- \* Goal 7: Affordable and Clean Energy
- \* "Ensure access to affordable, reliable, sustainable and modern energy"
- \* Define these many words!

G7 Energy Access

Level: Business, Status: Not Determined Type: Value, Labels: no labels

Is Part Of: [TOP 17 Goals](#)

Status 0 Goal 100

Goal [Energy Recipients = Home, Ensured Access = Energy Subsidy, Affordable Energy = Small Kit Home Solar, Reliable Energy = 24/7 Minimum, Sustainable Energy = Solar Energy, Modern Energy = Electricity] @ 2030 : 100 <- tag simple arbitrary non perfect examples of Scale Parameters and decomposition to various conditions, in order to define an Energy requirement

Ambition Level: "Ensure access to affordable, reliable, sustainable and modern energy"

Stakeholders: Architecture Engineering And Construction (AEC), Dwelling Owner, Government Innovation Agencies

Scale:  
% [Energy Recipients] who get [Ensured Access] for [Affordable Energy] [Reliable Energy] [Sustainable Energy] and [Modern Energy]

Target Time Units: Year  
Affordable Energy: defined as:

**[Scale Parameters]/[General Terms] defined as a set of conditions or**

Affordable Energy: defined as:  
Inverter, Battery, Solar Panels, Charge Controller, CCTV Installation, Small Kit Home Solar, Bore Hole Drill

Energy Recipients: defined as:  
Home, Apartment, Office, Shop, Factory, Government Building, Mobile Homes, Refugee Camps, Schools, All Other Recipients,

Ensured Access: defined as:  
National Access Law, State Access Laws, Local Communal Laws, Energy Subsidy, Cooperative

Modern Energy: defined as:  
Electricity, Gasoline, Diesel, Wood, Manual Generation,

Reliable Energy: defined as:  
24/7 Minimum, 24/7 Full Supply, Backup Power Locally, Backup Fuel Supply,

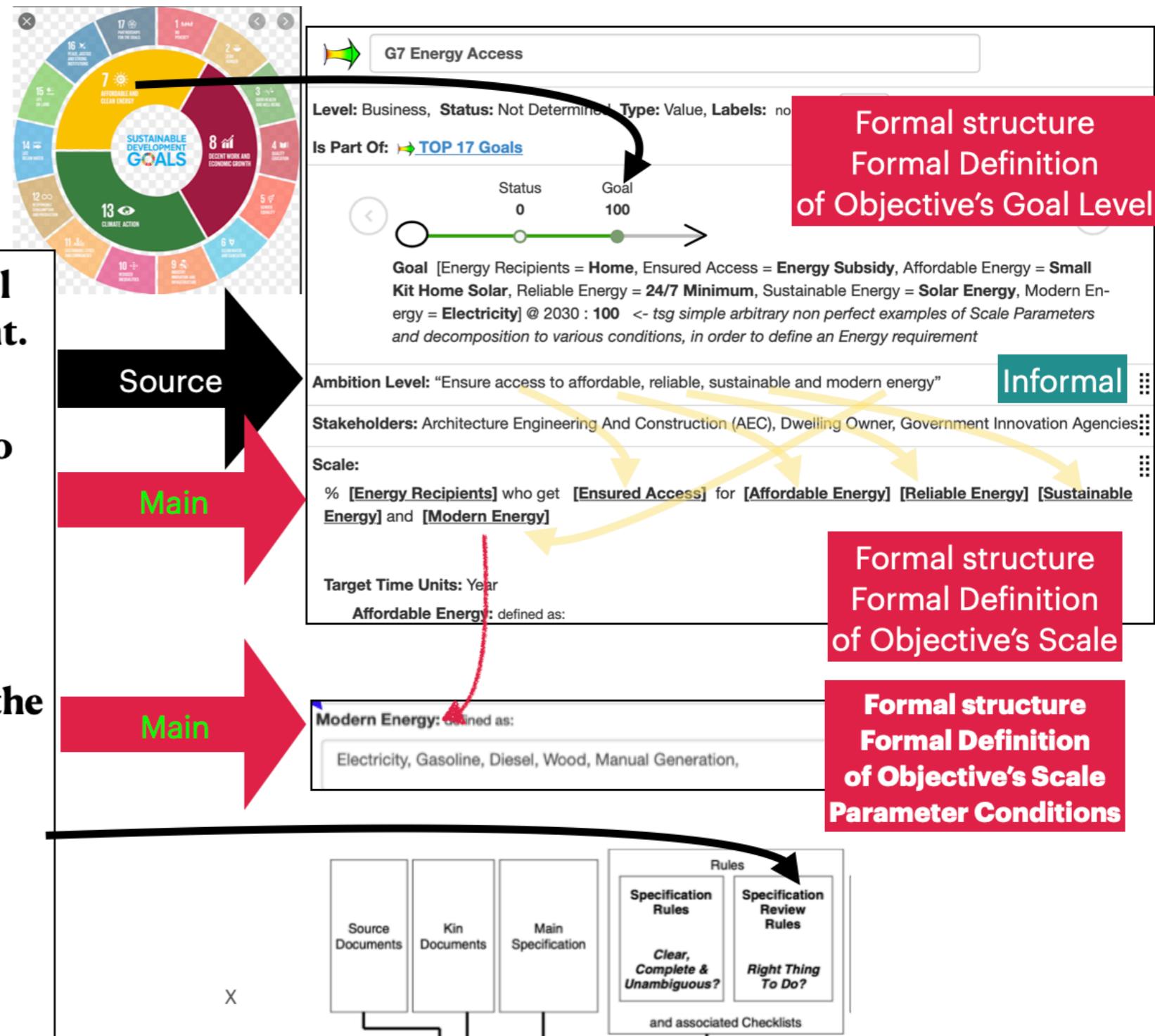
Sustainable Energy: defined as:  
Wind Energy, Wave Energy, Waterway Energy, Solar Energy, Sustainable Agriculture Energy,

## 2.10 PlanQC: Unclear Targets, can be kept but clarified

Here are some examples of a simple set of rules, we can apply to maintain the integrity of different levels of an objective (vague spec, quantified spec), for QC and Review

### Plan Review Rules. For UN Goal detailed specs, When clarified and tailored in Planguage

1. **The Main Document must contain all the elements of the Source Document.**
2. **The Main Document detailed interpretation must explicitly refer to the Source Document (Title, URL, paragraph, Ambition)**
3. **The Main Document detailed interpretation must be complete, useful, well defined, and relevant to the local purpose.**
4. **The Main Document detailed interpretation must be intelligible, complete, and realistic detail for domain experts and domain stakeholders.**



Theoretical QC is useful, because it is early. But it has limitations in understanding whether your plan is good. Modelling, theoretical plan perception, cannot give us good enough feedback about complex, large scale, changing reality. So we need to move, as early as possible, to measurement of some kind of reality. Our agile method, called 'Evo', allows us to plan to implement some part of the plan, on some part of current reality (think, 'adult quarantine, just in London') and to quickly get some measures of how well it works, and what surprising side-effects it has. This allows us to adjust the plan quickly for 'London' and other areas of the country. Details of Evo are in many of my writings like 'Competitive Engineering' and 'Value Planning'.

**Principle 9.**

## Plan an 'Incremental Rollout'

Deliver value quickly, learn both strategy and changing environment quickly, adjust to better meet longer term objectives.

**Ideally, after an initial planning session, a Startup Week, we will identify one and more small practical sub-strategies**

**which can be rolled out (locally, small scale) quickly (next week or month)**

**in order to prove out strategy concepts, measure results, measure costs, get reactions, retune strategies as we scale up,**

**and get some credibility.**

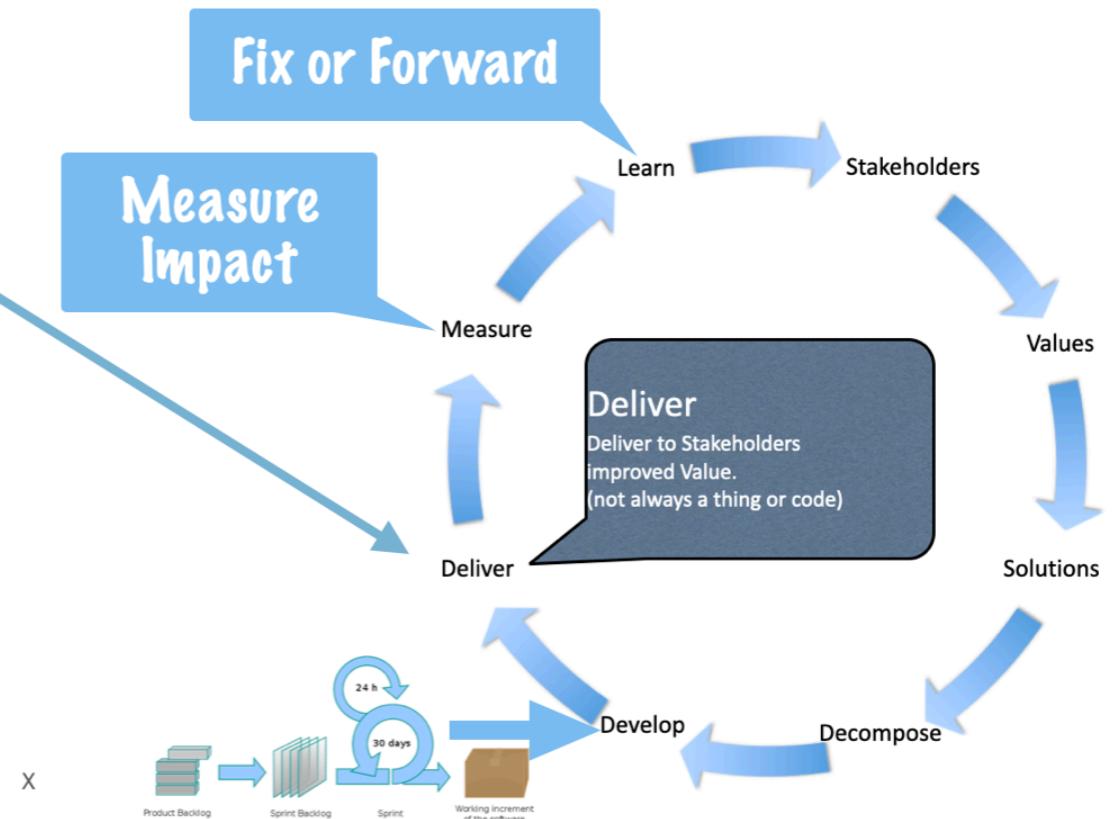
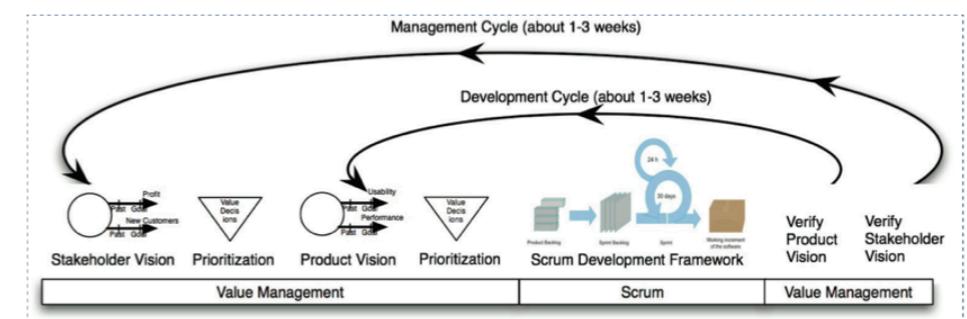
**The forward plans (next delivery steps) and past measures and experiences**

**will be published, integrated with the plan**

**and shown compared to initial estimates.**

Page 40 of 171

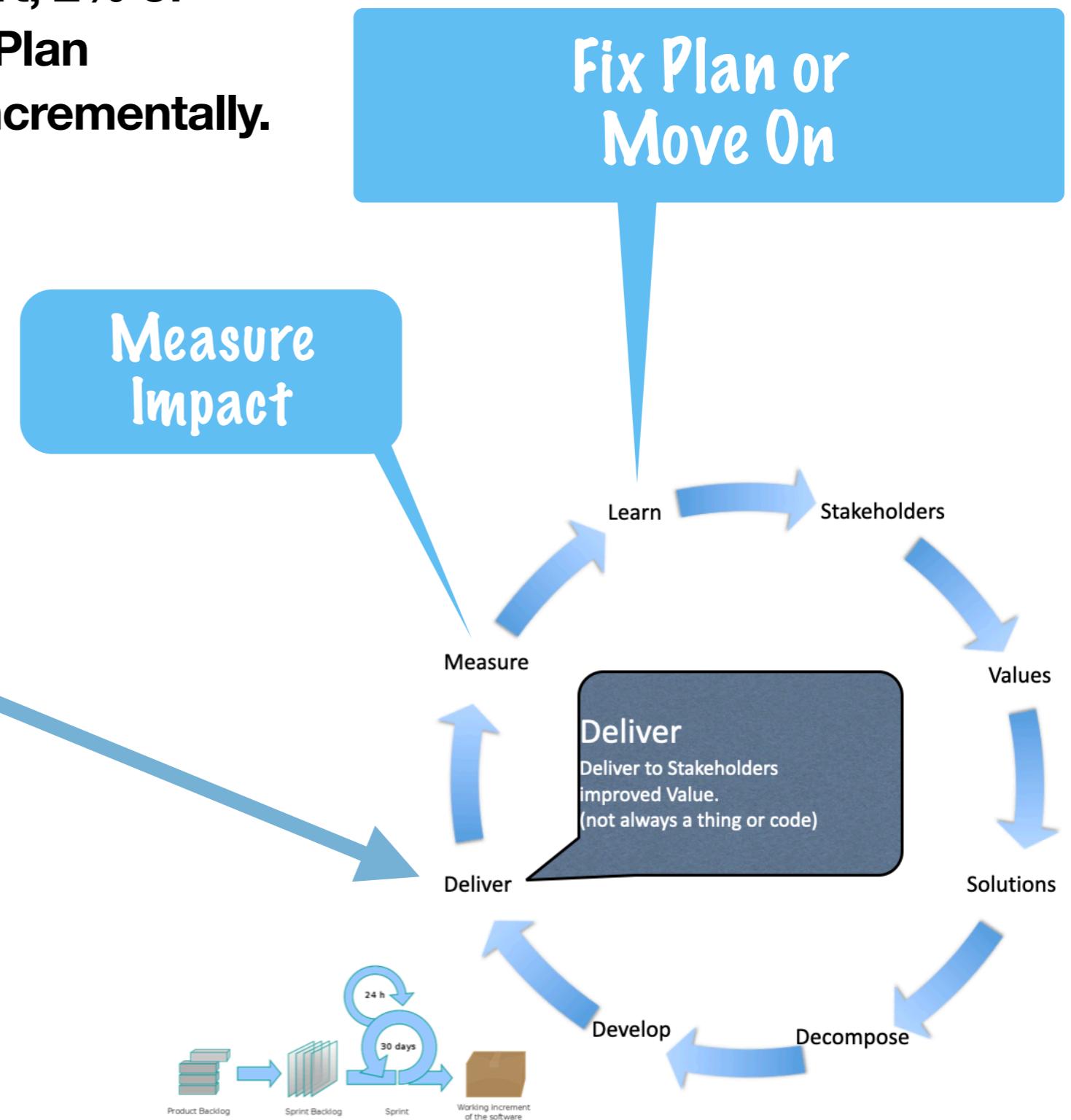
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**The Evo Cycle is designed to be short, 2% of project resources, 1 or more weeks. Plan elements are tested and measured incrementally.**

**The Process of Making It Happen for Real. Checking Plan Validity Early and Frequently - for Real.**

- \* PREREQUISITES: The stakeholder critical requirements, the plan, the plan decomposition to small delivery steps, the Quality Assurance, your design. STUDY: The
- \* DELIVER AND next step to manage is to integrate the planned step into the existing system ('deliver'), and see how it works in practice.
- \* FIX IS NECESSARY: Adjusting step plan if necessary.
- \* MANAGEMENT ROLE: What is the role of management at this stage?
  - \* Make sure these things really get done properly!
  - \* Do you make sure Values are *measured* at each value delivery cycle, and relevant action is taken?



## 2.12 PlanQC: very early strategy estimates, values and costs

### • The Startup Week\*.

Agile Value Delivery \*\*: phase 1, quantify the overview

- Monday
  - Quantify critical stakeholder values
- Tuesday
  - Identify top 10 strategies to reach the values
- Wednesday
  - Rate strategies versus values and costs, and risks on an Impact Table
- Thursday
  - Decompose best strategy, and rate value/ costs of details to choose next week's value delivery
- Friday
  - meet with managers to get OK
- Next week (and every week later)
  - deliver some measurable stakeholder value
  - measure results, costs
  - learn about problems early
  - adjust designs for future.

Monday's Quantified Objectives and Budgets

Each planned Tuesday Strategy gets Estimated

	Strategy 1.	2.	3.	4.	5.
→ Mutual Benefit	$10 \pm 10$ 20 ± 20 % 0 % (x 0.0) 20%	$0 \pm 0$ 0 ± 0 % 0 % (x 0.0) 0%	$10 \pm 2$ 20 ± 4 % 4 % (x 0.2) 20%	$6 \pm 0$ 12 ± 0 % 2 % (x 0.2) 12%	$1 \pm 0$ 2 ± 0 % 0 % (x 0.0) 2%
Status: 30 □ Wish: 80 NPS for [R... □ %: NPS for [Relationship Type] for defin... [Relationship Type = Growth □ 17th November 2017					
Sum Of Values: □ %: Worst Case: □ ± %: Credibility - adjusted: □ %: Worst Case Cred. - adjusted: □ ± %:	$451 \pm 953$ % -502 % 380 % 271 %	$223 \pm 51$ % 172 % 131 % 109 %	$198 \pm 103$ % 95 % 66 % 42 %	$99 \pm 47$ % 52 % 24 % 10 %	$83 \pm 0$ % 64 % 24 % 19 %
→ Technical Debt □ %: Status: 16 □ Budget: 0 Time to ma... □ %: Time (in Hours) to [Successfully] □ %: No qualifiers □ November 2017	$-15 \pm 5$ 94 ± 31 % 94 % (x 1.0) 94%	$-3 \pm 0$ 19 ± 0 % 38 % (x 0.0) 19%	$??? \pm 0$ 0 ± 0 % 0 % (x 0.0) ???	$??? \pm 0$ 0 ± 0 % 0 % (x 0.0) ???	$??? \pm 0$ 0 ± 0 % 0 % (x 0.0) ????
Sum Of Development Resources: □ %: Worst Case: □ ± %: Credibility - adjusted: □ %: Worst Case Cred. - adjusted: □ ± %:	$94 \pm 31$ % 125 % 94 % 125 %	$19 \pm 0$ % 19 % 38 % 0 %	$0 \pm 0$ % 0 % 0 % 0 %	$0 \pm 0$ % 0 % 0 % 0 %	$0 \pm 0$ % 0 % 0 % 0 %
Value To Cost: □ %: Ratio (Worst Case) □ %: Ratio (Cred. - adjusted) □ %: Ratio (Worst Case Cred. - adjusted)	4.80	11.70	0.00	0.00	0.00
	-4.00 4.00 2.20	9.10 3.40 109.00	0.00 66.20 11.90	0.00 23.50 10.40	0.00 24.30 18.60

We calculate strategy 'value to cost' ratio

\* source is 'Polish Export' examples in 'Innovative Creativity' book ([gilb.com](http://gilb.com)) chapter 9. Done over 2 days with 60 people in 20 teams. Warsaw, at Startberry (startup Incubator)

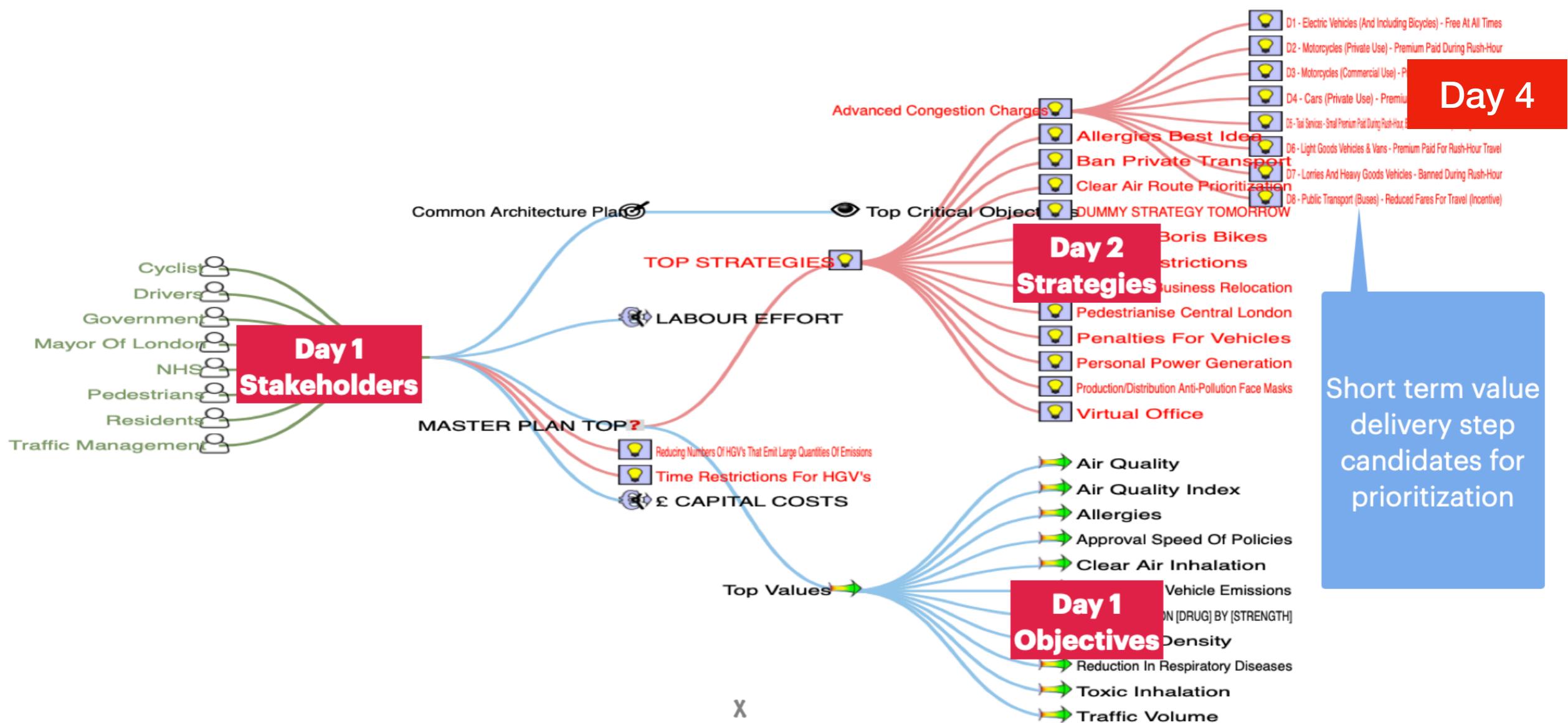
\*\* [S2] <http://www.gilb.com/dl812>, [P1] [gilb.com/dl568](http://gilb.com/dl568)

DL812: extensive slides, DL568: short paper

## 2.12 PlanQC: very early strategy estimates, values and costs

This is an overview of planning components in the startup week.

**BCS Course London Pollution case**  
**top level diagram,**  
**with 2 level strategies, THURSDAY, DAY 4, OF STARTUP WEEK**  
**In order to find value delivery steps next week, and the week after etc.**



On day 3 of very large projects, we do the first QC, by making estimates of Values and Costs. If we fail to have enough strategies to meet Goal levels, or

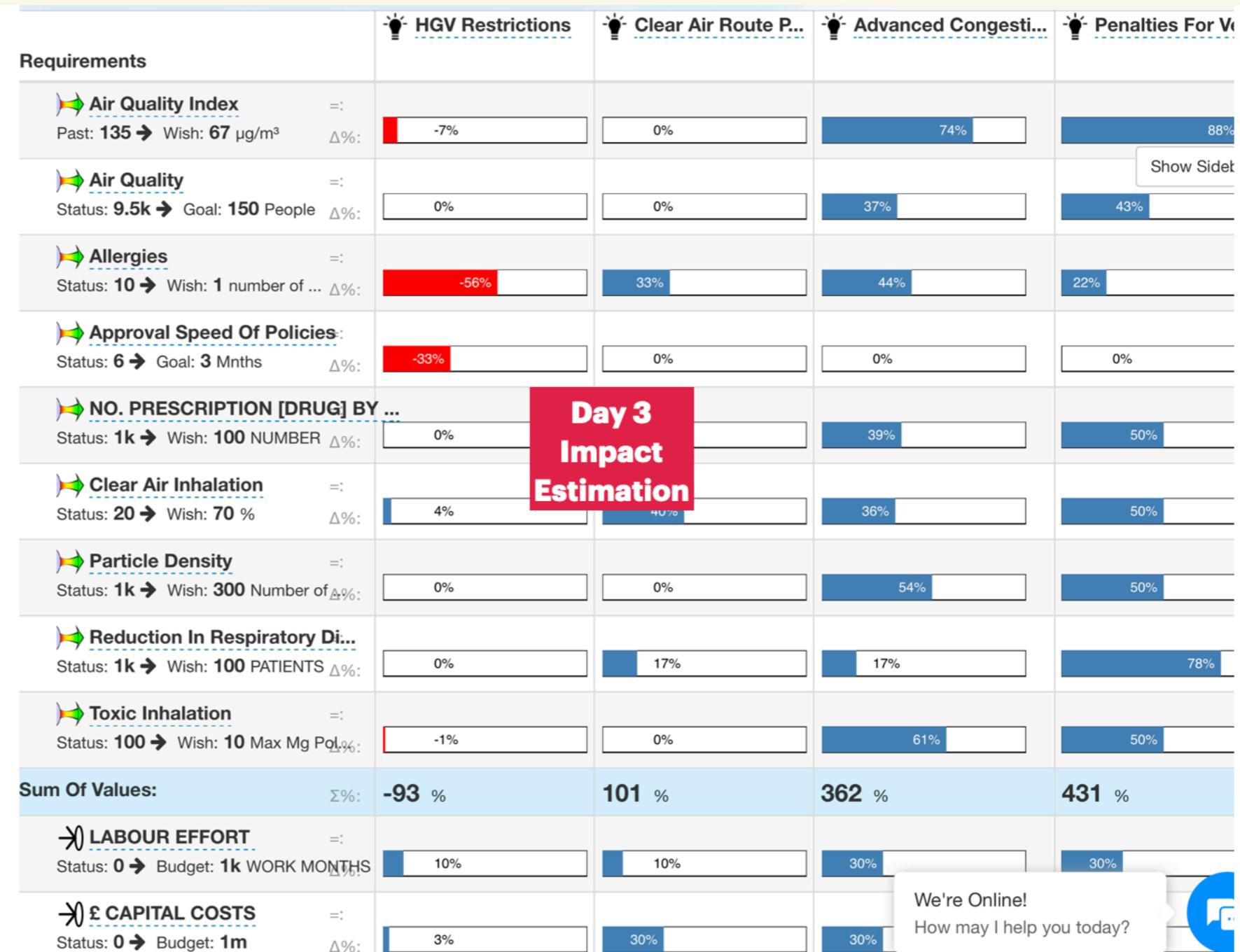
BCS Course  
London Pollution Planning

**Value Table: estimate how cost-effective your pollution strategies are**

This is 'day 3' of Startup week planning

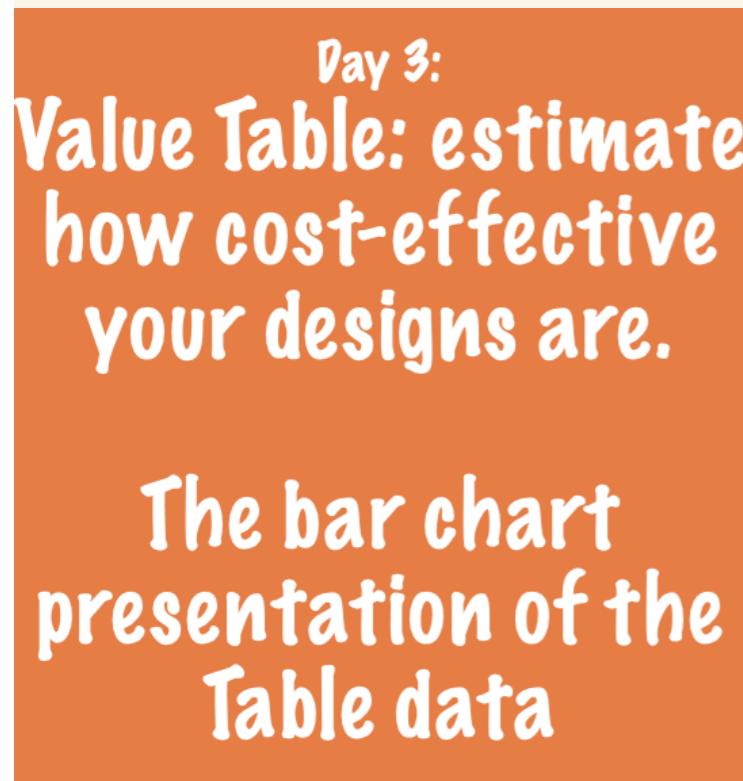
A Top-level, critical overview of Objectives and Strategies

- See next Page
- For
- Simplification
- Priority Design
- Bar Chart

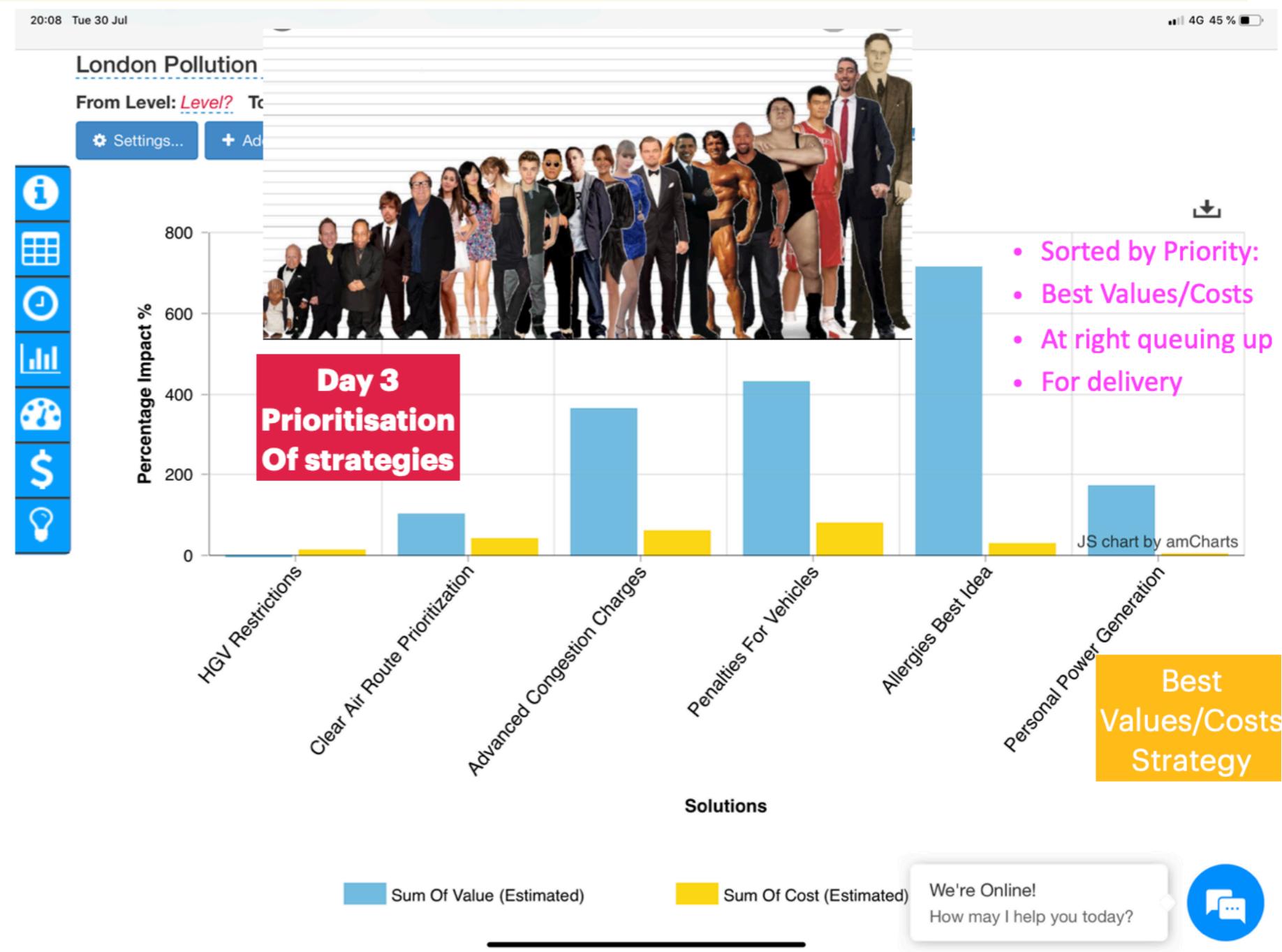


## 2.12 PlanQC: very early strategy estimates, values and costs:

On that 3rd planning startup day, using the impact table data, we can do 2 other useful things. We can present all the table numbers as a bar chart (Values sum, Costs sum) - for each strategy. We can sort the strategies in priority sequence, for example by Value for Money.

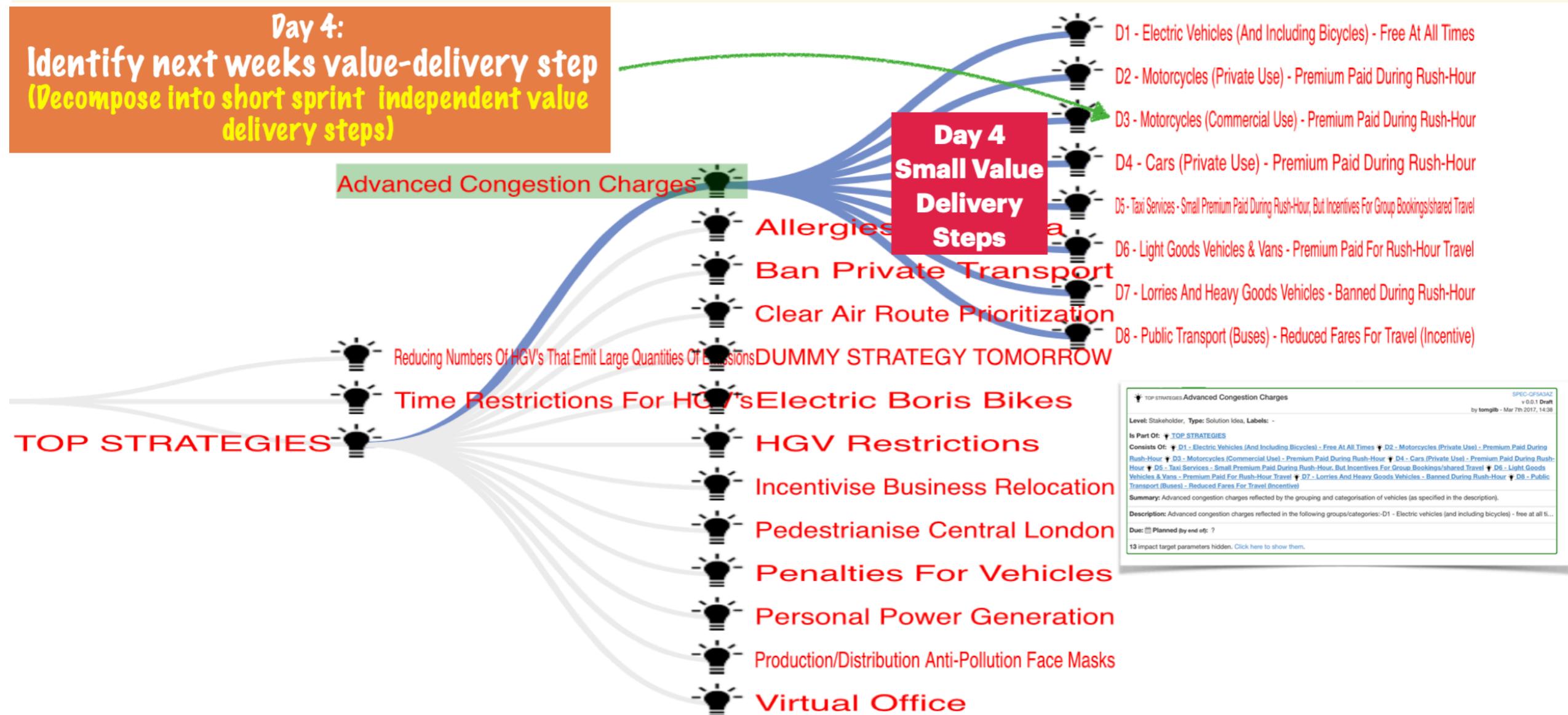


Requirements	HGV Restrictions	Clear Air Route Prioritization	Advanced Congestion Charges	Penalties For Vehicles
Air Quality Index Past: 135 → Wish: 67 µg/m³	-7%	0%	74%	88%
Air Quality Status: 9.5k → Goal: 150 People	0%	0%	37%	43%
Allergies Status: 10 → Wish: 1 number of	-66%	33%	44%	22%
Approval Speed Of Policies Status: 6 → Goal: 3 Months	-33%	0%	0%	0%
NO. PRESCRIPTION (DRUG) BY...	0%	11%	38%	50%
Clear Air Inhalation Status: 20 → Wish: 70 %	4%	40%	36%	50%
Particle Density Status: 1k → Wish: 300 Number of	0%	0%	54%	50%
Reduction In Respiratory Dis...	0%	17%	17%	78%
Toxic Inhalation Status: 100 → Wish: 10 Max Mg Pol...	-1%	0%	61%	50%
Sum Of Values:	-93 %	101 %	362 %	431 %
→ LABOUR EFFORT Status: 0 → Budget: 1k WORK MONTHS	10%	10%	30%	30%
→ CAPITAL COSTS Status: 0 → Budget: 1m	3%	30%	30%	30%



## 2.12 PlanQC: very early strategy estimates, values and costs

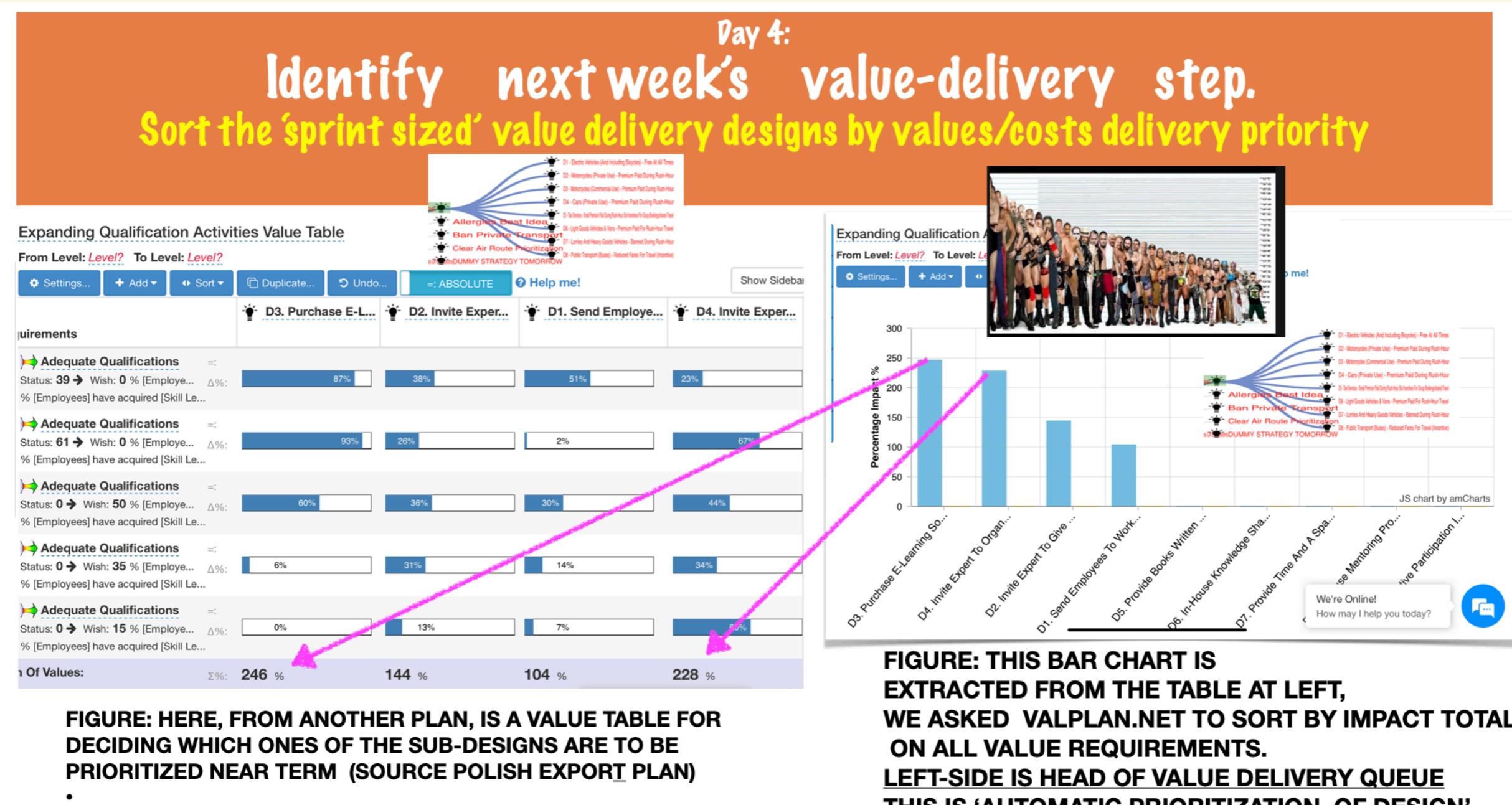
On the 4th planning day, we lay the groundwork for early and frequent realistic planned value delivery measurement. We decompose a good major strategy, into smaller value deliverable sub-strategies. Each is sequence independent, and each is a value deliverer.



London Pollution Planning BCS 2016

## 2.12 PlanQC: very early strategy estimates, values and costs

Once we have decomposed a strategy, we can apply the impact estimation process, at this more-detailed level. First, to 'QC' that the decompositions arguably each deliver value. Then we can use these estimates to prioritize delivery sequence, so as to maximise value delivery early in a project. It makes us look good by delivering real value early. These same estimates, are later compared to the actual results, as a QC that we

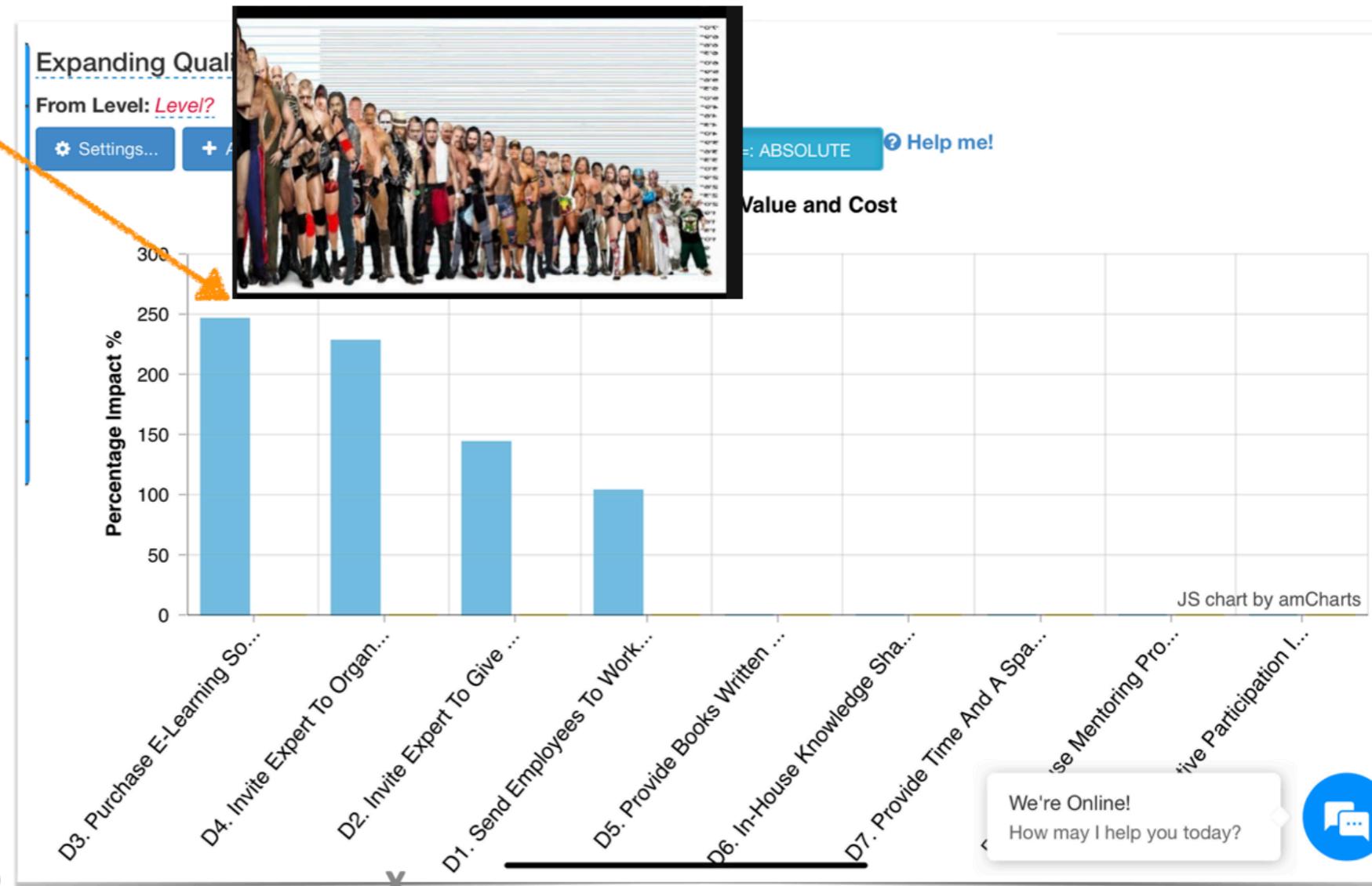


## 2.12 PlanQC: very early strategy estimates, values and costs

One form of QC is getting management buy in, and approval to proceed, based on the estimates made for the larger plan (long term estimates), and also for the first series of incremental deliveries of value (short term). My experience is that this is so clear and so exciting that managers always approve go ahead. They want to see measurable results, and get credibility with their own managers. They have usually not experienced such a fast



- **"Sub-Design D3 gives best overall stakeholder value delivery**
- **And takes 1 sprint week**
- **Shall we follow this value-delivery process?**
  - **Weekly ?**
  - **Would you like a weekly report on incremental value delivery?**
  - **Or would you prefer to look at costs and risks too?"**



## 2.12 RealQC: very early strategy estimates, values and costs

When the 'startup week' is finished, and we begin to deliver incremental measured value, QC consists of comparing the real value delivered, in relation to the planned level, and to the **deadlines** for those levels. We also need to keep an eye out for unexpected negative side-effects, and other unpleasant surprises, of a media or political nature. When targets are reached, we are done.

### Principle 10. Plan the 'Value Progress' to Date

**The cumulative Critical Values (top 10 at least) progress to date will be published with the Plan, on a regular basis.**

**The consumption or use of resources, as a % of available budget or time to deadline, will also be incrementally published.**

**Forward estimates for Goal Value levels delivery should be made,**

**with remarks about tactics or resources probably necessary to reach the Goal levels.**

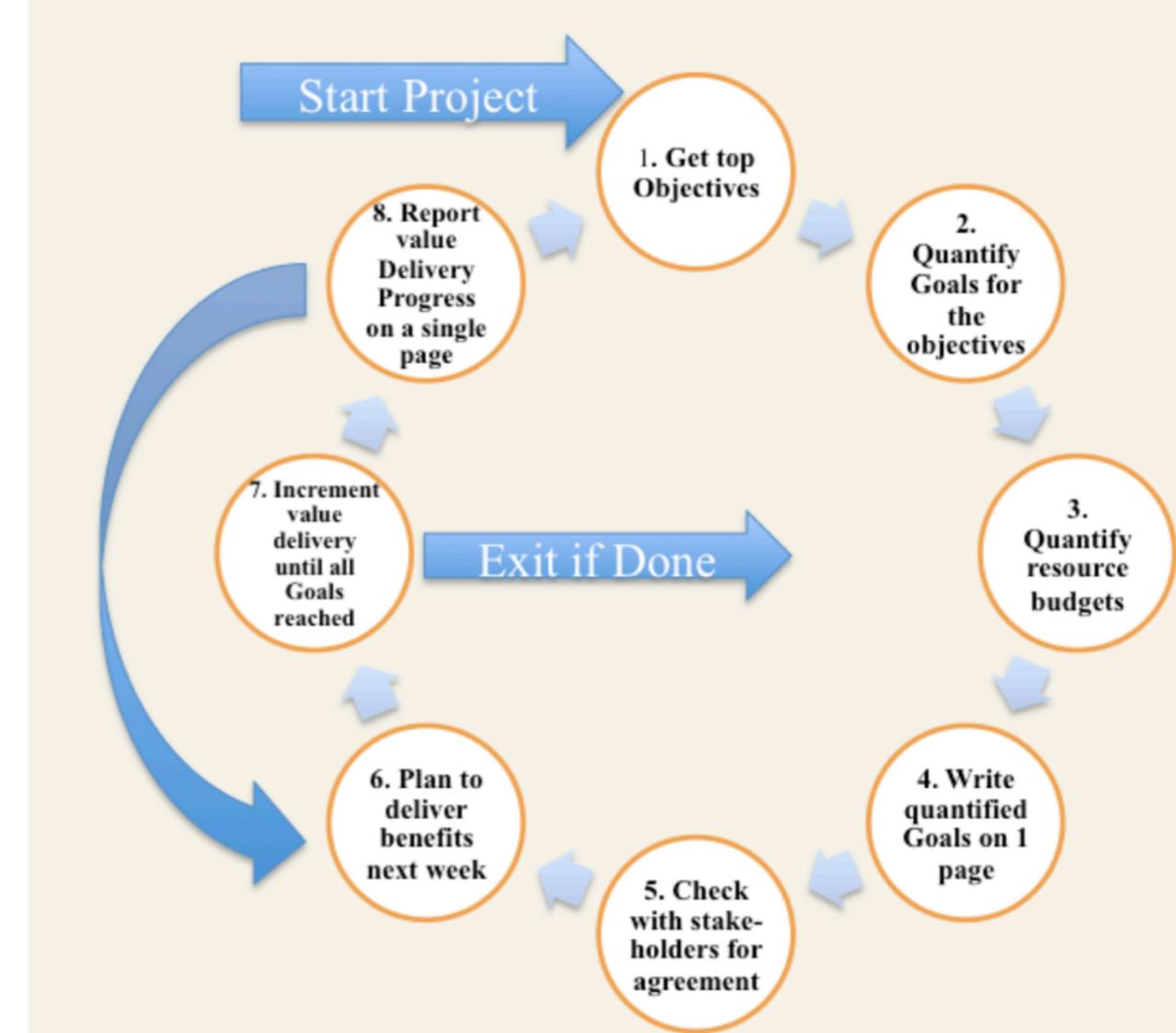
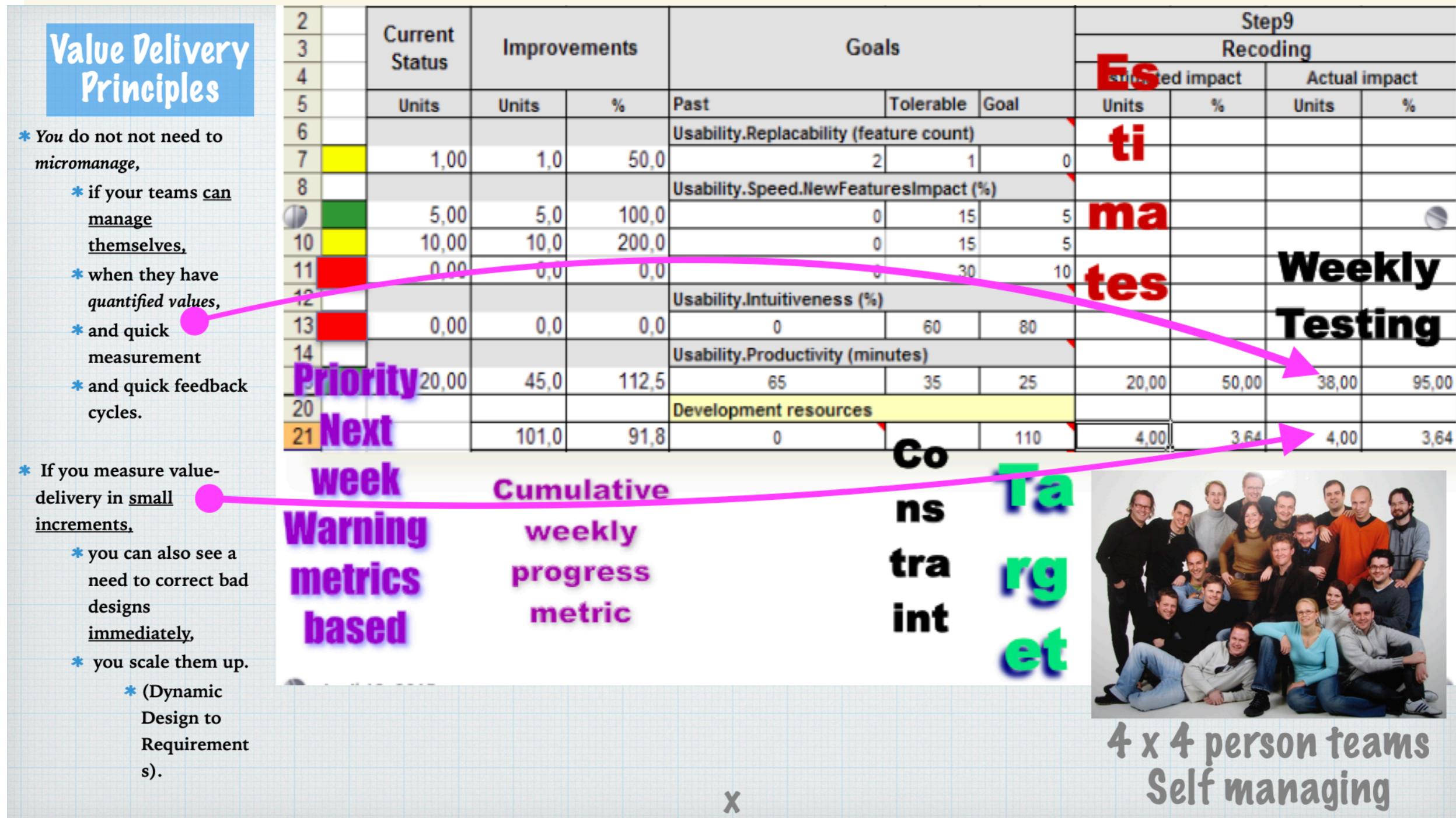


Figure 5 A. One view of the 'Evo', value delivery process.

## 2.13 RealQC: incremental strategy estimates, values and costs

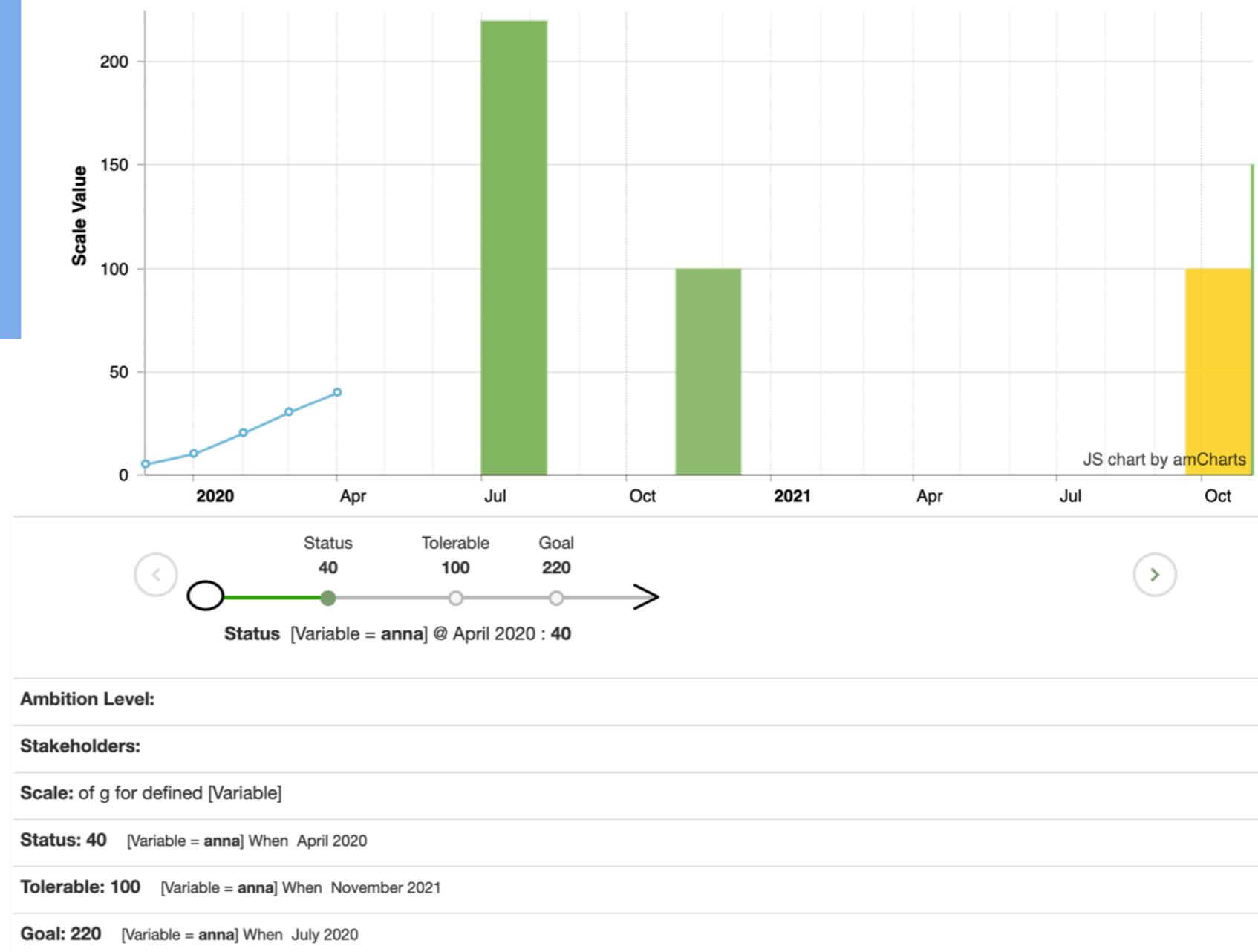
The Confitmit Case [P2]. This is a real report from the 9th of 12 weekly value delivery cycles. The time saving delivery this cycle was 2x (65 - 38 min. saved vs. 20 estimated), later optimised to 20 minutes achieved (12.5% of Goal). The Improvements-% column tells us we are on track to delivering 100% of values planned, in the next 3 of 12 weeks, before release to world. The traffic light colours warn us of our dynamically changing priorities. Red means you are not even at a tolerable level. Green you hit the Goal. Yellow, you are tolerable but did not hit the



## 2.13 RealQC: incremental strategy estimates, values and costs

This shows us tracking status (left -\*- line) versus the planned levels, which are shown in the calendar time scale. Things don't look optimistic at this stage. This is not a measure of effort spent, or time used. This is

**Value Delivery  
measures  
Compared to worst  
case (Yellow) and  
success requirements**



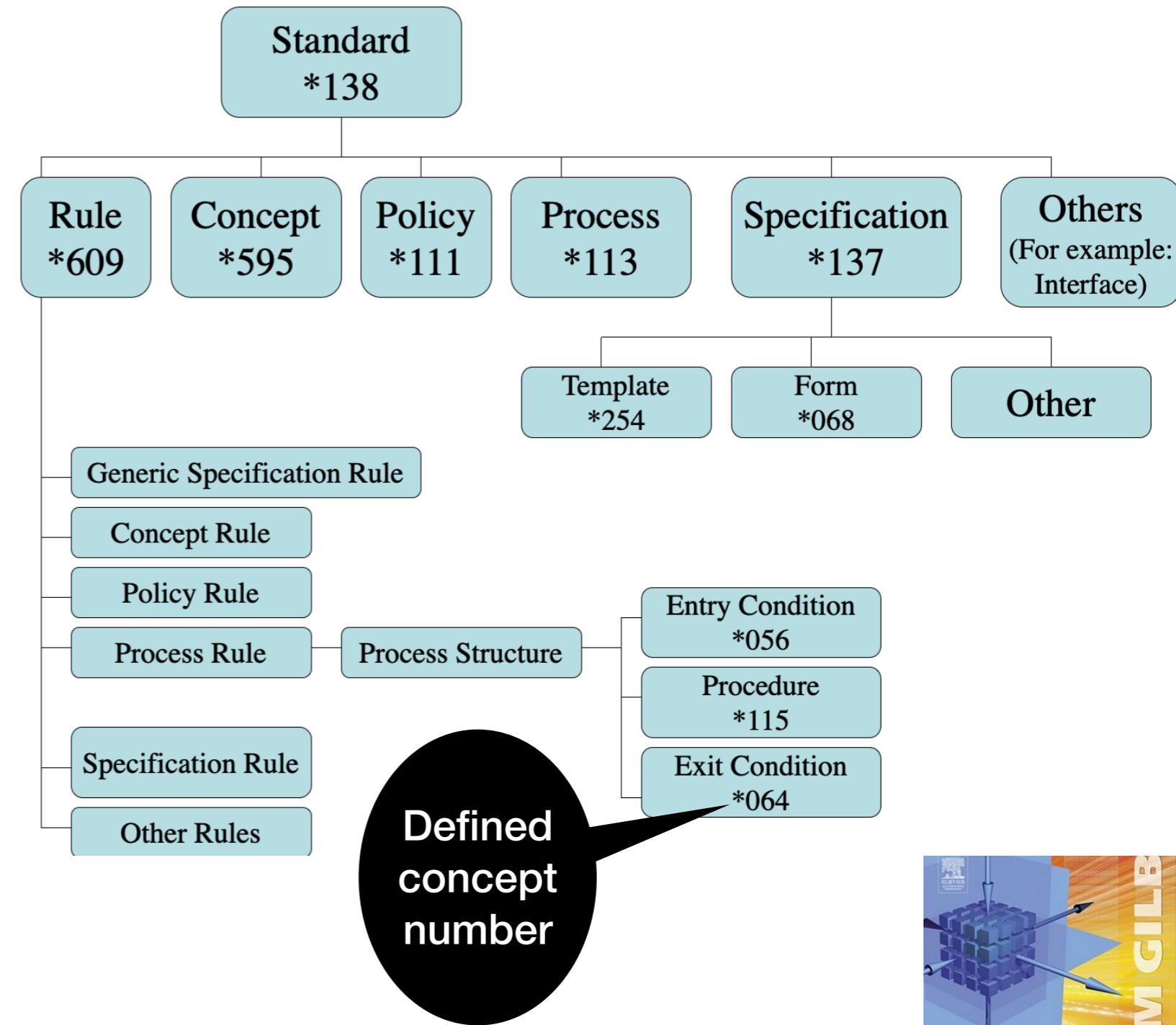
## Chapter 3

# Standards

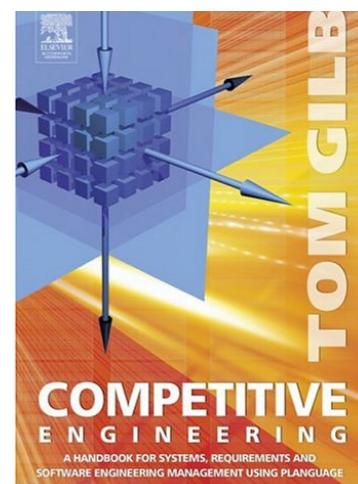
**Official Guides  
to Proper Public Planning**

We have carefully defined each type of planning standard, and given many real examples of them in the Competitive Engineering book

- Standards should be best practice.
- Standards are tailored to your planning culture
- Standards are there to prevent 'defect insertion' in plans
- Standards not-followed are 'planning defects', and can be objectively measured (by SpecQC)
- Standards can be used in training, but are most effectively learned by QC feedback, exit level control, and peer practice.



[B1]. <https://www.gilb.com/p/competitive-engineering>  
(free pdf) The CE book.



### 3.1

## Standards: Rules for Writing. How to specify - clearly and relevantly.

Rules are *standards* for planning specification.

People should *not* be permitted to write serious plans in arbitrary subjective prose style.

Because it leads directly and immediately to useless unintelligible plans.

A *rule* defines a planning specification (plan spec) **defect**.

A 'plan spec defect' is a *potential* economic threat,

**Rules: are planning specification 'do' and 'don't'**

**Rules; are short, and in groups of about 1 page maximum, per rule type**

**Rule violation in a plan is 'defect', or 'plan specification defect', a basis for measurement of plan quality (SpecQC)**

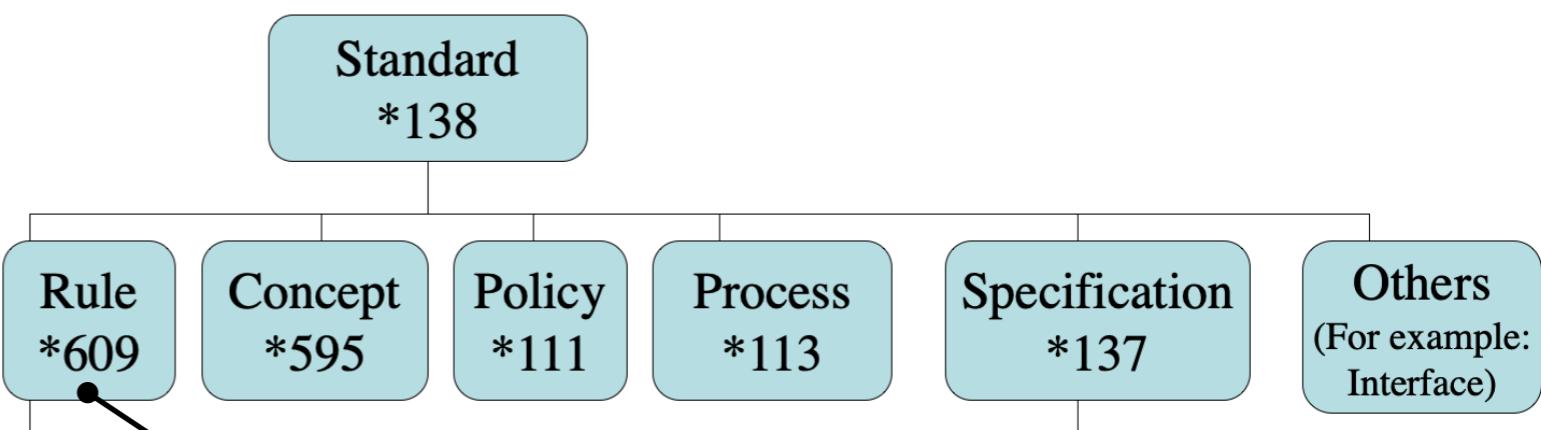
**Rules are there to *prevent* early defects happening, and *prevent* them becoming late errors, faults, and project disasters**

**Rules are about *substantial* and critical things, not minor cosmetics.**

**Rules define your planning *culture*.**

**Rules are justified and stimulated by hard**

See detailed rule sets [P3], [S3],



### AFOTEC PLANNING Rules for objectives (US Air Force example)

PP1 (**Critical**) All critical 'strategic' mission-level objectives shall be identified together, in an unambiguous, quantified, trackable, reportable and testable format. The top ten or twenty is sufficient at the first level. All others should be subsets or 'means objectives'.

PP2 (**Scale**) All objectives shall have a formally defined written 'scale of measure', directly, or in a set of their sub-objectives. All 'qualitative' aspects are quantifiable.

PP3 (**Meter**) All Objectives shall have at least an outline of the method or process by which we can track, test or estimate the numeric status of each defined objective, at any time from birth to death of the unit/project/system being tracked.

PP4 (**Benchmarks**) in setting objectives at least one, and possibly several, benchmark analytical levels shall be established; and kept together with the Objectives. These shall include Past systems, Competitors, State of the Art, and Trends, as appropriate background for Objective users. Use {Past, Record, Trend} parameters.

PP5 (**Stakeholders**) all critical stakeholders in the outcomes shall be explicitly identified and consulted. They shall, where appropriate, each have a separate, but related, set of Objectives, and if possible have explicit integration in the main set of objectives, and possibly distinct-for-stakeholder levels-of-performance specified, using [qualifiers] to identify stakeholders and their related {when, If} conditions.

PP6 (**Basic Categories**) Objectives/Requirements shall be defined in the following set of basic categories {Quality, Cost, Function, Constraints}. In addition, the following sections will appear, with appropriate supplementary information: {Stakeholders, Definitions, Assumptions, Risks, References, Strategies/Designs, Impact Analysis, Evolutionary Plans} in addition to other sections, which are deemed useful.

PP7 (**Target Levels**) Future target levels shall be specified as {Wish, Tolerable or Goal}, together with suitable [when, where, IF] qualifiers. Uncertainty shall be explicitly stated and detailed sources for the targets shall be given (using '←' or 'Source', or 'Authority').

PP8 (**Approval**) Approval of a set of objectives is dependent on at least two fundamental stages, (1) exit from a formal 'Inspection' at no more than 0.2 Majors per Page Maximum remaining. Then (2) Go/No-go approval by an authorized Review Panel.

**Base:** The **generic** rules, Rules.GS and the **requirement** specification rules, Rules.RS apply.

**R1: Table Format:** The requirements (Value Objectives) must be specified in the left-hand column. The design ideas ('strategies') must be specified along the top row.

**R2: Requirement:** Each performance requirement (objective) and each resource requirement must be identified by its tag and by a simplified version of the chosen Baseline->Target Pair (B->T pair). The B->T pair should be written under the tag.

Each B->T pair must consist of two reference points, the chosen baseline (Past) and the planned target (Goal or Budget). Each reference point must be stated as a numeric value or as a tag to a numeric value. The numeric values must be expressed using the chosen Scale for the requirement.

The baseline is stated first as it represents the 0% incremental impact point. Then usually an arrow '<->'. Then the planned target, which represents the 100% incremental impact point.

It must be possible to distinguish between multiple-level specifications for the same Goal or Budget statement. Where necessary, to be unambiguous, use a qualifier or tag the specific baseline and/or target for use in the IE table.

**Reliability:**

Type: Performance Requirement.

Baseline->Target Pair:

Benchmark Reliability <-> 30,000 hours [USA, Next Year].

Note: Reliability and Benchmark Reliability are tags.

## Rules for IET Spec

**R3: Qualifiers:** If there is one common set of qualifier [time, place and event]

conditions for reaching all targets, this should be explicitly stated in the notes accompanying the IE table. If the qualifiers vary then they must be explicitly stated next to the relevant B->T pair.

By default, the entire system is implied and no specific conditions are assumed. The deadline time period must always be explicitly stated.

**R4: Design Idea:** Each single column must identify a design idea or set of design ideas that could be implemented as a distinct Evo step. Each design idea must be identified by its tag. Multiple tags may be specified as a set of design ideas in a single column. All tags must be supported by a design specification, which must exist in the supporting documentation and must be sufficiently detailed to allow impact estimations to the required level of accuracy. As a minimum, each design specification must be sufficiently detailed to permit financial cost to be estimated to within an 'order of magnitude.'

**R5: Scale Impact:** For each goal or budget, the Scale Impact is the estimated or actual performance or cost level respectively (expressed using the relevant Scale) that is brought about by implementing the design idea(s) in each column.

**R6: Percentage Impact:** The Percentage Impact is a percentage (%) value derived from the Scale Impact (see Rules.IE.R2). An estimate of zero percent, '0%', means the impact of the implementation of this design idea is estimated to be equal to the specified baseline level of the objective. '100%' means the specified target level would probably be met exactly and on time. All other percentage estimates are in relation to these two points. Note: In an IE table, it is acceptable to specify either Percentage Impacts and/or the Scale Impacts (the absolute values on the defined scale of measure). Examples: 60%, 4 minutes.

**R7: Uncertainty:** The  $\pm$  Uncertainty (based on the evidence experience borders) of the Scale Impact estimate shall normally be specified. Percentage Uncertainty values are then calculated in a similar way to the Percentage Impacts. Example:  $60\% \pm 20\%$ . Usually, the uncertainty values are calculated individually for each cell. An exception to this occurs when some overall uncertainty (such as  $\pm 50\%$ ) is declared for the whole table or specified parts of it. Another more fundamental exception can be when a decision is made to defer dealing with uncertainty data.

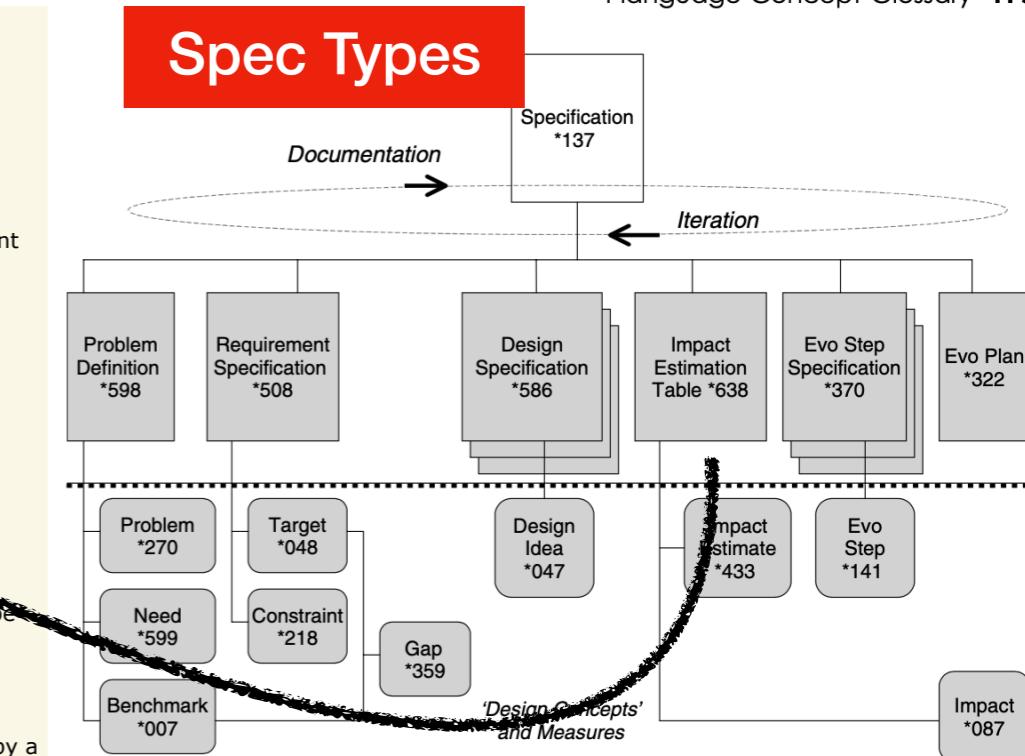
**R8: Evidence:** Each estimate must be supported by facts that credibly show how it was derived. Numbers, dates and places are expected. If there is no evidence, a clear honest risk-identifying statement expressing the problem is expected (such as 'Random Guess' or 'No Evidence'). The exact source of the evidence must also be explicitly stated. Note: Reference to a specific section of a document is permitted as evidence.

**R9: Credibility:** The evidence, together with its source, must be rated for its level of credibility on a scale of 0.0 (no credibility) to 1.0 (perfect credibility).

The relevant standard Credibility Ratings Table must be considered for use. Explanation must be given if alternative ratings are chosen.

**R10: Completeness:** All IE cells (intersections of a design idea and a requirement) must have a non-blank statement of estimated impact. This must be given as a numeric value using the relevant Scale units, or as a Percentage Impact as assessed against the defined Baseline <->Target Pair, or both. If there is no estimate, then a clear indication of this must be given.

All the appropriate IE calculations must be carried out and the arithmetic must be correct. Hint: Using an application, such as a spreadsheet, helps! (etc. more detail here).



**Figure G27**  
Different kinds of specification.

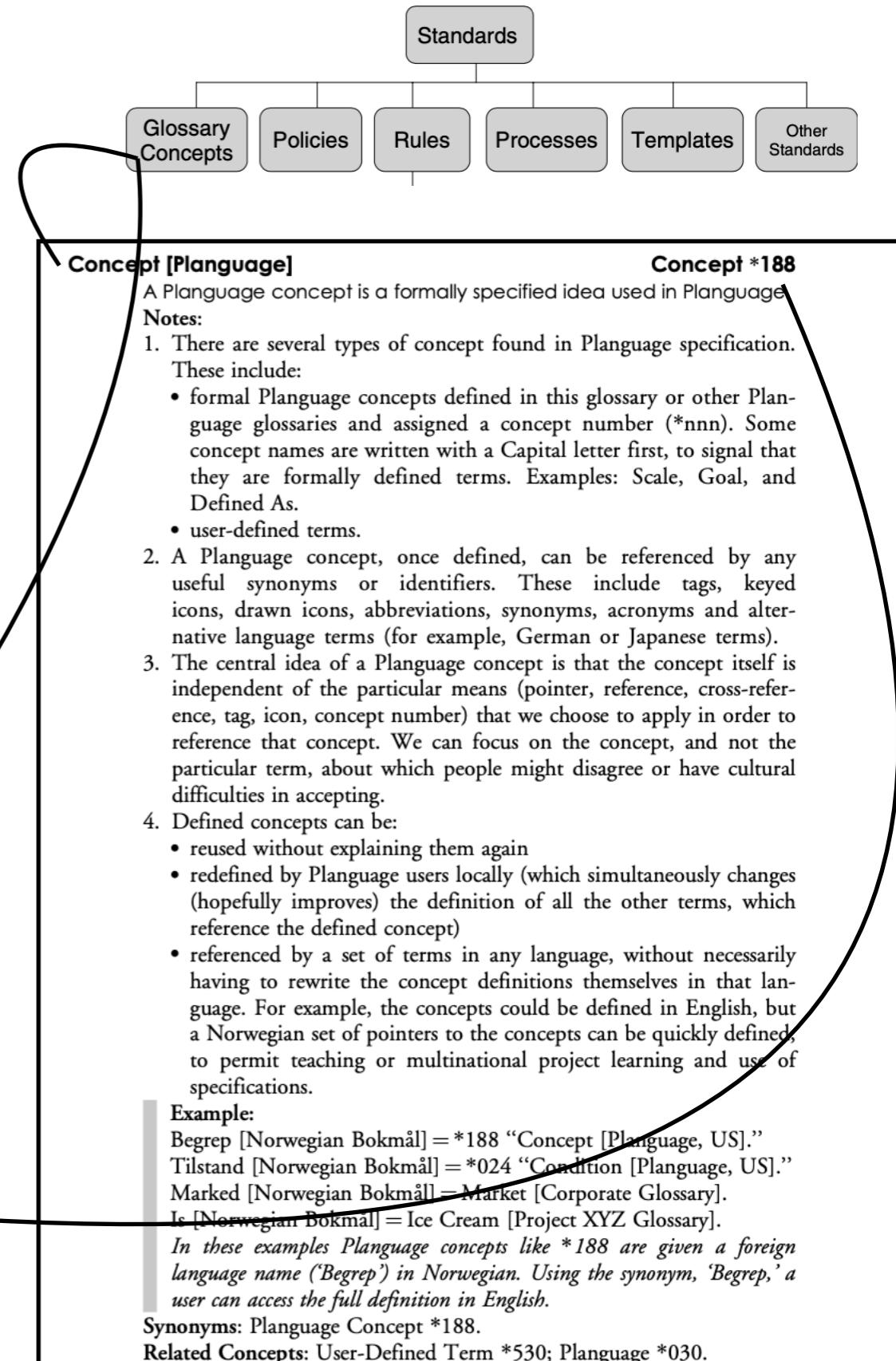
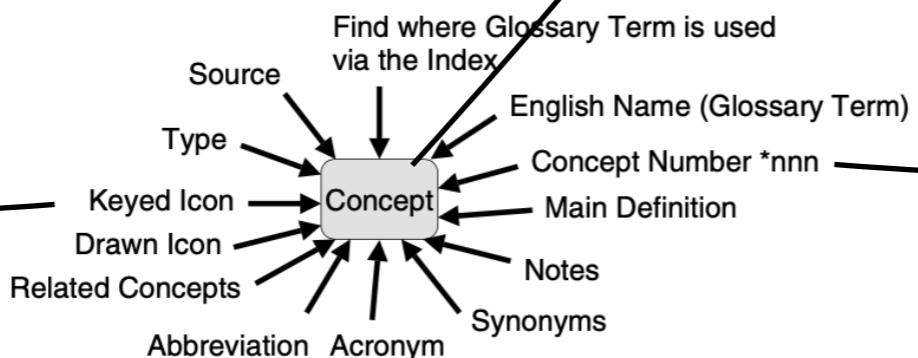
## HEALTHCARE SYSTEM IMPACT ESTIMATION

Automate Rules	Web Self Service	Decision Support	Total Impacts
10 minutes (30 minutes $\rightarrow$ 10 minutes)	3 minutes 100%	-	200%
100 errors (353 per week $\rightarrow$ 30 per week)	< 50 90%	-	170%
35 minutes (70 minutes $\rightarrow$ 10 minutes)	- 70%	< 10 minutes 90%	160%
-	1 hour 100%	10 minutes 103%	203%
<b>TOTAL DESIGN REQUIREMENT IMPACT</b>		250% 290% 193%	

## 3.2 Standards: Glossary Concepts (not ambiguous terms)

**Glossary Concepts give clear, agreed, deep definitions throughout the planning process, and culture.**

- Planguage (Planning Language) defines about 700 planning concepts [P4]
- The concepts 'know about each other' (Concept Integration)
- The concepts have remained stable for decades, with small incremental additions.
- A Planning Project can add defined concepts within an organization, or within a project, or a single plan
- The concepts are free to adopt and modify to your planning organization.
- The concepts can be referenced by any useful set of symbols, synonyms or \*numbers



### 3.3 Standards; 'Policies'

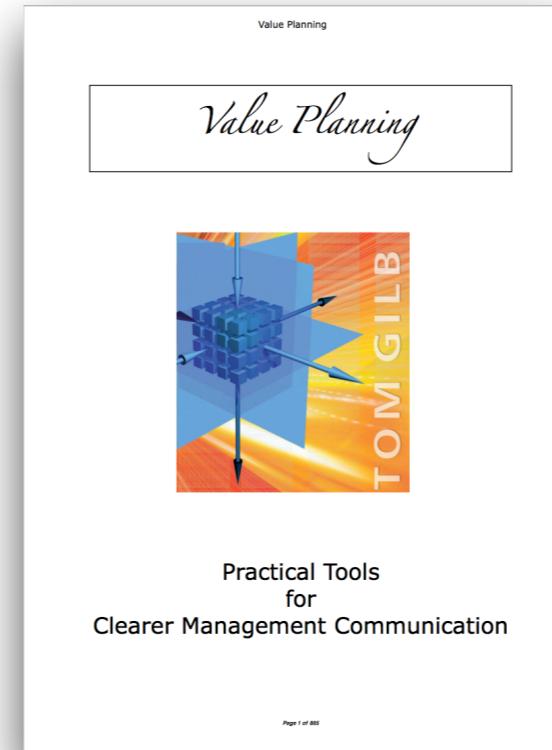
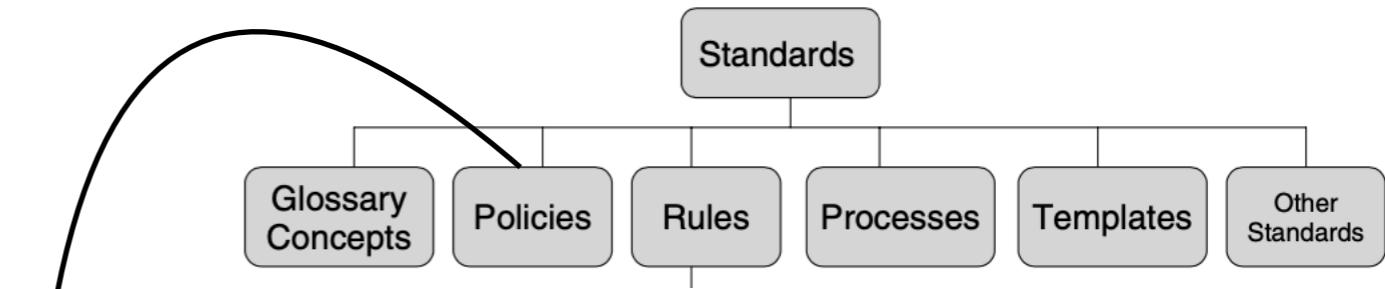
#### Policy

Concept \*111 February 22, 2003tg

A policy is a set of principles for decision-making, which permit delegation of decision-making to other people, at other times, under 'unknown conditions at the time of writing the policy'. However, policy may be ignored for higher priority considerations. For example, because of a law or contract in conflict with the policy.

Source above: [P3] Full Planguage Glossary

- Policies, differently from the standard 'Rules', do not necessarily instruct as exactly how to specify a plan.
- Policies are more about 'doing', actions, perceptions, viewpoints. Most of us, 'doing in the future'.
- Policies formally define, some of the organizational *culture*.
- Policies give people a **safe** (management approved in advance) framework for actions, which they need to decide on locally, later, based on new, different, surprising circumstances (think Covid-19)
- Policies are a long-term stable form for **delegation of authority**, enabling faster action without permission and approvals. They save top management effort.
- Policies are *constraints*; and also *enablers*, to decision-making and planning decisions.
- Policies can have a dramatic 'change influence' on any organization. They can be powerful, and even revolutionary.
- Policies are not absolute 'Laws', but are strong official guidance, and can be ignored with specific justification, by using higher purposes or priority of other policies.
- Policies can be reviewed, audited, examined, to see if they are still appropriate, or if they are a *cause* of problems experienced. 'Organizational Learning'.



The 'Value Planning' book [B2] has over 100 suggested management *planning* policies, at least one for each of 100 sub-chapters

VP Chapter 7 Risk Management  
[https://www.dropbox.com/sh/fxvtya6gyvgwkfa/AAA5-vrLUT\\_z0h9EYt1ql3Uma?dl=0](https://www.dropbox.com/sh/fxvtya6gyvgwkfa/AAA5-vrLUT_z0h9EYt1ql3Uma?dl=0)

Sample the planning policies here.

Source below: 'Vision Engineering' [B3] core of Value Planning [B2] book

#### Evo' Project Management Policy

- **Efficiency:** The project manager and the project will be judged exclusively on the relationship of progress towards achieving the goals versus the amounts of the budgets used.
- **Creativity:** The project team will do anything legal and ethical to deliver the goal levels within the budgets.
- **Value Reward:** The team will be paid and rewarded for benefits delivered in relation to cost.
- **Freedom:** The team will find their own work process and their own design.
- **Feedback:** As experience dictates, the team will be free to suggest to the project sponsors (stakeholders) adjustments to 'more realistic levels' of the goals and budgets.

## 3.4 Standards; Processes

### Process Concept \*113 February 23, 2003 tg

A process is a work activity consisting of:

- an entry process, which examines entry conditions
- a task process, which follows a procedure defining the task. There might also be an associated verification process, such as test or quality control
- an exit process, which examines exit conditions

Processes transform inputs to outputs, using resources, and display their own performance and resource (cost) characteristics.

Source above: [P3] Full Planguage Glossary

Example of a Planning process, 'GP'  
the 'core procedure', for a 'task process'  
minus Entry and Exit processes. See next page 3.4

### • Procedure

P1: Specify Requirements [Initial]: Specify the initial top-level requirements (see Chapters 2, 3, 4, 5 and 6 as appropriate ).

P2: Determine Design [Initial]:

P2.1: Analyze the Requirement: Consider the stakeholder value and the delivery order for the requirements. Identify any constraints and any conflicts. Establish the scope for the system design.

P2.2: Find and Specify Design Ideas: Identify and specify the initial top-level design ideas to meet the requirements (see Chapter 7 ).

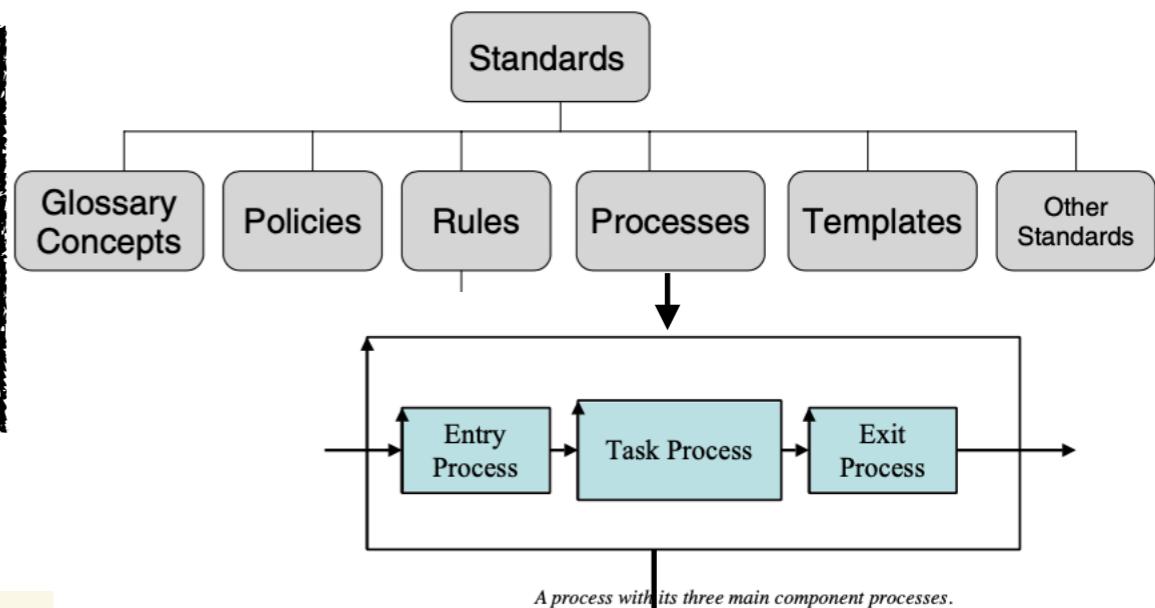
P2.3: Evaluate Design Ideas: Estimate the impacts of all the design ideas on all the requirements (see Chapters 7 and 9 ).

Re-do P1 to P2.3, until a reasonable balance between requirements and costs is obtained.

P2.4: Select Design Ideas and Produce Evo Plan: Produce an initial overview, long-term evolutionary plan of the sequence of Evo steps. That is, a plan for starting early delivery of required results by implementing the design ideas in a series of small result cycles. Each result cycle using, say 2% of total project time. (That is, each result cycle is an Evo step. Note, an Evo step contains one or more design ideas.)

Determine the sequence of step delivery of the potential Evo steps. Do this by calculating for each potential step, the performance to cost ratio, or ideally you would use the 'stakeholder view' of the value to cost ratio (the value being the benefits the stakeholders consider they will obtain from the system improvements). Ideally, sequencing should be in order of descending ratios, but consideration needs to be given to any associated dependencies (see Chapters 7 and 10 ). Note this plan will be modified, within the result cycles, using the feedback provided by the results of implementing the design ideas (see below).

P3: Manage Evolutionary Project: Iterate Plan-Do-Study-Act (PDSA) evolutionary result cycles until the exit conditions (below) are met. Each result cycle implements the next Evo step and provides feedback to modify the design, and maybe, to adjust requirements to more realistic levels (within each result cycle, the processes Specify Requirements and Determine Design are reiterated to carry out any more detailed work required as part of the implementation of the Evo step, and to cater for any changes required as a result of the feedback), (see Chapter 10, 'Evolutionary Project Management').



### Process Output

A process output is any data or materials output from a process.

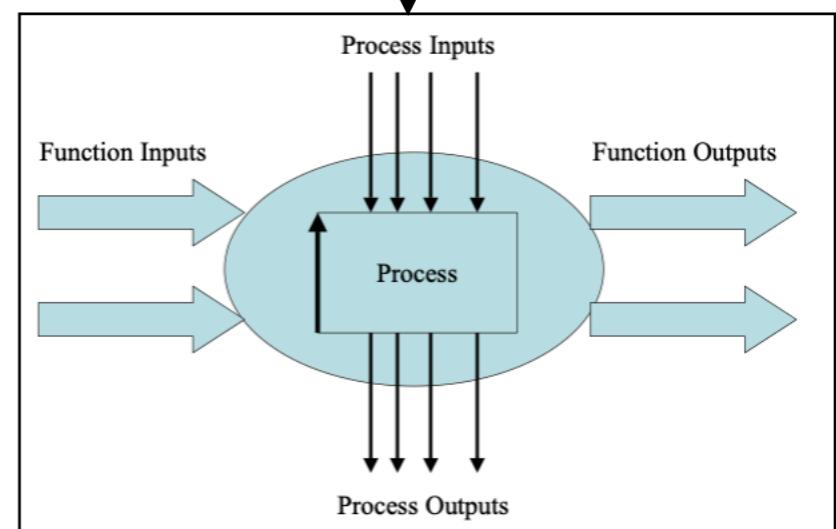


Figure \*179a: A process viewed as integral to a system. Function inputs are resource attributes, and function outputs are resource attributes.

### Procedure

A procedure is a repeatable description to instruct people as to the best-known practice, or recommended way, to carry out the task of a defined process. A procedure is part of a process description.

### Concept \*115

Source above: [P3] Full Planguage Glossary

# 3.4 Standards: Processes, an example

## Planning Process Definition: 'GP'

Source: Competitive Engineering [B1]

### Entry Conditions

E1: The Generic Entry Conditions apply (see separate specification for Generic Entry Conditions below).

- The raw requirements should have been gathered.
- The known sources of requirements should be identified and listed.
- These include: all the critical stakeholders all the currently identified requirements with detailed sources (use '<' and, state who or which document)
- and any justification for these requirements (use the Rationale parameter).

### Procedure

P1: Specify Requirements [Initial]: Specify the initial top-level requirements (see Chapters 2, 3, 4, 5 and 6 as appropriate ).

P2: Determine Design [Initial]:

P2.1: Analyze the Requirement: Consider the stakeholder value and the delivery order for the requirements.

Identify any constraints and any conflicts. Establish the scope for the system design.

P2.2: Find and Specify Design Ideas: Identify and specify the initial top-level design ideas to meet the requirements (see Chapter 7 ).

P2.3: Evaluate Design Ideas: Estimate the impacts of all the design ideas on all the requirements (see Chapters 7 and 9 ).

Re-do P1 to P2.3, until a reasonable balance between requirements and costs is obtained.

P2.4: Select Design Ideas and Produce Evo Plan: Produce an initial overview, long-term evolutionary plan of the sequence of Evo steps. That is, a plan for starting early delivery of required results by implementing the design ideas in a series of small result cycles. Each result cycle using, say 2% of total project time. (That is, each result cycle is an Evo step. Note, an Evo step contains one or more design ideas.)

Determine the sequence of step delivery of the potential Evo steps. Do this by calculating for each potential step, the performance to cost ratio, or ideally you would use the 'stakeholder view' of the value to cost ratio (the value being the benefits the stakeholders consider they will obtain from the system improvements). Ideally, sequencing should be in order of descending ratios, but consideration needs to be given to any associated dependencies (see Chapters 7 and 10 ). Note this plan will be modified, within the result cycles, using the feedback provided by the results of implementing the design ideas (see below).

P3: Manage Evolutionary Project: Iterate Plan-Do-Study-Act (PDSA) evolutionary result cycles until the exit conditions (below) are met. Each result cycle implements the next Evo step and provides feedback to modify the design, and maybe, to adjust requirements to more realistic levels (within each result cycle, the processes Specify Requirements and Determine Design are reiterated to carry out any more detailed work required as part of the implementation of the Evo step, and to cater for any changes required as a result of the feedback), (see Chapter 10, 'Evolutionary Project Management').

Note: When using Evo, as long as the Evo result cycles are delivering to the planned levels, the need for initial management review is considerably decreased (if not eliminated) as the resource commitment for each delivery step is only about 2% of the project total.

### Exit Conditions

X1: The Generic Exit Conditions apply (see separate specification for Generic Exit Conditions below).

X2: Cease doing Evo steps (P3) when either the stakeholder requirements are met, or resource budgets are exhausted. In other words, stop when the performance requirements are met at planned levels, or when resources (budgets) are 'used up' at their planned levels.

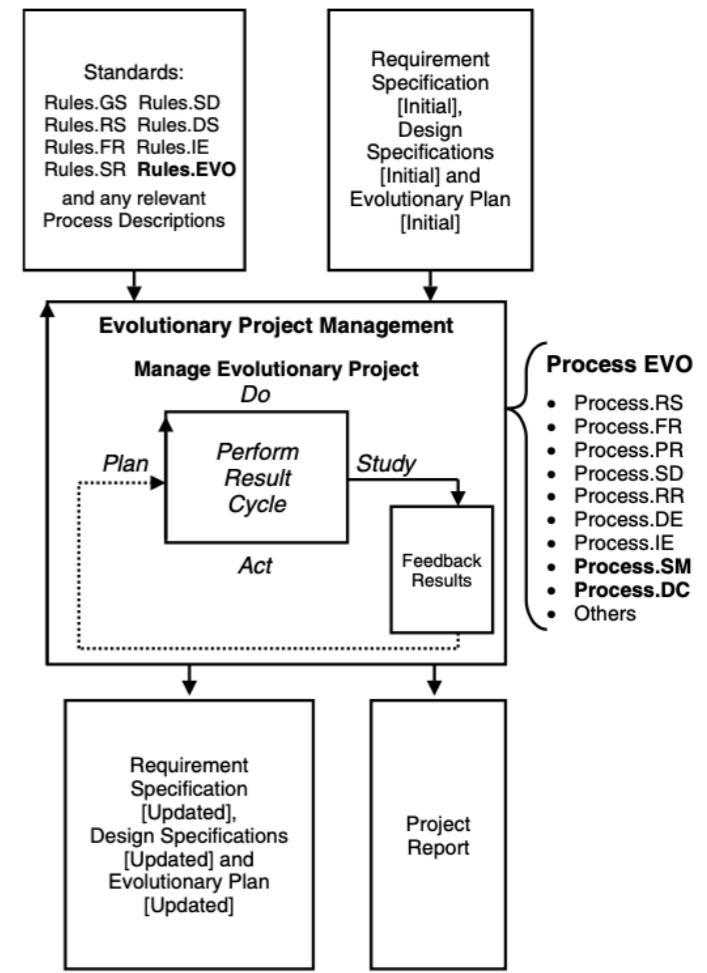


Figure 1.6

An overview of the defined Planguage process, which supports Evolutionary Project Management, Process.GP.P3 or in more detail, Process.EVO in Chapter 10.

# 3.5 Standards; Templates

## Template

Concept \*254 February 22, 2003tg

A template is an example or 'model' of something, which can be used to help people to tailor or make something, based on that model.

## Requirement specification template.

This is a summary template giving an overview of the set of requirements.

Requirement Specification Template (A Summary Template)

Tag: <Tag name for the system>.

Type: System.

### Basic Information

Version: <Date or other version number>.

Status: <{Draft, SQC Exited, Approved, Rejected}>.

Quality Level: <Maximum remaining major defects/page, sample size, date>.

Owner: <Role/e-mail/name of the person responsible for changes and updates>. Stakeholders: <Name any stakeholders (other than the Owner) with an interest in the system>.

Gist: <A brief description of the system>.

Description: <A full description of the system>.

Vision: <The overall aims and direction for the system>.

### Relationships

Consists Of: Sub-System: <Tags for the immediate hierarchical sub-systems, if any, comprising this system>.

Linked To: <Other systems or programs that this system interfaces with>.

### Function Requirements

Mission: <Mission statement or tag of the mission statement>.

Function Requirement:

<{Function Target, Function Constraint}>: <State tags of the function requirements>.

Note: 1. See Function Specification Template. 2. By default, 'Function Requirement' means 'Function Target'.

### Performance Requirements

Performance Requirement:

<{Quality, Resource Saving, Workload Capacity}>: <State tags of the performance requirements>.

Note: See Scalar Requirement Template.

### Resource Requirements

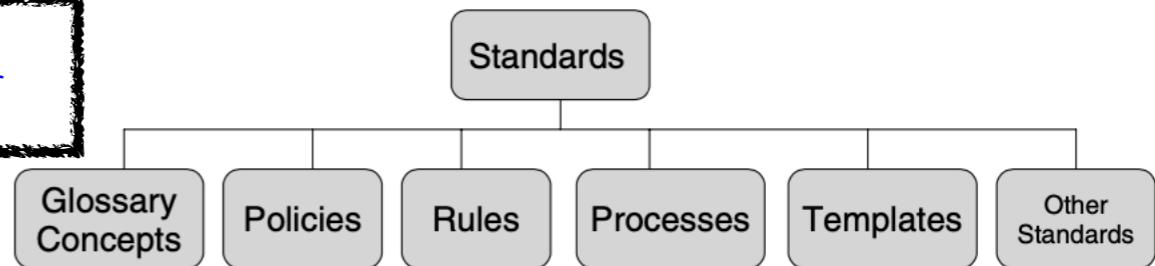
Resource Requirement:

<{Financial Resource, Time Resource, Headcount Resource, others}>: <State tags of the resource requirements>.

Note: See Scalar Requirement Template.

### Design Constraints

Design Constraint: <State tags of any relevant design constraints>.



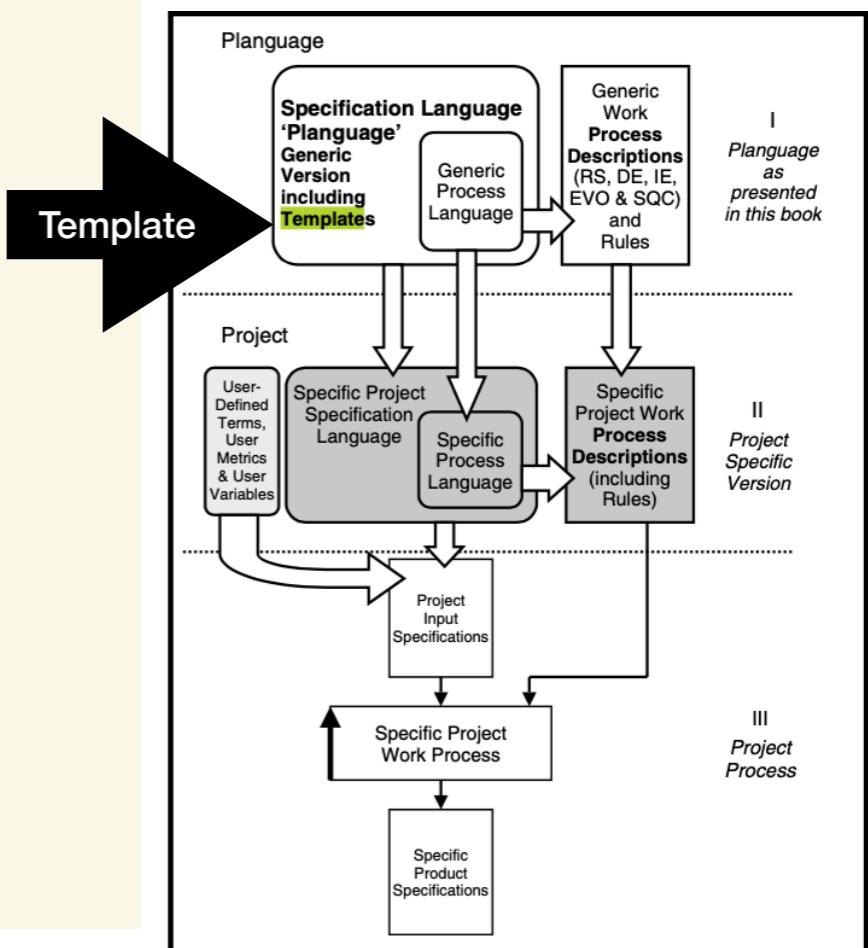
## Template 'with <Hints>'

This is a Word Template. It reminds people what their options are, it defines the options in <fuzzy brackets>, meaning 'undefined'.

The nice thing is that in a word processor, when you insert a definition, you erase the fuzzy brackets definition.

One client made use of Word Macros, to upgrade the degree of automation.

Of course a Spreadsheet can be used to do this too.



## Template

## Concept \*254 February 22, 2003tg

A template is an example or 'model' of something, which can be used to help people to tailor or make something, based on that model.

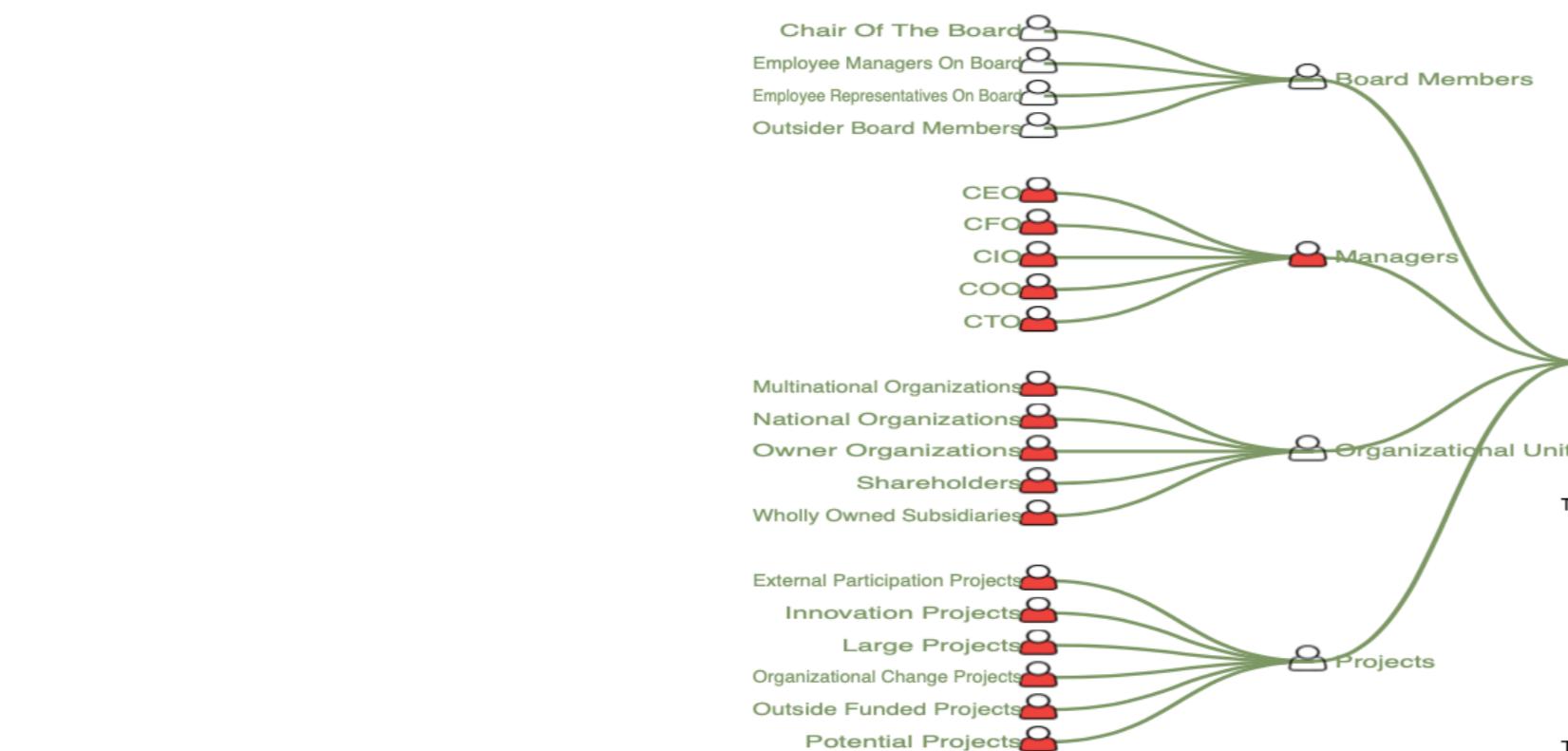
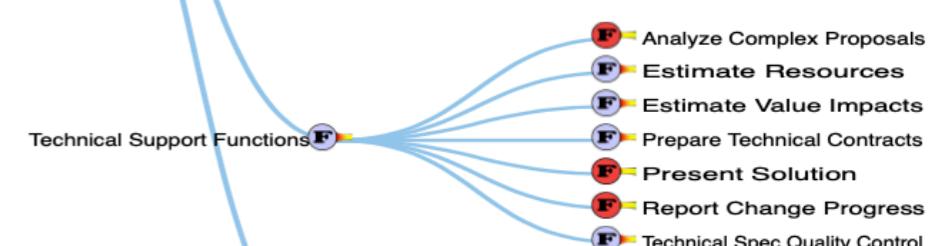
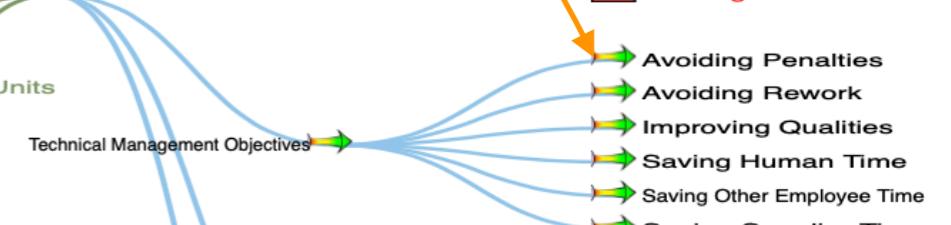
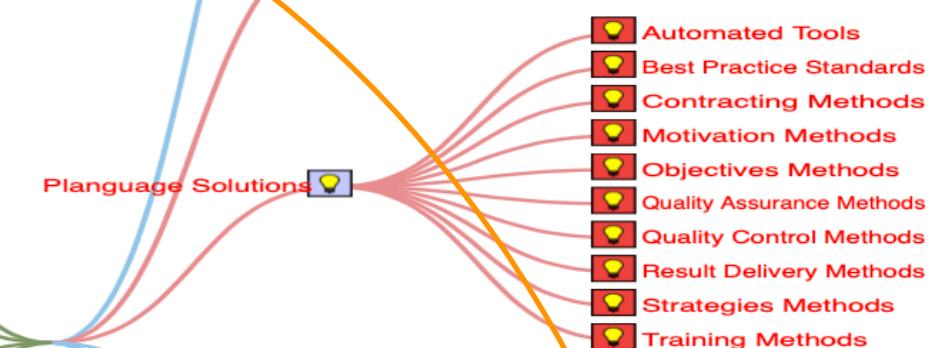
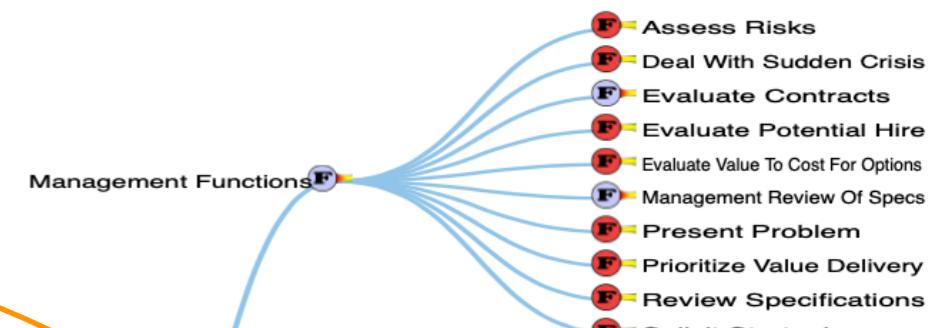
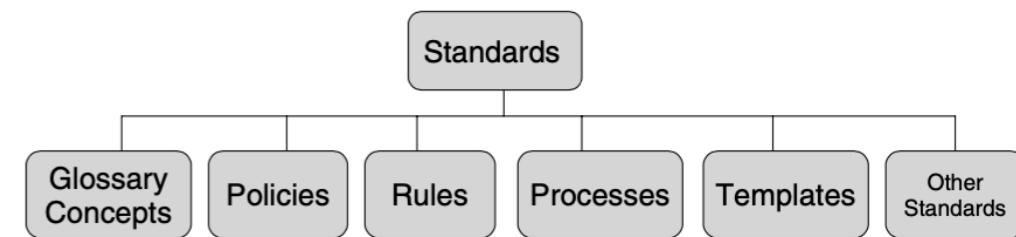
With an app like ValPlan, we would not have a template like the *previous page*, for 'collecting information about all the requirements'.

We would generate many different models of the set of planning-objects, from the basic specification-objects (stakeholders, requirements, strategies).

And we would select the pieces of it, we need, for the current discussion.

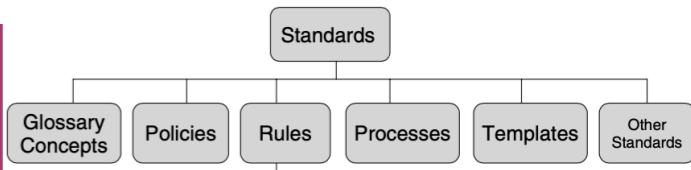
From such display models we can click on a spec object (example 'Avoiding Penalties' Objective')

and go directly to the detail we want to see (its detailed structure and quantification).



3.5

# Standards; Templates, on App [valplan.net](https://valplan.net)



Template

Concept \*254 February 22, 2003tg

A template is an example or 'model' of something, which can be used to help people to tailor or make something, based on that model.

## Requirement specification template.

This is a summary template giving an overview of the requirements.

A large number of template add-in options for Specification Parameters. Scroll for many more.

The screenshot shows the 'Requirement specification template' interface. At the top, there's a toolbar with various icons. Below it is a header with 'Concept \*254 February 22, 2003tg' and a 'Template' label. A blue box contains the definition of a template. The main area is titled 'Requirement specification template.' and contains the text 'This is a summary template giving an overview of the requirements.' Below this, there's a 'Tag' input field and a status bar with 'Level: Product, Status: Intolerable Range, Type: Value, Labels: no labels'. A 'Status' section shows a green slider with 'Status 0' and 'Wish 0'. A red callout box points to this section with the text 'The simplest bare bones template for the type of specification (Stakeholder Value Objective)'. To the right, a sidebar lists 'Parameters (click to add)' with items like 'Wish', 'Administration', 'Authority', etc. A red callout box points to the 'Parameters' section with the text '3 other classes of templates Built into the app Which can be added to by the user'. At the bottom, there are sections for 'Ambition Level', 'Stakeholders', 'Scale', 'Target Time Units: Calendar Date', 'Status: 0 (as of: 29 Jun 2020)', 'Wish: 0', and a 'Terms' section.

## 3.6 Standards: Process Entry and Exit Conditions

Plans can have a standard for entering a process, and for being released from a process

## Entry Condition Concept \*056 February 22, 2003 tg

An entry condition is a written part of a work-process standard. Entry conditions are usually found in sets. The relevant set of entry conditions is evaluated in an entry process. They are used to determine if there is entry permission to a task process.

## Entry Process

Concept \*057 February 22, 2003tg

An entry process involves evaluating any applicable entry conditions for a process. The process itself is defined by a main task. When *all* entry conditions are met, the main process task may officially commence.

## Exit Condition

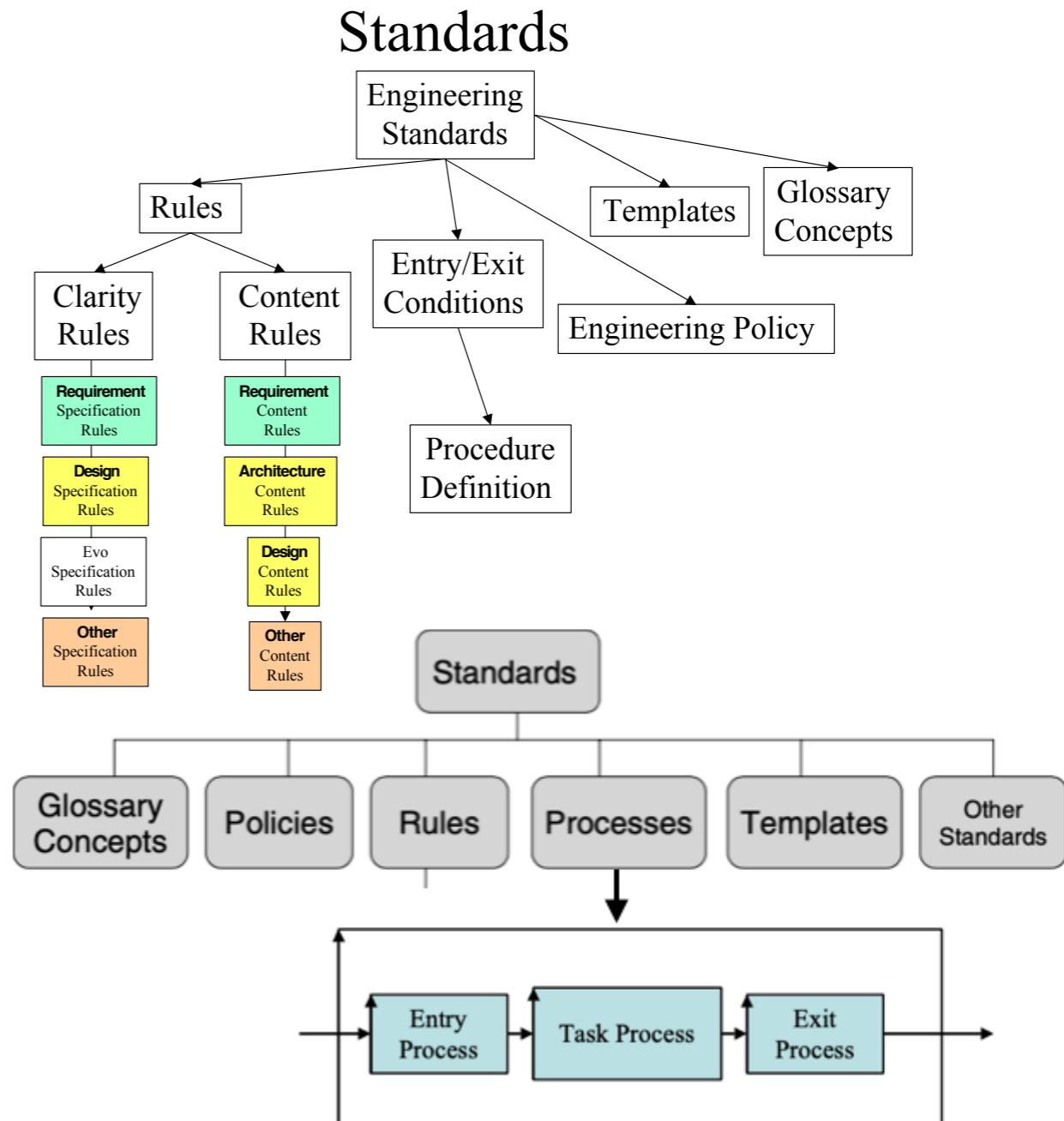
**Concept \*064 February 22, 2003**

An exit condition is a written part of a work-process standard. Exit conditions are usually found in sets. The relevant set of exit conditions is evaluated in an exit process. They are used to determine if there is exit permission from a task process. All the generic and specific exit conditions must normally be met, in order to exit from a process, thus releasing work products to the other 'downstream' processes.

## Exit Process

Concept \*065 February 21, 2003

An exit process involves evaluating any applicable exit conditions for a process. Only when *all* exit conditions are met, can the main process task officially terminate, and any process output be released to the next process.



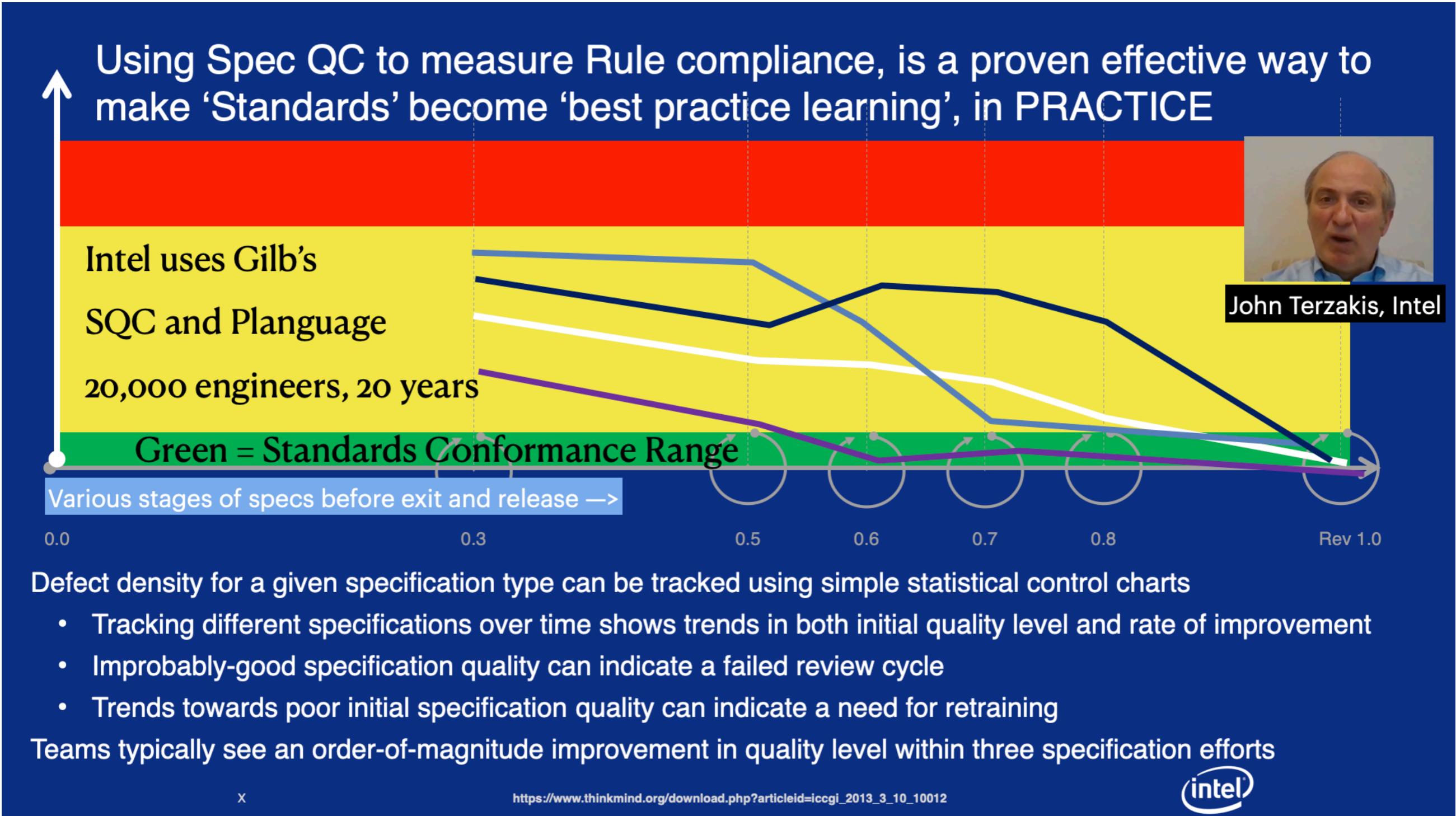
**The big idea is, resist deadline pressure to handover and accept plans. Be quite formal about necessary conditions for plan transfer to another process. This is based on what is ‘known to pay off’. Planning defects cost 10X to 1,000x more downstream**

**No GIGO: no Garbage In, no Garbage Out.**

**Key player is ‘Rules’: if you follow them well enough, you can proceed. otherwise NOT (no Exit)**

### 3.6 Standards: Process Entry & Exit Condition: Defect Levels

The most powerful Exit/Entry condition is based on the level of defects in the plan. I don't know of public planners who use this condition, except NASA Jet Propulsion Labs (J. Kelly, M. Bush), <https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/19890016247.pdf>



Checklist Concept \*016

A 'checklist' for a Specification QC process usually takes the form of a list of questions. All checklist questions are derived directly and explicitly from cross-referenced specification rules. Checklists are 'stored wisdom' aimed at helping to interpret the rules and explain their application. Checklists are used to increase effectiveness at finding major defects in a plan specification.

Example:

**STDQ: Rule:** "All critical project requirements must always be expressed numerically and measurably."

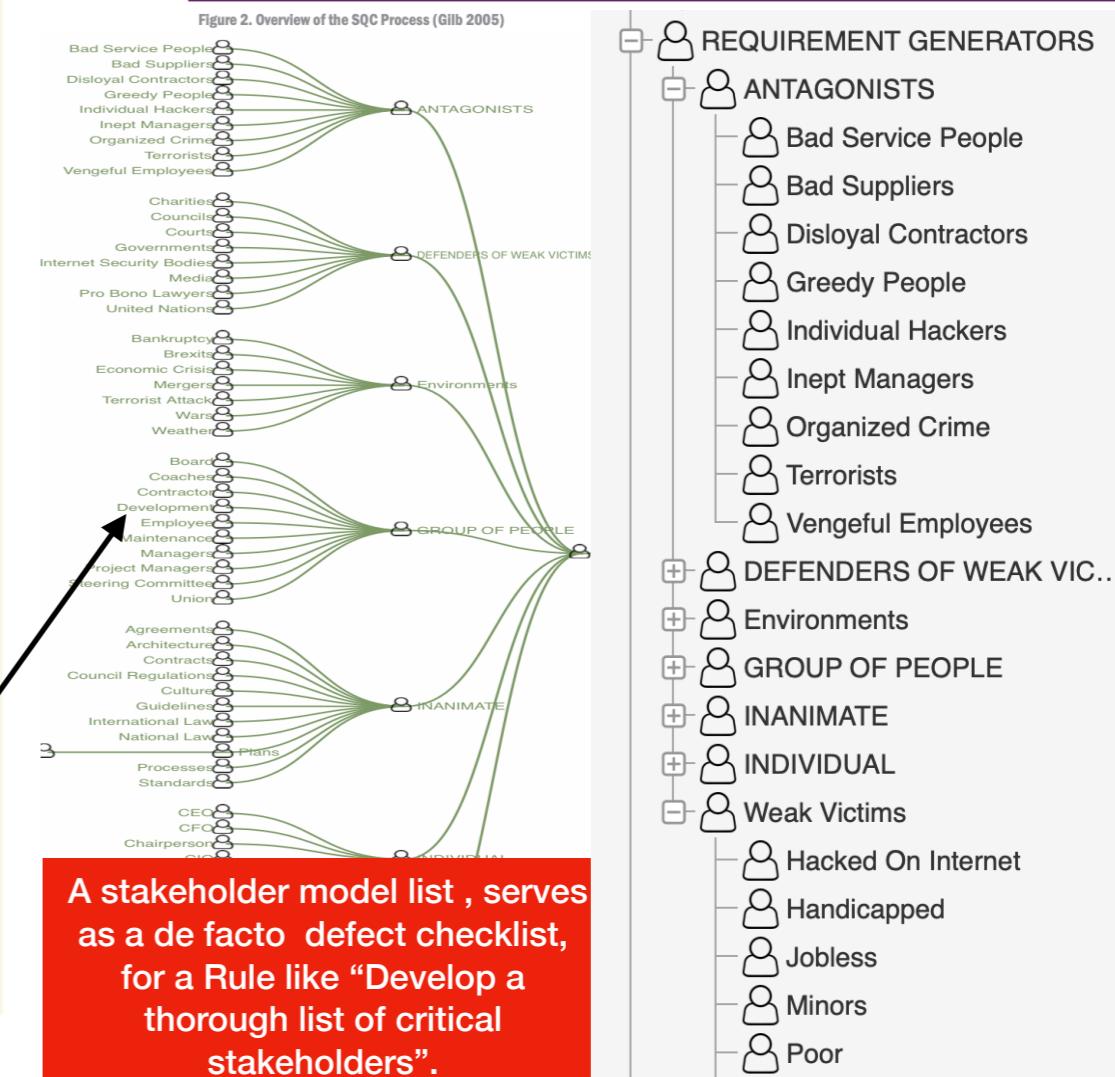
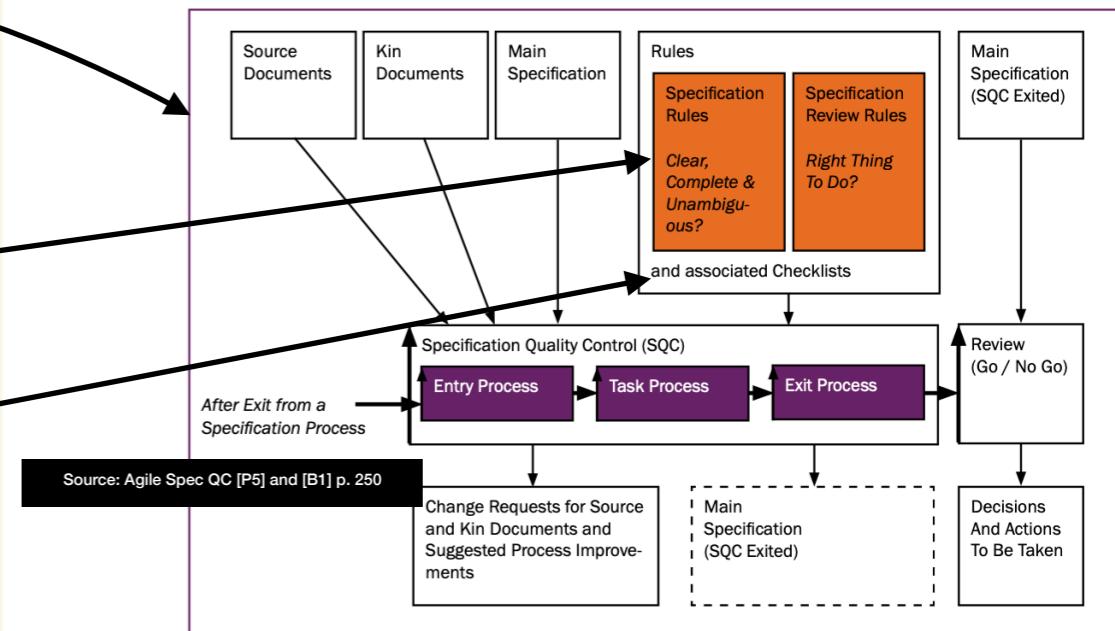
*This is the rule. The associated checklist question below is designed to help people understand how to apply the rule in practice, and identify any defects breaking the rule.*

**Checklist Q:** "Are all performance concepts (including all qualitative concepts – all '-ilities') expressed quantitatively?"      Source=Rule.STDQ.

An example of a checklist question with the rule it supports (STDQ) being referenced.

Notes:

1. Checklists are like law court interpretations of the law. They are not the official 'law' itself, but they do help us understand the proper interpretation of the law. Anyone can write checklists at any time to give advice on how to check. They are intentionally less formal to create, and to change, than specification rules. They do not necessarily have formal 'owners.'
2. Checklists should not be used instead of a proper set of rules, which is maintained by an engineering process owner. They are only intended as a supplement for checkers. Issues can *only* be classified as real defects if they can be shown to violate the official agreed rules for a specification.
3. Less formal 'de facto checklists' also exist. These include any documents that can be used to check a document with a view to identification of defects. These can have other names and even other purposes than a 'pure' checklist.
4. Examples of 'de facto checklists' include 'sources,' 'standards,' 'guidelines,' 'templates' and 'model documents.' If they help check, they must be some sort of checklist, irrespective of what people call them or intended them to be used for.



## Principle

Concept \*208 May 28, 2003

A principle is a short basic statement, which summarizes and teaches basic philosophy or the pragmatics of a method.

Page 19 of 215

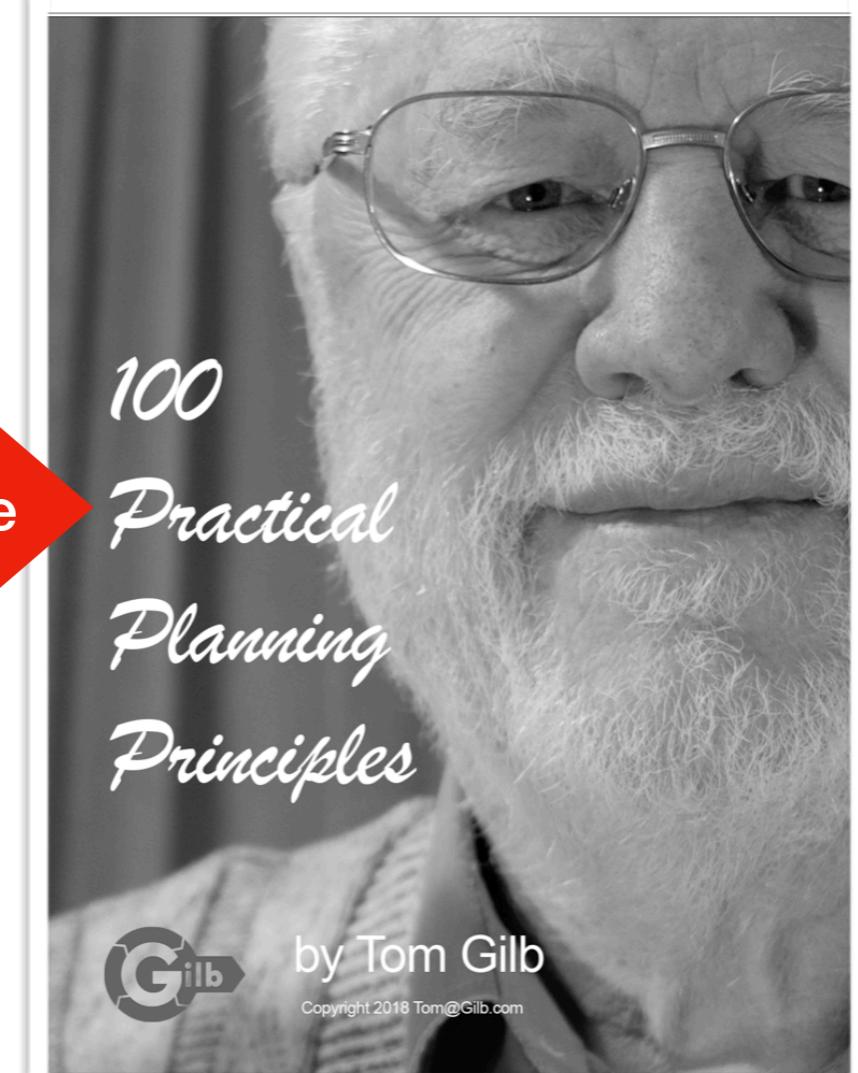
100 PPP

## Principle 1.8 Written, and approved, does not mean 'static'.

### REFLECT REALITY RAPIDLY:

**Changing the specification of objectives,  
and other plan objects,  
is a natural and necessary response to  
insights, feedback, competition, and politics.**

Sample



Just because an objective is *written*, or it is *quantified*, does not mean it is 'chiseled in stone'.

In fact, one reason for writing things down, is to *clearly* see any changes later.

A reason for *quantification* is to more-clearly realize that a numeric *change has been made*, however small.

Our policy must be that *changes will be clearly communicated*, to all parties who are potentially impacted, or interested. The consequences of changes (like cost or time increases) should be intelligible to all concerned parties.

Even the smallest changes can have *large* consequences



Booklet (€14)  
<https://www.gilb.com/store/4vRbzX6X>

The 100 principles are directly derived from 'Value planning' [B2], where they are explained in about 7 pages, each

# Chapter 4. Stakeholder Analysis

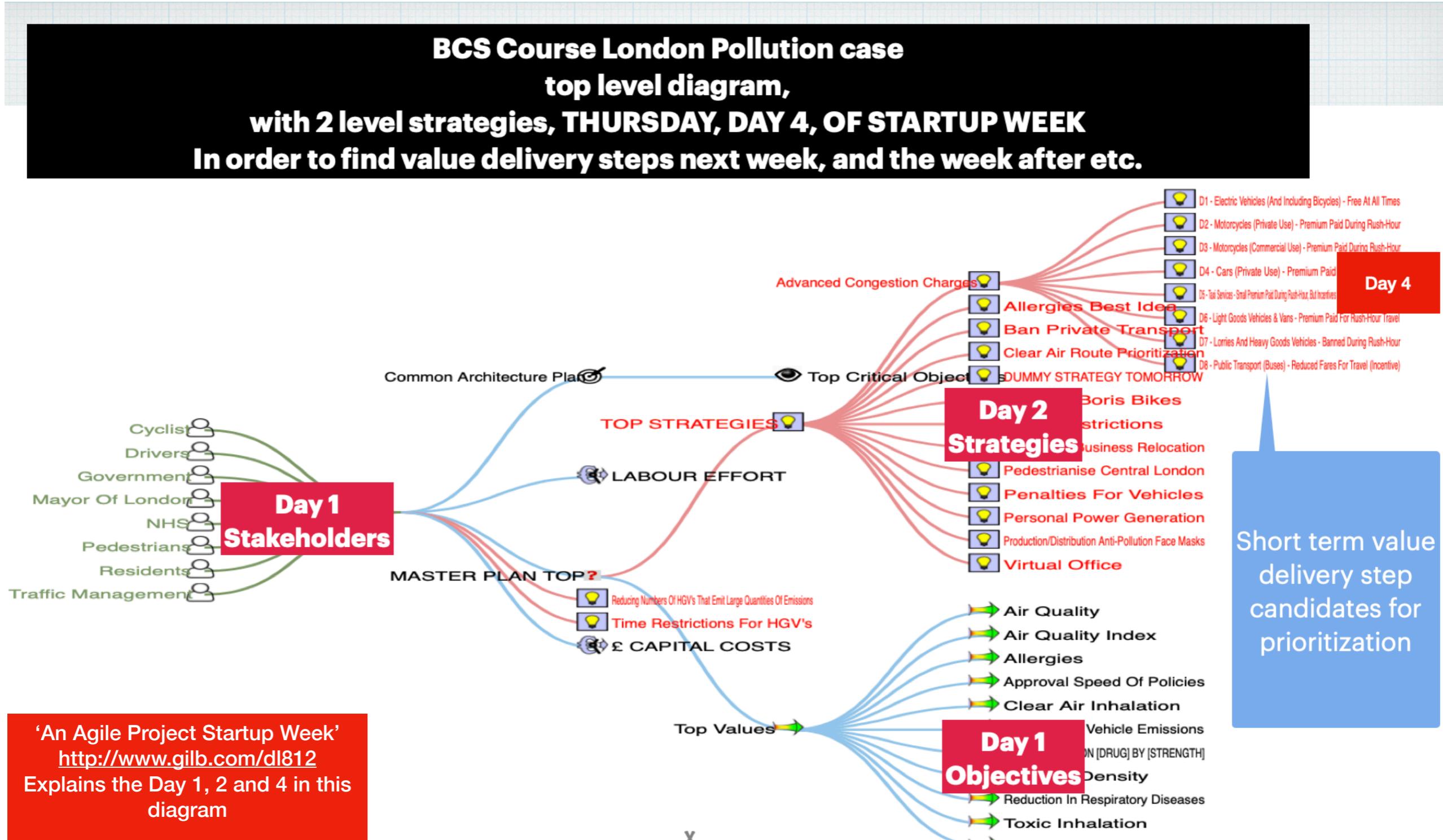
**Requirement Sources**

**and**

**Requirement ‘Generators’**

## 4.0 Stakeholders: not just 'users' or 'customers' but much

Stakeholder analysis should begin on Day 1 of a project. It should focus on the *critical* stakeholders. It should lead you their *critical objectives*. About 10 stakeholders, and 10 objectives is a good start. The process of *discovery* of stakeholders, *new* information about *existing* stakeholders, and stakeholder's *changing values* is



## 4.1 Stakeholders: keeping formal track of them

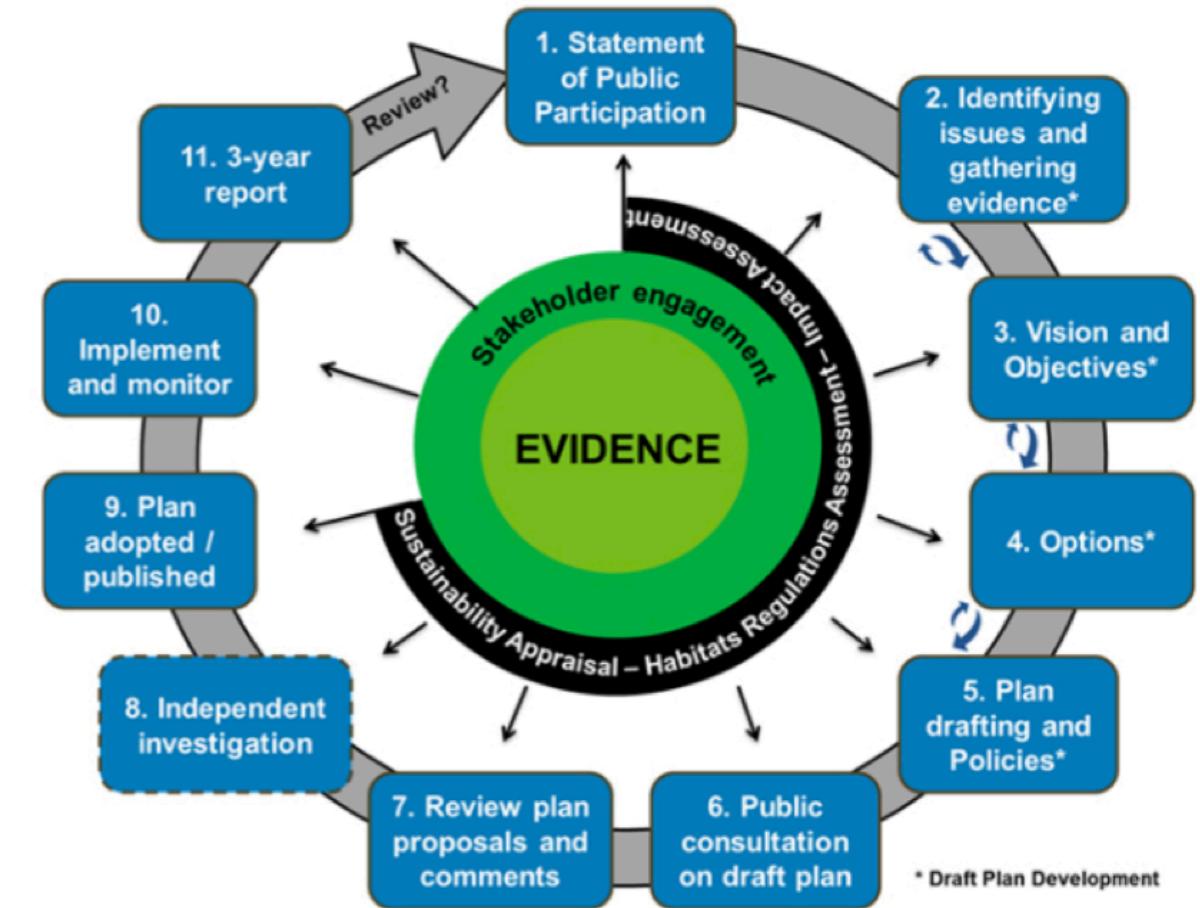
Stakeholder mapping is a basic process; so that we can discover their critical objectives and other requirements. We need to discover new stakeholders continuously, and consult with them to adjust

**Problem 8. STAKEHOLDER MAPPING:**  
formal specification of acknowledged stakeholders and their acknowledged values is not complete enough, public enough, and not connected explicitly enough to the plan.

**“You might forget a stakeholder, but they will not forget you”.**

**we cannot easily see which stakeholders have been ignored**

**we cannot see which stakeholder concerns have been included, and considered.**



How stakeholders think requirement gathering works.

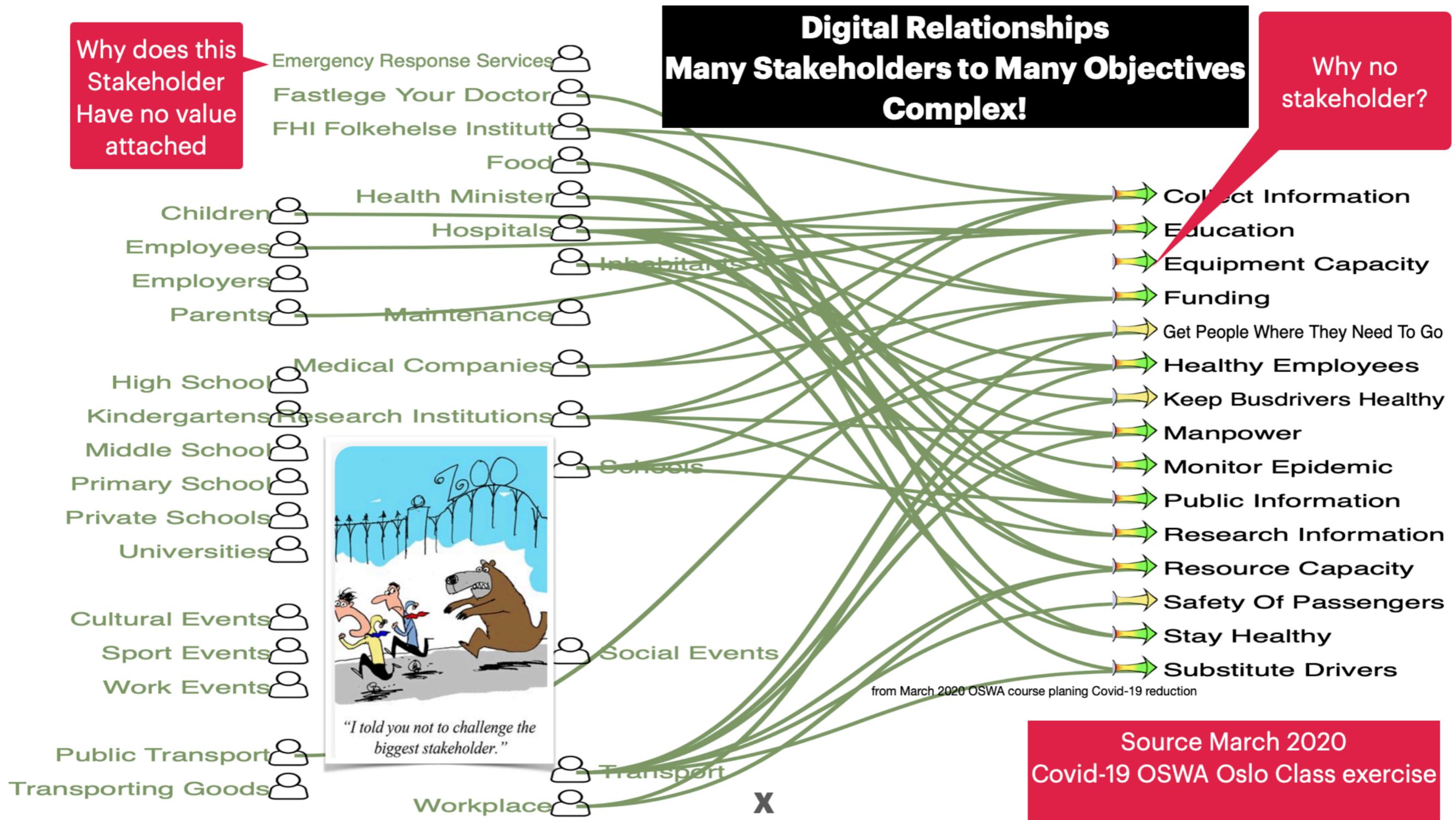


How requirement gathering really works.



## 4.2 Stakeholders: the many to many relationship

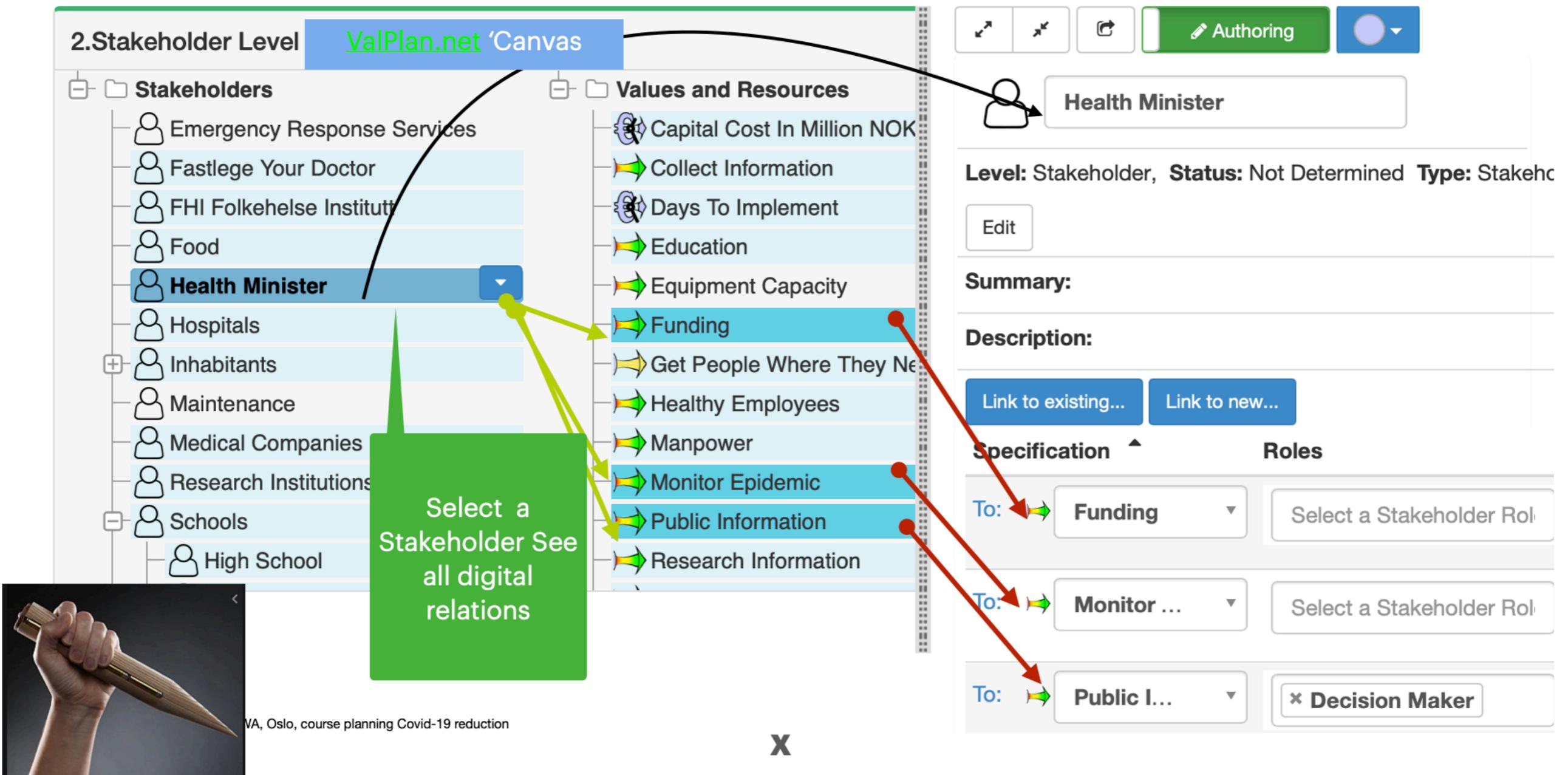
A stakeholder can have many requirements, and a requirement can have many stakeholders. There is constant churn and conflict, which must be resolved by intelligent balancing and compromise. A juggling act.



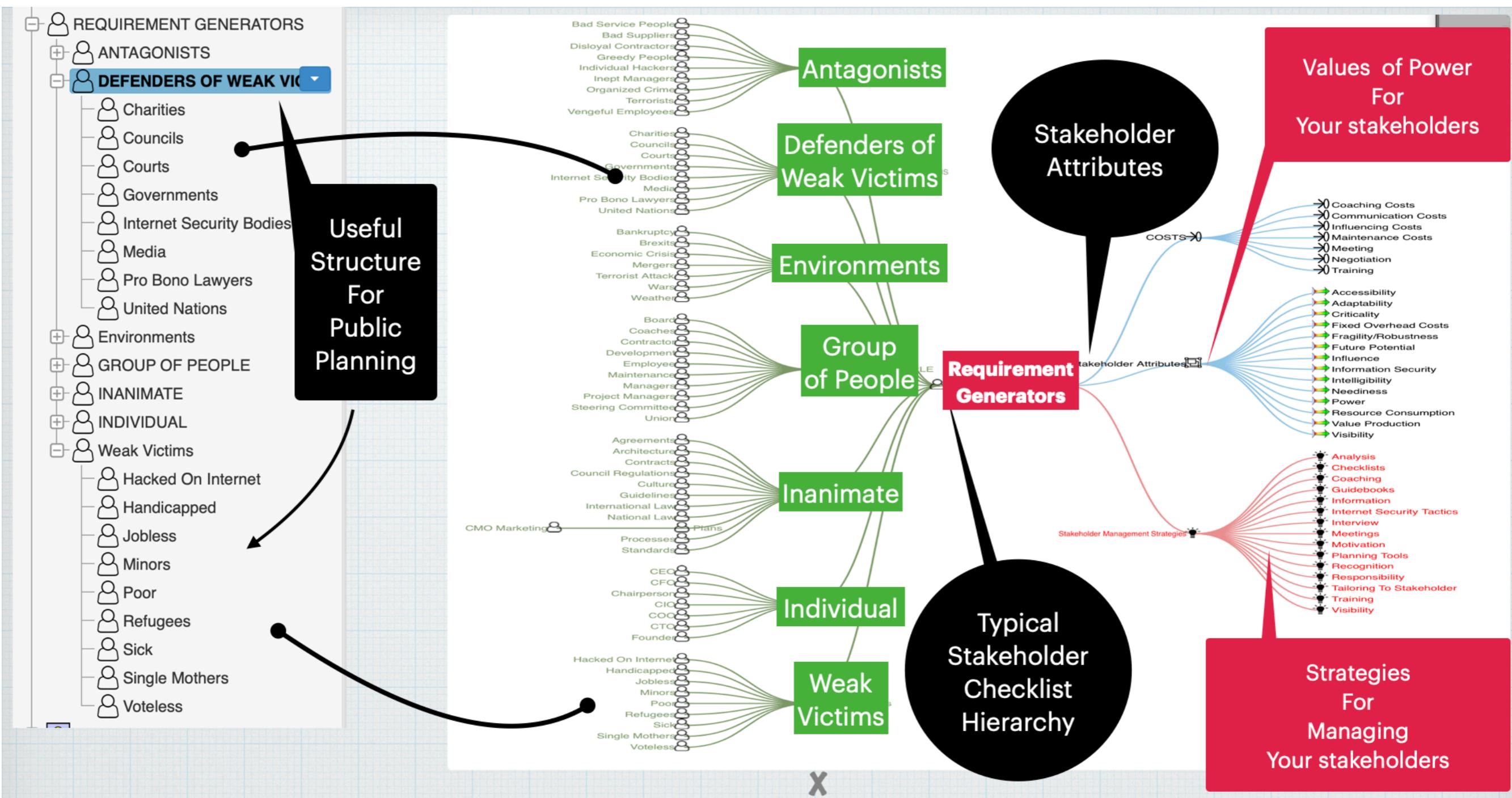
## 4.3 Stakeholders: precise and complete connections to plans

If you keep your plans *digitally* updated, you have continuous access to the relations a stakeholder has with requirements, strategies, project plans, costs, and time.

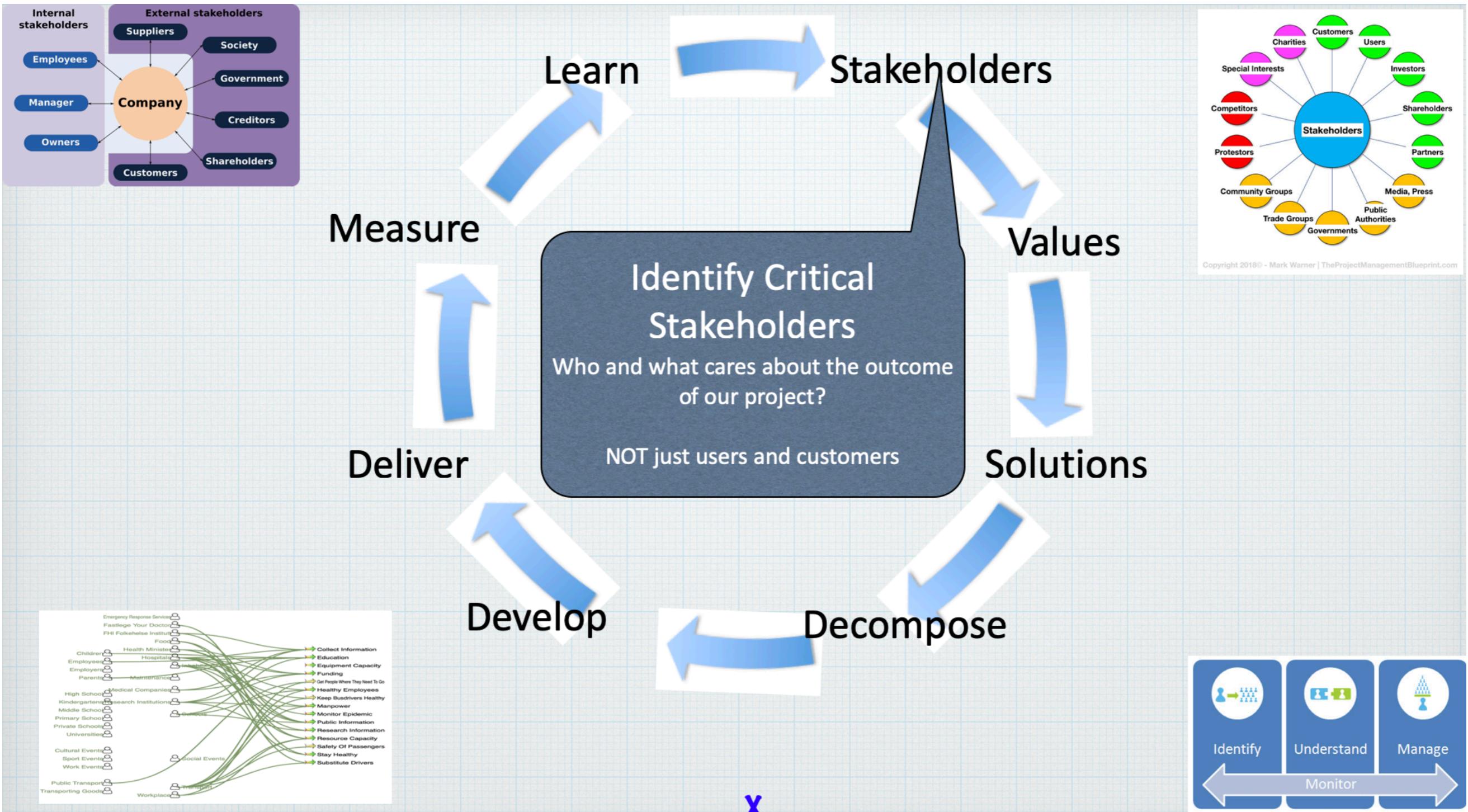
### Stakeholder <-> Value Digital relation. Covid-19 Planning



Forgetting even one critical stakeholder, may cause total project failure. We need to use all the tactics we can, to remember stakeholders, and their requirements, in our domain.



There is a cycle of incrementally analysing stakeholders and their values, and then planning solutions and proving they work. You cannot succeed by doing it in one big batch, with no feedback and experience. Some stakeholders will only rear their ugly heads when you tickle the system with change. So be sensitive to that, and prepared to retreat, on a small incremental scale.



## 4.6 Stakeholders: a framework of principles, words to the wise.

Stakeholders is a snake pit, mixed with other dangers and opportunities. There is

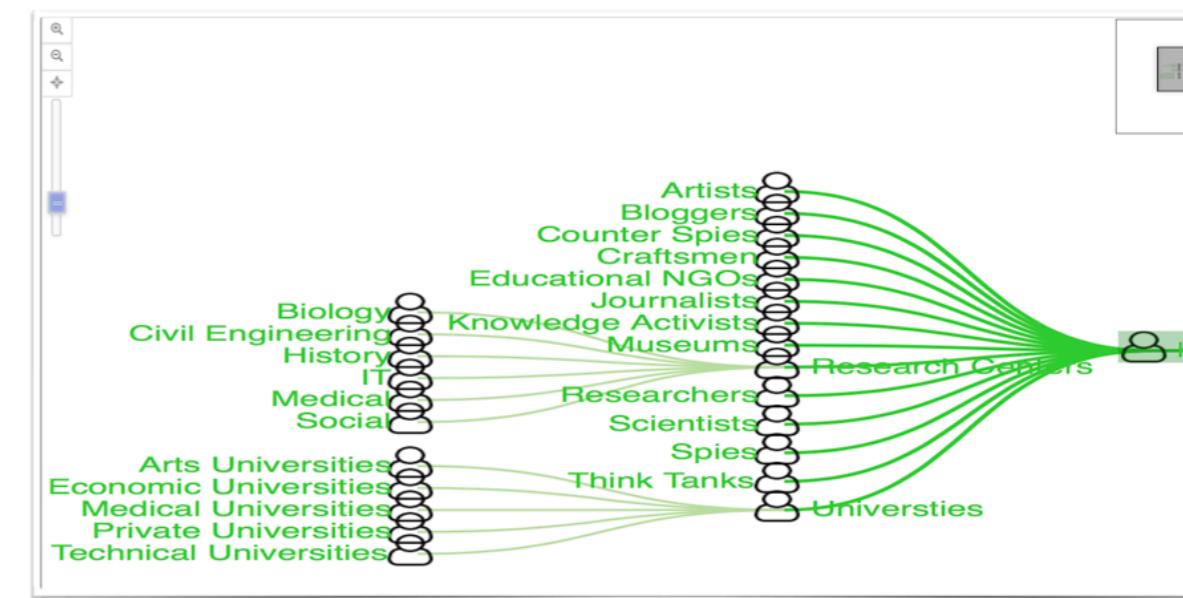
### Ten Stakeholder Principles

Stakeholders determine and give priority to their values.  
Our planning can prioritise them, or not,  
depending on higher our own priorities and limited resources

1. Some stakeholders are *more critical* to your system than others.
2. Some stakeholder needs are *more critical* to your system than others.
3. Stakeholders are *undisciplined*: they may not know all their needs, or know them precisely, or know their value. But they can be analyzed, coached, and helped to get the best possible deal.
4. Stakeholders may be *inaccessible*, unwilling, inanimate, oppositional, and worse: but we need to deal with them intelligently.
5. Stakeholders might well ask for the *wrong thing*, a 'means' rather than their real 'ends'. But they can be guided to understand that. Or their requests can be interpreted in their own real best interests.
6. Stakeholders do *not want to wait years, get delays, invest shitloads of money, and then little or no value*. They want as much 'value improvement' of their current situation, as they can get, as fast as they can get it. For as little cost as possible,
7. Stakeholders *cannot have any realistic idea of what their needs and demands will cost to satisfy*. So their adopted (by you) requirements need to be based on *value for costs*, not on value alone. Delivering small increments, based on high value-to-cost, is one smart way to deal with this.
8. If you think you have found 'all critical stakeholders', I think you should assume there is *at least one more*, and when you find that one, .... They will emerge, and they are not all there at the beginning.
9. If you think you have found all critical needs of a stakeholder, there will *always be at least one more need*, hiding.
10. If you do not understand, and act on the principles above; you will blame your failure on 'system complexity', and the unexpected and wicked problems. But in reality it is *your own fault and responsibility*; deal with it - up front and constantly.

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Spreading  
Knowledge in Poland  
Masterclass Project  
May 2018  
Katowice



<http://www.gilb.com/dl318>  
Some Stakeholder Slides 2009

## **Chapter 5. Clear Objectives ... (is unusual)**

**Objectives**  
**(and all notions of Requirements):**  
**Future States, Visions, Value, Qualities**

## 5.1 Clear Objectives: the rockbed foundation of all plans

Unclear, and incomplete objectives is a rampant sickness, of too much within public planning. This is a worldwide problem, except for good engineering and scientific communities. But the cost of bad planning is far too high, and in the public sector life is at stake, the quality of many lives are at stake, and hard-earned taxpayer money is wasted for nothing. It is time to raise the alarm. To start a taxpayer and citizens revolution. It is time to change our planning culture; and to recognise that bad planning, based on childish objectives, is irresponsible, unethical, and shameful. Some parts of the human race knew better, long since. Time to change!

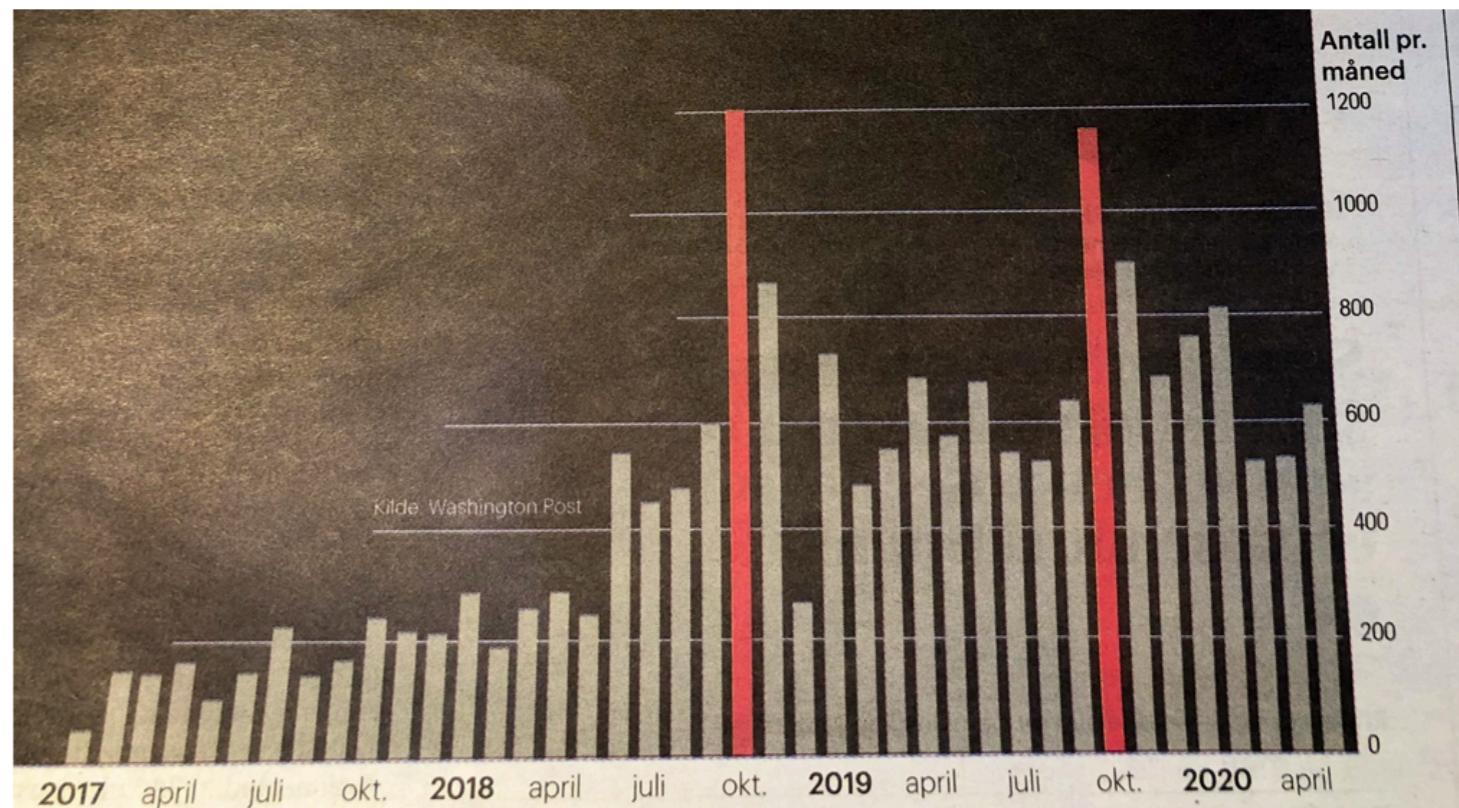
### Problem 1.

#### **CLARITY:**

#### **Lack of clarity.**

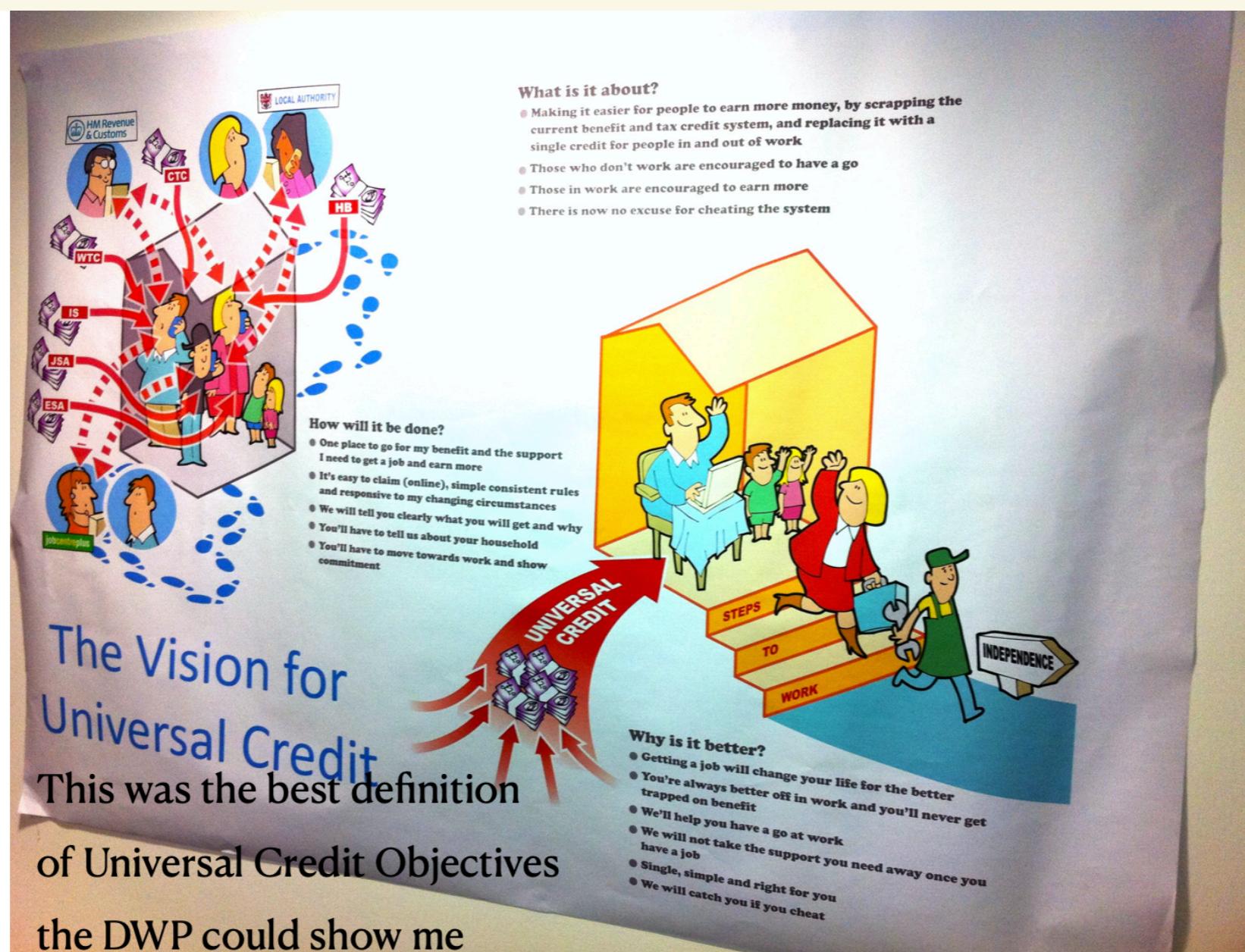
Does everyone understand the problem the same way, or do they have different interpretations?

**Ambiguity, Scope not defined, misleading, incomplete, dated, ....**



**FALSE AND MISLEADING PER MONTH,  
BY A PRESIDENT  
Washington post checking**

One day some of my old students invited me to look at their project at DWP. They were at Director level. I found these nice slogans, in the photo, about a new major government system, on their wall. I probed for clearer and deeper definitions of the nice slogans, but they were not forthcoming. So we did a little exercise, and tried to come up with a list of the critical objectives (below right). Then I tried to demonstrate, to their surprise, that these nice-sounding words could be articulated as clear, quantified, measurable, well structured objectives; on the spot. They all said 'nice platitudes' about the planning improvement this would enable them to do. And to my knowledge, never followed up and did anything about it. After all they were civil servants, mustn't rock the boat. I'm sure they were overtaken by high priority events like new ministers. Still, nothing happened. Sad for all the workers and pensioners.



### Critical Value Objectives (TG)

- Government
  - People Self-Sufficiency
  - Unemployment
  - Household Employment
  - Work Uptake Encouragement
  - Earnings Increase [Employed]
  - Fraud
  - Operational Costs
  - Rule Updatedness
  - Claim Data Integrity "honesty, correct, updated, not fraud"
  - Motivation
  - **Benefit Dependency**

The 'What is it about?' box, was the best the directors could show me. Sounds nice; a politician could have said that on television. But almost all the words are capable of many interpretations. Try: 'easier', 'people', 'earn more', 'scrapping' and much more (see 2.1, 2.2). This is not a proper basis for building a large country's pensions and work system. In fact it is clearly unethical practice. My opinion. Would you defend these fuzzy statements as good practice, in a court of law? I myself am not that crazy. The specification at left might not be immediately clear to you. It might take some training and reading, to understand the detail. But I guess you can read it, and make some sense of it, if you take your time, and are patient. But hopefully you can see an attempt at quantification, and organized structure?

### An Example for DWP Of translating vague objectives 2011 London

#### Benefit Dependency:

**Ambition** level: people will not have anywhere near the same level of benefits dependency as at present.

**Scale:** duration of defined Benefit Types for defined Claimant types under defined Circumstances

**Past** [2011, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 7 years ? ± 6 ? <- MW

**Goal [Deadline = Next Election, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 4 years ? ± ? <- MW**

**Goal [Deadline = Next Election + 5 years, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 2 years ? ± ? <- MW**

#### • Stakeholders

- Taxpayer Disposable Income
- Earning Ease "taxing them less"
- Claim Ease
- Equitable Treatment (under the law)
- Tailored Responsiveness
- Rights Clarity "what, why"

#### "What is it About?

"Making it easier for people to earn more money, by scrapping the current benefit and tax credit system, and replacing it with a single credit for people in and out of work.

Those who don't work are encouraged to have a go.

Those in work are encouraged to earn more."

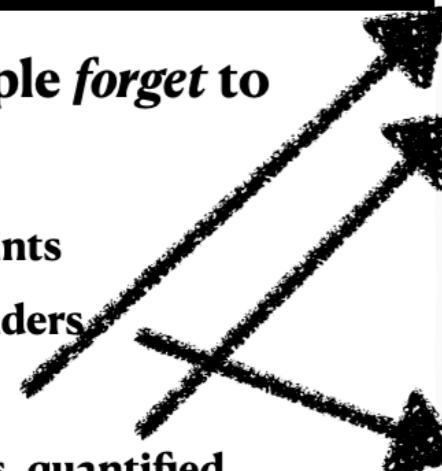


Being clear about what you specify, is a basic necessity. But 'clear objectives' are still not good enough, for many purposes, if they are **incomplete**; if they are missing information that helps us understand and manage **risks**, that helps us **prioritise**, and that helps us make responsible **changes**. To deal with these things, we will need more than the 'core objective' itself. We need **background** information, like 'who are the stakeholders?', and 'what is the current state of play?', and very much more. We cannot leave the decision, of what must be included in objectives, to individual taste. The organization needs to make, and enforce, those completeness standards. It is not good enough that 'everybody knows' the correct planning culture, by tradition, either. Planning culture *must* be written down. It must be *improved as needed*. And it must be *enforced effectively*, such as by using Specification Quality Control, as discussed earlier in Chapter 2. Below left, is a basic checklist of items to consider for making objectives 'more complete'. On the right-hand side below, is a more-detailed, and specific, set of Rules, to help people know, what 'complete specification of an Objective', means. In this case it is better to 'err on the side of caution', to include *more* rather than *less* information, about an objective, which *might* cost £\$€100 million, and affect 10 million lives, or more. Does that sound reasonable?

## Problem 2. COMPLETENESS: Incompleteness.

### What do people *forget* to plan?

- Constraints
- Stakeholders
- Values
- Qualities, quantified
- Next level up objectives
- Costs
- Operational Costs
- Responsibilities
- Sources
- Risks
- Systems view
- And very much more.....



### AFOTEC PLANNING POLICY

PP1 (Critical) All critical 'strategic' mission-level objectives shall be identified together, in an unambiguous, quantified, trackable, reportable and testable format. The top ten or twenty is sufficient at the first level. All others should be subsets or 'means objectives'.

PP2 (Scale) All objectives shall have a formally defined written 'scale of measure', directly, or in a set of their sub-objectives. All 'qualitative' aspects are quantifiable.

PP3 (Meter) All Objectives shall have at least an outline of the method or process by which we can track, test or estimate the numeric status of each defined objective, at any time from birth to death of the unit/project/system being tracked.

PP4 (Benchmarks) in setting objectives at least one, and possibly several, benchmark analytical levels shall be established; and kept together with the Objectives. These shall include Past systems, Competitors, State of the Art, and Trends, as appropriate background for Objective users. Use {Past, Record, Trend} parameters.

PP5 (Stakeholders) all critical stakeholders in the outcomes shall be explicitly identified and consulted. They shall, where appropriate, each have a separate, but related, set of Objectives, and if possible have explicit integration in the main set of objectives, and possibly distinct-for-stakeholder levels-of-performance specified, using [qualifiers] to identify stakeholders and their related {when, If} conditions.

PP6 (Basic Categories) Categories shall be defined for the main objective, and for each of the sub-objectives. These shall include {Quality, Cost, Function, Customer, Process, Environment, Safety, Health, Social, Ethical, etc.} and any other supplementary information required. These shall include Impact Analysis, Evolutionary Planning, and other relevant methods.

PP7 (Target Levels) Future target levels shall be defined for each objective, and for each of the sub-objectives. These shall be defined in terms of [when, where, IF] qualifiers, and shall be given (using '←' or 'Source' parameters).

PP8 (Approval) Approval shall be given for each objective, and for each of the sub-objectives, by formal 'Inspection' at no regular intervals, or by an authorized Review Panel.

PP9 (Feedback) The current status of each objective, and for each of the sub-objectives, shall be assessed whether design, (Evolutionary) or operational, is progressing, or not, and whether any corrective action is required.

### Practical example

#### Of a tool (Planning Rules)

to make sure that planners are 'more complete'

Especially if used together with

Quality Control measurement (Spec QC)

That they do it every time

Before a plan is released (Exited)

Check out PP1, PP2, and PP5 as examples of making sure  
Plans are 'complete'

# Clear Objectives: a sample ‘Objective, completeness’ standard

Here is the same planning policy as the previous page. I suggested it to Major General Jeffrey Cliver, off the cuff, one day. It is pretty similar to Rules and Policies in my books, like Competitive Engineering (2005) and other examples for many clients. But the point I want to bring out here, is the citation he gave me for this, and for other ideas. He stopped all activity, cancelled his agenda, and ordered his staff to come and listen to my ideas, like Impact Estimation Tables. No excuses like ‘no time’. Prioritization of the best Top Gun target, now! He really appreciates concrete and deep ideas like this, and I expected he would act on some version of it. Not every government employee appreciates these ideas, to put it mildly. But this guy is a literally ‘Top’ Top Gun, with an amazing record, you can find on the internet. Appreciating powerful ideas, listening to ‘outsiders’ like me, and implementing powerful ideas, is what makes him a Top Gun. Not everybody has the courage. Do you? Maybe I am expecting too much of ordinary civil servants. Maybe this is the kind of thing it took a Winston Churchill to do. But we have to change! And *somebody* has to lead that change? My experience is that one fearless persistent person can lead the change, to massive adoption. But I suspect I underrate the fear culture of some civil service organizations. Big downside, little upside. Who actually designs and determines a civil service culture? Yes Minister!



## US AF Testing AFOTEC

### TG Suggestion for planning policy 1998 (Rules for Objectives)

#### AFOTEC PLANNING P O L I C Y

PP1 (**Critical**) All critical ‘strategic’ mission-level objectives shall be identified together, in an unambiguous, quantified, trackable, reportable and testable format. The top ten or twenty is sufficient at the first level. All others should be subsets or ‘means objectives’.

PP2 (**Scale**) All objectives shall have a formally defined written ‘scale of measure’, directly, or in a set of their sub-objectives. All ‘qualitative’ aspects are quantifiable.

PP3 (**Meter**) All Objectives shall have at least an outline of the method or process by which we can track, test or estimate the numeric status of each defined objective, at any time from birth to death of the unit/project/system being tracked.

PP4 (**Benchmarks**) in setting objectives at least one, and possibly several, benchmark analytical levels shall be established; and kept together with the Objectives. These shall include Past systems, Competitors, State of the Art, and Trends, as appropriate background for Objective users. Use {Past, Record, Trend} parameters.

PP5 (**Stakeholders**) all critical stakeholders in the outcomes shall be explicitly identified and consulted. They shall, where appropriate, each have a separate, but related, set of Objectives, and if possible have explicit integration in the main set of objectives, and possibly distinct-for-stakeholder levels-of-performance specified, using [qualifiers] to identify stakeholders and their related {when, If} conditions.

PP6 (**Basic Categories**) Objectives/Requirements shall be defined in the following set of basic categories {**Quality, Cost, Function, Constraints**}. In addition, the following sections will appear, with appropriate supplementary information: {Stakeholders, Definitions, Assumptions, Risks, References, Strategies/Designs, Impact Analysis, Evolutionary Plans} in addition to other sections, which are deemed useful.

PP7 (**Target Levels**) Future target levels shall be specified as {Wish, Must or Plan}, together with suitable [when, where, IF] qualifiers. Uncertainty shall be explicitly stated and detailed sources for the targets shall be given (using ‘←’ or ‘Source’, or ‘Authority’).

PP8 (**Approval**) Approval of a set of objectives is dependent on at least two fundamental stages, (1) exit from a formal ‘Inspection’ at no more than 0.2 Majors per Page Maximum remaining. Then (2) Go/No-go approval by an authorized Review Panel.

PP9 (**Feedback**) The currently-approved objectives shall be the **fundamental basis** for reporting all progress; whether design, (Evolutionary) development, testing or operation of the organizational unit or system.

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Notice that Government top managers  
Really like the idea of some rigour in  
Planning. At least when life is at stake!

It only takes one missing detail to cause a project to fail, totally or partially. I do not believe we will ever manage to specify absolutely all useful details in a plan. There is a certain fraction of information, which can only be learned and known, after partial implementation, measurement and reaction from affected stakeholders. But, we should work to do as well as we can, cost-effectively, in the planning *specification* alone, thus reducing the number of surprises and threats, that pop up after partial implementation. My client experience tells me that we can really expect to reduce planning defects by 50X to 100x, if we try! (Terzakis, Intel for example).

## More Problem 2. COMPLETENESS: Planning Incompleteness.

### What are the consequences of incompleteness? (Tom's List)

- Risk of total or partial failure
- Delays (years!)
- Cost Overruns
- Bad decision-making
- Bad service result to population
- Getting paid to redo the whole thing again
- Embarrassing public humiliation
- And more (Incomplete list here)

<https://www.tutor2u.net/economics/reference/government-failure>

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### Summary of some Causes of Government Failure

Cause of government failure	Brief explanation of the problem caused	Examples of government failure to consider
• Political self interest	Government influenced by influential political lobbying	Farm support policies, the drinks industry, transport lobby
• Poor value for money	Low productivity / high waste makes spending less effective	Investment on IT projects in the NHS, poor record of PFI projects
• Policy short-termism	Governments often looking for a “quick fix” solution	Road widening to reduce congestion, ASBOs for offenders
• Regulatory capture	When Govt agency operates in favour of producers	Self-regulation on alcohol prices, powerful energy lobby
• Conflicting objectives	One policy objective might conflict with another	Minimum carbon price could damage UK competitiveness
• Bureaucracy & red tape	Costs of enforcement may hurt enterprise & incentives	Costs of meeting health and safety and environmental laws
• Unintended consequences	Policies have unanticipated or unintended side-effects	Smoking ban – increased use of outdoor patio heaters



Political self interest / lobbying



Policy myopia – search for “quick fixes”



Regulatory Capture



Information failures



Disincentive effects



High Enforcement / Compliance Costs



Conflicting Policy Objectives



Damaging effects of red tape

## 5.3 Clear Objectives: *why is planning incomplete? Planning the Planning Process.*

There is no public discussion or debate, about 'making planning more complete'. Of course the notion of 'complete planning' supposes a notion of the objectives of planning, like risk reduction, agility in face of change, accuracy, predictability, stakeholder co-operation, etc. And then, objectives stated and agreed, the stuff we add to the improved planning process is a kind of 'design' or 'strategy' for making planning better. What would you add to a planning process, if you want to improve the 'Review-ability' of the plan by independent reviewers? What would you add to a planning process, if you wanted to reduce the risk of cost overruns? So this whole 'planning improvements' is a multidimensional problem (many planning values, and costs), with many design options. And of course I do not see anybody ever having such a systematic discussion about planning. Maybe on a few aspects (like stakeholder identity) in an obscure corner of academia. What we need is that, at least, large organizations, like a Health Service, or a Police, Forest Service, Environmental Agency, or Social Services, to 'formally plan their planning' and 'continuously improve their planning process'. But since they already have such bad informal planning processes, why would they suddenly plan the planning properly? Googling 'making plans more complete' does not turn up anything in this direction for me.

### Problem 2. **COMPLETENESS:** Incompleteness.

**Why** is public planning incomplete?  
(TG Opinion)

- Lack of knowledge about more complete methods
- Lack of motivation to succeed
  - No consequences
  - No rewards
  - No leadership
- Lack of training, with university and organizational
- Public Planning Culture
  - Politics, not engineering
- **WHAT CAN WE DO, IF WE CARE?**
  - **OUR OWN PROJECTS, MUCH BETTER**
  - **WAIT 100 YEARS ?**
  - Wait decades until sub-suppliers become planning competent.

### Government failure – When public sector intervention leads to inefficiency

#### Caused by:

- **Lack of incentives.** Public sector workers less likely to be paid for performance / profit targets.
- **Levels of bureaucracy.** Governments tend to have more layers of administration and planning.
- **Political interference.** Decisions made for short-term political gain – rather than sound economics, e.g. keep on unproductive workers.
- **No consistency.** Change of government often leads to change of approach and new political initiatives.
- **Moral hazard** – Government can act lender of last resort - this may encourage banks to take risks knowing they will be bailed out.
- **Regulatory capture** – When government agencies become too friendly with business/groups they are trying to regulate.
- **Unintended consequences.** Policies to reduce relative poverty 'means-tested benefits' can create 'welfare dependency'.

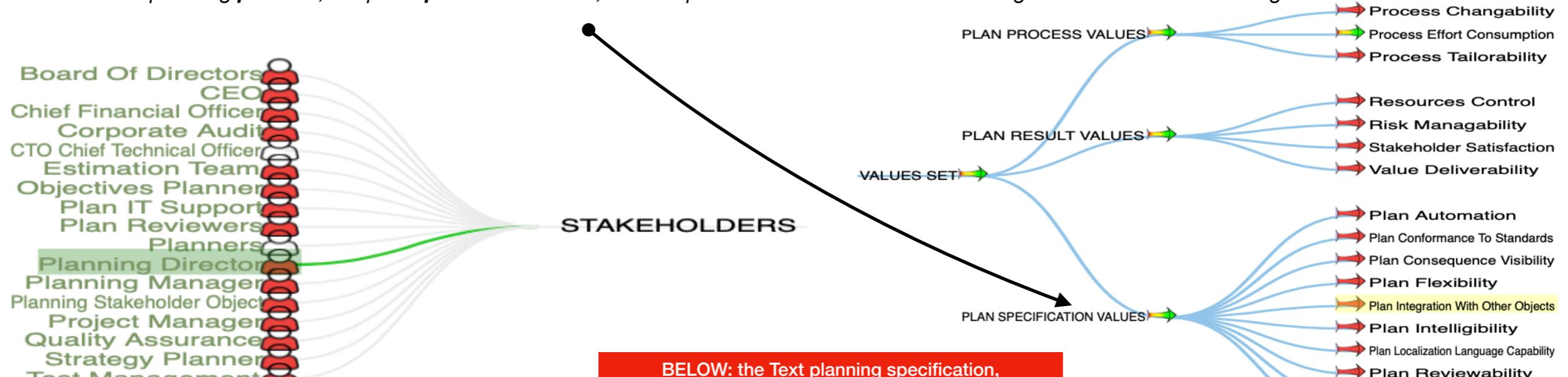
[www.economicshelp.org](http://www.economicshelp.org)

## 5.3 Clear Objectives: Planning the Planning Process: Draft 'Objectives' and 'Stakeholders' sets

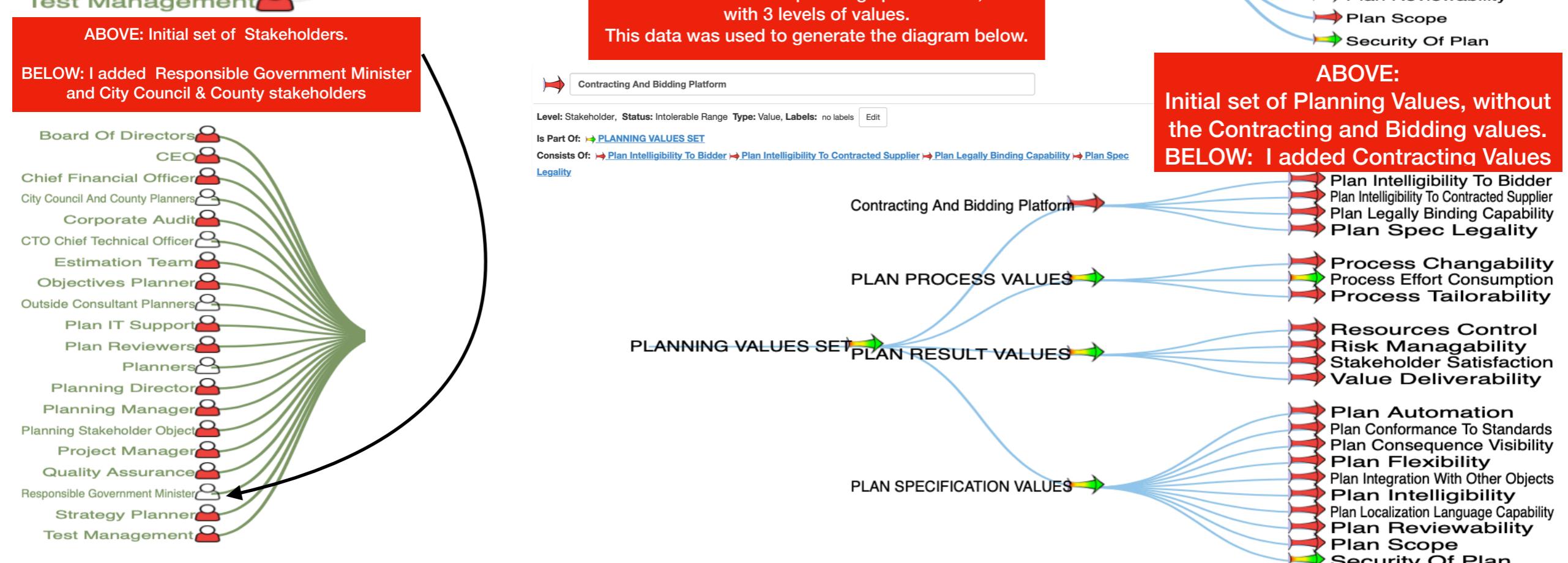
Just for fun, after I wrote the previous page, and suggested formal planning of a Planning process, I decided to start work on that. So here, to give you some ideas, are a draft set of stakeholders, and draft set of planning value-objectives.

Hopefully you can review my stakeholder draft, and think of some 'stakeholders for planning', that I forgot in my quick initial draft, for example a Minister (I'll add that immediately to my plan). And when I did it, I thought of some more stakeholders. Notice I divided up the planning objectives into 3 main sections (is there a 4th, like Contracting and Bidding Platforms?, I think so, I'll add it to the plan framework before I forget it).

The three are the planning **process**, the plan **specification** itself, and the plan **results**! I like that line of thought. I'll add the 'Contracting' to it now.



BELOW: the Text planning specification,  
with 3 levels of values.  
This data was used to generate the diagram below.



## 5.4 Clear Objectives: Clarity of Relationships. National Health example.

Here is a sample of real NHS stated objectives. These are typical of 'objectives statements' found all over NHS planning. This is not a summary of something properly specified in more detail. THIS IS IT. There is no cross reference or footnote, pointing to any other information. Relationship details might be hidden in a larger plan. Have fun looking. If we then ask questions, like the ones listed at below-left, we get no good answers.

### Problem 3. **CONNECTIONS:** **Lack of Interconnectedness**

**No source references. For claims.**

**Where did this come from and when, who is responsible?**

**Not enough notes on relationships and impacts on other things**

**Look at the NHS 'Objectives'**  
**And ask**

**1. Exactly which authority or stakeholders are behind each Objective?**

All Missing

**2. How are these to be limited or prioritised (for example by % of total budget)**

**3. What if there is a conflict between these objectives?**

**4. Which instances are responsible for delivering these objectives?**

**5. How will these objectives be measured?**

**The NHS will provide a comprehensive range of services**  
**The NHS will shape its services around the needs and preferences of individual patients, their families and their carers**  
**The NHS will respond to the different needs of different populations**  
**The NHS will improve the quality of services and minimise errors**  
**The NHS will support and value its staff**  
**Public funds for healthcare will be devoted solely to NHS patients**  
**The NHS will work with others to ensure a seamless service for patients**  
**The NHS will help to keep people healthy and reduce health inequalities**  
**The NHS will respect the confidentiality of individual patients and provide open access to information about services, treatment and performance**

**"We can tell that these are principles, rather than objectives, by asking ourselves a simple question: could we tell if the NHS failed to achieve them? The answer is: not easily."**  
<https://blog.gooroo.co.uk/2010/06/what-are-the-nhs-objectives/>. Rod Findlay



## 5.4 Clear Objectives: Clarity of Relationships. NHS Planning.

Another, more structured plan, which gives some more information about the objectives, based on the column they are in. But the same questions (1 to 5) get no good answers. We. Are still faced with ‘unintelligible objectives’, which give us almost no information about stakeholders, priorities or values.

### Appendix: Summary of NHS Improvement's 2020 objectives

2016 for 2020

Quality	Finance and use of resources	Operational performance	Strategic change	Leadership and improvement capability
<i>Continuously improving care quality, helping to create the safest, highest quality health and care service</i>	<i>Balancing the provider sector finances and improving provider productivity</i>	<i>Maintaining and improving performance against core standards</i>	<i>Ensuring every area has a clinically, operationally and financially sustainable pattern of care</i>	<i>Building provider leadership and improvement capability to deliver sustainable services</i>
<p>1) Reduce to zero the number of providers in <b>special measures</b></p> <p>2) Two-thirds of inspected providers will be operating at CQC ‘good’ or ‘outstanding’ levels of quality</p> <p>3) Support providers in the roll out of <b>seven-day hospital services</b>, working with NHS England</p> <p>4) Implement <b>patient safety</b> initiatives in priority areas</p> <p>5) Deliver guidance and tools for providers to make <b>safe staffing</b> decisions</p>	<p>6) Achieve and maintain sustainable <b>financial balance</b> for the provider sector from 2017/18</p> <p>7) Deliver with providers a <b>2% efficiency</b> improvement year on year, including through implementation of the Carter Review recommendations</p>	<p>8) Consistently meet <b>NHS Constitution standards</b> over the period, with a particular focus on the aggregate A&amp;E standard, while improving quality and efficiency</p> <p>9) Deliver <b>mental health waiting standards</b> in aggregate every year</p>	<p>10) Implement <b>new care models</b>, including chains</p> <p>11) Change to a <b>sustainable pattern of care</b> in the <b>most challenged health economies</b></p> <p><b>Look at the NHS ‘Objectives’ And ask</b></p> <p><b>1. Exactly which authority or stakeholders are behind each Objective?</b></p> <p><b>2. How are these to be limited or prioritised (for example by % of total budget)</b></p> <p><b>3. What if there is a conflict between these objectives?</b></p> <p><b>4. Which instances are responsible for delivering these objectives?</b></p> <p><b>5. How will these objectives be measured?</b></p>	<p>12) <b>Develop, maintain and enhance effective boards:</b> both people and ways of working</p> <p>13) Expect every provider board to <b>reflect the diversity</b> of the people it serves, including gender-balanced boards</p> <p>14) Expect every provider to implement effectively a recognised <b>continuous improvement approach</b></p> <p>15) Decision-makers in providers have access to <b>high quality information</b> (including on income and expenditure and benchmarks such as from the Carter Review recommendations)</p> <p>16) Focus on <b>high value interactions with providers</b>, minimising any low value or disproportionate regulatory burden</p>

## 5.5 Clear Objectives: Value quantification. UN Goal 1 example.

Here we are, the UN with essentially the same problems as above, that we analyzed with NHS UK. Most all terms here, are also ambiguous and undefined: not clear. In addition there is no supporting detail, about many types of stakeholders. No excuses, like this is a high level generic plan. Many stakeholders, and their values, can be identified, *specifically* (like Unesco, World Bank) and *generically* (local NHS). But in addition to the problem of relation information, there is, as usual, no information about present and future needed levels of variables like 'resilience', 'vulnerability'. There is no distinction between an improvement by 2030 of 1%, 10% or 99%

**Planning Problem 4.**  
**VALUE QUANTIFICATION:**  
**Lack of quantification of critical values, qualities and degrees of success, failure and goodness.**  
**Never a clear objective.**  
**Variable values rarely quantified.**

**Rare to actually specify any consequent (to specifying a vision) decisions, related specifications, or agreements**  
**on 'what levels of critical values are current, 'benchmarks'**  
**minimum in future(s), 'constraints'**  
**and are 'enough' in future. 'Targets'**



**Vision**

"By 2030, build  
the resilience of the poor  
and those in **vulnerable situations** and reduce their  
exposure  
and vulnerability  
to **climate-related extreme events and other**  
**economic, social and environmental shocks and**  
**disasters**"

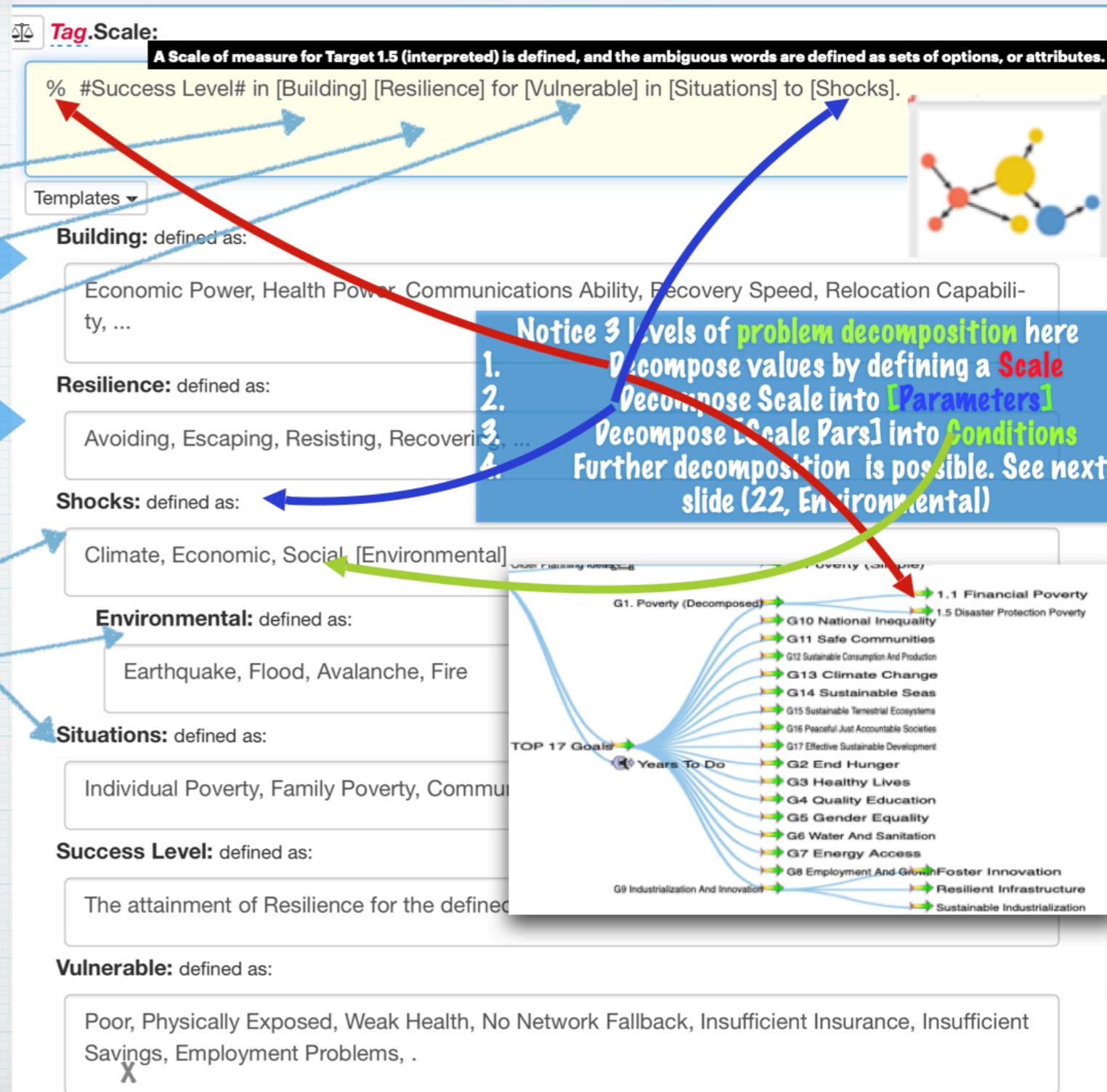
- \* The 'Disaster Protection Poverty' Target 1.5.
  - \* I have stated as an 'Ambition Level'.
- \* I have made **bold** or underlined above,
  - \*<sup>X</sup> terms needing definition
  - \* because of their ambiguity.

OK, sorry if there is a lot going on here. But there are many terms needing definition, and we're doing it here. Part of our 'Planguage' definition structure is 'defining things by decomposing them into sets of things'. If we take a closer look, we have 4 related levels of decomposition. If you take your time, and follow the arrows and the text, you can hopefully see the definition process. If you have difficulty, the good news is the structure is digitised and the app ([ValPlan.net](http://ValPlan.net)) understands it perfectly every time. And with some exercise in making these scales, on a workshop course, my experience is that you too will, both understand, and be able to write, such Scales yourself, same day of the course. Everybody does that.

## How to derive a Scale-definition from a vague Ambition Level. Beginning to communicate clearly ->

“By 2030, build  
the resilience of the poor  
and those in **vulnerable situations** and  
reduce their **exposure**  
**and vulnerability**  
to **climate-related extreme events and other**  
**economic, social and environmental shocks**  
**and disasters**”

- \* The 'Disaster Protection Poverty' Target 1.5.
  - \* I have stated as an 'Ambition Level'.
- \* I have made bold or underlined above,
- \* terms needing definition
- \* because of their ambiguity.



Here is some more UN planning. It might save the world from poverty, if anyone could really understand it, and agree to what it says. But I am afraid the poor will just have to wait for us rich planners to get our act sorted out. I wrote a very detailed analysis of the problems with these goals (like, they are not even Goals, they are strategies). So if you are to learn to analyze such bad plans, start reading at the below left.



## UN-Clear Sustainability Goals (possibly a threat to humanity?)

### Let me spell it out, to leave no doubt in your mind.

1. Notice 1.5 and 1.A 20 and 28 pitfalls. By my rough count these statements contain 20 (1.5) and 28 (1.A) ambiguous and undefined words.

1. Like 'resilience', 'exposure', 'ensure', 'significant', 'dimensions'.

2. There is no hope of any 2 people on the planet understanding all such terms as intended by the author (UN).

3. Two 'Fuzzys' (1.5 and 1.A) do not make a Clear Idea (SDG1), (End Poverty).

4. If all (48+) ambiguous terms were somewhere defined, it might help reduce ambiguity.

5. But there is no hint or pointer to such a **glossary** in the UN material. But there are some **glossaries**! See later.

6. So everyone is on their own.

7. Dictionary definitions will not be helpful. Too general, and too many synonyms there.

2. In a desperate attempt to clarify or define, they specify a few 'measures'  
(Indicators 1.5.1 etc, and 1.A.1 etc.).

But guess what? **Same ambiguity problem!** What is a '**disaster**'? What are '**resources**'?

If there were some UN statistics for these categories, they should be referenced, right here.

1. This is a messy mixture of **ends** and **means**, many levels of them.

2. Phrases like 'in order to' [1A] and 'to (end poverty)' [1A] are what I call '**link words**'. They link a suggested **means** (strategy, solution) to a specified **end**.

3. The situation is that we have not defined 'end poverty' at all.

We have suggested some **specific strategies** ('mobilization of resources' (1.A), 'predictable means') (1.A) to reach a **badly-defined goal** ('end poverty').

Premature specification of **strategies** to solve badly-defined problems, is a bad planning idea.

4. We cannot know if these various nice-sounding ambiguous strategies are **cost-effective**, because we do not have a clear definition yet of 'end poverty', to judge them by.



A selection of The UN 'Targets'  
and Indicators for SDG1 (End Poverty)

[sustainabledevelopment.un.org](http://sustainabledevelopment.un.org)



HOME SDGS HLPF STATES SIDS UN SYSTEM STAKEHOLDERS

ABOUT

**1.5** By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters

**1.5.1** Number of deaths, missing persons and persons affected by disaster per 100,000 people



**1.5.2** Direct disaster economic loss in relation to global gross domestic product (GDP)a

**1.5.3** Number of countries with national and local disaster risk reduction strategies

**1.A** Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate and predictable means for developing countries, in particular least developed countries, to implement programmes and policies to end poverty in all its dimensions

**1.A.1** Proportion of resources allocated by the government directly to poverty reduction programmes



**1.A.2** Proportion of total government spending on essential services (education, health and social protection)



## Principle 7.9 OVERWHELMING VALUE

**Try to overwhelm unavoidable disappointments, with overwhelmingly successful, cost-effective, value delivery.**

We have discussed many of the basic ideas, for delivering great value, earlier: here is a summary.

- **Focus on the top-level critical 'few' objectives**
  - So when you win, you win something *important*
- **Pick strategies that have a large number of good impacts on many critical objectives** (using IE Tables) **at the same time**. Like a smart chess move.
  - So that if there is disappointment in some areas, there is some good news in the impact on other objectives.
  - So that the total sum of effects is a large value
- **Prioritise immediate short-term, next week, value delivery steps, so as to get the highest total value for the time and resources available.**
  - Get off to a flying start with reasonable results, at reasonable costs.
  - Avoid using resources without *some immediate* value to show for it, as opposed to no value whatsoever - which is embarrassingly common. 'Value delivered' over 'work done'.
- **Pick the strategies with best values-for-costs in the 'worst-worst' case.**
  - When estimating value, use the Impact Estimation method of risk management. Consider  $\pm$  uncertainty, and Credibility
  - 'Worst-worst case' means the lesser estimated value in the  $\pm$  range, *times* the credibility factor ( $60 \pm 20 = 40 \times 0.5 = 20$  <- 20 is worst-worst case). The *most conservative* estimate.
- **Make sure your supplier contracts are based on value for payment** ([URL6, No Cure No Pay].
  - Make sure you cannot continue to 'burn' money if things don't work well for you. Slam on your brakes, to avoid wasted resources.
  - Do NOT contract for *work done*, or *systems delivered*. *Contract for the results* you expect; both incrementally, step by step; and cumulatively in the long term.
  - That includes the idea of contractually binding a supplier to long-term maintenance, at a predictable cost.
    - So they do not get too tempted to do sacrifice long-term *maintainability characteristics* [URL28, A B, 1 Chapter 5 'Adaptability']. Which you need to keep in your top 10 critical objectives anyway!

*"I think it's very important to have a feedback loop, where you're constantly thinking about what you've done and how you could be doing it better. I think that's the single best piece of advice: constantly think about how you could be doing things better and questioning yourself."*

**Elon Musk, Co-Founder/CEO Paypal, Tesla Motors, Inc. [F6], Space X, Solar**



**Photo** From a TED Talk Video

## Principle 7.10 ACCENTUATE THE POSITIVE: Reward, and focus on, 'net success', do not punish small accidents.

### Practical Tip 7.10 Make ten early bets on value delivery

- in your first 10 weeks of your project, plan 10 increments of value.
- declare all increments as pilots, experiments, or trials
  - (some might fail)
- but keep successes in place, and then scale up.
- The point is partly political, be seen as a 'value deliverer'.
  - And is partly to get you in the mode of a 'stream of measurable value delivery'.

### Policy 7.10 Focus on progress, ignore other distractions

- We will clearly put all emphasis on the real consistent progress towards our strategic goals.
  - We will not do anything to criticize experiments and small failures, assuming they are genuine, controlled, attempts to make progress.
- Why?
  - To motivate people to try our new promising ideas,
  - and to avoid demotivation and fear.
- 

**"Far better it is to dare mighty things, to win glorious triumphs, even though checkered by failure, than to take rank with those poor spirits who neither enjoy much nor suffer much, because they live in the gray twilight that knows neither victory nor defeat."**

Theodore Roosevelt (1858-1919) American President, in  
**"Strenuous Life"**



# Chapter 11

# Ethical Planning

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## Public Planning Ethics Principles

**PEP**

Do Good, Do no Harm,  
Be Humble and Open

1. All critical *stakeholders* will be identified and analyzed
2. All critical stakeholder *values* will be analyzed and quantified
3. All critical *resources* will be identified, estimated and budgeted
4. The planning focus will be to *deliver* planned priority stakeholder *values*, within minimum balanced public resources.
5. Large projects will deliver a *stream* of early, continuous, and frequent measurable value deliveries.
6. *Priority* for delivery increments will be by *value for resources*, with regard to planning risk.
7. Negative *decisions* will be *recorded* with detailed reasoning for declining or reducing priority, including minority opinions.
8. *Decisions* will be based on written policies, logic, written specifications, facts and evidence, and incremental feedback from real value delivery to our environment.
9. Plans will be developed in digital forms, so there is an integrated digital database encompassing all details, past and present, normally available to the public and media.
10. All planning concepts, and all terms used in the plan, will be defined in writing, and assigned a Tag: with the ideal of perfect intelligibility for all intended readers, all stakeholders, politicians, civil service, and system users.

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**The higher level ethical ideas are:**

- **Multidimensional Planning**
- **Plan decision transparency**
- **Stakeholder Value-for-resources**
- **Early Feedback and Correction: Dynamic, agile**
- **Independent review, QC, criticism, investigation basis**
- **Automation: AI**
- **Extreme Clarity**

ethical | 'eθɪk(ə)l |

adjective

1 relating to moral principles or the branch of knowledge dealing with these: *ethical issues in nursing* | *ethical standards*.

- morally good or correct: *can a profitable business ever be ethical?*
- avoiding activities or organizations that do harm to people or the environment: *an expert on ethical investment* | *switching to more ethical products* | *adopt ethical shopping habits* | *ethical holidays*.

## The Civil Service Code (via DWP)

UK

11. Where a civil servant believes he or she is being required to act in a way which:

- is illegal, **improper**, or **unethical**;
- is in breach of constitutional convention or a **professional code**;
- may involve possible **maladministration**; or
- is otherwise inconsistent with this Code;

he or she should report the matter in accordance with procedures laid down in the appropriate guidance or rules of conduct for their department or Administration. A civil servant should also report to the appropriate authorities evidence of criminal or unlawful activity by others and may also report in accordance with the relevant procedures if he or she becomes aware of other breaches of this Code or is required to act in a way which, for him or her, raises a fundamental issue of conscience.



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## References

**Books, Papers, Slides**

## Main Current Books Written by Tom Gilb. Supports this book with detail.

B0. **Governeering**: <https://tinyurl.com/Governeering>

A 64 Page pdf book. Aimed at demonstrating with examples how top management can communicate their 'visions' far more clearly.

B1. **Competitive Engineering** (paper or digital 2005).

The definition of the Planguage. A Handbook and a Planguage standard.

<https://www.gilb.com/p/competitive-engineering> (free pdf)

and paper via Amazon (Kindle and paper)

[https://www.amazon.com/dp/0750665076/ref=rdr\\_ext\\_sb\\_ti\\_sims\\_2](https://www.amazon.com/dp/0750665076/ref=rdr_ext_sb_ti_sims_2)

B4. **FREE LINK TO 5 NEW DIGITAL BOOKS (B5 to B9) WRITTEN SUMMER 2019**

[https://www.dropbox.com/sh/adcrki52xo5zb36/AABMD\\_2GOX4rT6c-HRCmT-Qua?dl=0](https://www.dropbox.com/sh/adcrki52xo5zb36/AABMD_2GOX4rT6c-HRCmT-Qua?dl=0)

B5. **Value Requirements** book

<https://www.dropbox.com/s/hxg1rx9rzesw2id/Value%20RequirementsPDF%20BEST%20%2070MBQ%20011019%202245%202.pdf?dl=0>

B6. **Value Design**

Book. July 2019

<https://www.dropbox.com/s/ldrofca89sfwzur/Value%20Design%20MASTER%20B2607%20V1408.pdf?dl=0>

B7. **Value Management**, book August 2019

<https://www.dropbox.com/s/7utbgxzcmahfj0c/Value%20Management%20MASTER%20B070819%20V160819.2252.pdf?dl=0>

B8. **Value Agile**, [tinyurl.com/ValueAgile](https://tinyurl.com/ValueAgile)

B9. **Sustainability Planning**, <https://tinyurl.com/UNGoalsGilb>

B3. **Vision Engineering**.

"Value Planning: Top Level Vision Engineering"

How to communicate critical visions and values quantitatively. Using The Planning Language.

<http://concepts.gilb.com/dl926>

## The 2018 5 Books, Older Books

B10. **Life Design**, 2018

B11. **Technoscopes**, 2018

B12. **Clear Communication**, 2018

B13. **Innovative Creativity**, 2018

B14. **100 Practical Planning Principles**, 2018

Based on the same 100 **Value Planning** sub-sections and principles.

B15. **Principles of Software Engineering Management**, 1988

B16. **Software Inspection**, 1993

## Free Downloadable Papers

P1. **'Agile Project Startup Week'**, [gilb.com/dl568](http://gilb.com/dl568)

P2. **Confirmit Case** <http://www.gilb.com/DL32>, 'FROM WATERFALL TO... BY TROND AND TOM GILB

P3. **Planguage Rules Collection from CE Book.docx**,, <http://www.gilb.com/dl829>, 23 pages., See similar set S3

P4. **Full Planguage Concept Glossary**, <http://www.gilb.com/dl830>

See also [B1] Glossary, and GILB.COM SITE GLOSSARY, [http://concepts.gilb.com/A?structure=Glossary&page\\_ref\\_id=126](http://concepts.gilb.com/A?structure=Glossary&page_ref_id=126)  
the digital glossary by Kai and company, and [ValPlan.net](http://ValPlan.net), or other variations of glossary info.

P5. **Agile Specification QC**, in Testing Experience 2009, by Tom Gilb, <http://www.gilb.com/DL264>

P6. **Estimation: A Paradigm Shift Toward Dynamic Design-to Cost and Radical Management**

Volume 13 Issue 2 of SQP journal - the March 2011 version. <http://www.gilb.com/DL460>

S1: PPPP: **Proper Public Planning Principles**: 'Engineering Society', Responsibly

**SLIDES** = <http://concepts.gilb.com/dl980> (pdf) <https://tinyurl.com/PPPPslides>

**Video** = <https://youtu.be/mlaVLHvQOp0>

S2: 'An Agile Project Startup Week'. <http://www.gilb.com/dl812>

S3. **QC for Design Design Rules from Competitive Engineering** MASTER.key.pdf GilbFest Slides 2015,

<http://concepts.gilb.com/dl84>, See similar set P3

S4. Most of videos (see below) have a link to their slide set on slide 1.

S5. **"Estimation: A Paradigm Shift Toward Dynamic Design-to Cost and Radical Management"**

Slides made for BCS SPA June 1 2011. <http://www.gilb.com/DL470>

S6. **IBM FSD MILs and Quinnan Slides**. <http://concepts.gilb.com/dl896>

S7.

## Videos with Free Links

V1. **PPPP. Proper Public Planning Principles:** 'Engineering Society', Responsibly

SLIDES = <http://concepts.gilb.com/dl980> (pdf, 230620 VERSION). Origin of much of this book.

Video (90 min.BCS Lecture, 23 June 2020) = <https://youtu.be/mlaVLHvQOp0>

V2. **SP. Sustainability Planning**

<https://tinyurl.com/UNGoalsGilbVideo>

V3. **SA. Sustainability and AI.** Video Podcast 24 mins., Oslo 2019 Aim

<https://www.youtube.com/watch?v=J70zf1gF2b8>

V4. **Technoscopes** BCS SPA 2020

[https://www.youtube.com/watch?v=920rCFYW3ZQ&list=PLKBhokJ0qd3\\_wlvr0j85YhmNfNj8ZJ8M-&index=2&t=0s](https://www.youtube.com/watch?v=920rCFYW3ZQ&list=PLKBhokJ0qd3_wlvr0j85YhmNfNj8ZJ8M-&index=2&t=0s)

V5. **VA. Value Agile** Video. <https://lnkd.in/dkyJpMZ>

V6. **VR. Value Requirements** video 22 April 2020, 3 hours.

[https://www.youtube.com/watch?v=ZHrwQtG6IMw&list=PLKBhokJ0qd3\\_wlvr0j85YhmNfNj8ZJ8M-](https://www.youtube.com/watch?v=ZHrwQtG6IMw&list=PLKBhokJ0qd3_wlvr0j85YhmNfNj8ZJ8M-)

V7. **VD. Video Value Design**, May 2020,

[https://www.youtube.com/watch?v=y\\_FaiH5jt6E&list=PLKBhokJ0qd3\\_wlvr0j85YhmNfNj8ZJ8M-&index=4&t=0s](https://www.youtube.com/watch?v=y_FaiH5jt6E&list=PLKBhokJ0qd3_wlvr0j85YhmNfNj8ZJ8M-&index=4&t=0s)

V8. **VM. Value Management** 2.5 hours, 13 May 2020, BCS <https://www.youtube.com/watch?v=mr9gUFWj4Jg>

V9. **QQ. Quantify the un-quantifiable: Tom Gilb at TEDxTrondheim** 17 minutes.

V10. **Generic** Gilb Videos. Search browser for 'Tom Gilb Videos', and hit the 'Videos' selection too.

V11. **gilb.com** has a large selection of videos, free and paid courses. <https://www.gilb.com/blog?tag=video>