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# “Proper Public Planning Principles”: PPPP ‘Engineering Society Responsibly’

Slides =

[https://www.dropbox.com/sh/mb7u93s8no8x2r6/AACULut4ubcH5Z-VTM9I\\_Keja?dl=0](https://www.dropbox.com/sh/mb7u93s8no8x2r6/AACULut4ubcH5Z-VTM9I_Keja?dl=0)

100 Practical Planning Principles. (your book), <https://www.gilb.com/offers/Shju4Zqn/checkout>

## Tuesday June 23 2020

18:30-20:00 approximately - presentation UK Time

20:00-20:30 approximately - further questions and networking

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**by Tom Gilb**

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# Public Planning Problems

## Overview Summary

Here are some of the planning problems I can see. They are not unique to the public sector. They are a world-wide human failing. Let us blame poor management planning training at business schools of all kinds.

1. CLARITY: Lack of clarity.

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

2. COMPLETENESS: Incompleteness.

3. CONNECTIONS: Lack of Interconnectedness

No source references. Where did this come from and when, who is responsible?

Not enough notes on relationships and impacts on other things

4. VALUE QUANTIFICATION: Lack of quantification of critical values, qualities and degrees of success, failure and goodness.

no consequent decisions or agreements on what levels of critical values are current, minimum in futures and enough in future.

5. COMPLETE IMPACT ANALYSIS: No systematic analysis of impacts of strategies (aka solutions, architectures, means, and ideas) on critical values objectives, on resources, and on other constraints

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)

6. FUNDAMENTAL VALUES: In addition to clarity and completeness of the current project (Brexit, Covid-19, etc.) value objectives; we need a clear acknowledgement of the higher set of values that we acknowledge as a guiding framework (Fundamental Objectives, R. Keeney).

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.

7. PUBLIC ACCESS: the plans need to be accessible by the press and public, online.

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

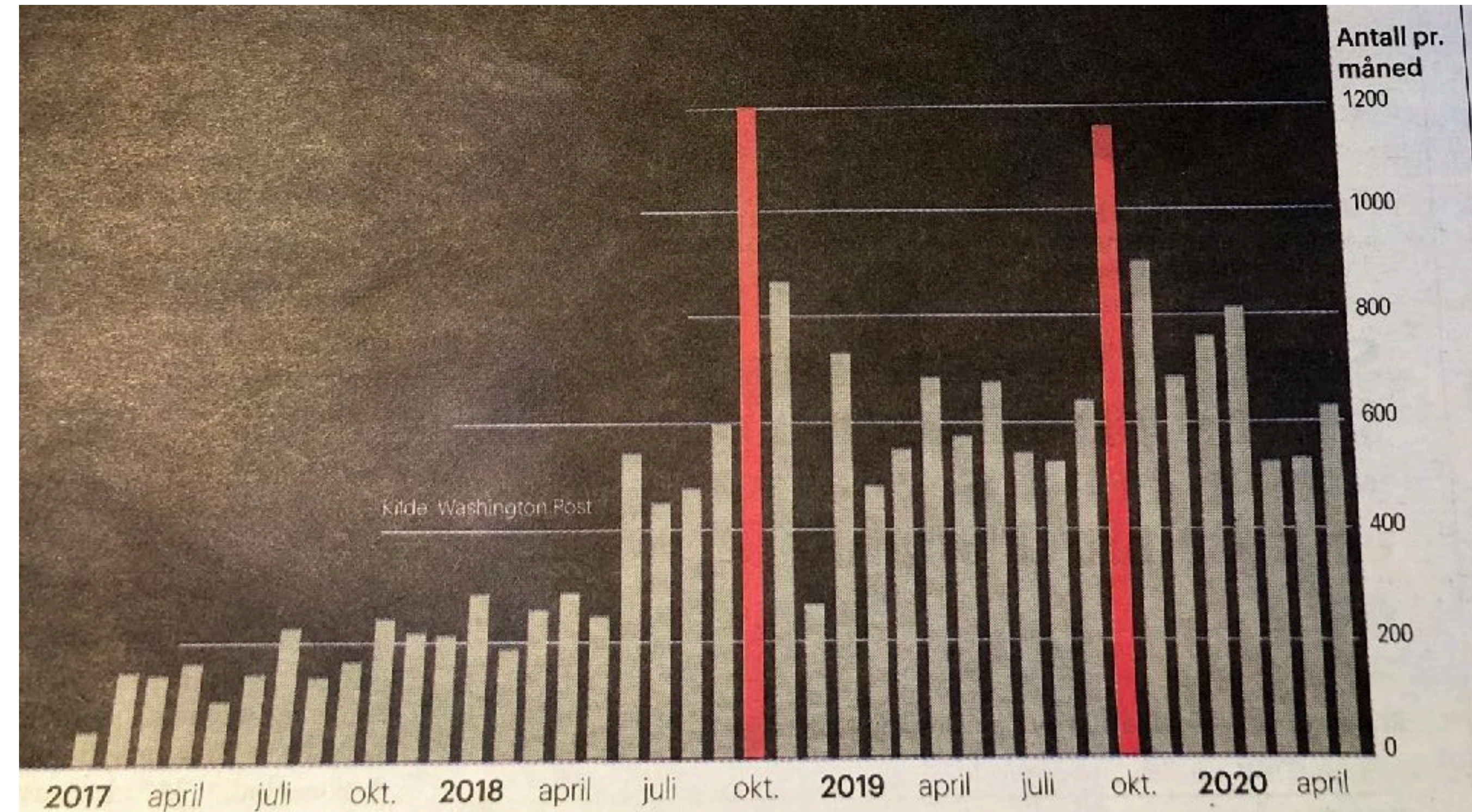
8. STAKEHOLDER MAPPING: formal specification of acknowledged stakeholders and their acknowledged values is not complete enough, public enough, and connected explicitly enough to the plan. we cannot easily see which stakeholders have been ignored we cannot see which stakeholder concerns have been included, and considered.



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



## 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**





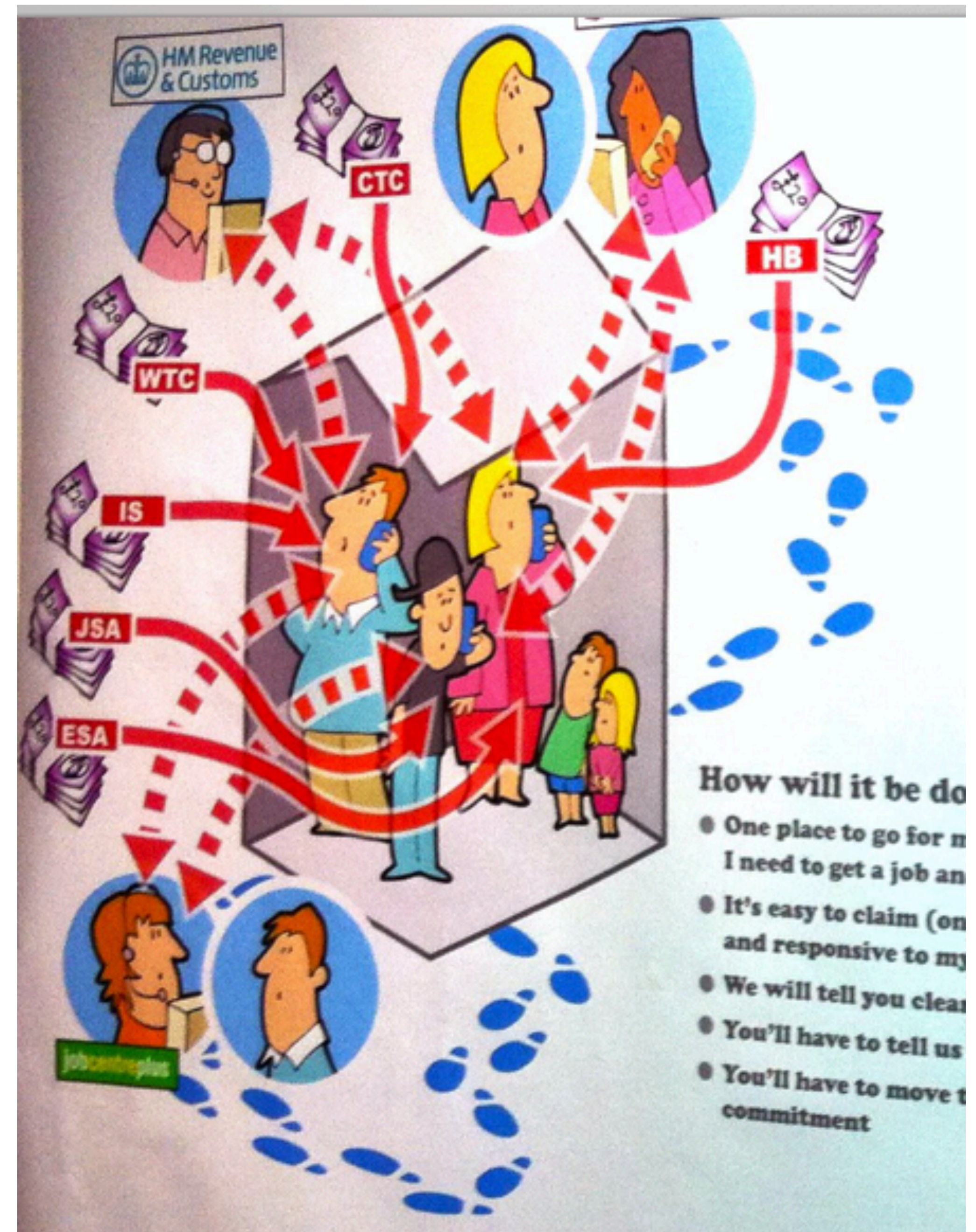
# The Civil Service Code (via DWP)

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.





# 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 ?  $\pm$  6 ? <- MW

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

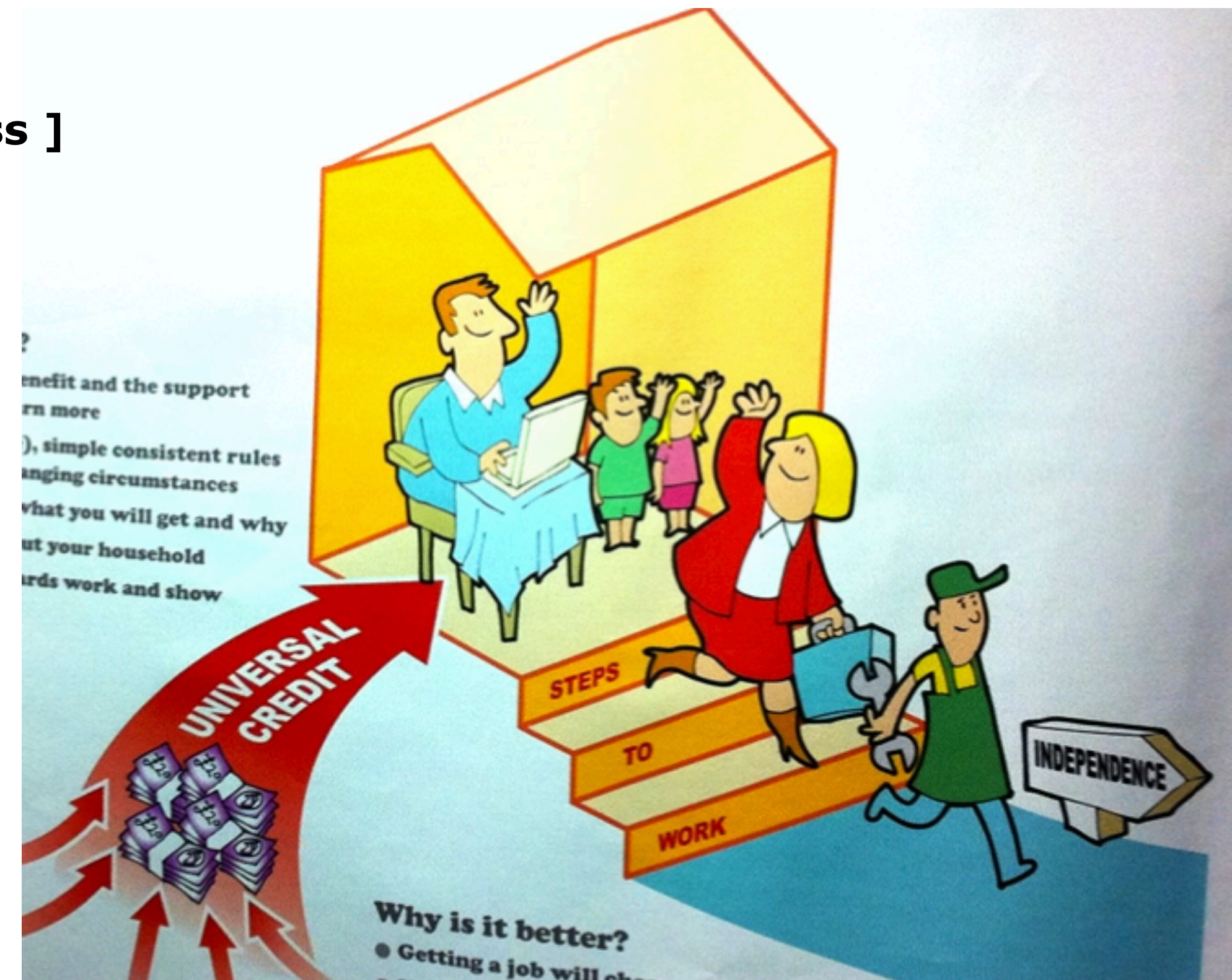
**Goal** [Deadline = Next Election + 5 years, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 2 years ?  $\pm$  ? <- MW

#### • 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





## 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 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) {Quality, Cost, Function, supplementary information Impact Analysis, Evolution

PP7 (Target Levels) Future [when, where, IF] qualified given (using '←' or 'Source

PP8 (Approval) Approval formal 'Inspection' at no more than an authorized Review Panel

PP9 (Feedback) The current whether design, (Evolution

**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'**



# US AF Testing AFOTEC

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

### AFOTEC PLANNING P O L I C Y

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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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**Mr. Tom Gilb**

"With Special Thanks For Your  
Exceptional Generosity"

Maj Gen Jeffrey Cliver  
and all at AFOTEC

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



# 'Standards'

The trick is  
to NOT leave it to  
*individuals* and  
their *memory*

Use

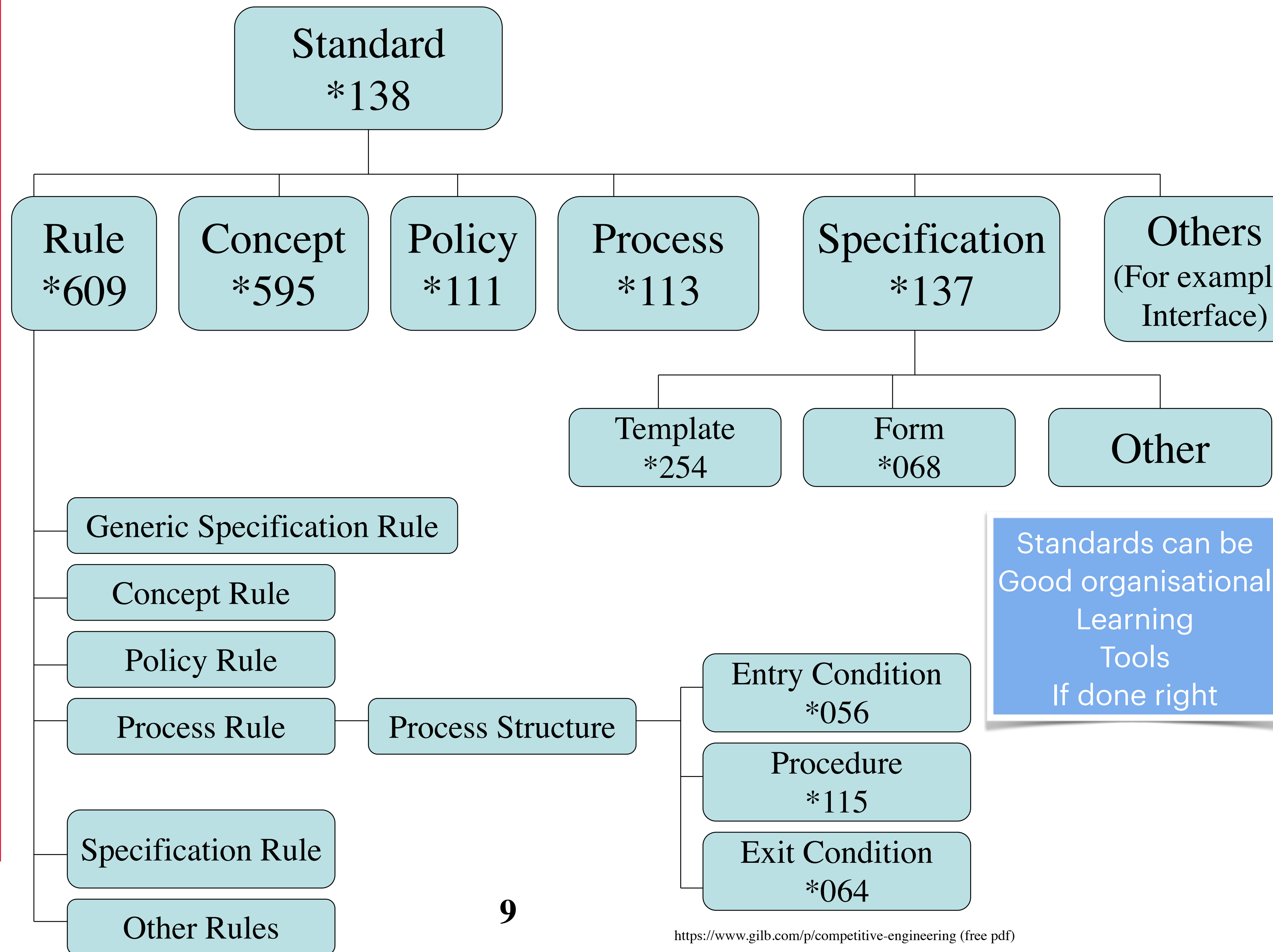
written standards

and

Quality Control

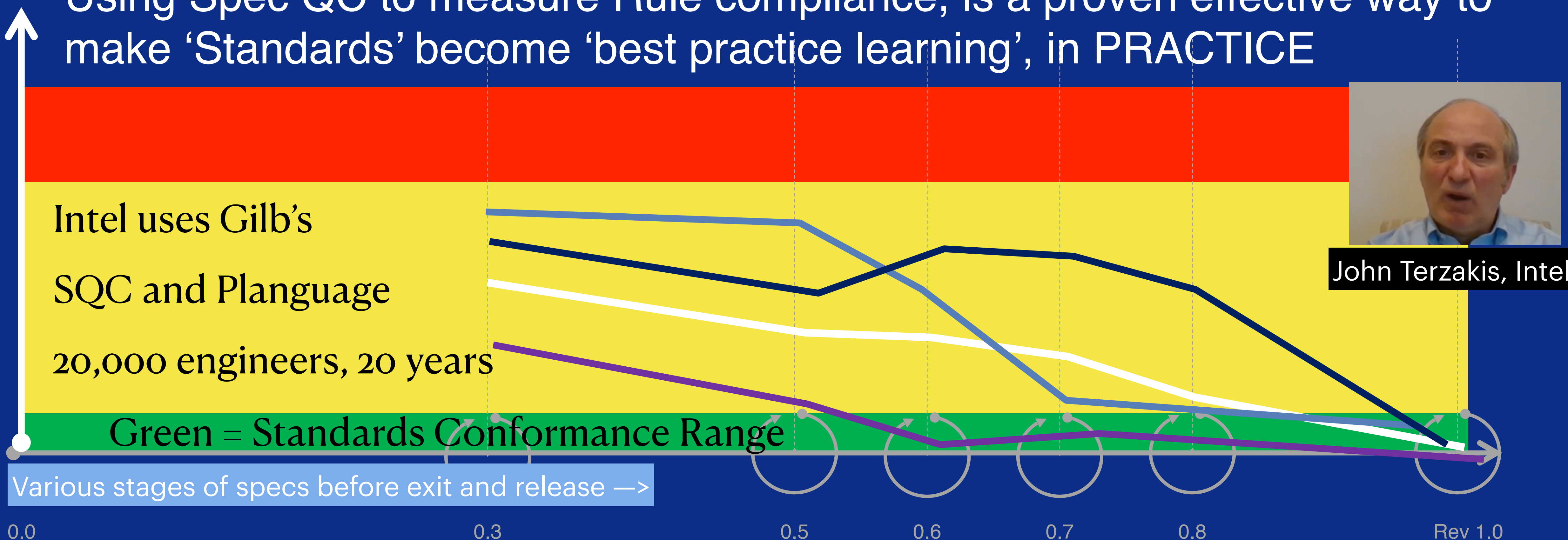
=

**Completeness**



Standards can be  
Good organisational  
Learning  
Tools  
If done right

Using Spec QC to measure Rule compliance, is a proven effective way to make 'Standards' become 'best practice learning', in PRACTICE



Defect density for a given specification type can be tracked using simple statistical control charts

- Tracking different specifications over time shows trends in both initial quality level and rate of improvement
- Improbably-good specification quality can indicate a failed review cycle
- Trends towards poor initial specification quality can indicate a need for retraining

Teams typically see an order-of-magnitude improvement in quality level within three specification efforts



## 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)

## 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



## 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)



## 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?**

**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?**

All Missing

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-nhss-objectives/>. Rod Findlay**

**NHS**



# 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>
1) Reduce to zero the number of providers in <b>special measures</b> 2) Two-thirds of inspected providers will be operating at <b>CQC 'good' or 'outstanding' levels of quality</b> 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</b> decisions	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

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

**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?**





## 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,

\* terms needing *definition*

\* because of their *ambiguity*.





# 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.



**Tag.Scale:**

A Scale of measure for Target 1.5 (interpreted) is defined, and the ambiguous words are defined as sets of options, or attributes.

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

Templates ▾

**Building:** defined as:

Economic Power, Health Power, Communications Ability, Recovery Speed, Relocation Capabili-ty, ...

**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, Commu...

**Success Level:** defined as:

The attainment of Resilience for the defined

**Vulnerable:** defined as:

Poor, Physically Exposed, Weak Health, No Network Fallback, Insufficient Insurance, Insufficient Savings, Employment Problems, .

Notice 3 levels of problem decomposition here

1. Decompose values by defining a Scale
2. Decompose Scale into [Parameters]
3. Decompose [Scale Pars] into Conditions
4. Further decomposition is possible. See next slide (22, Environmental)

TOP 17 Goals

Years To Do

G1. Poverty (Decomposed)

G10 National Inequality

G11 Safe Communities

G12 Sustainable Consumption And Production

G13 Climate Change

G14 Sustainable Seas

G15 Sustainable Terrestrial Ecosystems

G16 Peaceful Just Accountable Societies

G17 Effective Sustainable Development

G2 End Hunger

G3 Healthy Lives

G4 Quality Education

G5 Gender Equality

G6 Water And Sanitation

G7 Energy Access

G8 Employment And Growth

G9 Industrialization And Innovation

1.1 Financial Poverty

1.5 Disaster Protection Poverty

Foster Innovation

Resilient Infrastructure

Sustainable Industrialization





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



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

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

## 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**.

The screenshot shows the UN Sustainable Development Goals Knowledge Platform website. It features the UN logo and the text 'SUSTAINABLE DEVELOPMENT GOALS KNOWLEDGE PLATFORM'. Below this is a navigation bar with links: HOME, SDGS, HLPF, STATES, SIDS, UN SYSTEM, and STAKEHOLDERS. The main content area displays 'ABOUT' followed by '1.5' and '1.A'. Target 1.5 is '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'. It lists three 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). Target 1.A is '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'. It lists two indicators: 1.A.1 (Proportion of resources allocated by the government directly to poverty reduction programmes) and 1.A.2 (Proportion of total government spending on essential services (education, health and social protection)). To the right of the targets, there are two circular gauges. The top one is labeled '<- 20 Pitfalls' and the bottom one is labeled '<- 28 Pitfalls'. Both gauges have a needle pointing to the 20 mark.



The planning error of specifying badly defined 'indicators', even before the primary objective is well-enough defined, and agreed to.  
**Premature Quantification.**

\* 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,

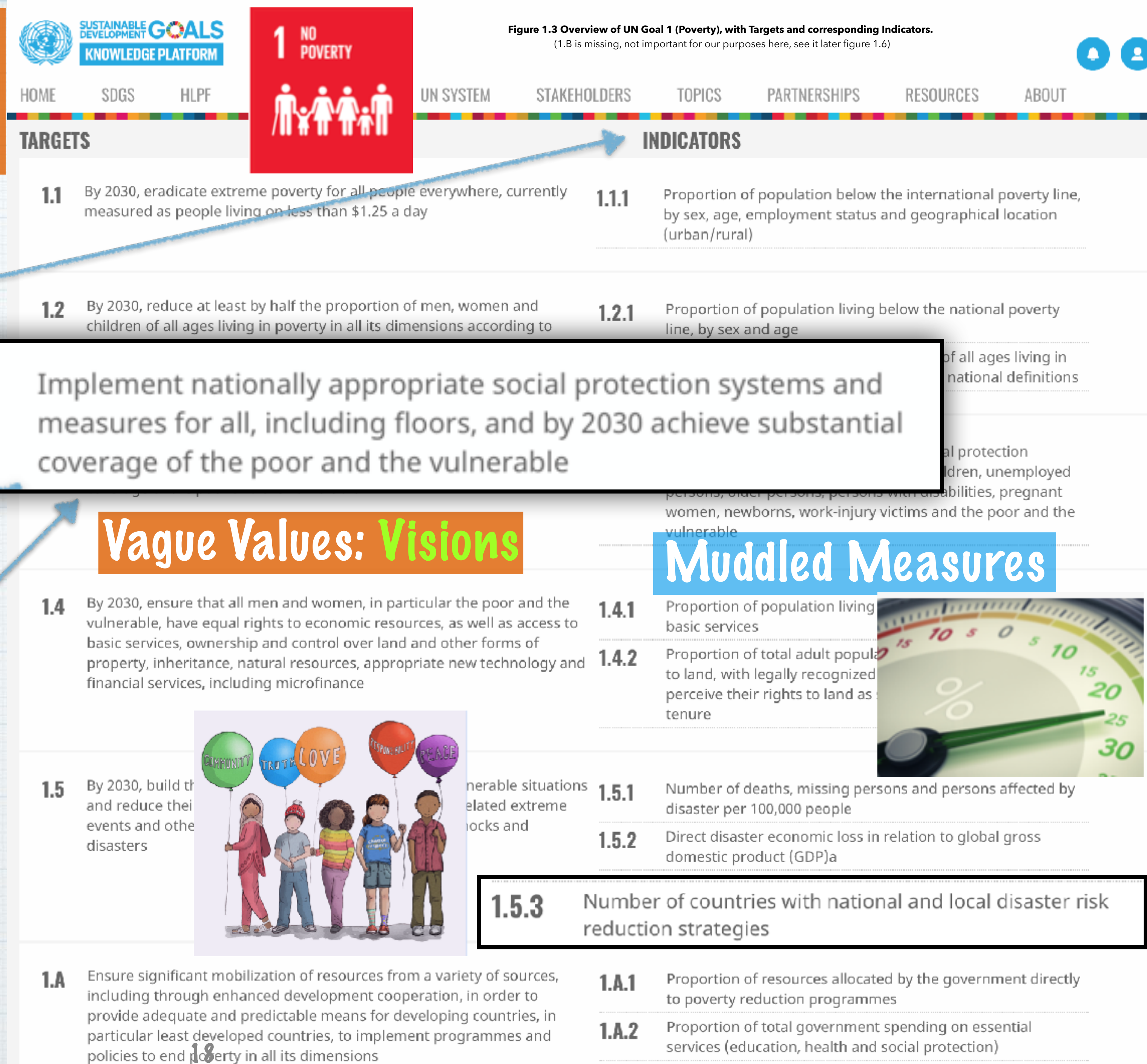
- \* **because** we need *first* to sort out the **unclear Goal, and Target** statements themselves,
- \* **before** we can even discuss if the *indicators* actually reflect our Poverty Ideas.

\* 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?**





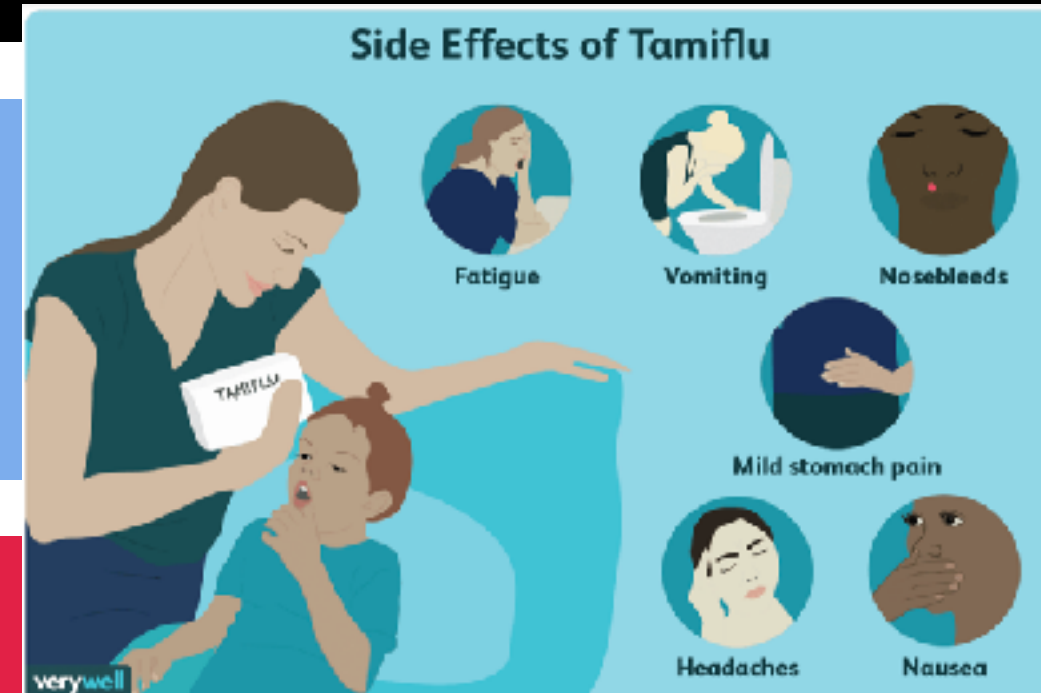


## Planning Problem 5.

### INCOMPLETE IMPACT ANALYSIS:

No systematic analysis of impacts of 'strategies',  
(aka solutions, architectures, means, and ideas),  
on critical values objectives, on resources, and on other constraints

Doctors like to know  
side effects  
of prescribed medicines.  
Did you notice this?  
(like Covid-19 Vaccines)



How do  
strategies  
impact all  
values  
and costs

### • 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 out of hours services from 2019/20.

- This will provide specialist advice, treatment and referral of healthcare professionals, encompassing both physical and mental health, supported by collaboration plans with all secondary care services.
- 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.
- This includes using the CAS **to simplify the process** for GPs, ambulance services, community teams and social care to make referrals via a single point of access for an urgent response from community health services using the new model described at paragraph 1.8 above.

But, side  
effect is privacy  
violations, as  
happened in Oslo  
10 June 2020

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

- 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 medical science for drugs, and procedures?*
  - *What harm can hydroxychloroquine, do. Have a go now. I do.DT*
- The missing impact analysis does not have to be **just here**,
  - in a paragraph presentation.
  - But it **must exist somewhere**,
    - 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.
    - This tight explicit cross referencing is a reasonable standard for enabling intelligibility, review, understanding and criticism of a plan.



## INCOMPLETE IMPACT ANALYSIS:

Some practical examples  
of the tough questions ([www.gilb.com/dl24](http://www.gilb.com/dl24))  
that you should **ask of your own plans**

## Quiz for you and your colleagues, after the talk

- 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*?
- If a foreign power wanted to **sabotage** the NHS, would they encourage this quality of planning?

No  
good  
answers  
here

Very  
Incomplete !



### • 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.
- This includes using the CAS **to simplify the process** for GPs, ambulance services, community teams and social care to make referrals via a single point of access for an urgent response from community health services using the new model described at paragraph 1.8 above.

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



## Planning Problem 5. **INCOMPLETE IMPACT ANALYSIS:**

**My analysis of 2019, NHS Long Term Plan, Random sample  
(everything else is just as bad)**

**Total misinformation** to the NHS , the  
government and the public.



**Bad  
Practice  
Planning**

- Notice the **following defects**, wrt a reasonable standard of intelligibility
    - 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. (see CE URL below)
    - 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**
- <https://www.gilb.com/p/competitive-engineering>. (free pdf)

## • **Pre-hospital urgent care**

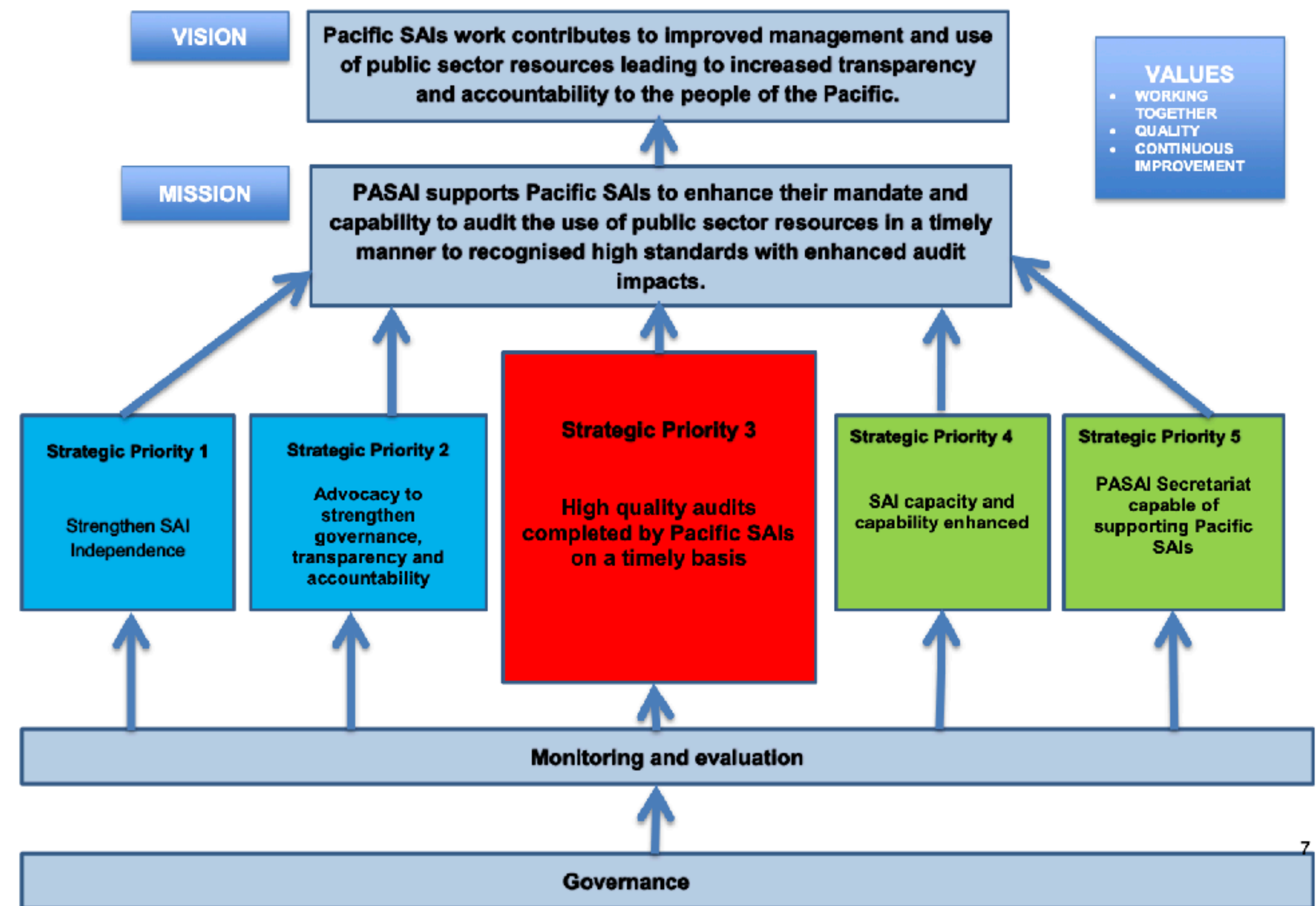
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- This includes using the CAS **to simplify the process** for GPs, ambulance services, community teams and social care to make referrals via a single point of access for an urgent response from community health services using the new model described at paragraph 1.8 above.



**Problem 6. FUNDAMENTAL VALUES:**  
**In addition to clarity and completeness of the current project (Brexit, Covid-19, etc.) value objectives; we need a clear acknowledgement of the higher set of values that we acknowledge as a guiding framework (Fundamental Objectives, R. Keeney).**

**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 they 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.**





# Keeney's: Levels of objectives (1, 3, 4).

- 1. Fundamental Objectives
  - (above us)
- 2. Generic Constraints (TsG)
  - (our given framework)
  - Political Practical
  - Design Strategy Formulation Constraints
  - Quality of Organization Constraints
  - Cost/Time/Resource Constraints
- 3. Strategic Objectives
  - (objectives at our level)
- 4. Means Objectives:
  - (*supporting* our objectives)



## Problem 6

**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



**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).
- 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 previous slide.
- I underlined the link words. ENDSlinkMEANS. Proving both ends and means are in this specification; both poorly defined 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

**Summary**  
**Explicit identity and traceability**

Why is this important?

Because

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

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

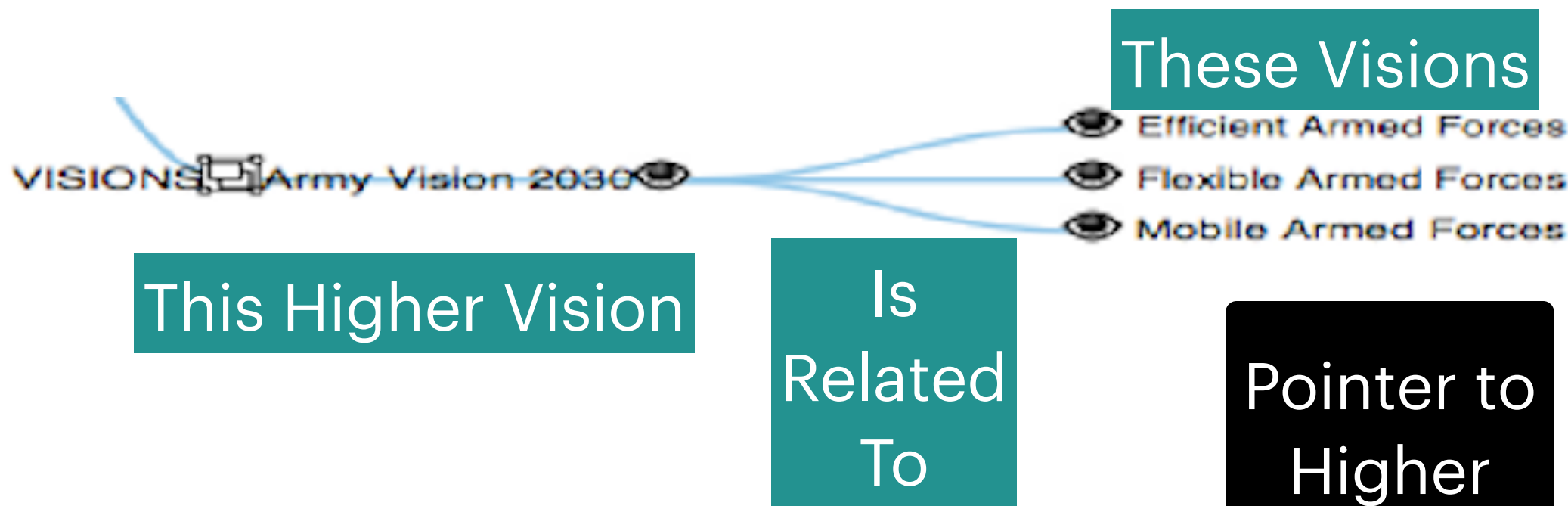
To ensure that the NHS can achieve the ambitious improvements we want to see for patients over the next ten years, the NHS Long Term Plan also sets out how we think we can overcome the challenges that the NHS faces, such as staff shortages and growing demand for services, by:

- 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.
- 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.



# Examples of Connecting Levels more explicitly

Main digital Tag to this spec



Pointer to Higher level objectives

Pointer to Lower level objectives

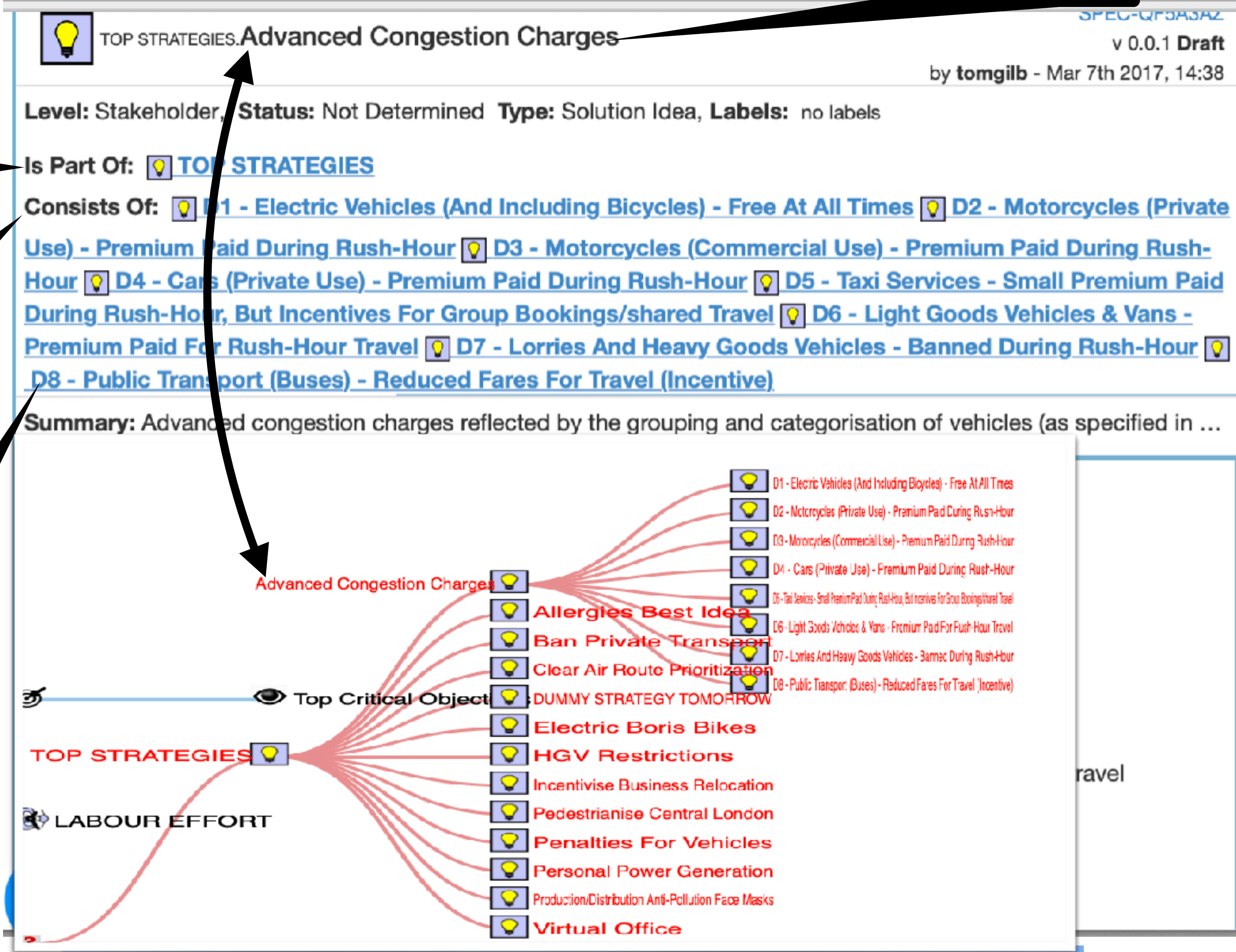
Explicit unique digital Tags to Lower level objectives

These Strategies

Are related to

Requirements	HGV Restrictions	Clear Air Route P...	Advanced Congesti...	Penalties For Veh...
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 ...	-56 %			22 %
Approval Speed Of Policies Status: 6 → Goal: 3 Months	-33 %	0 %	0 %	0 %
NO. PRESCRIPTION (DRUG) BY ... Status: 1k → Wish: 100 NUMBER	0 %	11 %	39 %	50 %
Clear Air Inhalation Status: 20 → Wish: 70 %	4 %	40 %	36 %	50 %
Particle Density Status: 1k → Wish: 300 Number of ...	0 %	0 %	54 %	50 %

These Objectives (digitally)












**Problem 7. PUBLIC ACCESS:**  
the plans need to be accessible by the press and public, online, in detail.


**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 detailed plan detail, and incremental change history which is NOT digitally available.
- And there is rarely any direct reference to its existence
- 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  Stakeholder  Stakeholder  Empty  (by g... 0.0.1 

Is Stakeholder Of: Educational Safety  Value Affordability Of Education  Value

Summary:  Change...

Groups of learners and teachers that are in danger when found to be in a locally una... 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/2012/09/09/world/asia/afghanistan-afghan-girls-school/index.html>

[https://www.unicef.org/somalia/SOM\\_resources\\_situationalanalysissummary.pdf](https://www.unicef.org/somalia/SOM_resources_situationalanalysissummary.pdf)

<http://reliefweb.int/report/afghanistan/school>

[https://www.unicef.org/somalia/SOM\\_resources\\_situationalanalysissummary.pdf](https://www.unicef.org/somalia/SOM_resources_situationalanalysissummary.pdf)

<http://www.theverge.com/2015/2/11/8014563/bill-gates-education-future-of-online-courses-third-world>



Stakeholder Value Interests

Stakeholder Deeper sources

**Here is a small sample of the kind of detail  
We could be missing, if the entire planning  
is not made available to the public  
From a digital database.**

**In this case we have a formally defined stakeholder,  
not just their name, and a set of URL links to go deeper into the  
Background of that stakeholder.**

**26**

**We do not need this in summary publications, but  
We do need it for reviews and media discussions**

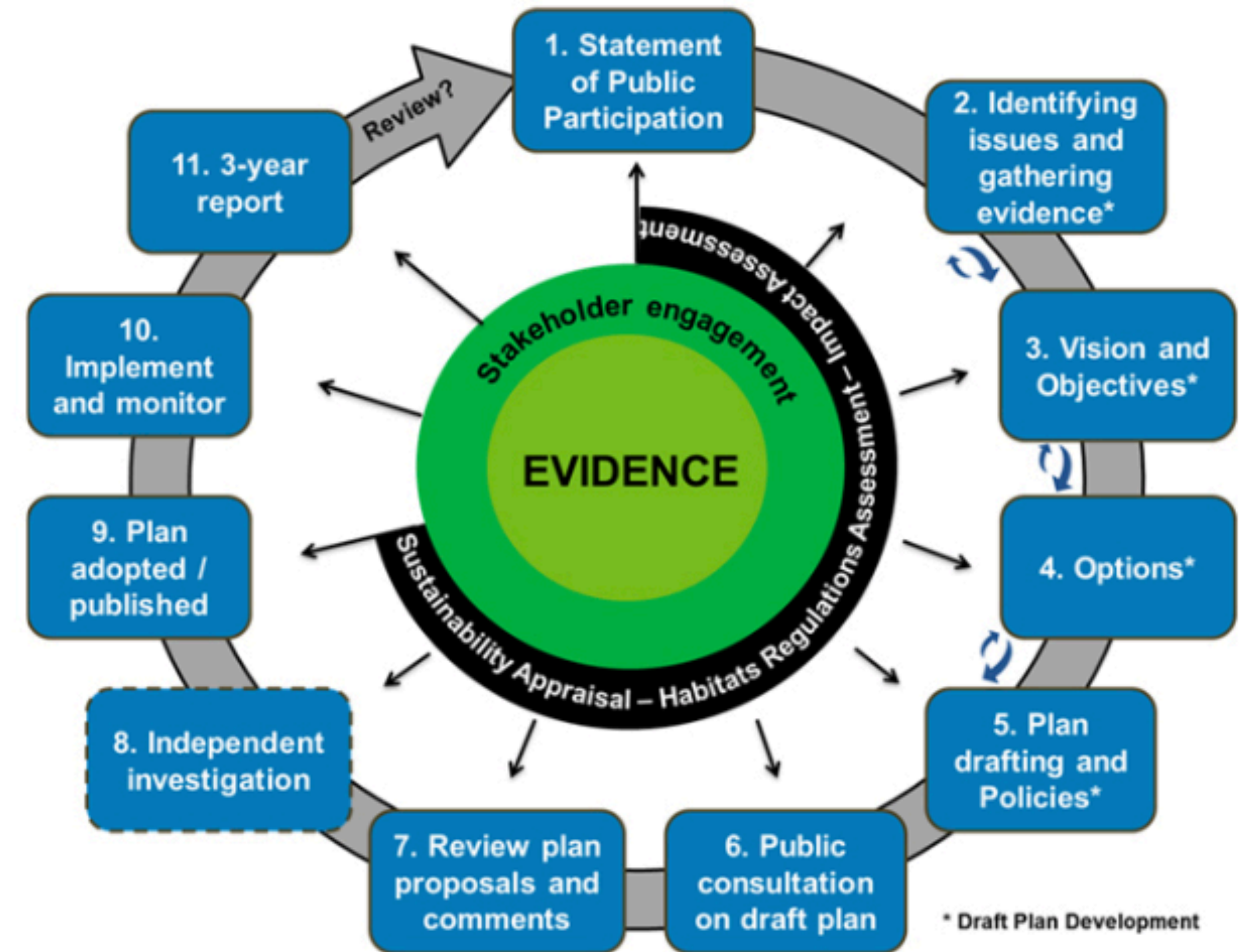


**Problem 8. STAKEHOLDER MAPPING:**  
formal specification of acknowledged stakeholders and their acknowledged values is not complete enough, public enough, and not connected explicitly enough to the plan.

**“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.*





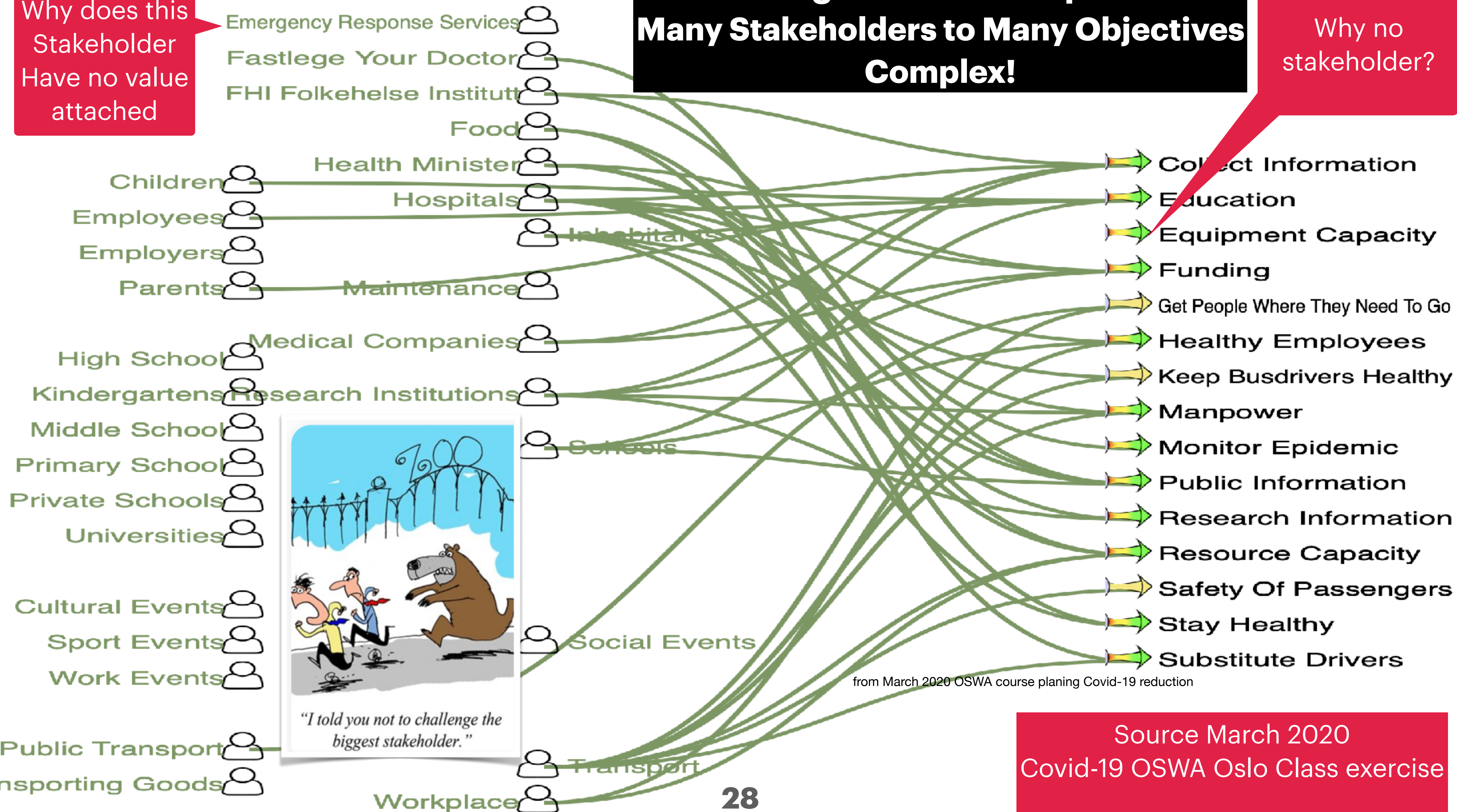
# Digital Relationships

## Many Stakeholders to Many Objectives

### Complex!

Why does this Stakeholder Have no value attached

Why no stakeholder?





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

2.Stakeholder Level

ValPlan.net 'Canvas'

Stakeholders

Emergency Response Services

Fastlege Your Doctor

FHI Folkehelse Institutt

Food

Health Minister

Hospitals

Inhabitants

Maintenance

Medical Companies

Research Institutions

Schools

High School

Values and Resources

Capital Cost In Million NOK

Collect Information

Days To Implement

Education

Equipment Capacity

Funding

Get People Where They Need

Healthy Employees

Manpower

Monitor Epidemic

Public Information

Research Information

Health Minister

Level: Stakeholder, Status: Not Determined Type: Stakeholder

Edit

Summary:

Description:

Link to existing... Link to new...

Specification

To: Funding

To: Monitor ...


To: Public I...

Select a Stakeholder Role

Select a Stakeholder Role

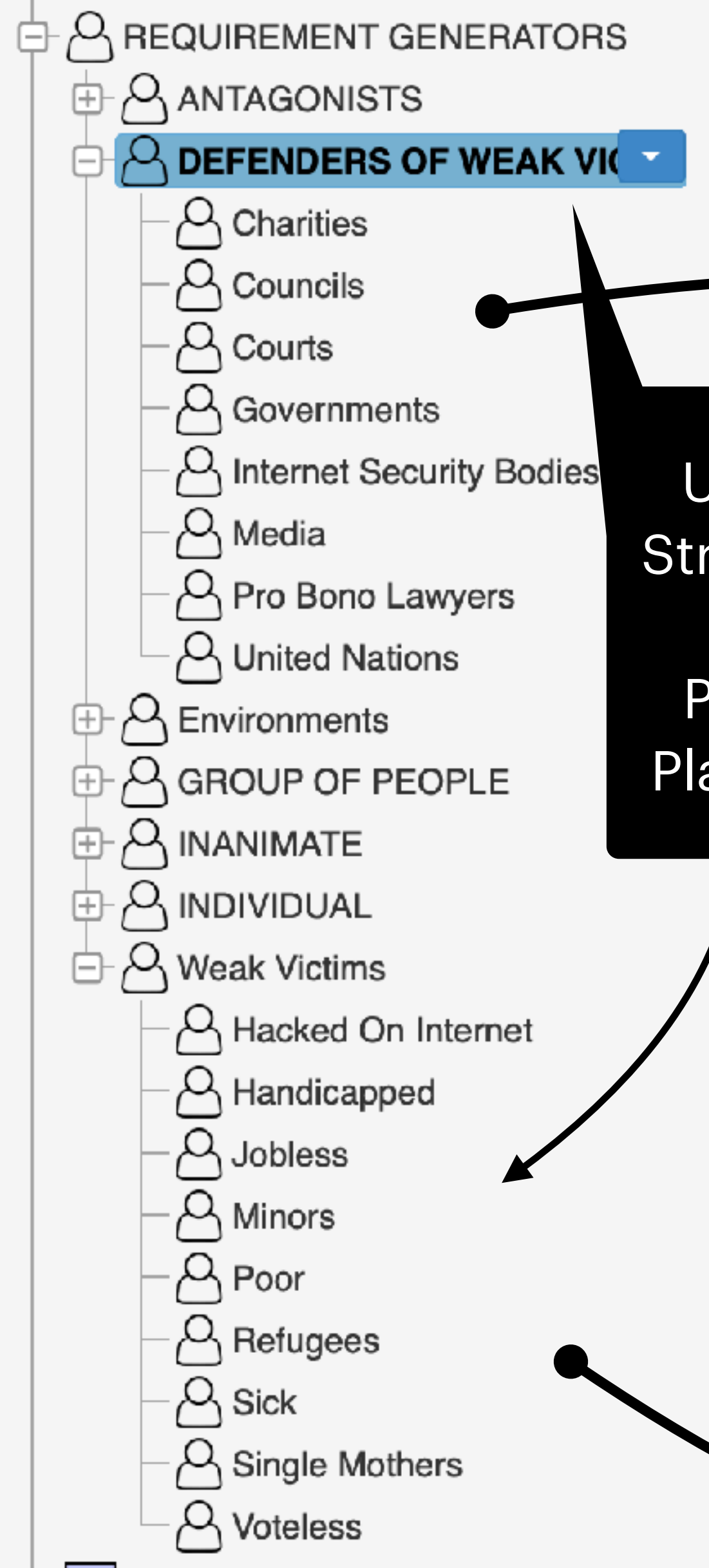
Decision Maker

Select a Stakeholder See all digital relations

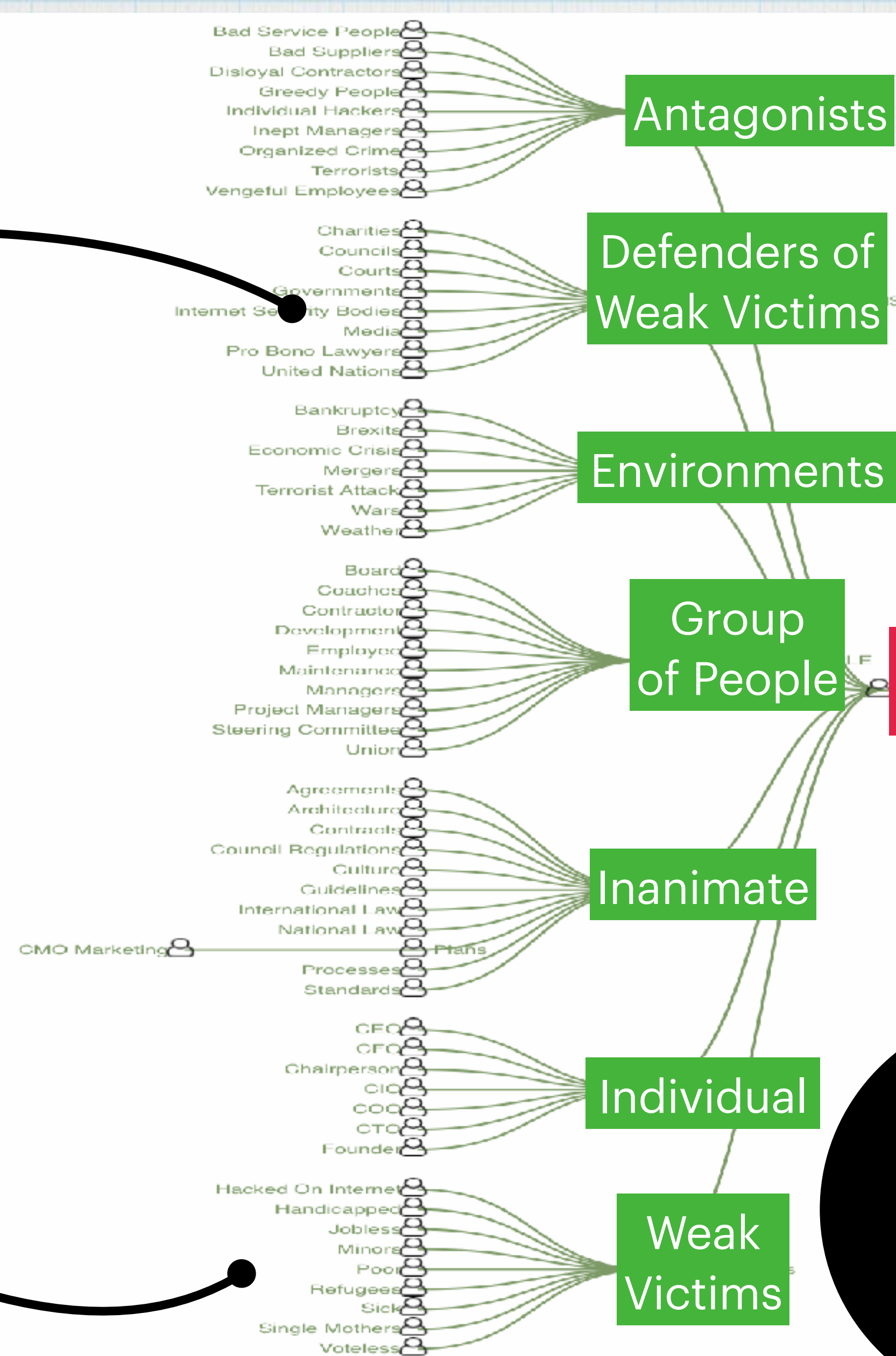


VA, Oslo, course planning Covid-19 reduction





Useful  
Structure  
For  
Public  
Planning

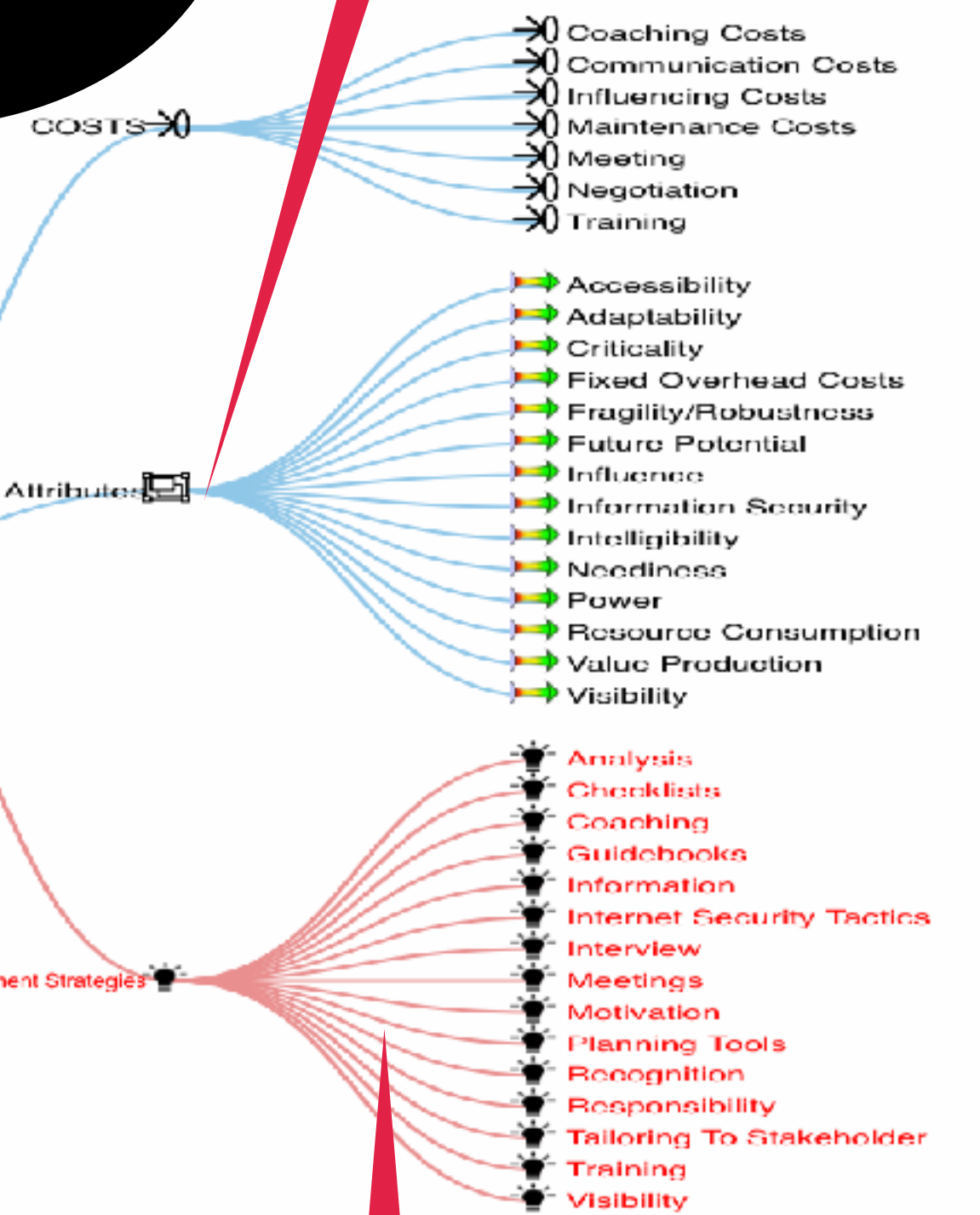


Stakeholder  
Attributes

Values of Power  
For  
Your stakeholders

Requirement  
Generators

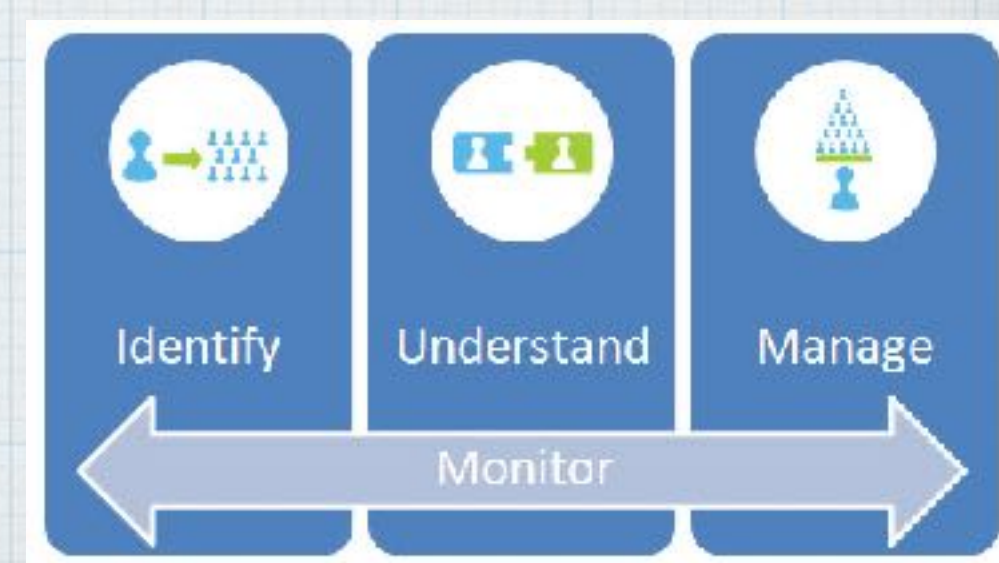
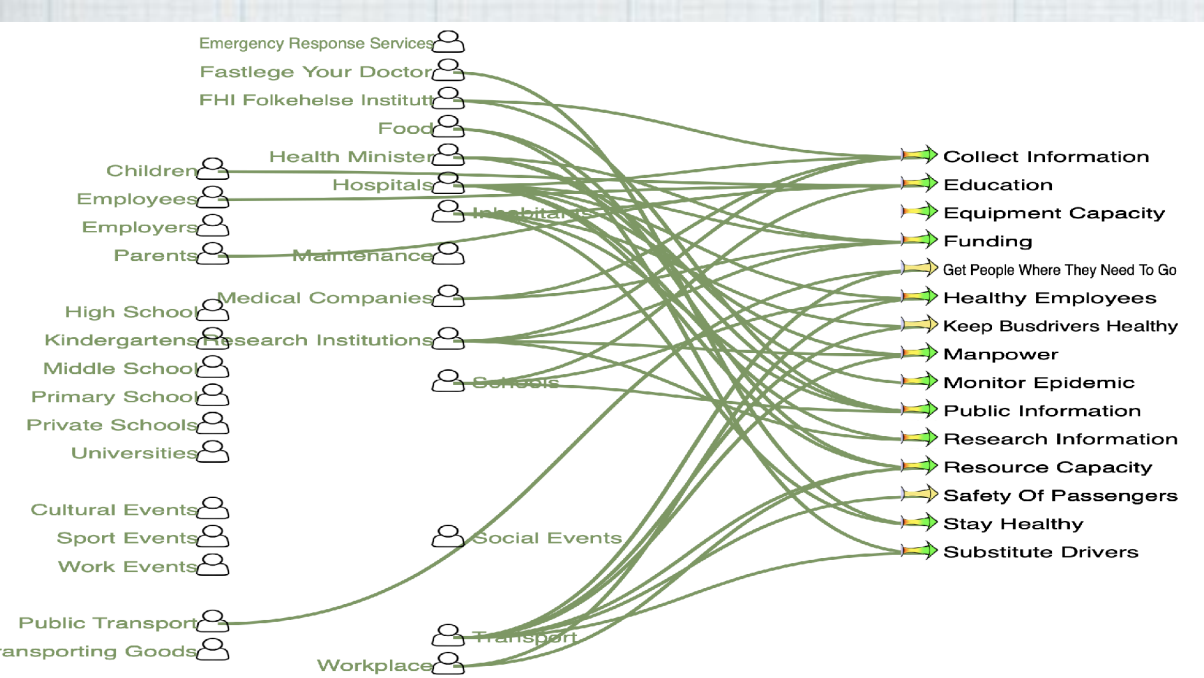
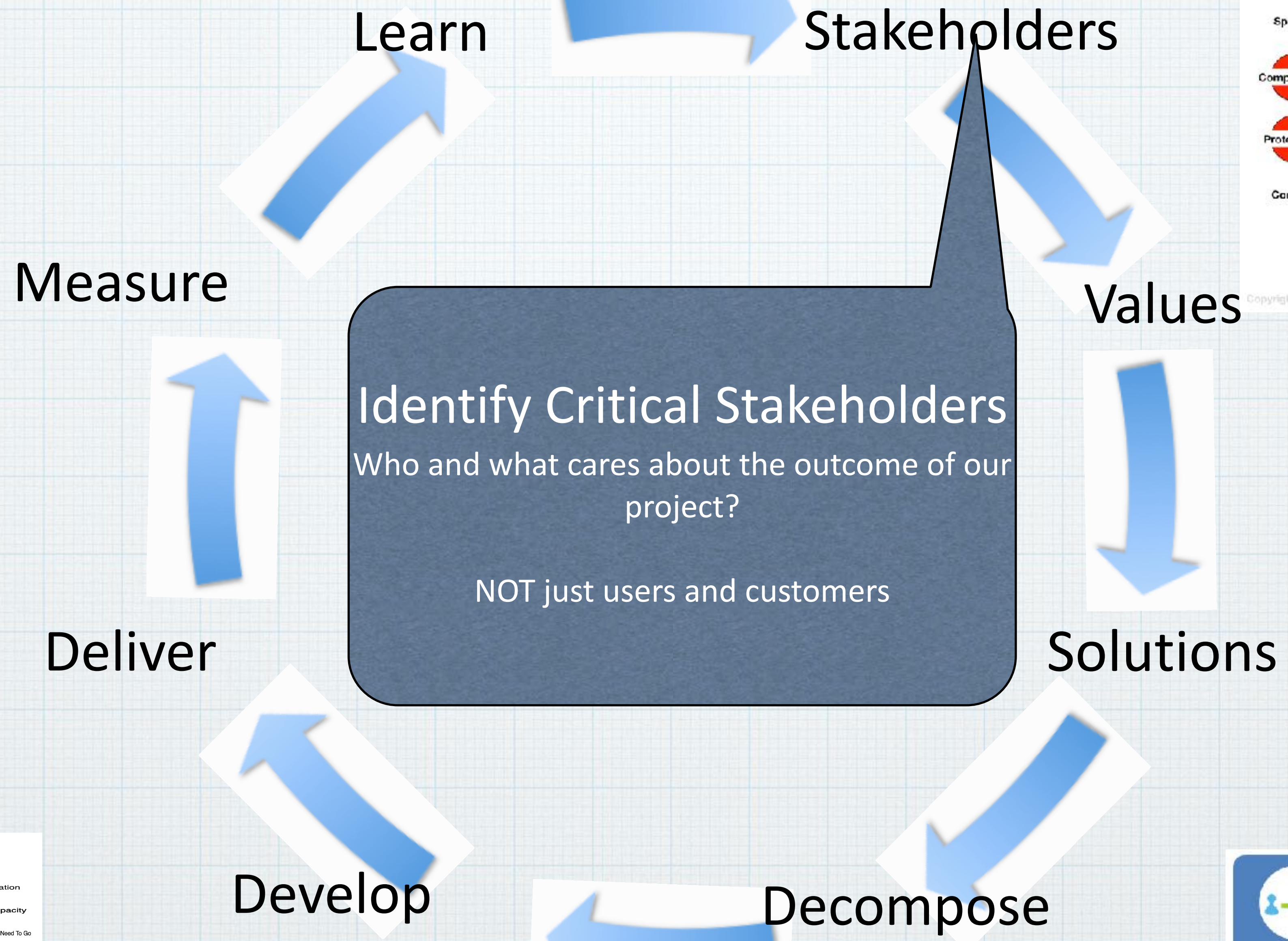
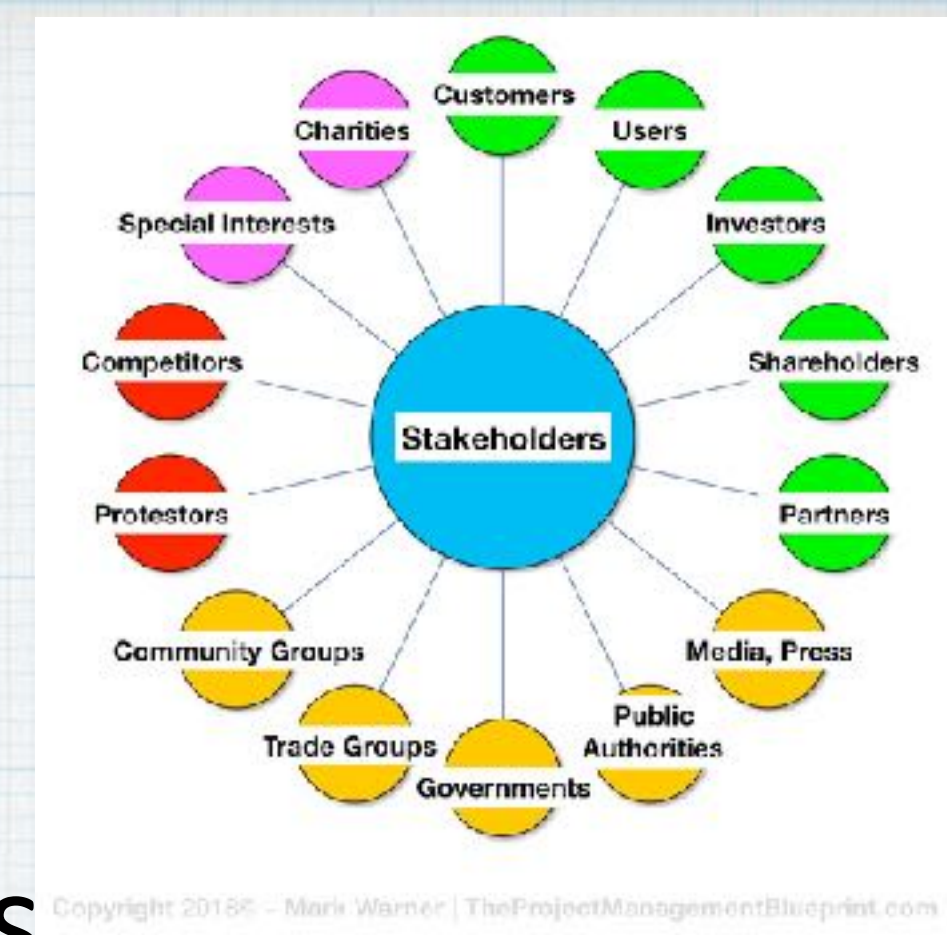
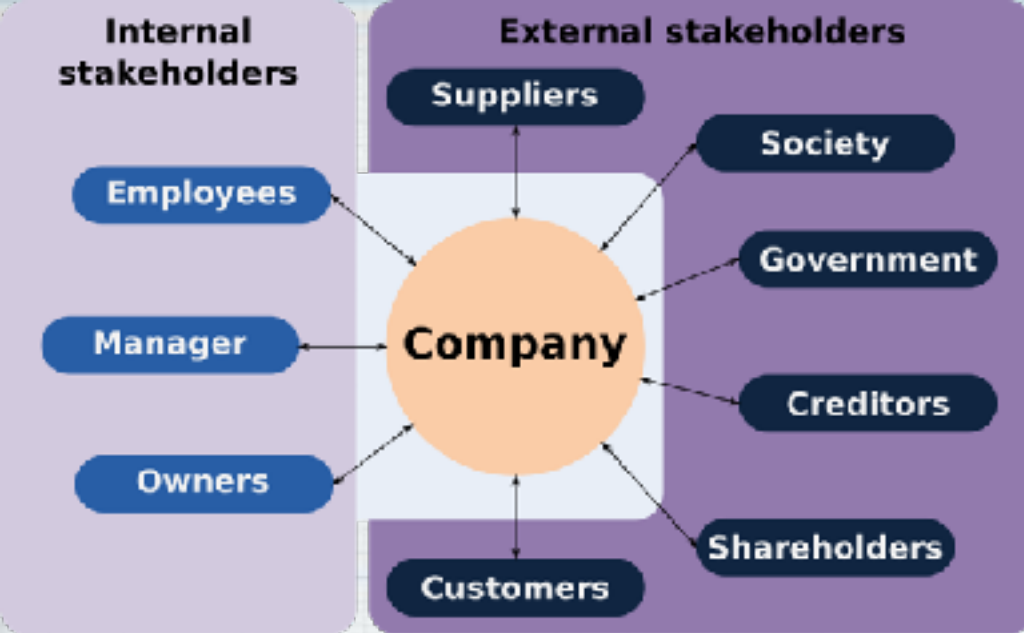
Typical  
Stakeholder  
Checklist  
Hierarchy



Strategies  
For  
Managing  
Your stakeholders

Stakeholder Types: a much richer picture than 'Users'







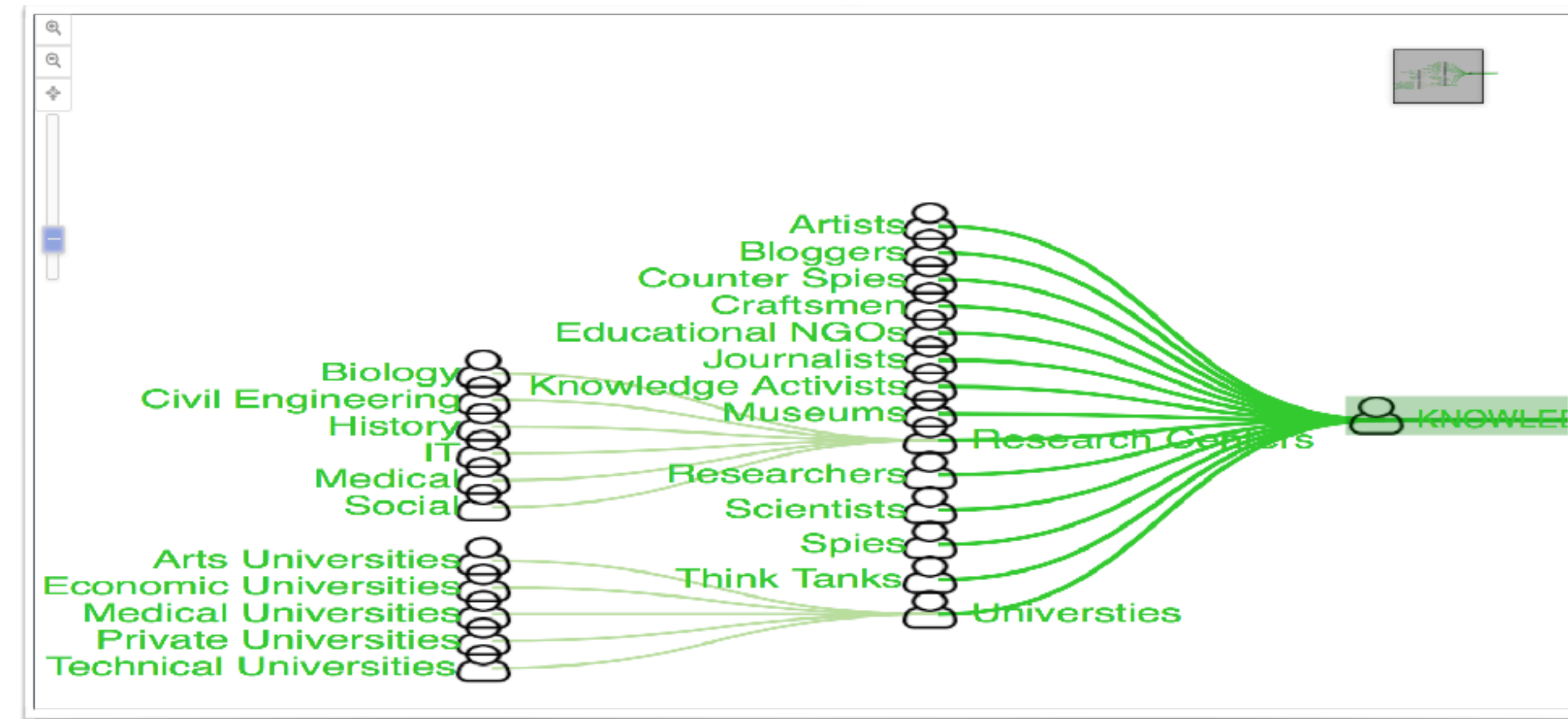
# Ten Stakeholder Principles

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

Spreading  
Knowledge in Poland  
Masterclass Project  
May 2018  
Katowice

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.

© tom@Gilb.com 2020



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



And now some solutions,

# The *Planning Principles*

With Public Planning Real examples



# Top 10 Public Planning Principles

1. Critical Values:

2. Critical Resources:

3. Stakeholder Value

4. Strategy Definition

5. Strategy Impact Analysis

6. Planning Rules

7. Plan Quality Control

8. Plan Review

9. Plan Incremental Rollout

10. Plan Progress To Date

## Overview Table

Add ▾

Sort ▾

Duplicate...

Δ: INCREMENTAL

Help

Show Sidebar

☐ New Legislation

☐ Comms Plan

☐ Ne

### Requirements

→ Consumer Costs

Δ:

70

50

????

Status: 0 → Wish: 100 % R...

Δ%:

70 %

50 %

0 %

% relative level of [Energy Costs] ...

70%

50%

[Energy Costs = { Consumer Monthly Ou...]

20th September 2017

→ Reputational Damage

Δ:

????

????

????

Status: 0 → Wish: 0

Δ%:

0 %

0 %

0 %

No qualifiers

????

????

?

→ Safe Transition

Δ:

????

????

????

Status: 0 → Wish: 0

Δ%:

0 %

0 %

0 %

No qualifiers

????

????

?

→ Consumer Costs

Δ:

????

130

????

Status: 0 → Tolerable: 120 % R...

Δ%:

0 %

108 %

0 %

% relative level of [Energy Costs] ...

????

108%

[Energy Costs = { Consumer Monthly Ou...]

20th September 2017

Sum Of Values:

Σ%:

70 %

158 %

0 %

→ UP FRONT ONE OFF PAYMENTS

Status: 0 → Budget: 10 £ B...

Δ%:

10 %

3

????

£ Billion[Payment Type] to [Recipien..

10%

30%

?

[Payment Type = { <All> },

20th September 2017

Sum Of Development Resources:

Σ%:

10 %

30 %

0 %

Value To Cost:

7.00

5.30

0.00



## Principle 1. Critical Values...

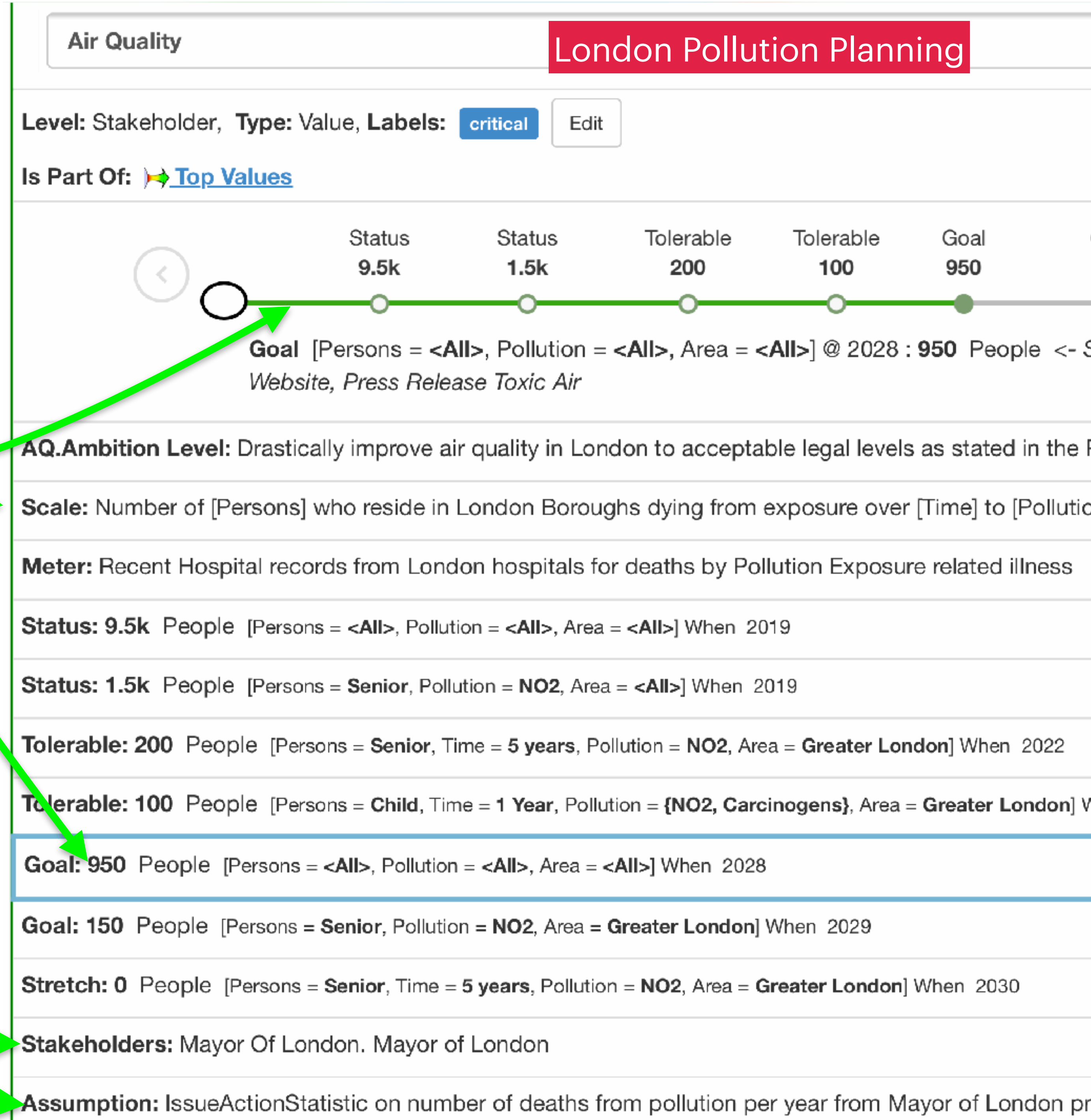
are the *real* reason that we plan, and have, projects,  
so make sure nobody can misunderstand, or corrupt, the  
stakeholder's *real value intention*

The 'top level critical values for this plan'  
will be defined numerically.

They will be digitally available in a  
database

They will be published, versioned, and  
'status denoted'

They will be explicitly, digitally, linked to all  
related values, resources, constraints,  
stakeholders, risks, value risk mitigation  
plans, and other relevant information.





- **Coherence:**

- ⇒ Ambition: improving the standard of coherence (towards 'entirely coherent') between existing systems and new systems <-G Sheldon.
- ⇒ Owner: Brig. Gen G. Sheldon
- ⇒ Type: Complex Objective {Redundancy, Gaps 'Field & Barracks', Productivity, }
- ⇒ Version: Oct 10 2001 10 58
- ⇒ Status: REJECTED AS OPTION SEE OTHER OPTIONS
- ⇒ Supports: {Productivity, Resource Efficiency, Application Mobility, War Staff work, Peacetime Planning }
- ⇒ Scale: **Probability that defined [Applications] can be fully used in defined [Environments] under defined [Conditions] for defined [Tasks] by defined [Staff].**
- ⇒ **Meter: <sample of 10 typical instances, judge if 'fully used' or not>**
- ⇒ **Past [2001] 70%**
- ⇒ **Plan [Application = GP3, Environments = {Brigade HQ, Desert} , Conditions = Battle Raging , Tasks = Operational Planning , Staff = SO3 'Captain', Delivery = End 2003 ] 80%**
- **Assumption: Past level is 70%**

Brig. Gen G. Sheldon  
His letter 23 oct 01  
'extremely  
grateful for your  
work...resulting in major  
revision of our Digitalization  
Goals ... Methods you have  
developed were  
exactly right for that purpose.



He challenged me to quantify  
the Coherence objective,  
and was vocally impressed  
when I did it on the spot

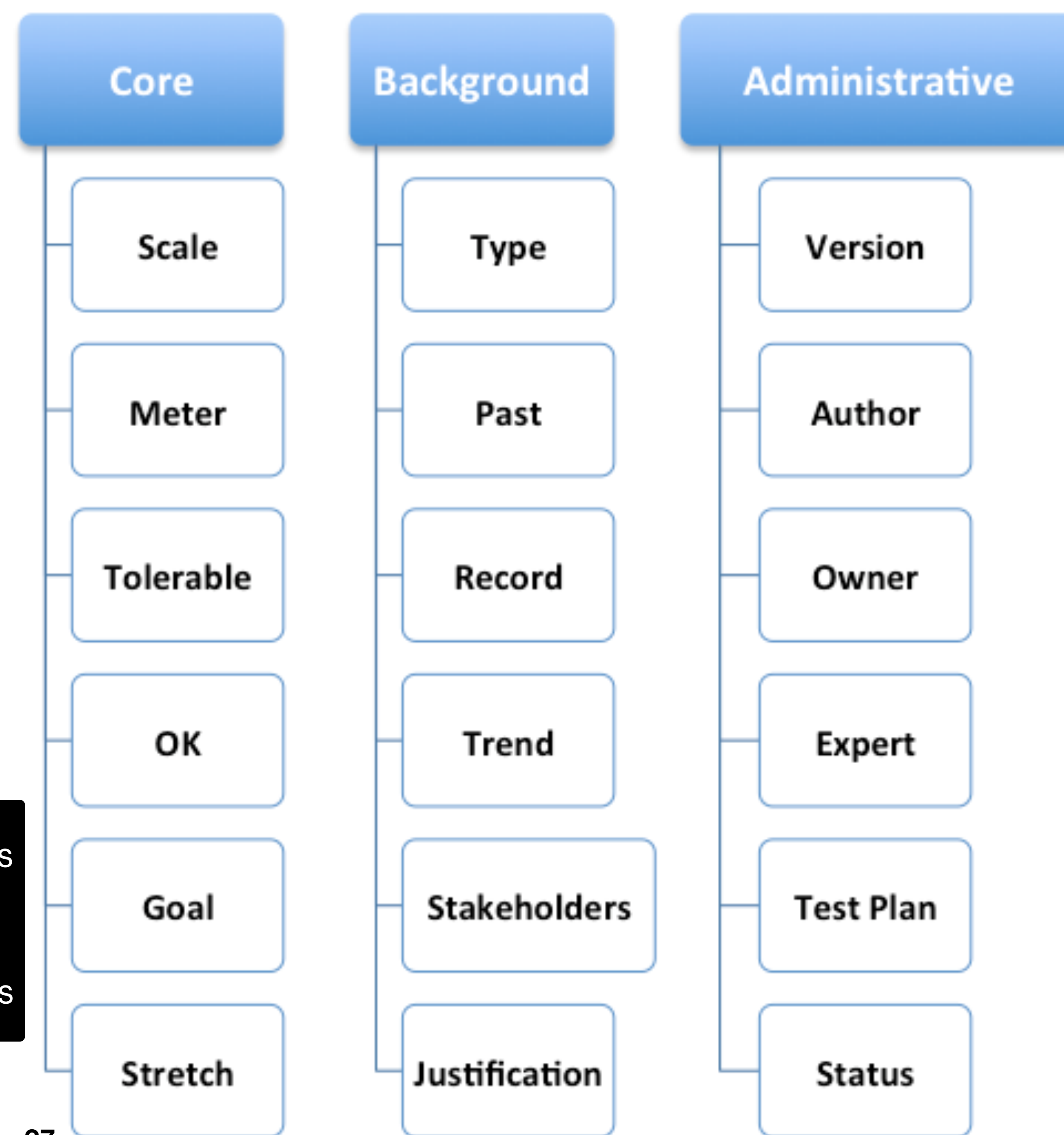


# RICH VALUE SPECIFICATION OPTIONS

Core, Background, Administrative  
Parameters in a specification object

- ***Some examples of various Planguage specification tools,***
  - ***so that a 'same name' (like 'Productivity') specification can be***
  - ***simultaneously tailored to several stakeholders,***
  - ***in a realistic and harmonious way:***
  - ***no over-generalization of a requirement.***
    - ***1 Size does not fit all.***
- ***Many 'sizes' to fit many stakeholders, and to fit varied needs.***
- ***Source 'Value Planning' Diagram 4.3.***

Many Goals  
for many  
different  
stakeholders





## Principle 2. Critical Resources:

Thorough 'resource understanding',  
not just capital cost or deadline  
Not just estimates, but followup incrementally

Estimates, current  
consumption,  
budgets, deadlines,  
resource risks, will be  
quantified and  
published, with  
sources, estimate  
evidence, and  
uncertainty.

Resource risk  
mitigation planning  
will be published, tied  
to the appropriate  
resource.

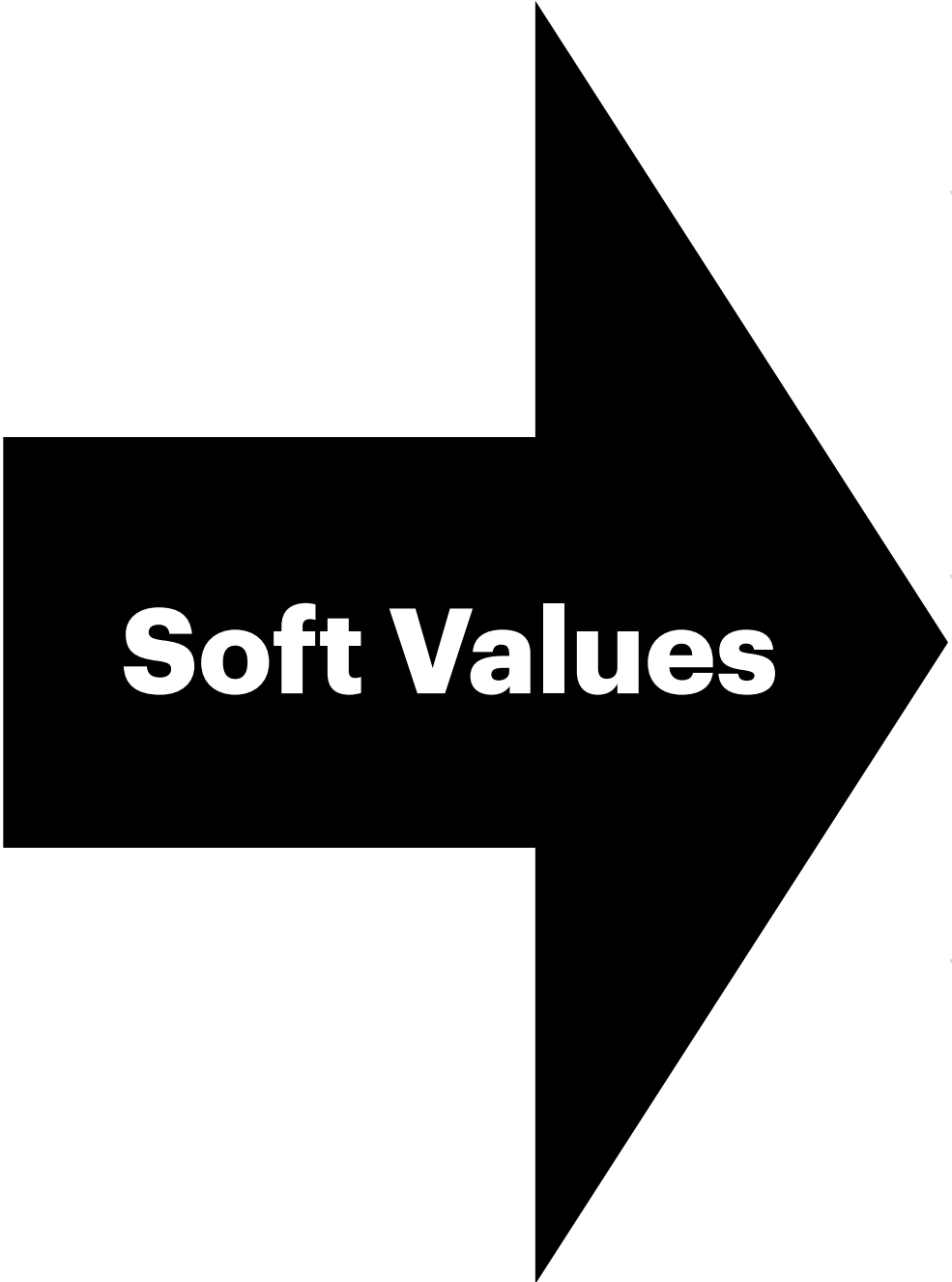
### Design 1 Resources

Sum of Resources  
For multiple  
Strategies

<b>Capital Cost £</b> Status: 0 → Budget: 3.584m £ Pounds to deliver the initial set of... No qualifiers 31st December 2020	Δ: 500k ± 60k =: 500k £ Σ%: 14 ± 2 %   14 7%: 21 % (x 0.5) 14%	Δ: 500k ± 60k =: 500k £ Σ%: 14 ± 2 %   14 7%: 21 % (x 0.5) 14%	Δ: 500k ± 60k =: 500k £ Σ%: 14 ± 2 %   14 7%: 21 % (x 0.5) 14%	Δ: 500k ± 60k =: 500k £ Σ%: 14 ± 2 %   14 7%: 21 % (x 0.5) 14%	Δ: 500k ± 60k =: 500k £ Σ%: 14 ± 2 %   14 7%: 21 % (x 0.5) 14%	Δ: 500k ± 60k =: 500k £ Σ%: 14 ± 2 %   14 7%: 21 % (x 0.5) 14%
<b>Calendar Cost, Days</b> Status: 0 → Budget: 1k days days, the time taken to implement [D... [Defined Tasks = All...] 30th June 2022	Δ: 1k ± 50 =: 1k days Σ%: 100 ± 5 %   100 7%: 150 % (x 0.5) 100%	Δ: 1k ± 50 =: 1k days Σ%: 100 ± 5 %   100 7%: 150 % (x 0.5) 100%	Δ: 1k ± 50 =: 1k days Σ%: 100 ± 5 %   100 7%: 150 % (x 0.5) 100%	Δ: 1k ± 50 =: 1k days Σ%: 100 ± 5 %   100 7%: 150 % (x 0.5) 100%	Δ: 1k ± 50 =: 1k days Σ%: 100 ± 5 %   100 7%: 150 % (x 0.5) 100%	Δ: 1k ± 50 =: 1k days Σ%: 100 ± 5 %   100 7%: 150 % (x 0.5) 100%
<b>Full Time Equivalents 4.5</b> Status: 140k → Budget: 200k Pounds £ No qualifiers 2018	Δ: 5k ± 500 =: 145k Pounds Σ%: 8 ± 1 %   8 7%: 12 % (x 0.5) 8%	Δ: 5k ± 500 =: 145k Pounds Σ%: 8 ± 1 %   8 7%: 12 % (x 0.5) 8%	Δ: 5k ± 500 =: 145k Pounds Σ%: 8 ± 1 %   8 7%: 12 % (x 0.5) 8%	Δ: 5k ± 500 =: 145k Pounds Σ%: 8 ± 1 %   8 7%: 12 % (x 0.5) 8%	Δ: 5k ± 500 =: 145k Pounds Σ%: 8 ± 1 %   8 7%: 12 % (x 0.5) 8%	Δ: 5k ± 500 =: 145k Pounds Σ%: 8 ± 1 %   8 7%: 12 % (x 0.5) 8%
<b>Maintenance Costs £k</b> Status: 0 → Budget: 1m ann.. £ cost per Year No qualifiers 2022	Δ: 0 ± 0 =: 0 annual... Σ%: 0 ± 0 %   0 7%: 0 % (x 0.5) 0%	Δ: 0 ± 0 =: 0 annual... Σ%: 0 ± 0 %   0 7%: 0 % (x 0.5) 0%	Δ: 0 ± 0 =: 0 annual... Σ%: 0 ± 0 %   0 7%: 0 % (x 0.5) 0%	Δ: 0 ± 0 =: 0 annual... Σ%: 0 ± 0 %   0 7%: 0 % (x 0.5) 0%	Δ: 0 ± 0 =: 0 annual... Σ%: 0 ± 0 %   0 7%: 0 % (x 0.5) 0%	Δ: 0 ± 0 =: 0 annual... Σ%: 0 ± 0 %   0 7%: 0 % (x 0.5) 0%
<b>Sum Of Development Resources:</b> Worst Case: Credibility - adjusted: Worst Case Cred. - adjusted:	Σ%: 122 ± 8 %   122 Σ±%: 130 % Σ?%: 183 % Σ±?%: 65 %	Σ%: 122 ± 8 %   122 Σ±%: 130 % Σ?%: 183 % Σ±?%: 65 %	Σ%: 122 ± 8 %   122 Σ±%: 130 % Σ?%: 183 % Σ±?%: 65 %	Σ%: 122 ± 8 %   122 Σ±%: 130 % Σ?%: 183 % Σ±?%: 65 %	Σ%: 122 ± 8 %   122 Σ±%: 130 % Σ?%: 183 % Σ±?%: 65 %	Σ%: 122 ± 8 %   122 Σ±%: 130 % Σ?%: 183 % Σ±?%: 65 %



# Planning to ‘Make Poland Great’ 2019



Requirements		Strategies		💡 D01: Create A Pil...	💡 D02: Investigate
<div>🏹 <u>People Educated For Job Mar...</u></div> <div>Status: <b>60</b> ➔ Wish: <b>80</b> % of vacan...</div> <div>% of vacancies staffed with [People] ...</div> <div>[People = <b>All</b>, ...]</div> <div>📅 26 May 2024</div>		Δ: 10 ± 5 =: 70 % of va... Δ%: 50 ± 25 % ?%: 10 % (x 0.2)		7 ± 2 67 % of va... 35 ± 10 % 0 % (x 0.0)	
<div>🏹 <u>Unborn Life Protection</u></div> <div>Status: <b>99</b> ➔ Wish: <b>0</b> % of [Murd...</div> <div>% of [Murders] performed on [Living] ...</div> <div>[Murders = <b>abortion</b>, ...]</div> <div>📅 26 May 2020</div>		Δ: 0 ± 0 =: 99 % of [M... Δ%: 0 ± 0 % ?%: 0 % (x 0.0)		-1 ± 0 98 % of [M... 1 ± 0 % 0 % (x 0.0)	
<div>🏹 <u>Sense Of Security</u></div> <div>Status: <b>80</b> ➔ Wish: <b>90</b> % of [Poli...</div> <div>% of [Polish Families] (per 100) havi...</div> <div>[Polish Families = <b>Polish-only...</b>]</div> <div>📅 2021</div>		Δ: 0 ± 0 =: 80 % of [P... Δ%: 0 ± 0 % ?%: 0 % (x 0.0)		0 ± 0 80 % of [P... 0 ± 0 % 0 % (x 0.0)	
<div>🏹 <u>Good Health</u></div> <div>Status: <b>30</b> ➔ Wish: <b>50</b> % of [Popu...</div> <div>% of [Population] in given [Age Group...</div> <div>[Population = <b>Polish citizens&lt;...</b>]</div> <div>📅 14 Nov 2030</div>		Δ: 0 ± 0 =: 30 % of [P... Δ%: 0 ± 0 % ?%: 0 % (x 0.0)		-1 ± 1 29 % of [P... -5 ± 5 % -1 % (x 0.1)	
<div>Sum Of Values:</div> <div>Worst Case:</div> <div>Credibility - adjusted:</div> <div>Worst Case Cred. - adjusted:</div>		Σ%: 50 ± 25 % Σ±%: 25 % Σ?%: 10 % Σ±?%: 5 %		31 ± 15 % 16 % -1 % -1 %	
<div>➔ <u>Capital Cost</u></div> <div>Status: <b>2b</b> ➔ Budget: <b>42b</b> Amount of ...</div> <div>Amount of spend money by sprint</div> <div>No qualifiers</div> <div>📅 Sat May 26 2029 02:00:00 GMT+0200 (CEST)</div>		Δ: 400k ± 100k =: 2b Amount ... Δ%: 0 ± 0 % ?%: 0 % (x 0.0)		100k ± 200k 2b Amount ... 0 ± 0 % 0 % (x 0.0)	
<div>➔ <u>Technical Debt</u></div> <div>Status: <b>0</b> ➔ Budget: <b>10</b> % of time ...</div>		Δ: =:			



# Understanding that we probably have the **required resources** to use the strategy. Are there cheaper ideas? Can we afford it?

- \* Let's assume you have one or more strategy options that are acceptable, in terms of the questions above.

- \* And let us assume all candidates look roughly as good as any other.

- \* So they *might* deliver the value levels you require.

- \* But can you afford them?

- \* And is any option much cheaper or faster than the others?

- \* We can ask the following questions about the options, in order to pick a 'resource winner':

1. is the design specified in enough detail, that we can hope to estimate costs roughly ?  
(Order of magnitude, or maximum).

2. Vague strategy specifications have a very broad 'cost range'.

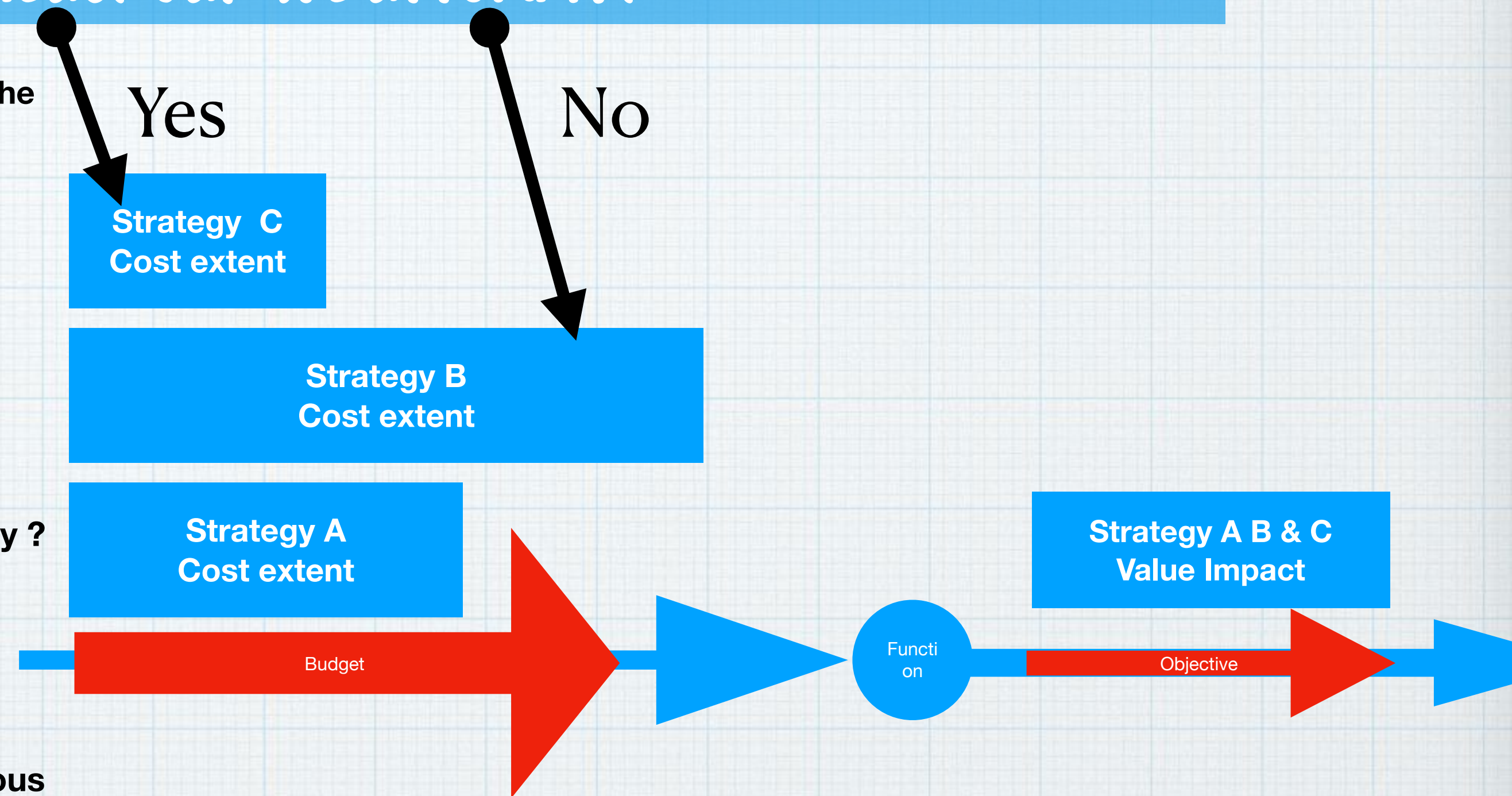
3. Do we know any resource information (time, people, money) at all about any previous uses of our options, by anyone, anywhere?

4. Can we get a sub-supplier to give us a fixed price, fixed-delivery-time contract, for the options?

These questions will help you point to a likely, cost-effective ('efficient strategy') candidate.

In some situations, that might be enough to go ahead and try the promising-designs out.

In other situations you would be gambling, too much of someone else's money and lives; so you might like some even-more-advanced strategy-resource-estimation-and-tracking-methods, for those cases.



**Cost-effective** strategy selection  
Or 'Efficient' strategy selection



## Principle 3. Stakeholder Value

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

Comprehensive lists and definitions of known stakeholder values which potentially have influence on these plans, will be noted in the stakeholder planning object, even if we have not adopted or agreed with them in this planning context.

The Stakeholder Planning Object will contain identification of specific stakeholders, or stakeholder representatives, contact information.

The Stakeholder analysis and contact history will be contained in the digital Stakeholder Planning Object.

With at least links to more-detailed records of interactions with them, and our planning conclusions or remarks about this interaction.

OBJECTIVES
Customer Service ? → 0 Violation of agreement
Availability 90% → 99.5% Up time
Usability 200 → 60 Requests by Users
Responsiveness 70% → ECP's on time
Productivity 3:1 Return on Investment
Morale 72 → 60 per mo. Sick Leave
Data Integrity 88% → 97% Data Error %
Technology Adaptability 75% Adapt Technology
Requirement Adaptability ? → 2.6% Adapt to Change
Resource Adaptability 2.1M → ? Resource Change
Cost Reduction FADS → 30% Total Funding



• *Example of one of the Objectives:*

### Customer Service:

**Type:** Critical Top level Systems Objective

**Gist:** Improve customer perception of quality of service provided.

**Scale:** Violations of Customer Agreement per Month.

**Meter:** Log of Violations.

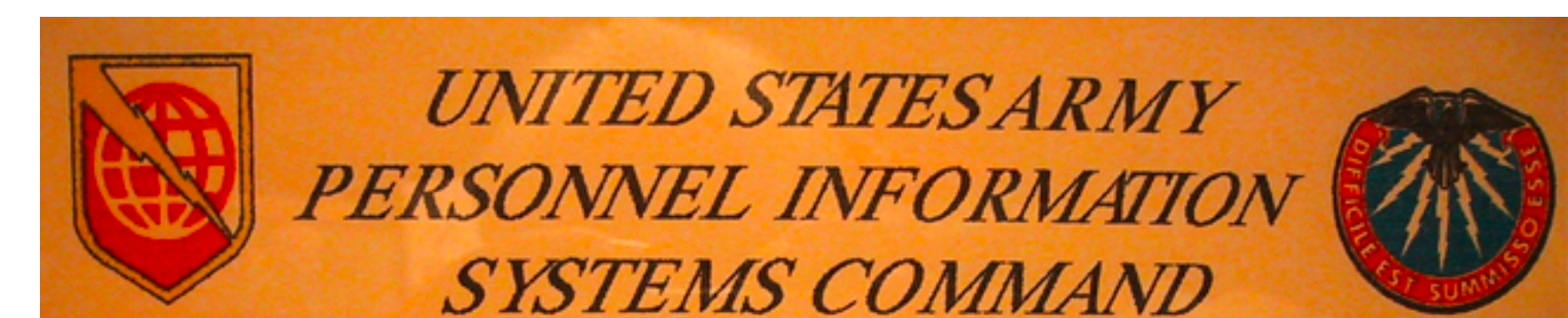
**Past** [Last Year] Unknown Number ← State of PERSCOM Management Review

**Record** [NARDAC] 0 ? ← NARDAC Reports Last Year

**Fail** : <must be better than Past, Unknown number>

←CG

**Goal** [This Year, PERSINCOM] 0 "Go for the Record" ← Group SWAG





**Stakeholder:**

Direct: {Borrower, Lender, Our Corp., Investor, Broker Dealer,}.  
Indirect: {Regulator, Realtor}

**Gist:**

To enhance our capability of extending our services to products and markets we do not currently serve.  
Authority: Corporate Goal 2 (d) “markets we do not currently serve”.  
Rationale: Our Division must effectively support the technical capability to serve these new markets and products.

**Scale:** The average calendar time between request (‘concept to spec’ process) to Our Division for support in entering a new market, or delivering a new product, until successful first useful capability is operational and has been successfully used at all, when priority is highest.

Note: implementation delays due to assigned low priority, and consequent lack of resource to make improvements, should not be included as a measure of Our Division capability. <-TG, agreed CK

Assumption: the ‘earned value’ aspect of these changes will be covered by I7 (or elsewhere). <--CK

**Meter:** manual analysis/logs , by Our Division, of real requests and successful implementations.

Note: 2Q 200x we are prototyping this meter, 3rdQ 200x we will use it on past observations. <-CK

**=====BENCHMARKS =====**

**Past Support:** Past [New Incremental Product] 12 Months, [New Product] 24 months, [New Business Areas] 36 months.

Source CK quick approximations.

**New Product:** Defined: something incremental, but could be really new

**Record** [Construction to ‘Perm’(anent Loan)] 6 months <- CK[Fixed Rate Adjustable] <6 months? <-CK ask Stephanie>, Trend

Note: we are improving this ability because of introduction of product pilots. <-C Kxxxxx

**===== TARGETS =====**

**Wish** “have to get better”, [New Product] 2 months <- CK,

[New Market Area, New Channel Required] 6 months <-CK

**Fail** [200x] “sustain current performance<-CK” = Past Support.

Note could change Fail if investment were made. <-CK

**Fail 200q:** Fail [Year 200q] Past Support I2

Authority: Corp Goals 2 (products we do not currently serve) and 4 ( record financial performance)

**Stretch** [200y] = Fail 200q,

Rationale: we want to one of the corporate leaders in improving time to market <-CK

Assumption: we will need to have a much better understanding of our processing baseline.

Constraint: We are constrained in how much time we can cut out by the characteristics of our current core processing systems <-CK

**Goal** [Long term] <ops implementation speed is not perceived as the bottleneck>

Note: this goal needs to be seen in the light of Earned Value measurement efforts, see BSC Objective I7 <-CK

**Note** I2 is a ‘means strategy’ for F2



**Real Example  
US Government Bank**

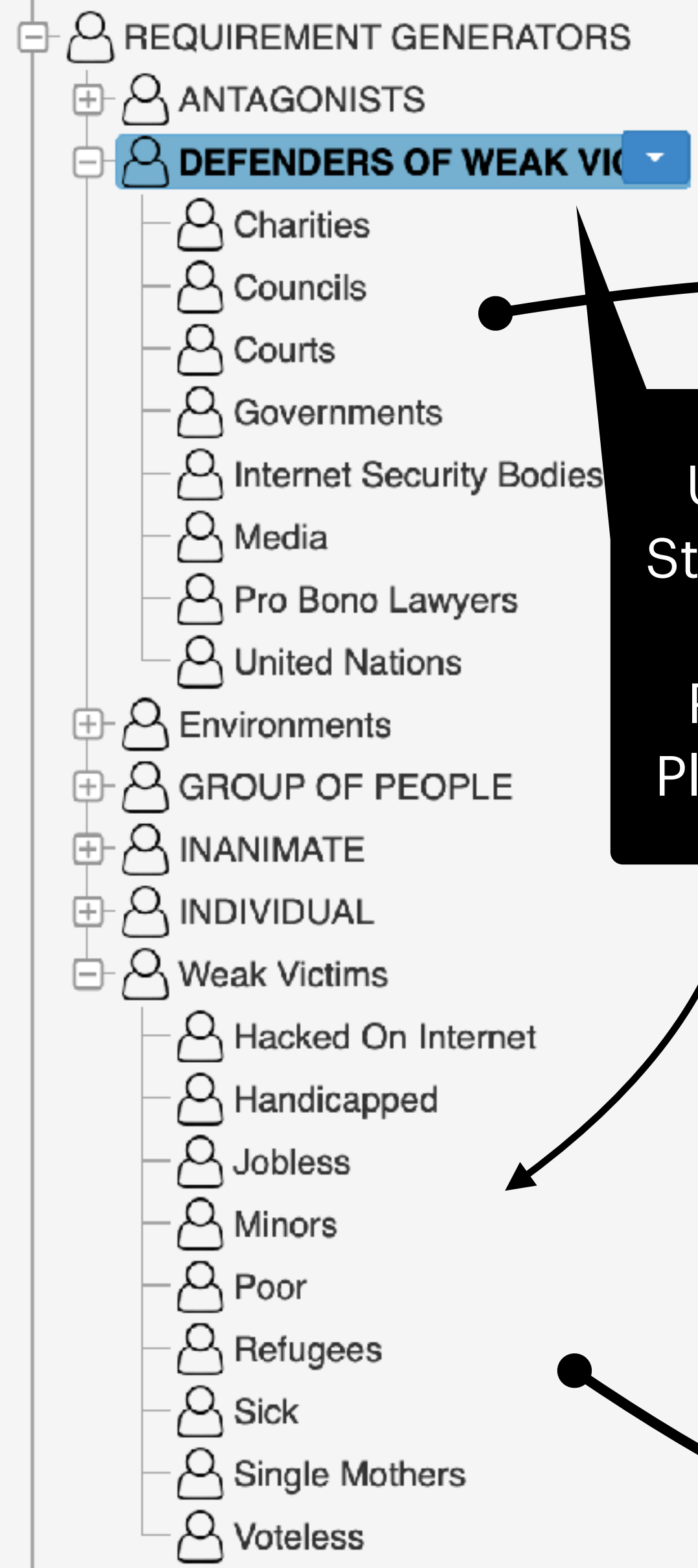
Problem was  
Trying to use  
Balanced Scorecard

Extreme Management  
Frustration  
Because the non financial  
values were not quantified

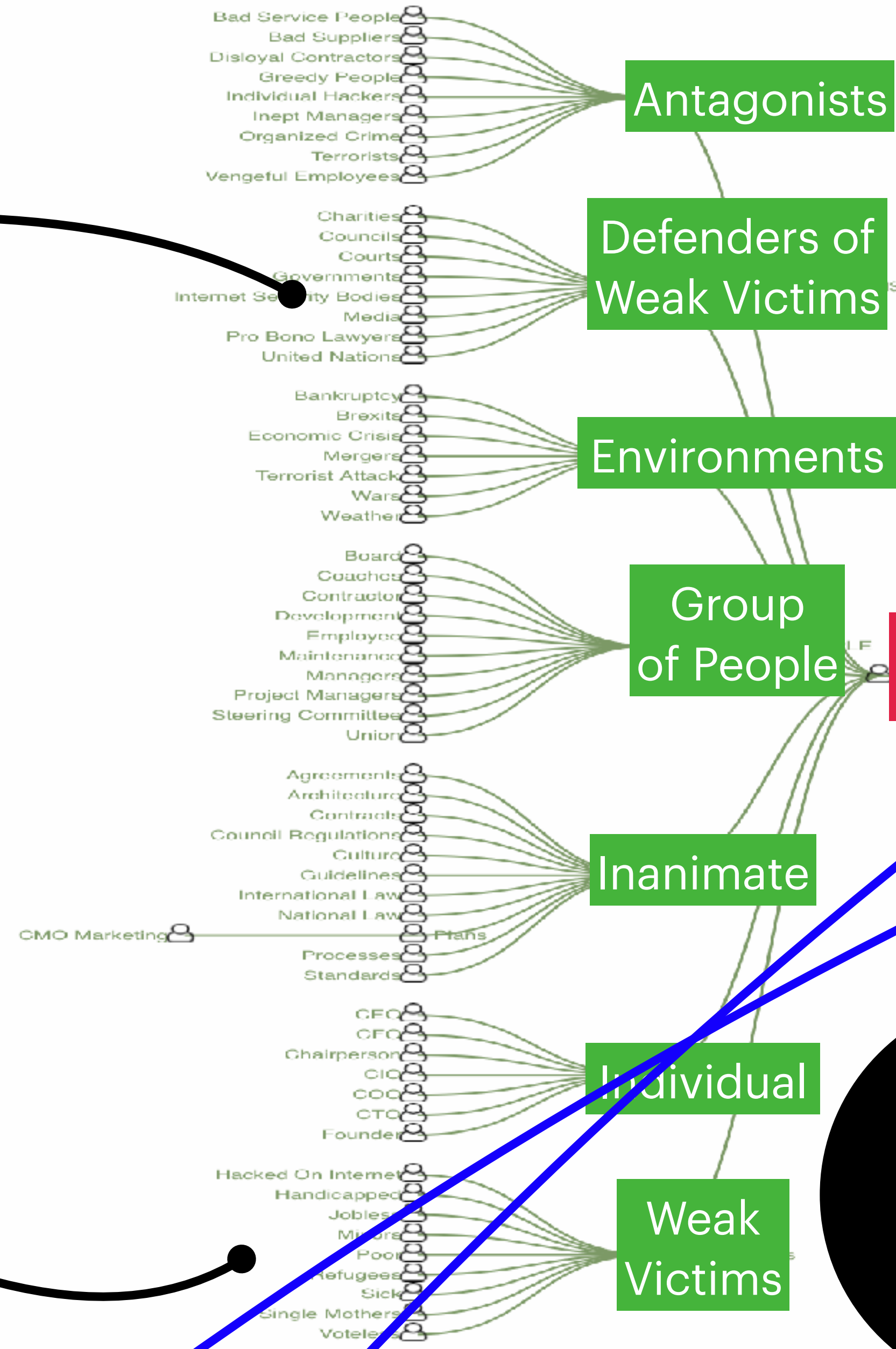
When Quantified  
They understood each  
other

What is Wrong with  
Balanced Scorecard, slides  
<http://concepts.gilb.com/dl135>



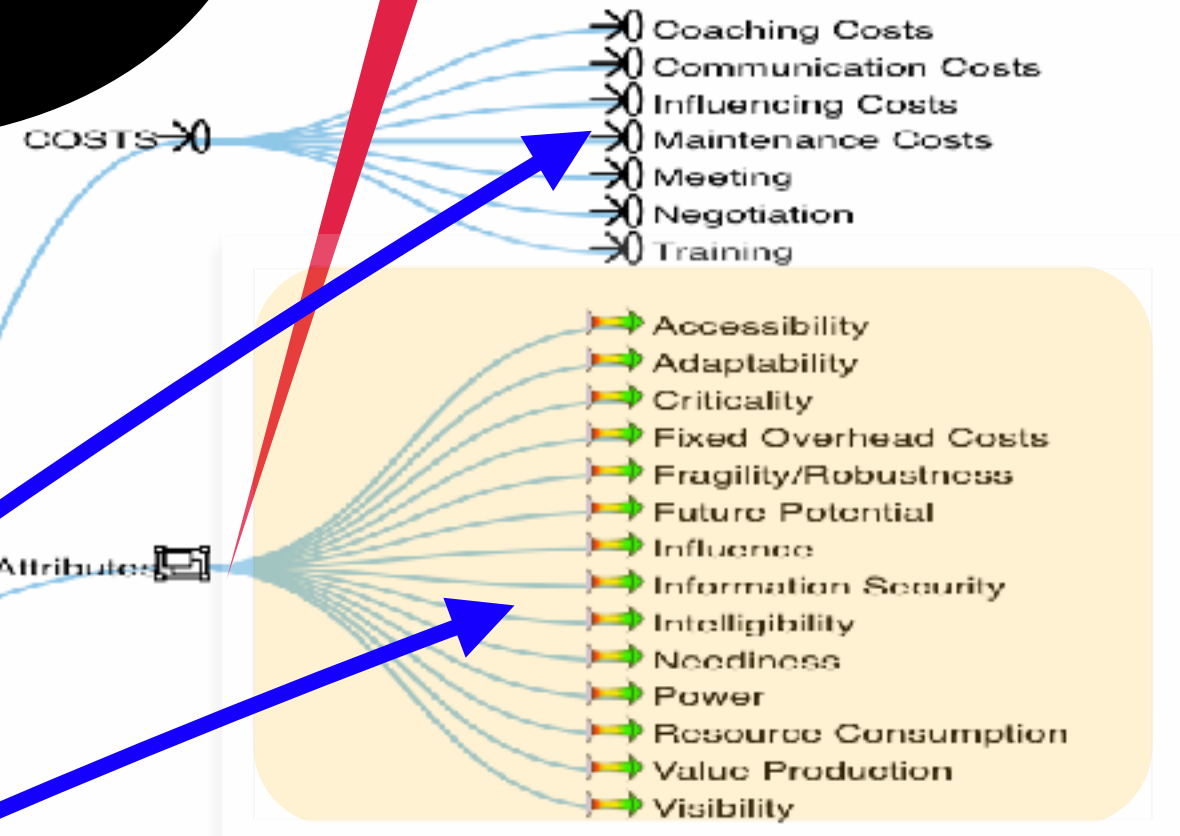


Useful Structure For Public Planning



Stakeholder Attributes

Values of Power For Your stakeholders



Requirement Generators

Typical Stakeholder Checklist Hierarchy

Strategies For Managing Your stakeholders



Stakeholders each possess a set of attributes and costs. These are valued by the project sponsors, and give priority to the stakeholder

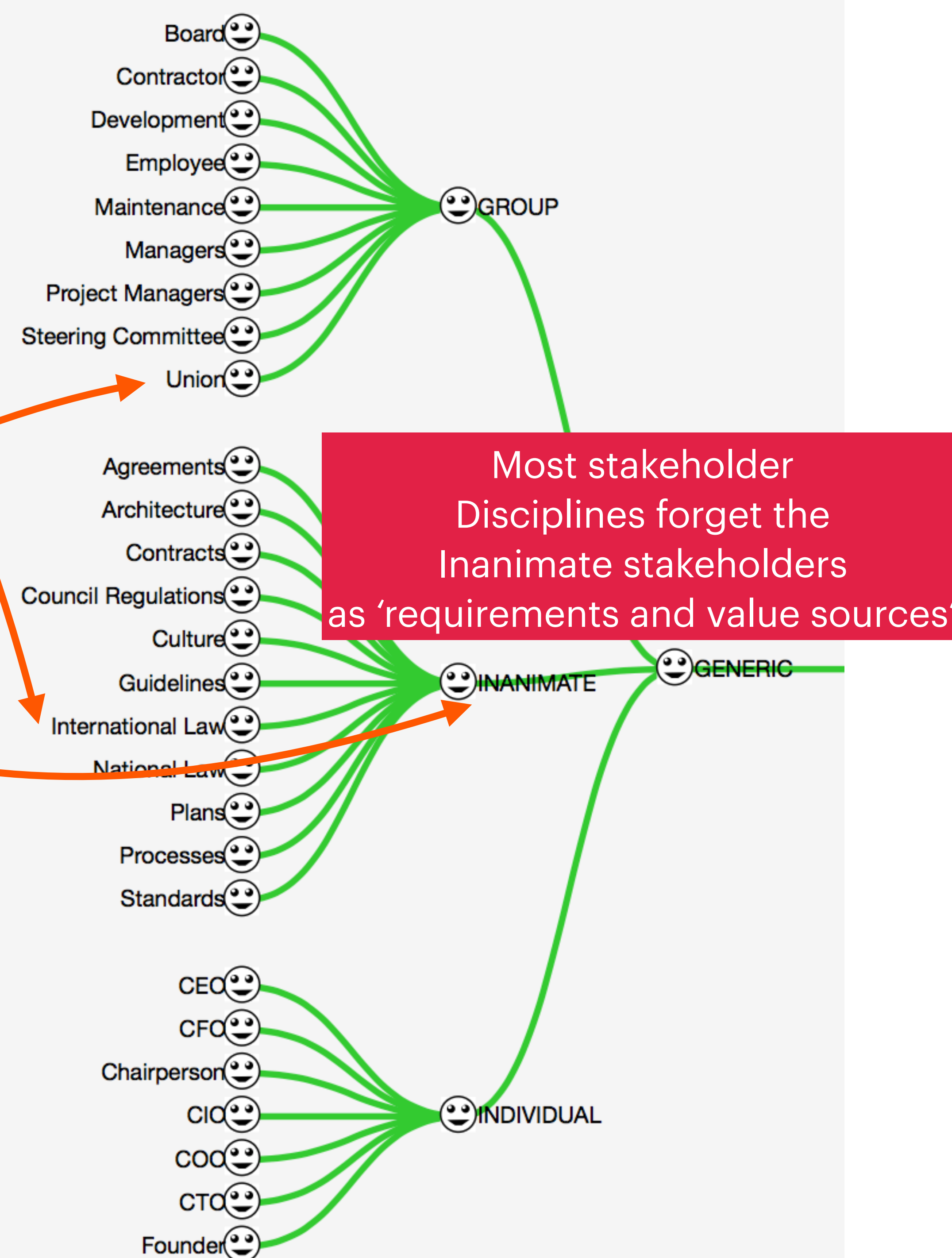


# My Ten Stakeholder Principles

© Tom Gilb, 2020

<http://concepts.gilb.com/dl880>

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 shilloads 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 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 below; 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.





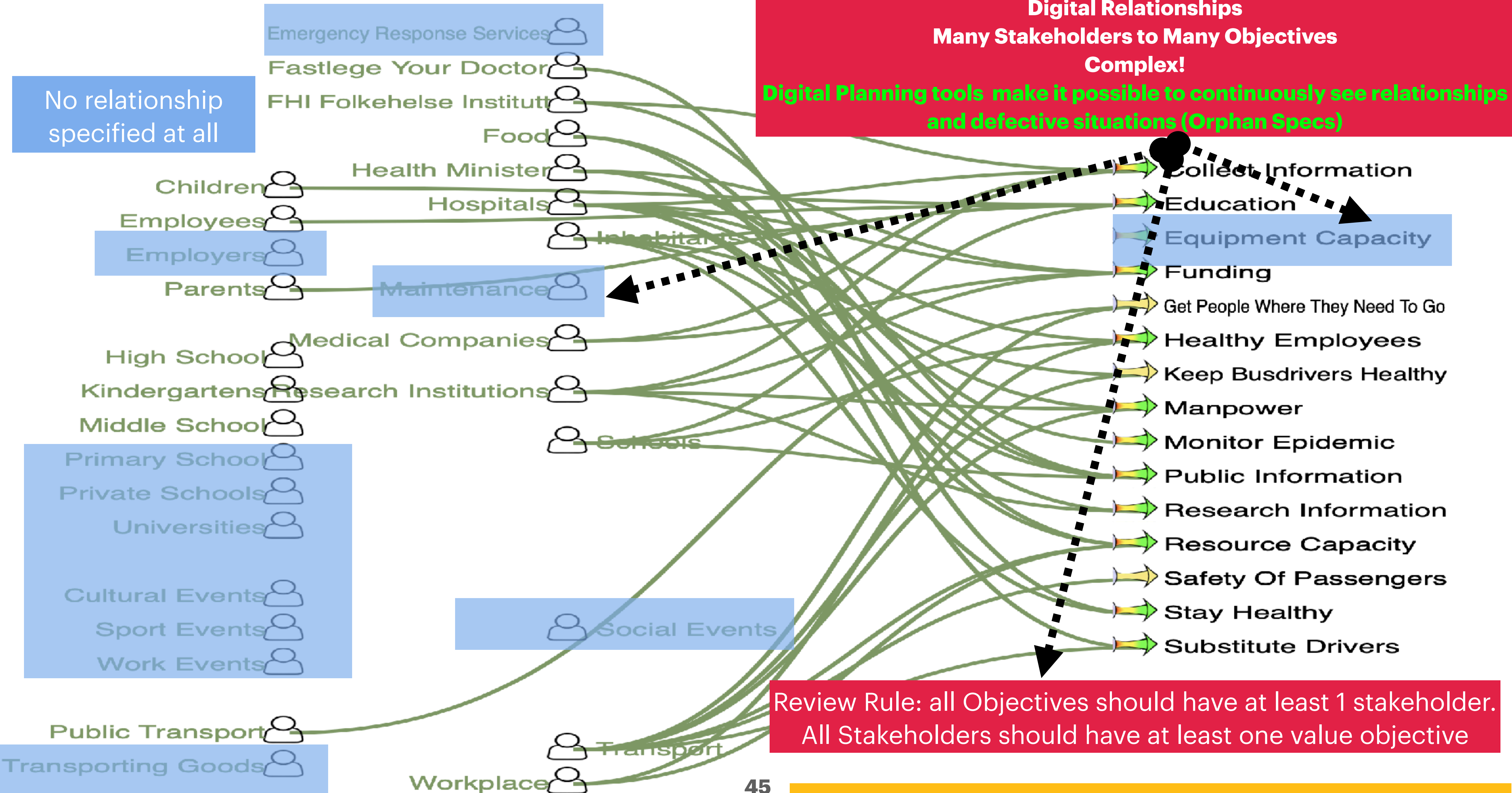
## Digital Relationships

Many Stakeholders to Many Objectives

Complex!

Digital Planning tools make it possible to continuously see relationships and defective situations (Orphan Specs)

No relationship specified at all





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

2.Stakeholder Level

ValPlan.net 'Canvas'

Stakeholders

Emergency Response Services

Fastlege Your Doctor

FHI Folkehelse Institut

Food

Health Minister

Hospitals

Inhabitants

Maintenance

Medical Companies

Research Institutions

Schools

High School

Values and Resources

Capital Cost In Million NOK

Collect Information

Days To Implement

Education

Equipment Capacity

Funding

Get People Where They Ne

Healthy Employees

Manpower

Monitor Epidemic

Public Information

Research Information

The Planning Object: The Stakeholder Spec, being built up

Health Minister

Level: Stakeholder, Status: Not Determined Type: Stakeh

Edit

Summary:

Description:

Link to existing... Link to new...

Specification

Roles

To: Funding Select a Stakeholder Rol

To: Monitor ... Select a Stakeholder Rol

To: Public I... \* Decision Maker

Select a Stakeholder See all digital relations

Tool = ValPlan.net

March 2020 OSWA, Oslo, course planning Covid-19 reduction

© tom@Gilb.com 2020

46



## Principle 4.

# Strategy: Definition & Specification

Define the 'means' so that it is effective, and even cost-effective

Each 'strategy' (a *means* to deliver values) option will be **defined in enough detail**, to avoid any misunderstandings; and in enough detail, so that *sufficiently accurate estimations* of value impacts and costs, can be made.

Strategy Options which have either been discarded, or not yet adopted, will be **kept visible** in the planning system, with enough information to see why they were discarded, or not yet adopted.

Strategies, whenever possible, will be **decomposed** into sub-strategies, and defined as a set of such sub-strategies.

A sub-strategy will have the property that it can be delivered to a real system, with **expected value and cost impacts**.

The reason being to make **early progress**, to **isolate causes and effects**, and to **learn fast what works**; and **change strategy**, if necessary.



Type: Solution Idea, Labels: -

Is Part Of: [Content Review System](#)

### Summary:

1. setup a business account on YouTube
2. start a casting for a good **[Presenter]**
3. prepare recording equipment
4. measure how many fake news are present in a **[Newspaper]** and prepare material for recording
5. record an episode about the last recent fake news found in the **[Newspaper]**
6. release the episode on the YouTube
7. measure and test the value against the scale
8. if below Tollerable, repeat 5, 6, 7, 8. If Goal reached, proceed 4 - 8 with another **[Newspaper]**

**Newspaper:** defined as:

Gazeta Wyborcza, Rzeczpospolita, Sopotnia Dzieni, Warszawskie Stoiki

**Presenter:** defined as:

A man or woman speaking in the e

**Source:**

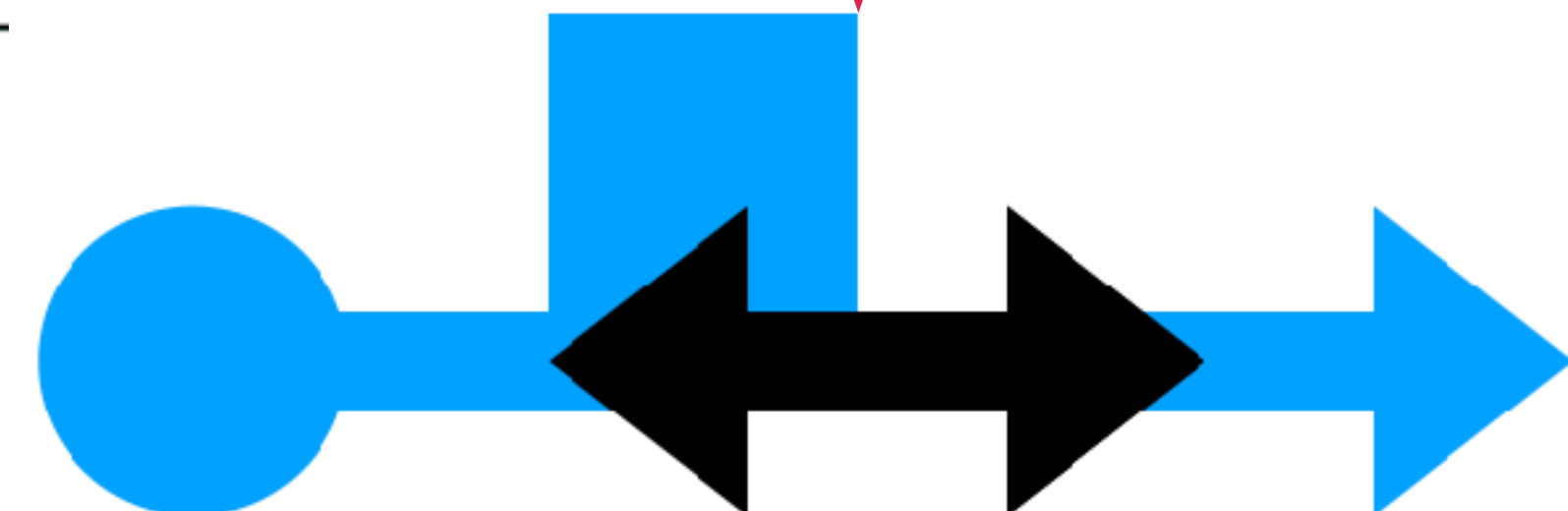
Iza, Kasjan, Pawel

**Description:** [Youtube

ews] in the terms of [

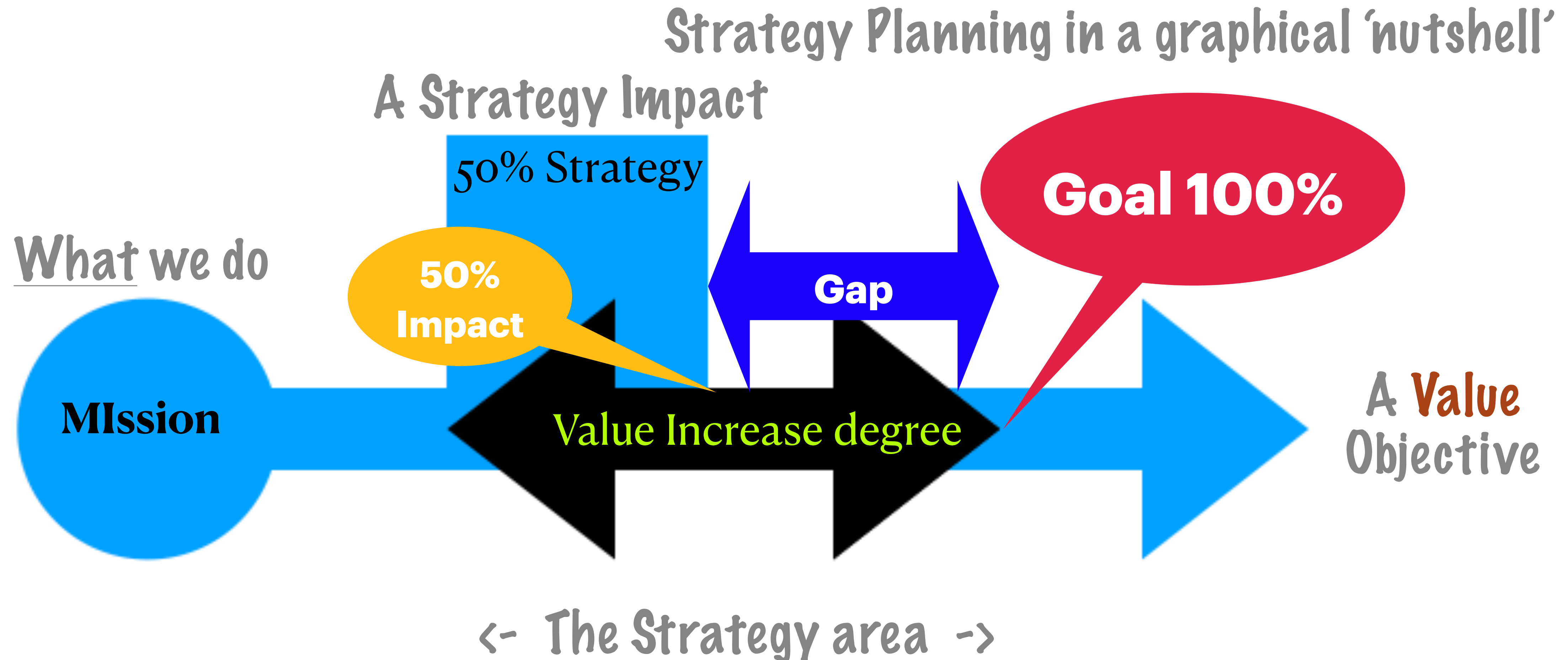
'MEDIA FAKE NEWS' Planning  
Masterclass, Warsaw, 2018

**The  
Strategy  
Delivers 'so much'  
Value**





# The 'Planning' Icons (Value, Strategy, Impact, Mission, Gap)



Yes I have designed a graphical icon language for Objectives and Strategies



# Strategy Specification Example

Polish Leadership In Industry / Canvas | List | Diagram / Using External Sources



Edit

Locked by gilbguest7 - Nov 27th 2018, 14:15



...cator (TomaszPawelBartosz). Using External Sources

SPEC-1ZYITQY

v 0.0.1 New

by gilbguest7 - Nov 27th 2018, 14:29

Type: Solution Idea, Labels: -

Is Part Of: [Blockchain Verificator \(TomaszPawelBartosz\)](#)

Summary:

Description:

1. Using external scoring sources (like SPAM lists, cloud hosting provider list, GeoIP list)
2. Selecting **[Programming Language]** to implement it to the product **[Algorithm]**

**Algorithm:** defined as:

mechanism to validate **[Fake News Parameters]** on requested **[Content]**

**Programming Language:** defined as:

Perl, Python, PHP, Java, C++, Erlang, Cobol...

Source:

Bartosz, Paweł, Tomasz

Document and track real-life plan to deliver an solution idea  
to stakeholders

'MEDIA FAKE NEWS' Planning  
Masterclass, Warsaw, 2018



# Strategy Spec example

Is there enough  
info  
Here

to  
Estimate impacts  
And costs

'MEDIA FAKE NEWS' Planning  
Masterclass, Warsaw, 2018

Type: Solution Idea, Labels: -

Is Part Of:  [Content Review System](#)

## Summary:

1. setup a business account on YouTube
2. start a casting for a good **[Presenter]**
3. prepare recording equipment
4. measure how many fake news are present in a **[Newspaper]** and prepare material for recording
5. record an episode about the last recent fake news found in the **[Newspaper]**
6. release the episode on the YouTube
7. measure and test the value against the scale
8. if below Tollerable, repeat 5, 6, 7, 8. If Goal reached, proceed 4 - 8 with another **[Newspaper]**

**Newspaper:** defined as:

Gazeta Wyborcza, Rzeczpospolita, Sosnowiec Dzisiaj, Warszawskie Słoiiki

**Presenter:** defined as:

A man or woman speaking in the episode

## Source:

Iza, Kasjan, Paweł

**Description:** [Youtube Channel] with [Fake News Analysis] and [Guide For Evaluating] [News] in the terms of [Reliability] an...



**Strategy identification and optimization is a continuous learning process, an engineering and scientific process.**





## Principle 5. Strategy Impact Analysis

Make sure you *really* understand, how good your suggested 'means' will be, for your many 'value objectives'.  
Give facts and evidence for strategies! Not political assertions, in *one* dimension

### MULTI-DIMENSIONAL ENGINEERING THINKING

Every candidate strategy will be analyzed, using an Impact Estimation Table.

QUANTIFIED Strategy-analysis will be used, to **select** and **prioritize** strategies.

Strategy analysis will be based on value **side-effect** analysis, critical **resources** analysis, and other constraint analysis (legal, GDPR).

Estimates will be made using **named** person or team **estimators**, using **evidence** of experience, **sources** of evidence, and **ranges** of experience ( $\pm$  uncertainty ranges)

Worst case analysis regarding **Credibility** (evidence and source) and  $\pm$  range of experience, will be calculated and presented.

## HEALTHCARE SYSTEM IMPACT ESTIMATION

	Automate Rules	Web Self Service	Decision Support	Total Impacts
Increase Transmission of Requests <i>(30 minutes <math>\rightarrow</math> 10 minutes)</i>	10 minutes 100%	3 minutes 100%	-	200%
Decrease Number of Errors Occurring <i>(353 per week <math>\rightarrow</math> 30 per week)</i>	100 errors 80%	< 50 90%	-	170%
Decrease Time for Processing of Requests <i>(70 minutes <math>\rightarrow</math> 10 minutes)</i>	35 minutes 70%	-	< 10 minutes 90%	160%
Decrease Time to Learn process <i>(1 day <math>\rightarrow</math> 1 hour)</i>	-	1 hour 100%	10 minutes 103%	203%
TOTAL DESIGN REQUIREMENT IMPACT	250%	290%	193%	

Deliver Pharmas to Patient Planning

SIMPLE REAL UK NHS VALUE DECISION TABLE

a real Health service, UK, table, successful project (source: <http://www.gilb.com/dl582>). Man-Chie Tse and Ravinder Ravi Singh Kahlon



# Detail of estimates, uncertainty, evidence, source (managing risks of designs)

A BCS class Project

Requirements	<input type="checkbox"/> Incentivise	<input type="checkbox"/> Tea Kiosk	<input type="checkbox"/> Daily Danger Checks	Sum	Selected Impact Target
<b>Project Timeliness</b> Status: 10 → Wish: 5 % % time overrun necessary to deliver [Project Cost Size = { Medium (\$10k - ...)] 30th June 2017	8 ± 0 -2 % 40 ± 0 % 32 % (x 0.8) 40%	5 ± 1 -5 % 100 ± 20 % 50 % (x 0.5) 100%	15 ± 8 5 % -100 ± 160 % -80 % (x 0.8) -100%	ΣΔ	Row: User Productivity Col: Tea Kiosk Scale: number of minutes for a [user] to complete a [task]
<b>Building Security</b> Status: 50 → Wish: 10 % I... % of [Emergency Types] which in fact [Emergency Types = { Earthquake }, 30th June 2018	50 ± 0 0 % Injury 0 ± 0 % 0 % (x 0.0) 0%	50 ± 0 0 % Injury 0 ± NaN % 0 % (x 0.6) 0%	30 ± 10 -20 % Injury 50 ± 25 % 15 % (x 0.3) 50%	ΣΔ	Value Impact: Change... Estimate: minutes Δ -7 ± 3 Actual: minutes Δ scale val ± 0 Credibility: 0.8 In-house measurements of design / strategy correlate to external sources Evidence: we have used tea kiosks and several competitors have which save about seven minutes for users Source: <a href="https://www.tripadvisor.com/ShowUserReviews-g154995-d4871495-r475327934-McDonald_s-London_Ontario.html">https://www.tripadvisor.com/ShowUserReviews-g154995-d4871495-r475327934-McDonald_s-London_Ontario.html</a> Add Comment...
<b>User Productivity</b> Status: 15 → Wish: 5 minutes number of minutes for a [user] to co... [user = { adult }, task = { dri...] 30th June 2017	10 ± 0 -5 minutes 50 ± 0 % 0 % (x 0.0) 50%	8 ± 3 -7 minutes 70 ± 30 % 56 % (x 0.8) 70%	15 ± 0 0 minutes 0 % (x 0.0) 0%	ΣΔ	
<b>Sum Of Values:</b> Credibility - adjusted:	Σ%: 90 ± 0 % Σ?%: 32 %	170 ± 50 % 106 %	-50 ± 185 % -65 %		
<b>Method Implementation Cost</b> Status: 0 → Budget: 3m \$ Total monetary cost in US Dollars fo... [Project Cost Size = { }] 30th June 2017	500k ± 0 500k \$ 17 ± 0 % 34 % (x 0.0) 17%	2m ± 0 2m \$ 67 ± 0 % 134 % (x 0.0) 67%	1m ± 0 1m \$ 33 ± 0 % 66 % (x 0.0) 33%	ΣΔ	
<b>Sum Of Development Resources:</b> Credibility - adjusted:	Σ%: 17 ± 0 % Σ?%: 34 %	67 ± 0 % 134 %	33 ± 0 % 66 %		
Value To Cost:					







Principle 6.  
**Planning 'Rules'**

Do not let each person plan things 'any way they want to'.  
Expect them to follow your 'known best practices'.  
*Like: 'Quantify critical stakeholder values'.*

**Detailed rules for specification of  
the plan,**

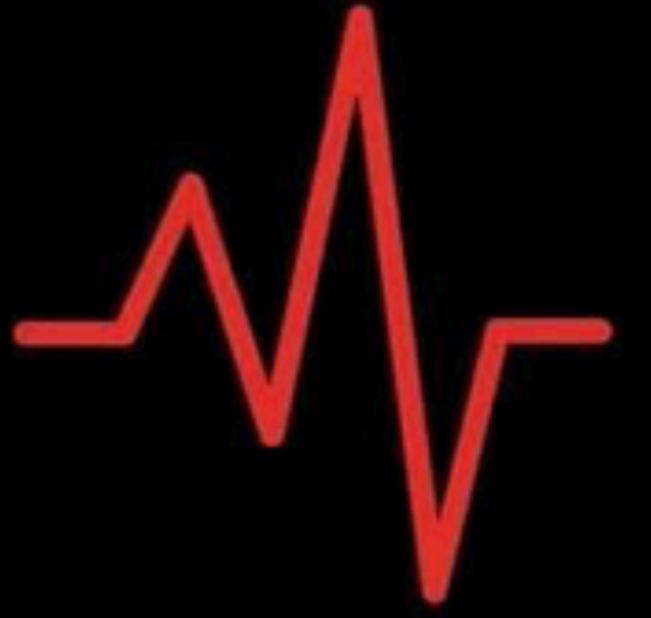
**such as the set of Rules in  
'Competitive Engineering',  
will be published in house,**

**called, our  
'Planning Specification Rules'.**

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

# 8 RULES OF LIFE

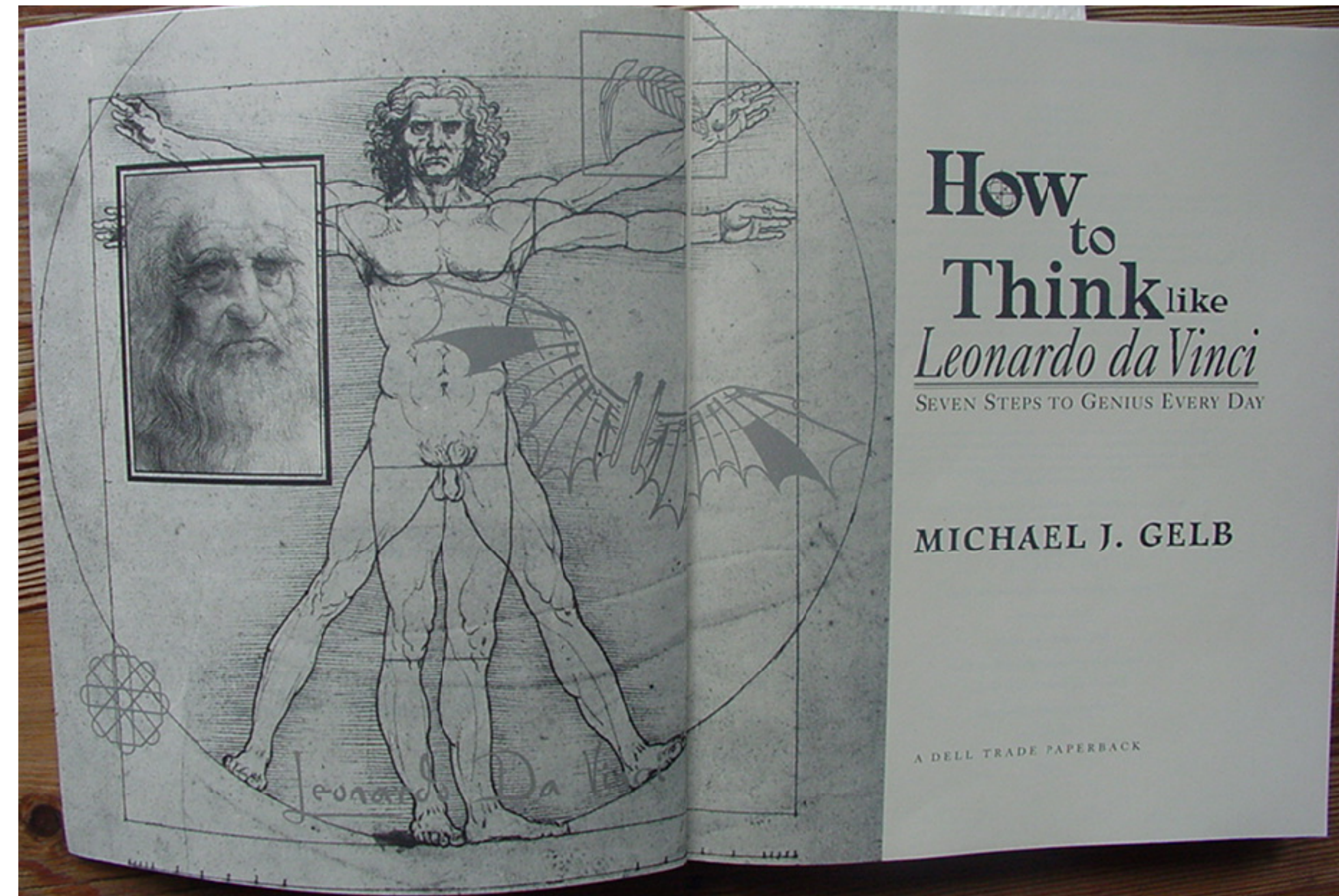
@master.thyself

1. Be adaptable
  2. Learn to say no
  3. Patience is a virtue
  4. Hard work always pays off
  5. Fail fast, fail early, fail often
  6. Stay away from toxic people
  7. Giving is better than receiving
  8. Don't let other's opinions hold you back
- 



# Da Vinci on 'Rules'

- “these *rules* will enable you to have a free and sound judgment:
- since good judgment is born of clear understanding,
- and a clear understanding comes of reasons derived from *sound rules*,
- and *sound rules* are the issue of sound experience –
- the common mother of all sciences and arts.”
- *The Notebooks of Leonardo da Vinci. 18.*





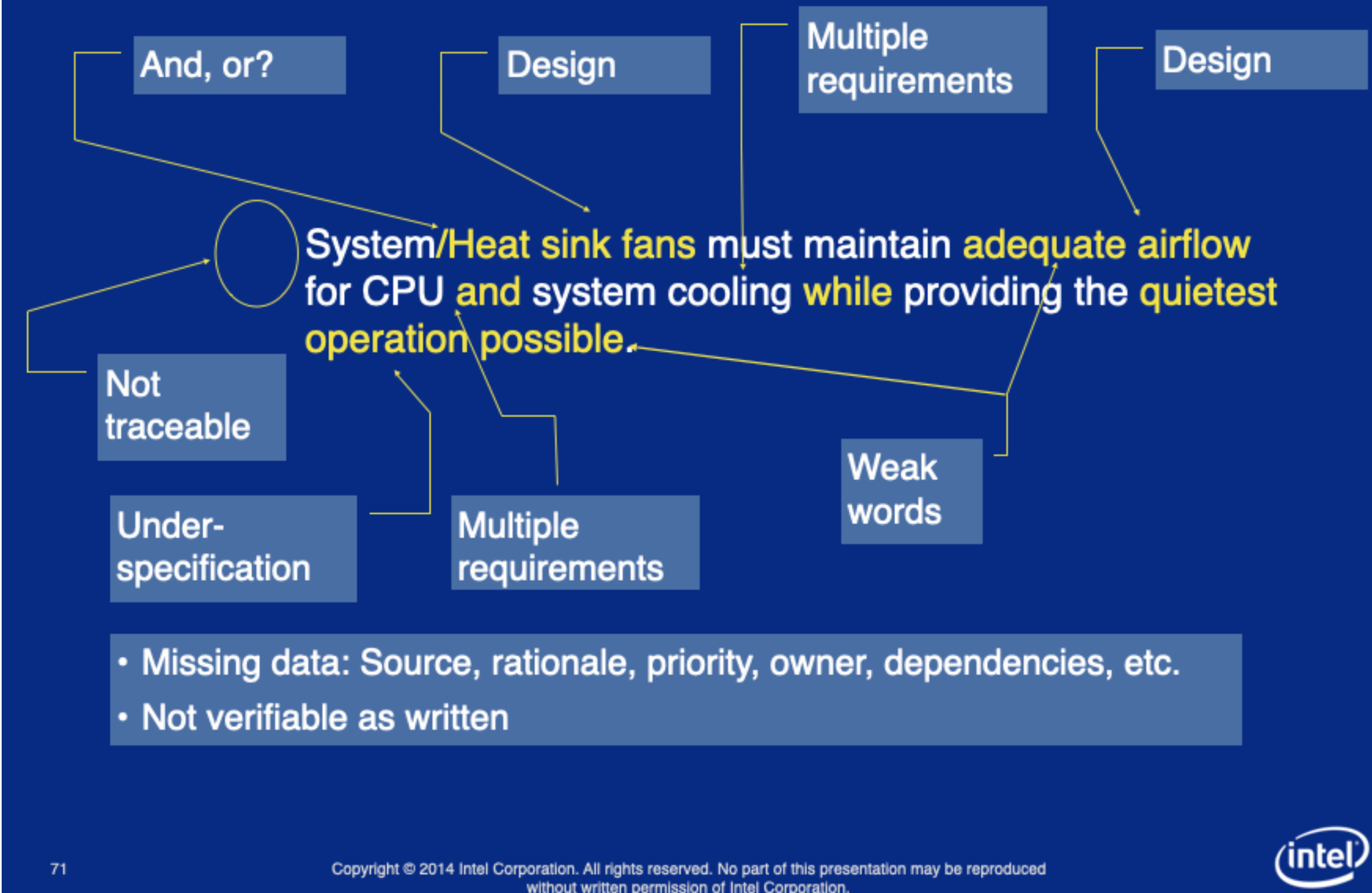
# • General Rules

Version June 22nd 20xx (apply to any plan) Owner: Tom B.

- **G1: Reference Name:**
  - Unique reference tag Capitalized for each elementary 'specification.
- **G2: Clarity**
  - Specs should be clear enough to measure or test, and clear to the intended readership.
  - Readership: shall be defined for each document.
- **G3: Unambiguous**
  - Specifications should be immediately unambiguous, as intended by the spec author, to the intended readership.
- **G4: Source references**
  - Each individual specification shall explicitly and in detail give the source (person or paragraph) of the spec.
- *Rationale: {quality control, priority, acceptance, consensus}*
- **G5: Rationale (justification, impact)**
  - Each spec of set of specs shall have a statement which directly explains what we are expecting as a result of doing it.
- **G6: Single Instance**
  - Specification shall have only one valid 'master' instance, to which all other uses will refer.
  - *Rationale: avoid confusion and multiple variations, automatic update, recognizability.*
- **G7: Fuzzy indication**
  - When we are conscious that a term or terms need further clarification or definition we will explicitly inform the reader, usually using fuzzy brackets.
- **G8: Assumptions: -Angela**
  - All underlying assumptions shall be brought out and explicitly stated.
  - Rationale: risk analysis and testing of the truth of such assumptions.
- **G9: Use The Planning Language**
  - The FM Version of The Planning Language (Planguage) will be the guide to style, consistency and definition of terms.
  - Interim guide is Gilb's: Competitive Engineering, at [www.Gilb.com](http://www.Gilb.com).

These Rules were developed for a USA Government Bank

## A Lot is Wrong, Actually...



Source: John Terzakis, Spec QC slides.

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





# Specification Rules for ‘Strategies’

Version 22 June 2XXXTG, owner Tom .

Strategies/Initiatives: Defined As: means to impact the Objectives.

**S1 (Use General Rules) - see next slide**

General Rules, Version June 22th 2000 (apply to any plan) Owner: Tom Blanco

**S2: Template:** Use the suggested template. ”Strategies Template” .

**S3.: Model:** see best practice model for other insights: “#2 Initiative June 22”

**S4: Spec:** The specification must be detailed enough and clear enough to understand the impacts of the strategy in terms of value delivered and costs.

**S5. Real Impacts:** The impacts are initially estimated on the scale of measure defined for a particular objective. So you need to specify the expected change from a defined baseline for the implementation of the strategy.

**S6: (% Impacts)** Impacts can also be expressed in terms of % progress on the real scale from the current level (0%, usually a Benchmark such as Past level), to the target level (usually a Plan level, 100% if on timel).

**S7 (Costs).** All relevant cost aspects should be estimated as well as possible.

**S8 (Risks)** All potential risks which can negatively influence the estimated impact need to be stated. This is to permit pro-active planning to contain those risks.

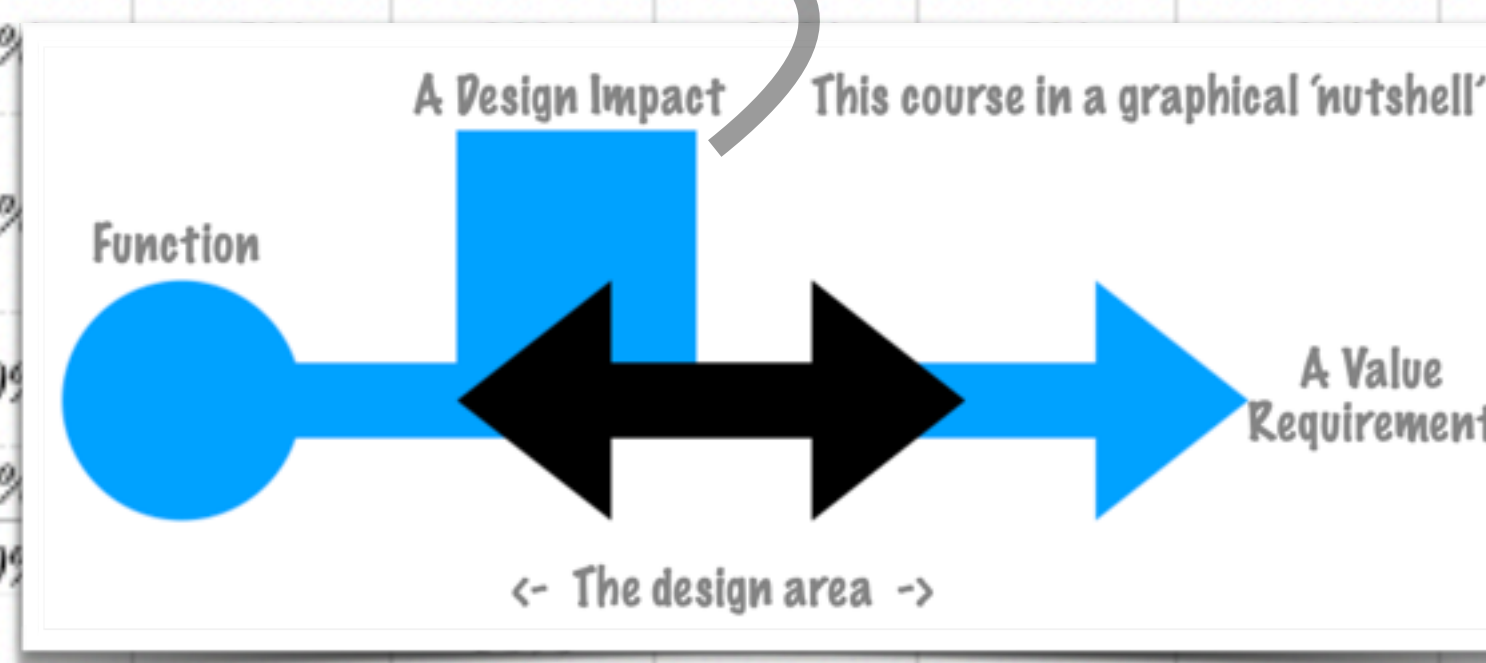
**S9 (Assumptions).** Any assumptions which the impact and timing of impact rests on need to be specified; again to that we can actively make sure these assumptions hold.

Rules here



## Planning Brexit

Strategy Proposals	Market Comms plan	Comms plan to eg. Market Players + DEx-EU	Guidance to No. 10/ Negotiators	SIs / Legal strategy (eg. Baseline design)	CM Market (Contingency?) Planning	Alternate / un-mothballed Trading Systems	REMIT Capability	Economic Modelling	Joint-Planning with Regulators + Operators etc	Sum Strategy Impacts
Risks										
1. Uncertainty in Exit Negotiations (for legislation)	0%	0%	5%	25%	0%	0%	0%	10%	15%	55%
2. Market Uncertainty (supply/ investment)	15%	15%	5%	15%	5%	10%	5%	0%	15%	85%
3. Capacity / Supply shortfalls	15%	20%	10%	20%	60%	15%	0%	10%	25%	175%
4. Price increases (to unacceptable)	5%	5%	5%						15%	80%
5. Trading Systems unavailable/ ineffective	0%	0%	5%						5%	60%
6. Reputation Risk	30%	20%	10%						25%	230%
7. Market Abuse	5%	10%	0%						15%	120%
Sum Contributions	70%	70%	40%						15%	
Percent £ budget Cost/Effectiveness										



**These Rules were suggested for a USA Government Bank**

Courtesy: C D <sup>58</sup>



# 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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## Principle 7.

# Plan the Quality-Control

Measure conformance to good planning practices,  
Motivate planners to plan properly

**The Rules will be used to do Specification  
Quality Control,  
and to find planning specification defects,**

**ie Rule Violations.**

**Example: Rule Scale: all values will be defined  
with Scales of Measure.**

**The Exit Level for a plan will be set, and  
published,**

**and will not be worse than '1 Major defect per  
300 words of text'.**

## 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

## Simple Plan QC

**Count all words in above Dept. Works and Pensions  
Which probably violate the Rule:**

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

**Exit ? If more than 1 violation of this rule, it must be re-written**

HINT:

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



# An Example for DWP (Dept. Of Work and Pensions) Of translating vague objectives Into clearer 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 ?  $\pm$  6 ? <- MW

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

**Goal** [Deadline = Next Election + 5 years, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 2 years ?  $\pm$  ? <- 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
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- There is now no excuse for cheating the system

Free bcs course on how to write clear requirements

Video Value Requirements 2020

Value Requirements video 22 April 2020, 3 hours

[https://www.youtube.com/watch?v=ZHrwQtG6IMw&list=PLKBhokJOqd3\\_wlvvOj85YhmNfNj8ZJ8M-](https://www.youtube.com/watch?v=ZHrwQtG6IMw&list=PLKBhokJOqd3_wlvvOj85YhmNfNj8ZJ8M-)





## QUALITY CONTROL RULE:

### “OBJECTIVES MUST ONLY HAVE FUTURE OUTCOMES, NOT SUGGESTED MEANS OR STRATEGIES”

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

**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

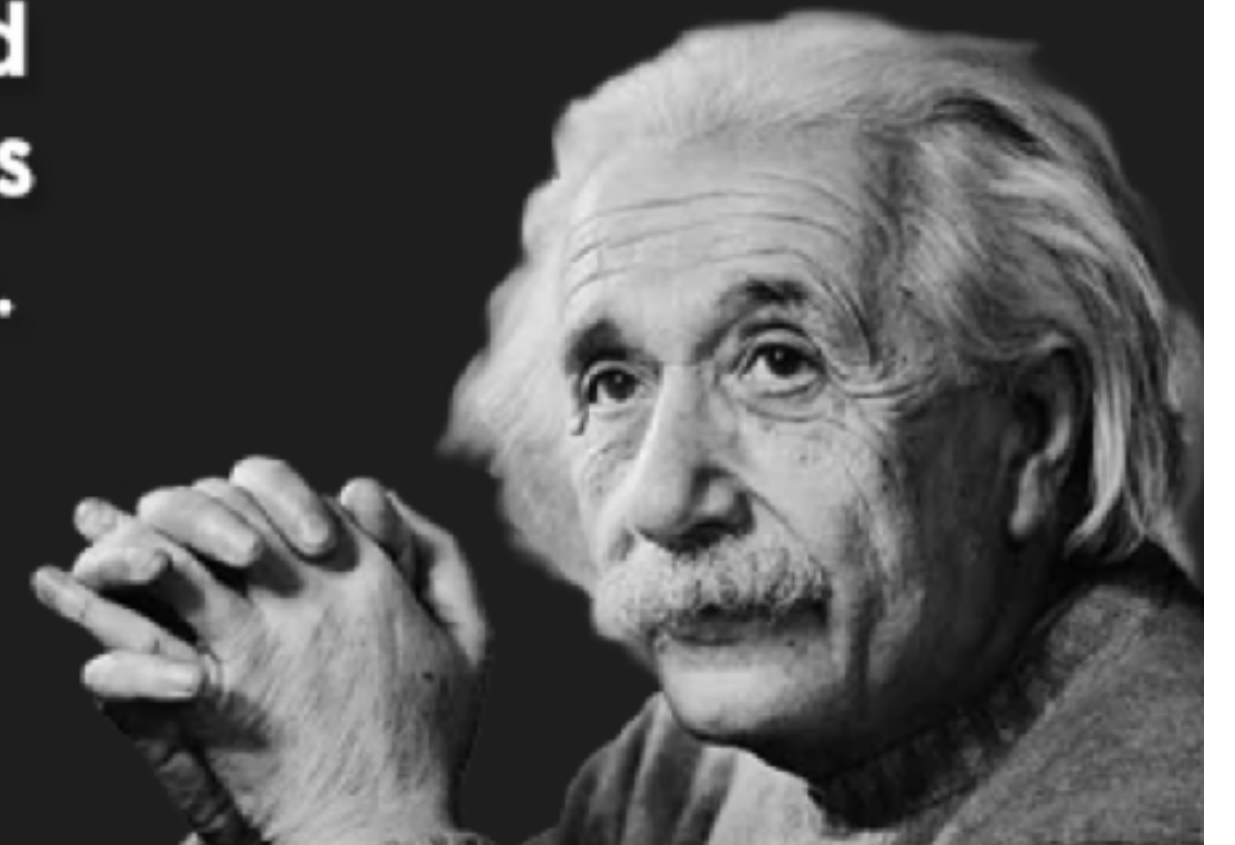
**8.2** Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors

**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

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**



## QUALITY CONTROL RULE:

**“OBJECTIVES MUST ONLY HAVE  
FUTURE OUTCOMES, NOT  
SUGGESTED MEANS OR STRATEGIES”**

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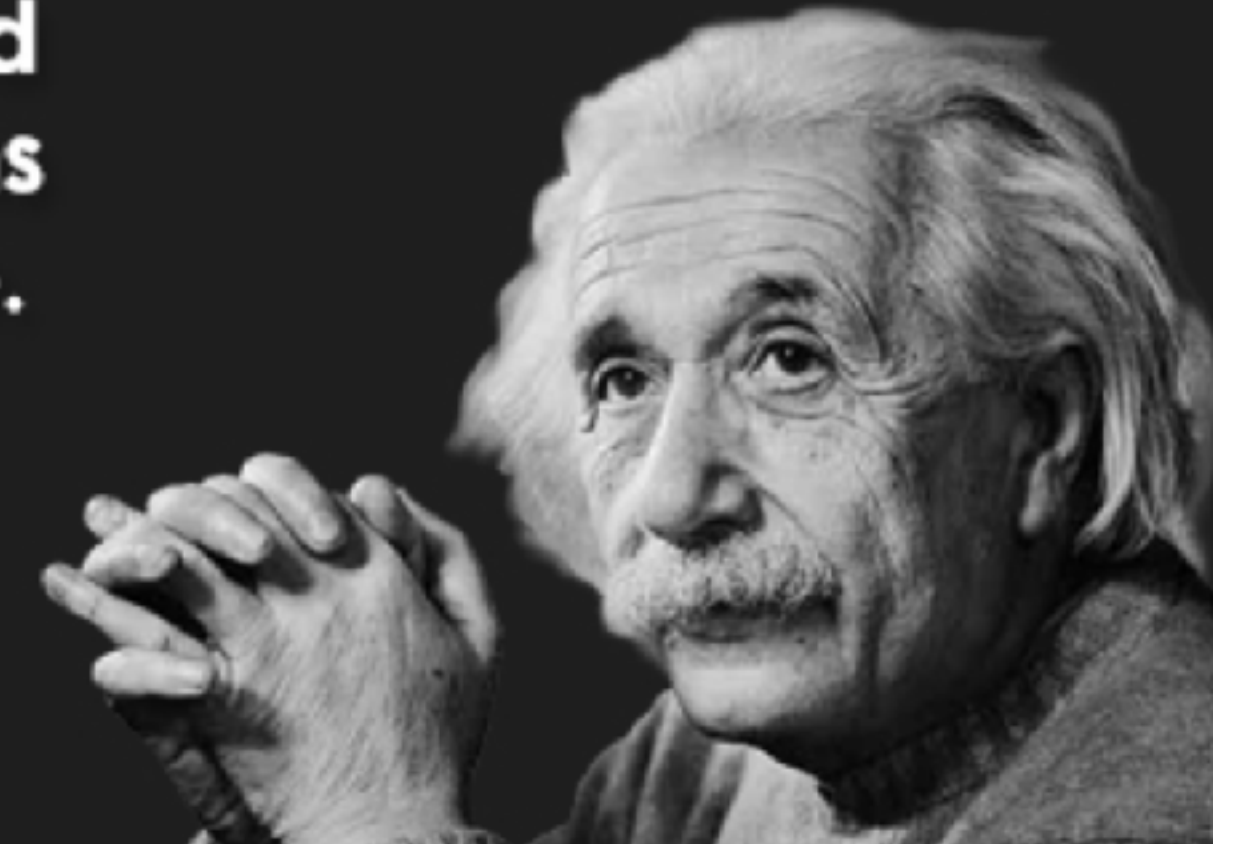
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Perfection of means and  
confusion of ends seems  
to characterize our age.

Albert Einstein



**Bold** indicates a strategy  
suggestion, a major rule  
violation

**Why is this a BAD practice?  
(needing a Spec Rule)**

**Because we risk implementing solutions and not  
getting the outcomes we want, and which are  
not even defined here.**





## 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.



Link words detect 'means' in the 'ends'

"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 workers **through** economic response and recovery programs;
4. Guiding the necessary surge in fiscal and financial stimulus **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](#)."



\* 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)

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



**ONE FIFTH** OF YOUNG PEOPLE ARE NOT IN EDUCATION, EMPLOYMENT OR TRAINING





## A 'Plan Review'

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

## = Right Values, budgets, strategies, priorities

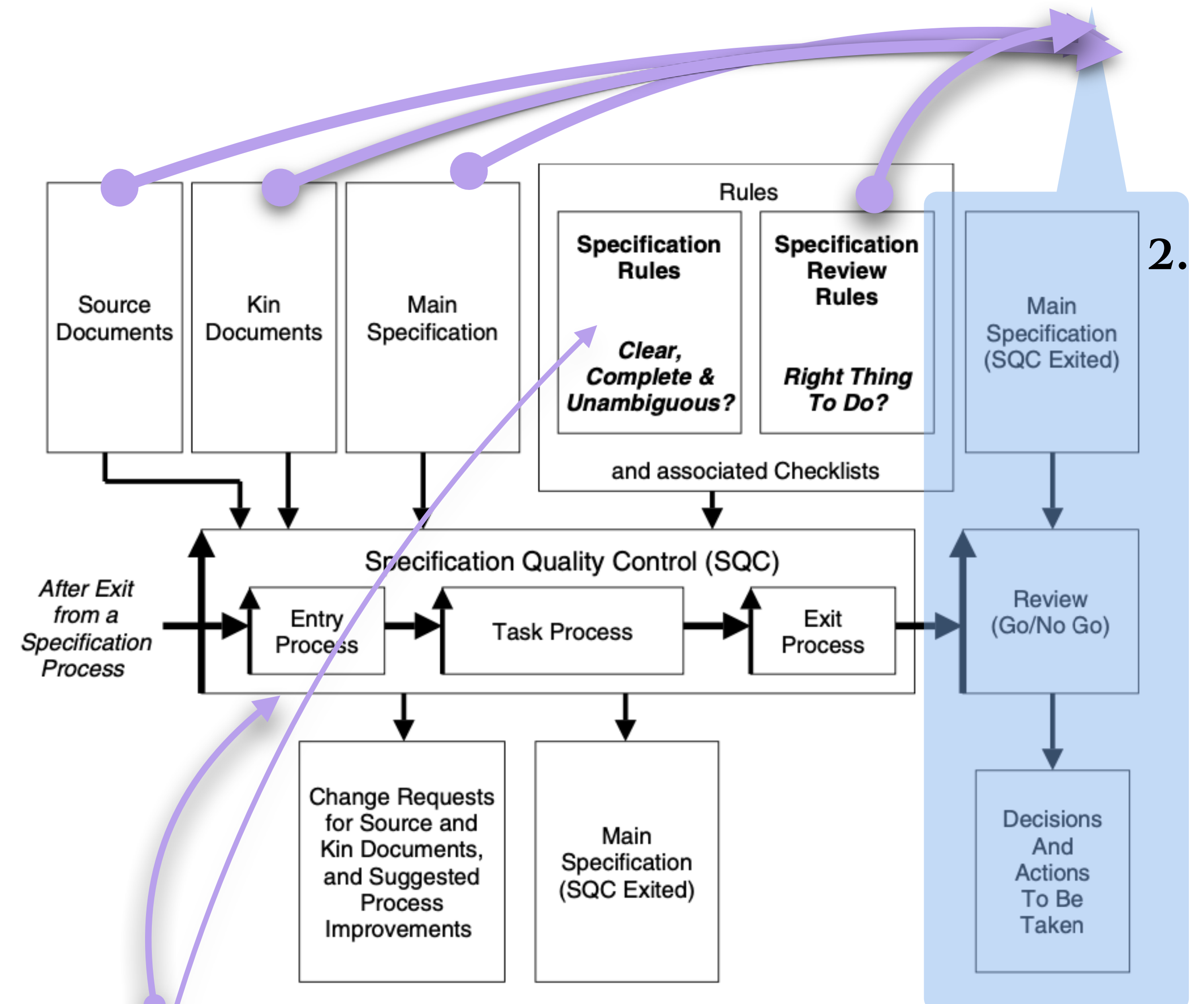
**The plan, in any section of the plan, at any time  
may be reviewed by any capable group of  
stakeholders,**

**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.**

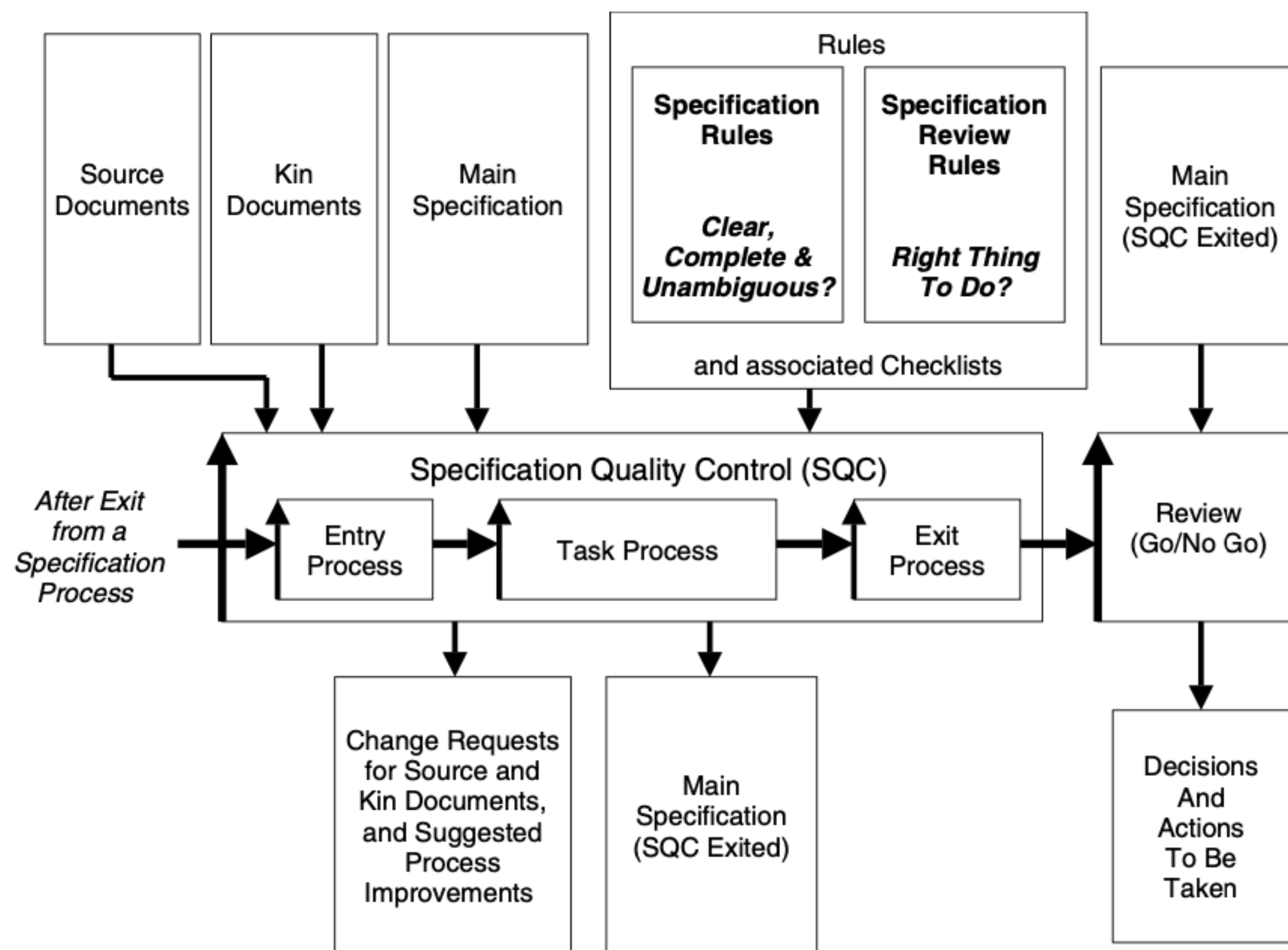


1. **“Clarity review ‘ can be done with a simple sampling Spec QC. On a spec document. By any small group, say 2 people**

2. But, reviewing a plan  
for 'relevant content'  
Requires more domain expertise,  
And more domain knowledge  
In the form of Source and Kin documents  
And reviewing 100% of the spec

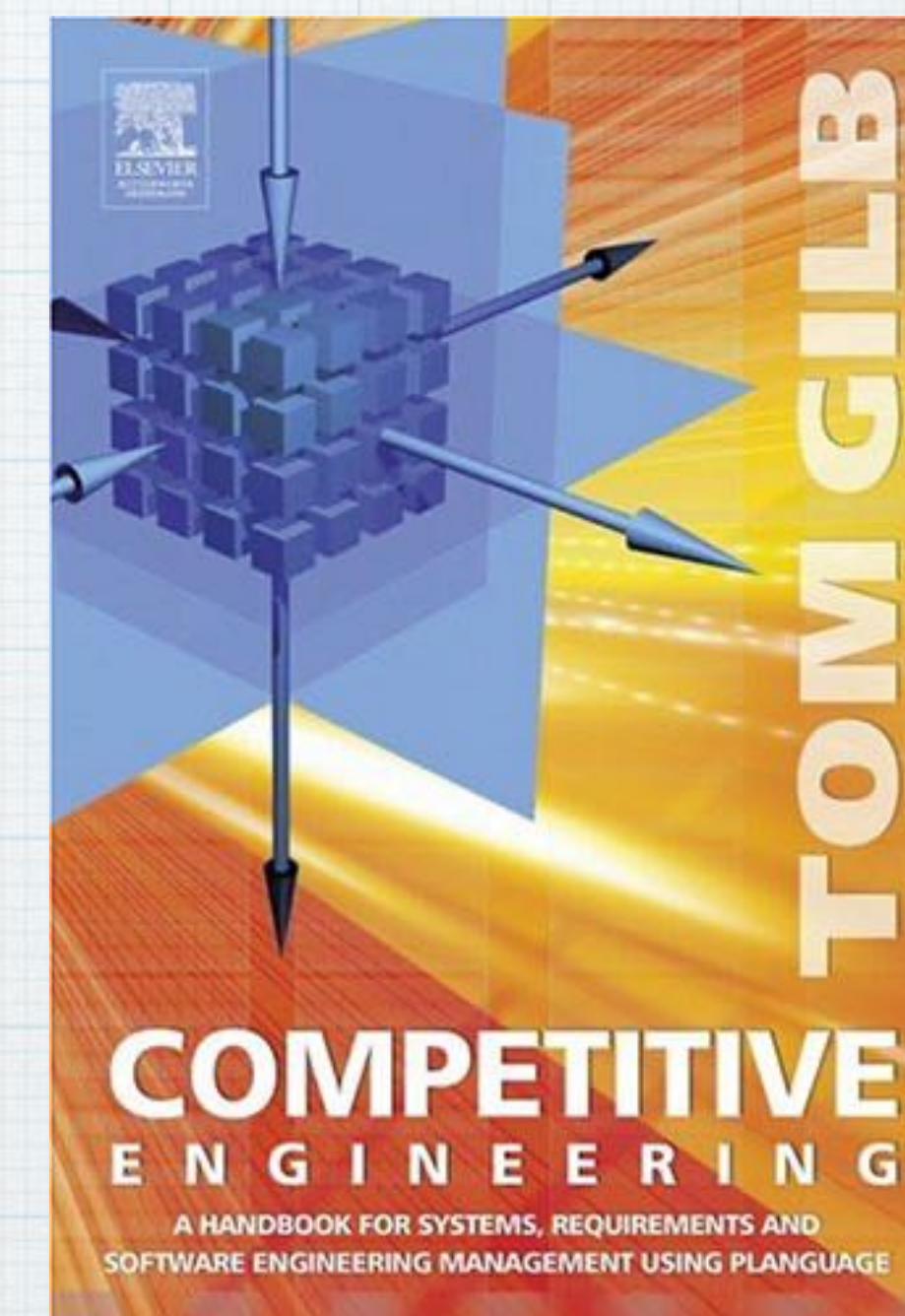


Clear? Right?

**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



<b>Plan Clarity</b>	<b>Plan Effectiveness</b>
<b>Clear</b>	<b>Main impact on Goals is estimated</b>
<b>Unambiguous</b>	<b>Side effects are estimated</b>
<b>Complete</b>	<b>Costs are estimated</b>
<b>Consistent</b>	<b>Constraint violations are specified</b>
<b>Variables quantified</b>	<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.*



# 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,  
○ which needs *clarification*, then *estimation* of impacts, then *decomposition*, then *prioritisation* for delivery.

2. The *Objective*

“Achieve higher levels of economic productivity”

- 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

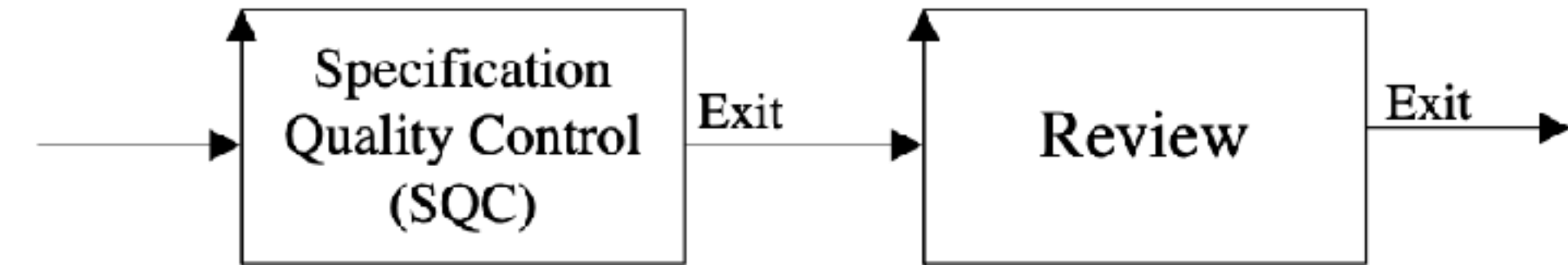


Figure 1: The two necessary distinct processes:

- Specification Quality Control (SQC) – *Is it following the standards (rules)?*
- Review – *Is it the right stuff?*

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.**

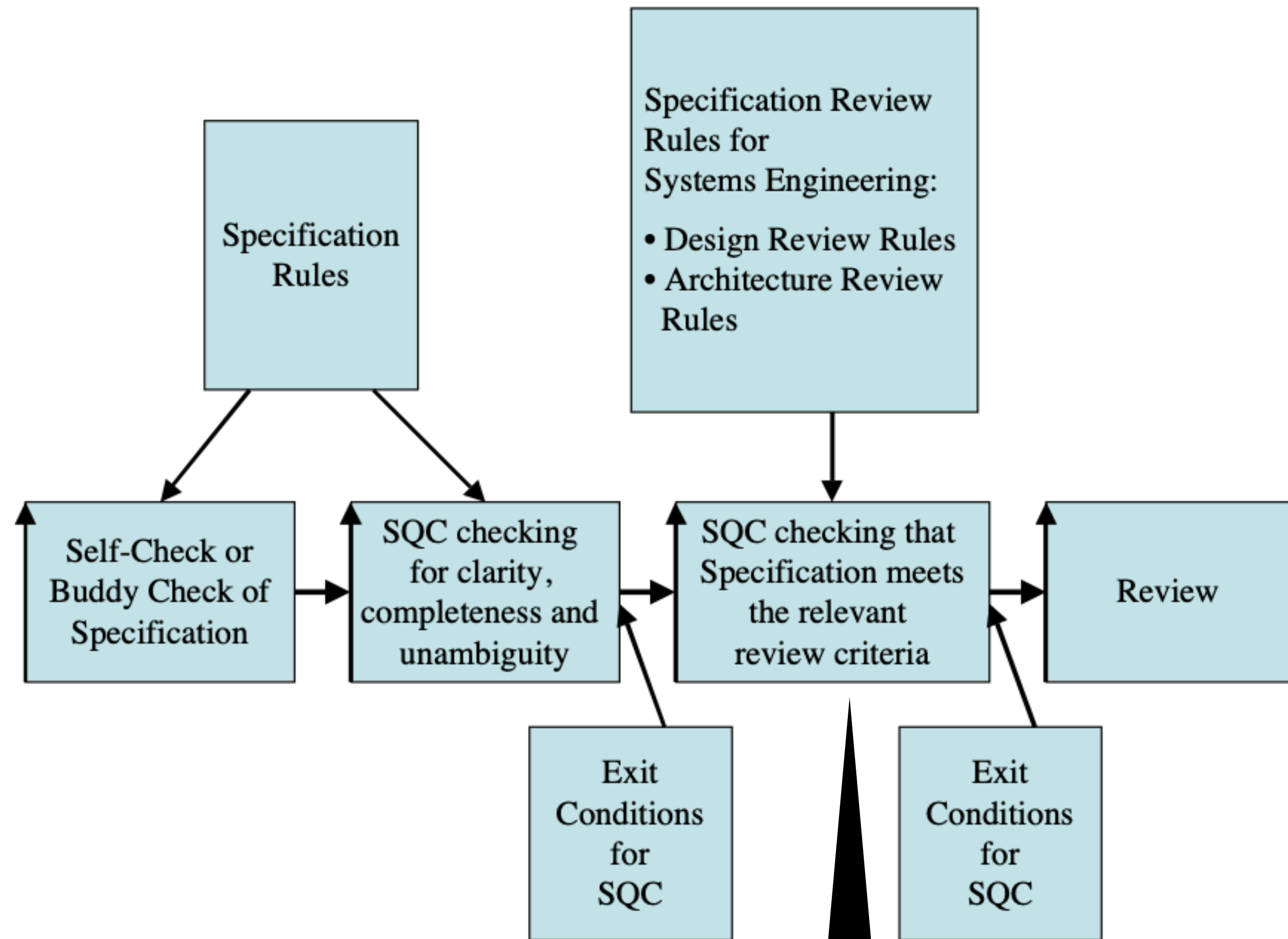


**Several levels of QC  
Might be necessary  
Before a content review  
Is worthwhile**

# 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.

Gilb: Rule Based Design Reviews 2006  
<http://www.gilb.com/dl45>



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

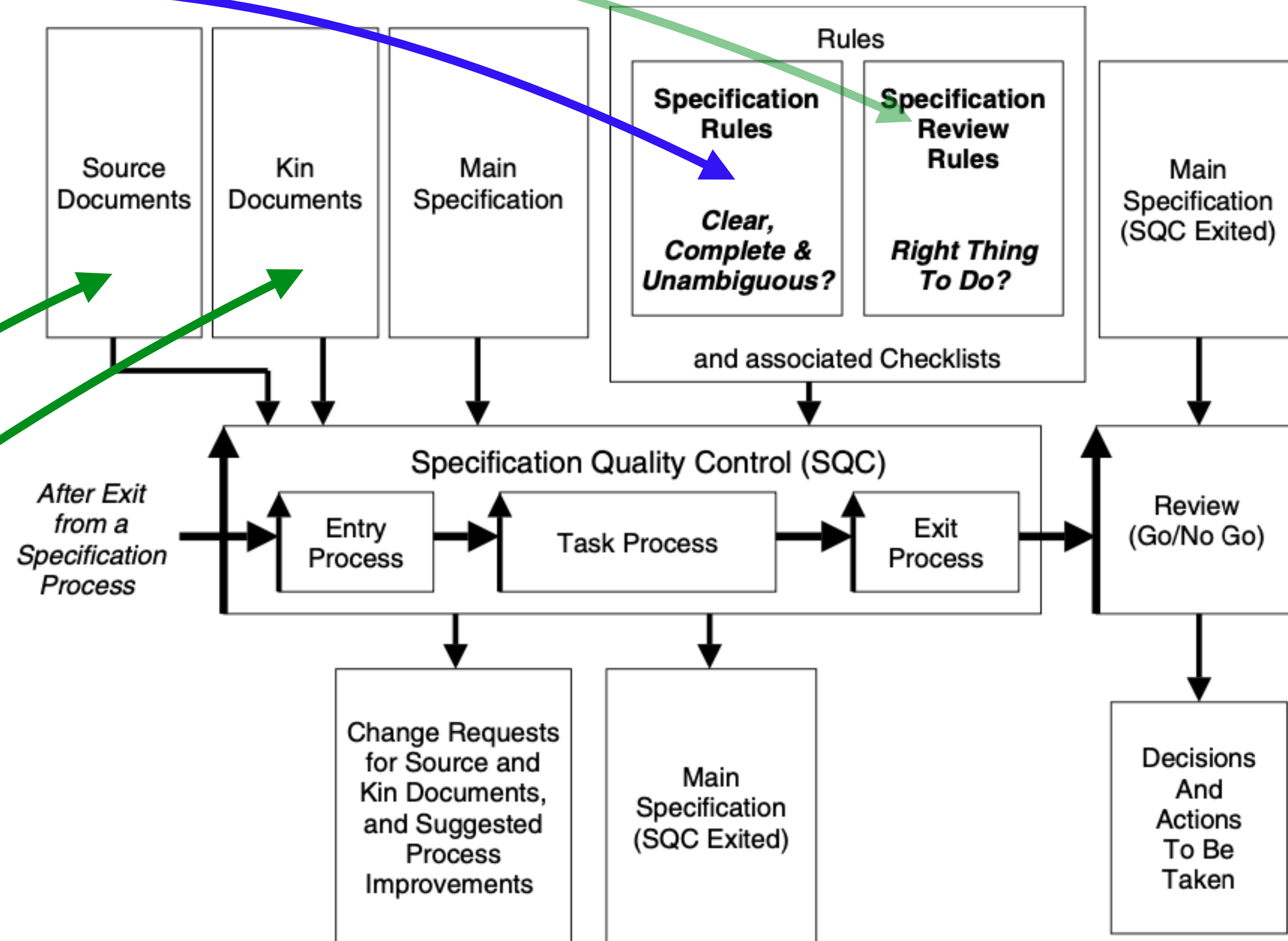


# Review Tools

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.



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!



[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 Energy ✓ ?

**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, ✓

General term  
Subset  
Selected

General term  
Total Subset  
← Defined

← General term  
used to define Scale

**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 <- big 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:

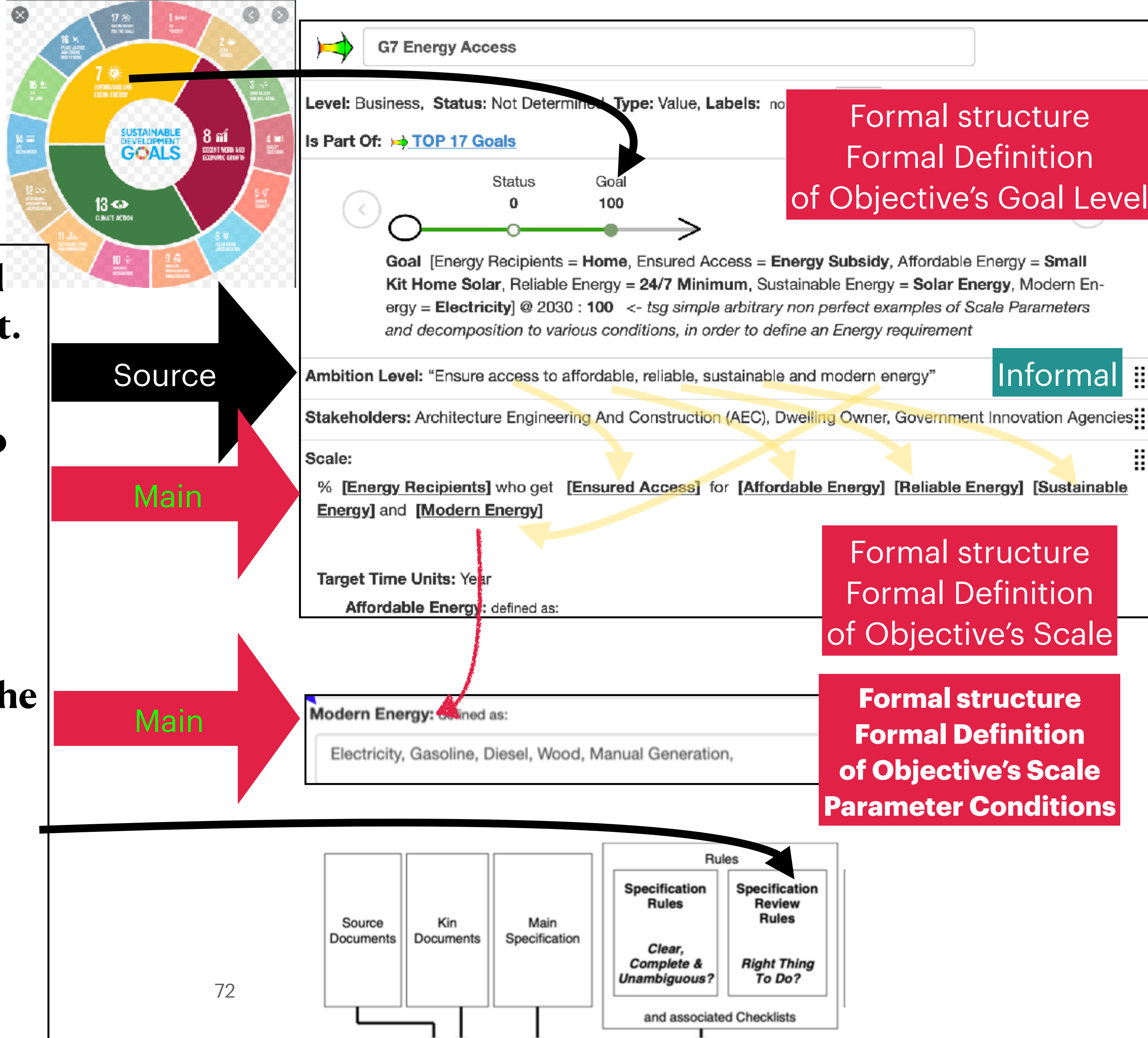


# Plan Review Rules.

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.

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## Plan an 'Incremental Rollout'

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

**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,**

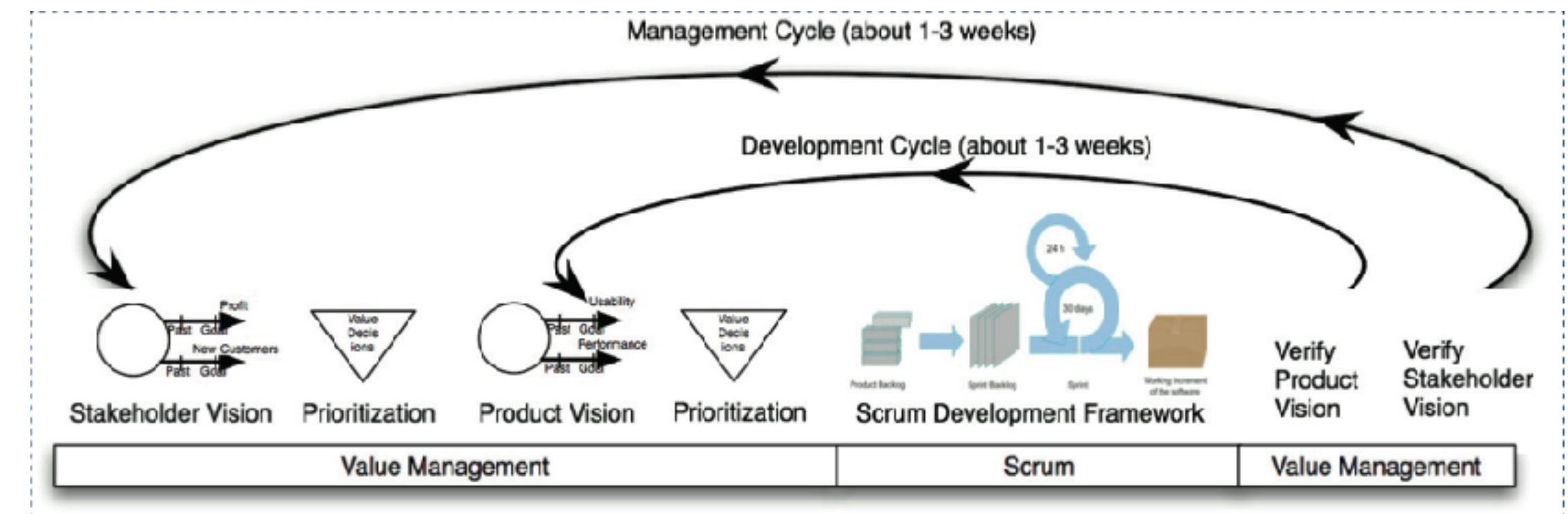
**and get some credibility.**

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

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

**and shown compared to initial estimates.**

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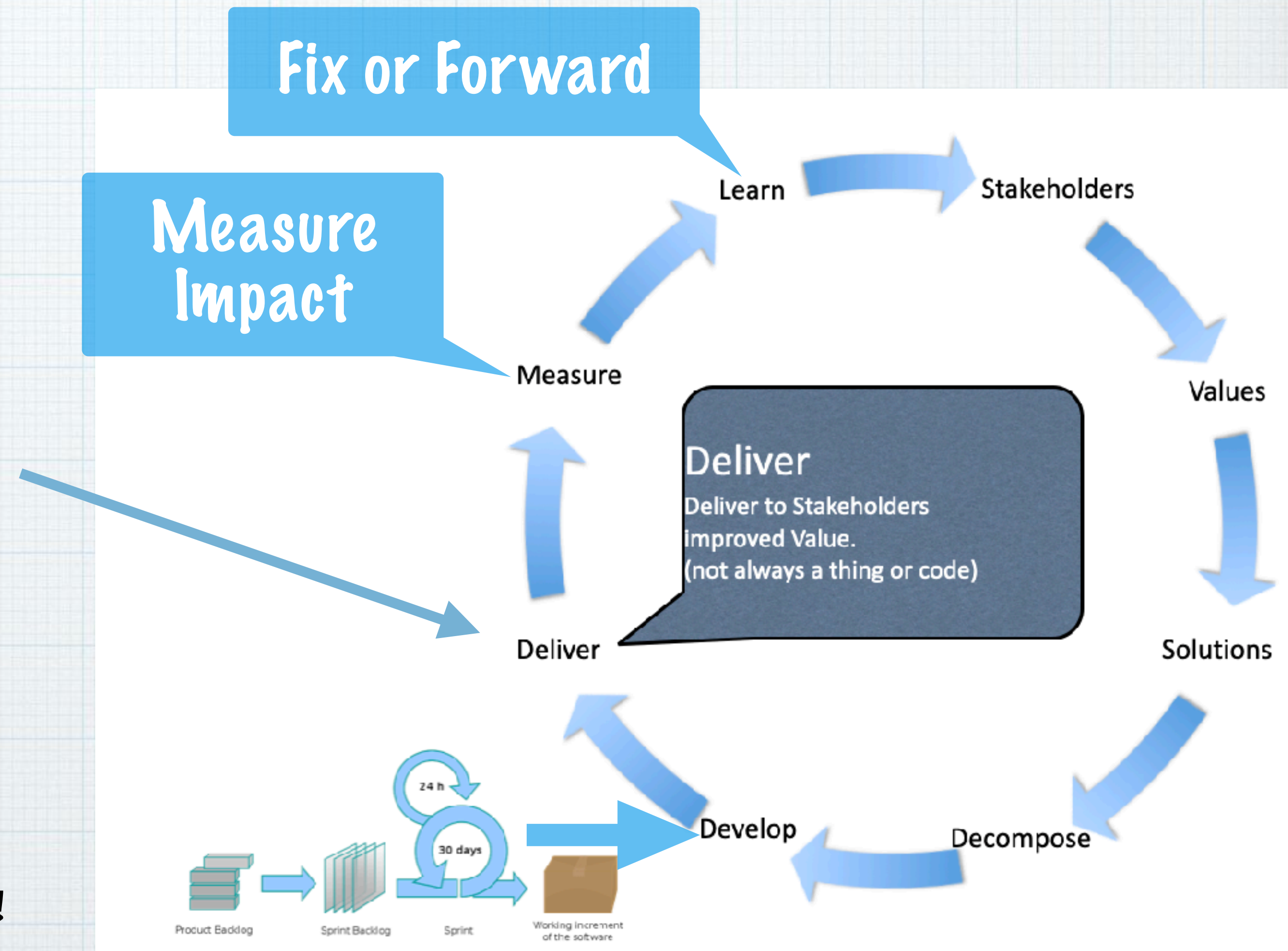




# Managing 'value delivery'

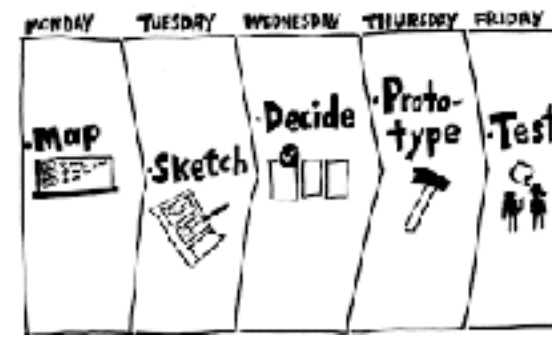
## The Process of Making It Happen for Real.

- \* **PREREQUISITES:** The stakeholder critical requirements, the design, the design decomposition to small delivery steps, the Quality Assurance, is *done*. Develop or procure your design.
- \* **DELIVER AND STUDY:** The *next* step to manage is to integrate the design step into the existing system ('deliver'), and see how it works in practice.
- \* **FIX IS NECESSARY:** Adjusting step design 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 delivery cycle, and relevant action is taken?

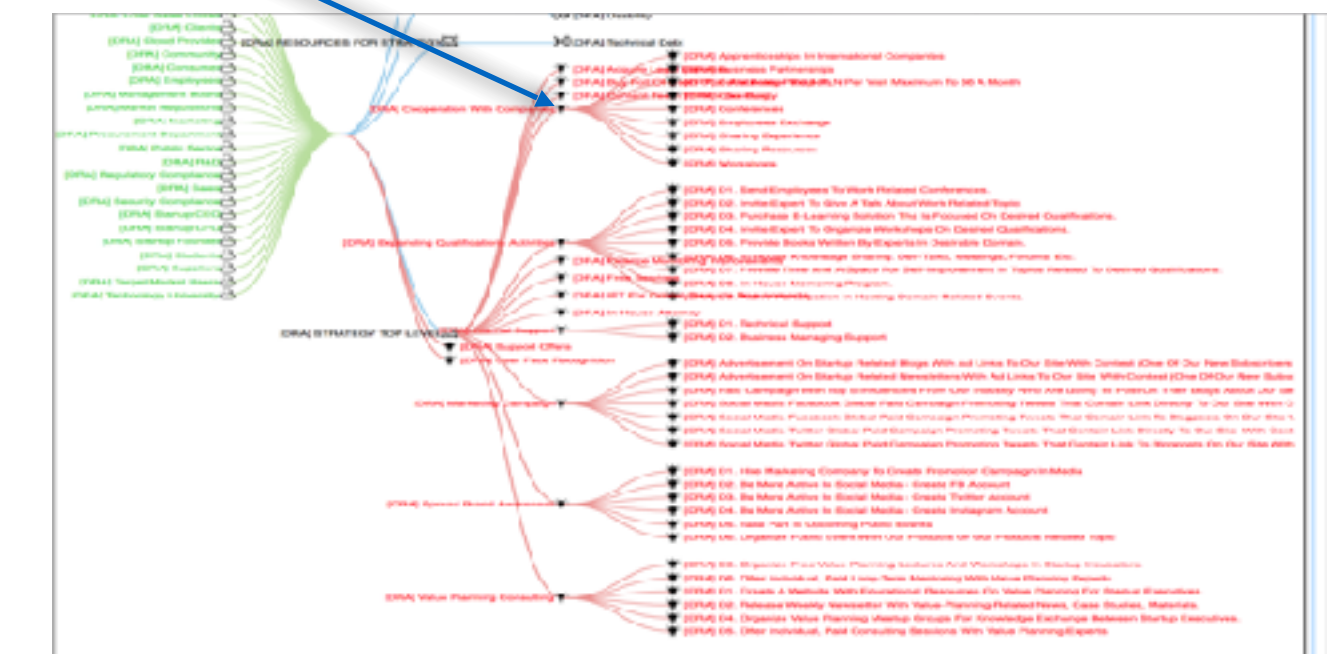
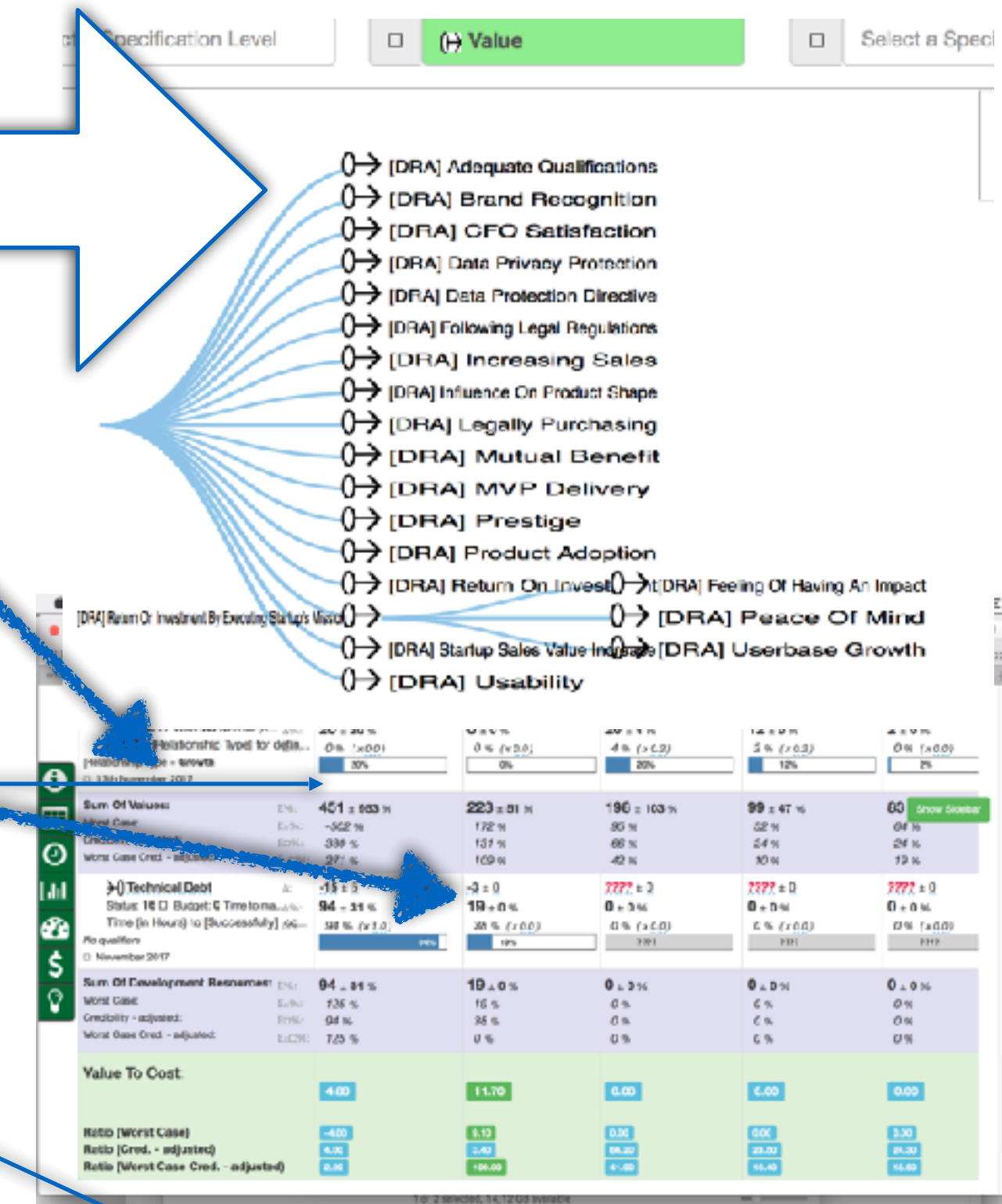




# An advanced 'Design Sprint' for grownups.



- The Startup Week\*. Agile Value Delivery \*\*
- Monday
  - Quantify critical stakeholder values
- Tuesday
  - Identify top 10 strategies or designs to each 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



- \* 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)
- \*\* <http://www.gilb.com/dl812>, [gilb.com/dl568](http://www.gilb.com/dl568)
- DL812: extensive slides, DL568: short paper, see 'Presenter Notes' in this slide.

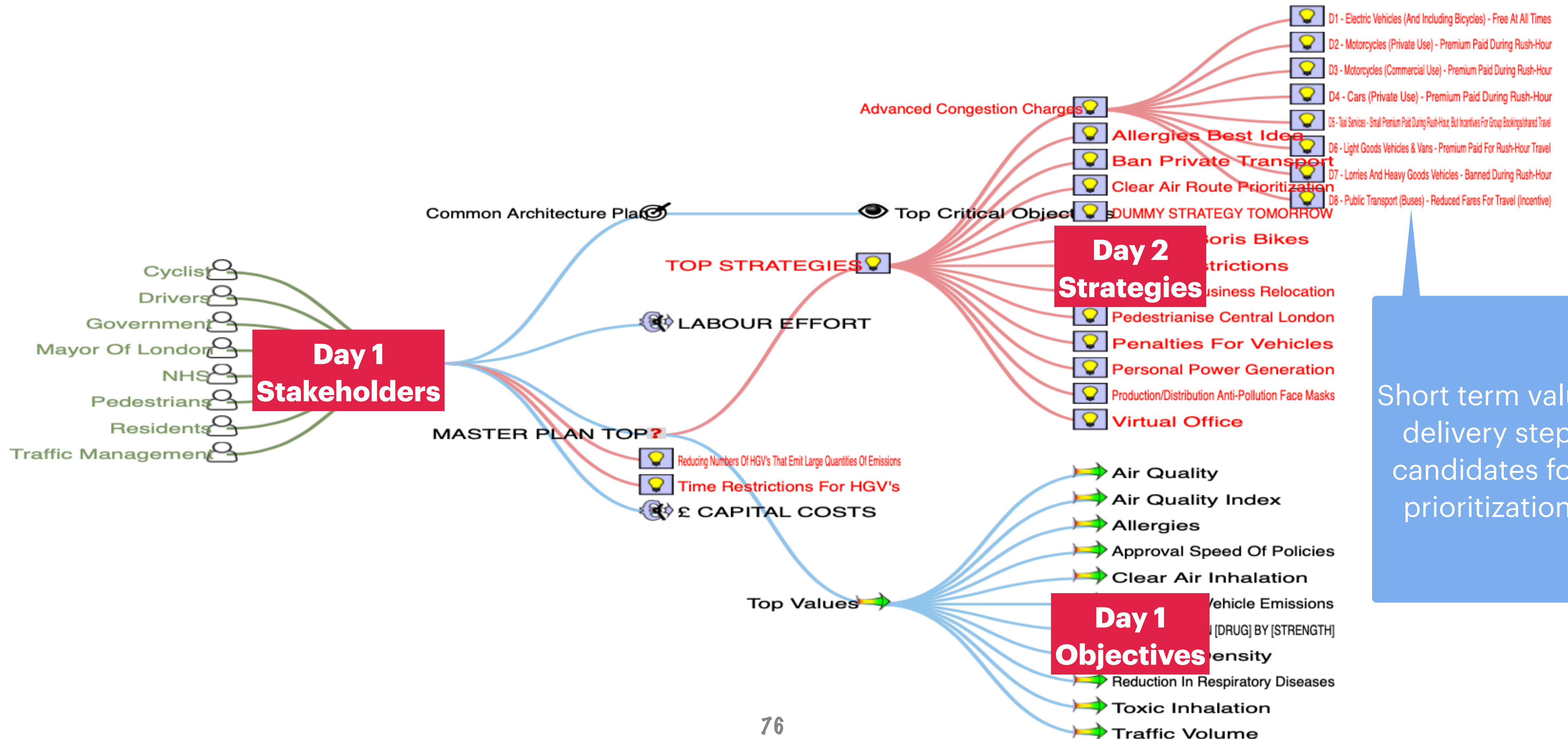


# BCS Course London Pollution case

## 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.








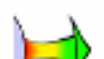
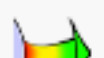
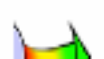





Value Table: estimate how  
cost-effective your pollution  
strategies are

This is 'day 3' of Startup  
week planning

A Top-level, critical overview  
of Objectives and Strategies

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

Requirements	💡 HGV Restrictions	💡 Clear Air Route P...	💡 Advanced Congesti...	💡 Penalties For V...
 <b>Air Quality Index</b> =: Past: 135 → Wish: 67 µg/m³ Δ%:	<div><div>-7%</div></div>	<div><div>0%</div></div>	<div><div>74%</div></div>	<div><div>88%</div></div>
 <b>Air Quality</b> =: Status: 9.5k → Goal: 150 People Δ%:	<div><div>0%</div></div>	<div><div>0%</div></div>	<div><div>37%</div></div>	<div><div>43%</div></div>
 <b>Allergies</b> =: Status: 10 → Wish: 1 number of ... Δ%:	<div><div>-56%</div></div>	<div><div>33%</div></div>	<div><div>44%</div></div>	<div><div>22%</div></div>
 <b>Approval Speed Of Policies:</b> Status: 6 → Goal: 3 Mnths Δ%:	<div><div>-33%</div></div>	<div><div>0%</div></div>	<div><div>0%</div></div>	<div><div>0%</div></div>
 <b>NO. PRESCRIPTION [DRUG] BY ...</b> Status: 1k → Wish: 100 NUMBER Δ%:	<div><div>0%</div></div>	<div><div>0%</div></div>	<div><div>39%</div></div>	<div><div>50%</div></div>
 <b>Clear Air Inhalation</b> =: Status: 20 → Wish: 70 % Δ%:	<div><div>4%</div></div>	<div><div>40%</div></div>	<div><div>36%</div></div>	<div><div>50%</div></div>
 <b>Particle Density</b> =: Status: 1k → Wish: 300 Number of Δ%:	<div><div>0%</div></div>	<div><div>0%</div></div>	<div><div>54%</div></div>	<div><div>50%</div></div>
 <b>Reduction In Respiratory Di...</b> Status: 1k → Wish: 100 PATIENTS Δ%:	<div><div>0%</div></div>	<div><div>17%</div></div>	<div><div>17%</div></div>	<div><div>78%</div></div>
 <b>Toxic Inhalation</b> =: Status: 100 → Wish: 10 Max Mg Pol Δ%:	<div><div>-1%</div></div>	<div><div>0%</div></div>	<div><div>61%</div></div>	<div><div>50%</div></div>
<b>Sum Of Values:</b> Σ%:	<b>-93 %</b>	<b>101 %</b>	<b>362 %</b>	<b>431 %</b>
 <b>LABOUR EFFORT</b> =: Status: 0 → Budget: 1k WORK MONTHS Δ%:	<div><div>10%</div></div>	<div><div>10%</div></div>	<div><div>30%</div></div>	<div><div>30%</div></div>
 <b>£ CAPITAL COSTS</b> =: Status: 0 → Budget: 1m Δ%:	<div><div>3%</div></div>	<div><div>30%</div></div>	<div><div>30%</div></div>	

Day 3  
Impact  
Estimation

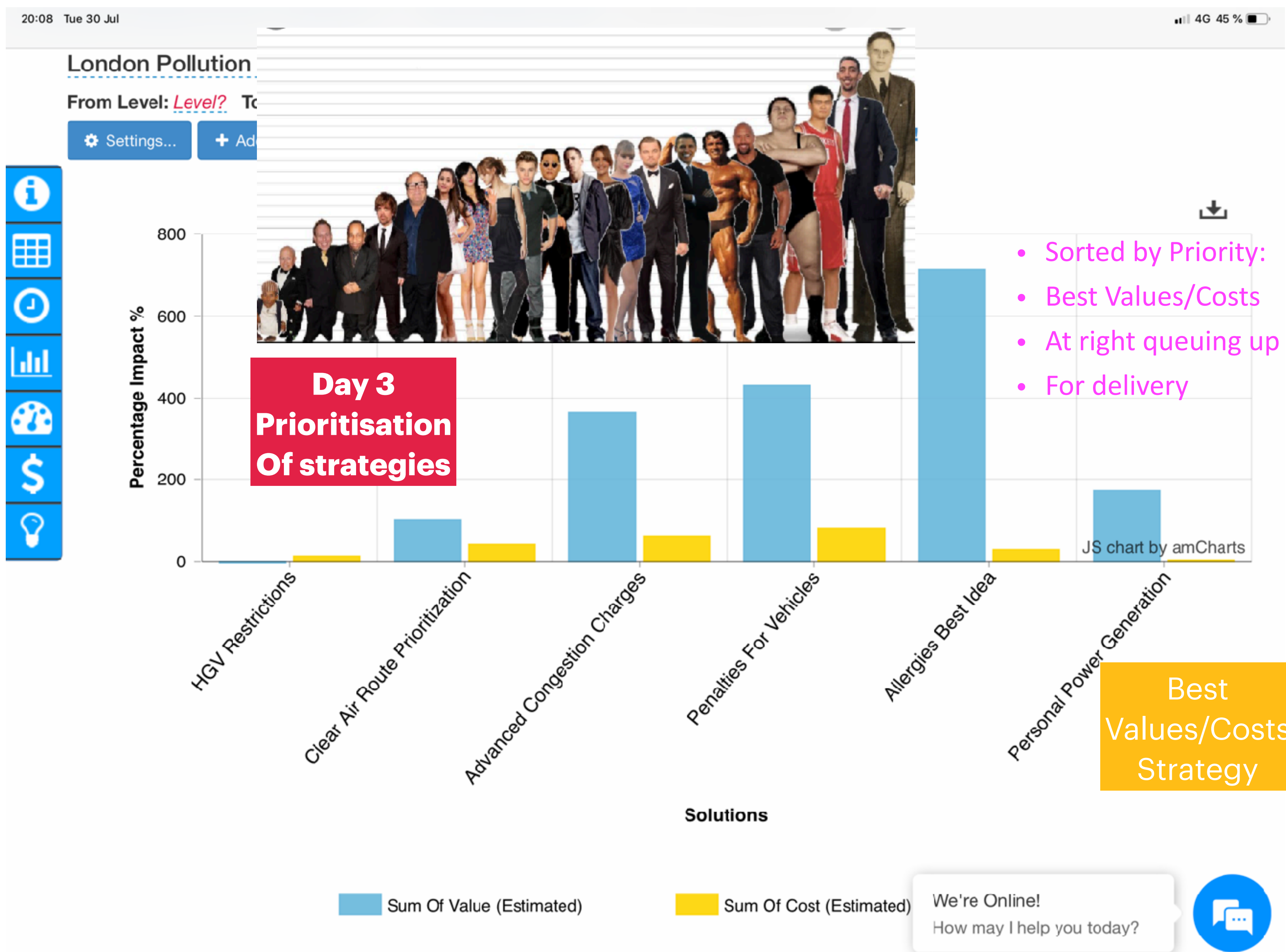
We're Online!  
How may I help you today?



Day 3:  
Value Table: estimate  
how cost-effective  
your designs are.

The bar chart  
presentation of the  
Table data

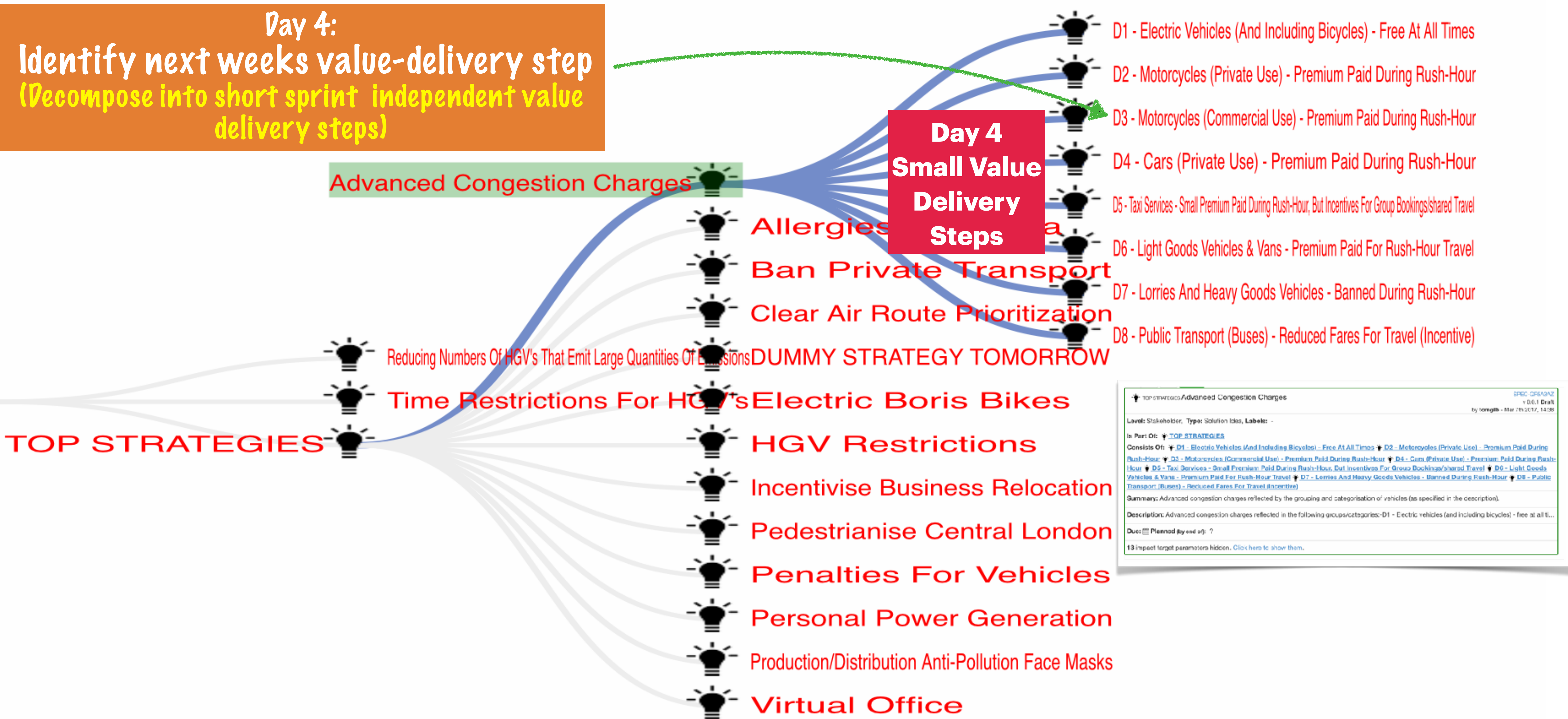
Requirements	HGV Restrictions	Clear Air Route P...	Advanced Congesti...	Penalties For V...
Air Quality Index Past: 135 → Wish: 67 µg/m³ Δ%:	-7%	0%	74%	88%
Air Quality Status: 9.5k → Goal: 150 People Δ%:	0%	0%	37%	43%
Allergies Status: 10 → Wish: 1 number of ... Δ%:	-56%	33%	44%	22%
Approval Speed Of Policies Status: 6 → Goal: 3 Mnths Δ%:	-33%	0%	0%	0%
NO. PRESCRIPTION (DRUG) BY ... Status: 1k → Wish: 100 NUMBER Δ%:	0%	11%	39%	50%
Clear Air Inhalation Status: 20 → Wish: 70 % Δ%:	4%	40%	36%	50%
Particle Density Status: 1k → Wish: 300 Number of Δ%:	0%	0%	54%	50%
Reduction In Respiratory Di... Status: 1k → Wish: 100 PATIENTS Δ%:	0%	17%	17%	78%
Toxic Inhalation Status: 100 → Wish: 10 Max Mg Po... Δ%:	-1%	0%	61%	50%
Sum Of Values:	Σ%: -93 %	101 %	362 %	431 %
LABOUR EFFORT Status: 0 → Budget: 1k WORK MONTHS Δ%:	10%	10%	30%	30%
£ CAPITAL COSTS Status: 0 → Budget: 1m Δ%:	3%	30%	30%	30%





Day 4:

Identify next weeks value-delivery step  
(Decompose into short sprint independent value delivery steps)



## London Pollution Planning BCS 2016



# Identify next week's value-delivery step.

## Sort the 'sprint sized' value delivery designs by values/costs delivery priority

### Expanding Qualification Activities Value Table

From Level: *Level?* To Level: *Level?*

Settings...	+ Add	Sort	Duplicate...	Undo...	ABSOLUTE	Help me!	Show Sidebar
			D3. Purchase E-L...	D2. Invite Exper...	D1. Send Employee...	D4. Invite Exper...	
<b>Requirements</b>							
<b>Adequate Qualifications</b>	=:						
Status: 39 → Wish: 0 % [Employee...]	Δ%:		97%	38%	51%	23%	
% [Employees] have acquired [Skill Le...]							
<b>Adequate Qualifications</b>	=:						
Status: 61 → Wish: 0 % [Employee...]	Δ%:		93%	26%	2%	67%	
% [Employees] have acquired [Skill Le...]							
<b>Adequate Qualifications</b>	=:						
Status: 0 → Wish: 50 % [Employee...]	Δ%:		60%	36%	30%	44%	
% [Employees] have acquired [Skill Le...]							
<b>Adequate Qualifications</b>	=:						
Status: 0 → Wish: 35 % [Employee...]	Δ%:		6%	31%	14%	34%	
% [Employees] have acquired [Skill Le...]							
<b>Adequate Qualifications</b>	=:						
Status: 0 → Wish: 15 % [Employee...]	Δ%:		0%	13%	7%	56%	
% [Employees] have acquired [Skill Le...]							
<b>Of Values:</b>	Σ%:		246 %	144 %	104 %	228 %	



### Expanding Qualification A

From Level: *Level?* To Level: *Level?*

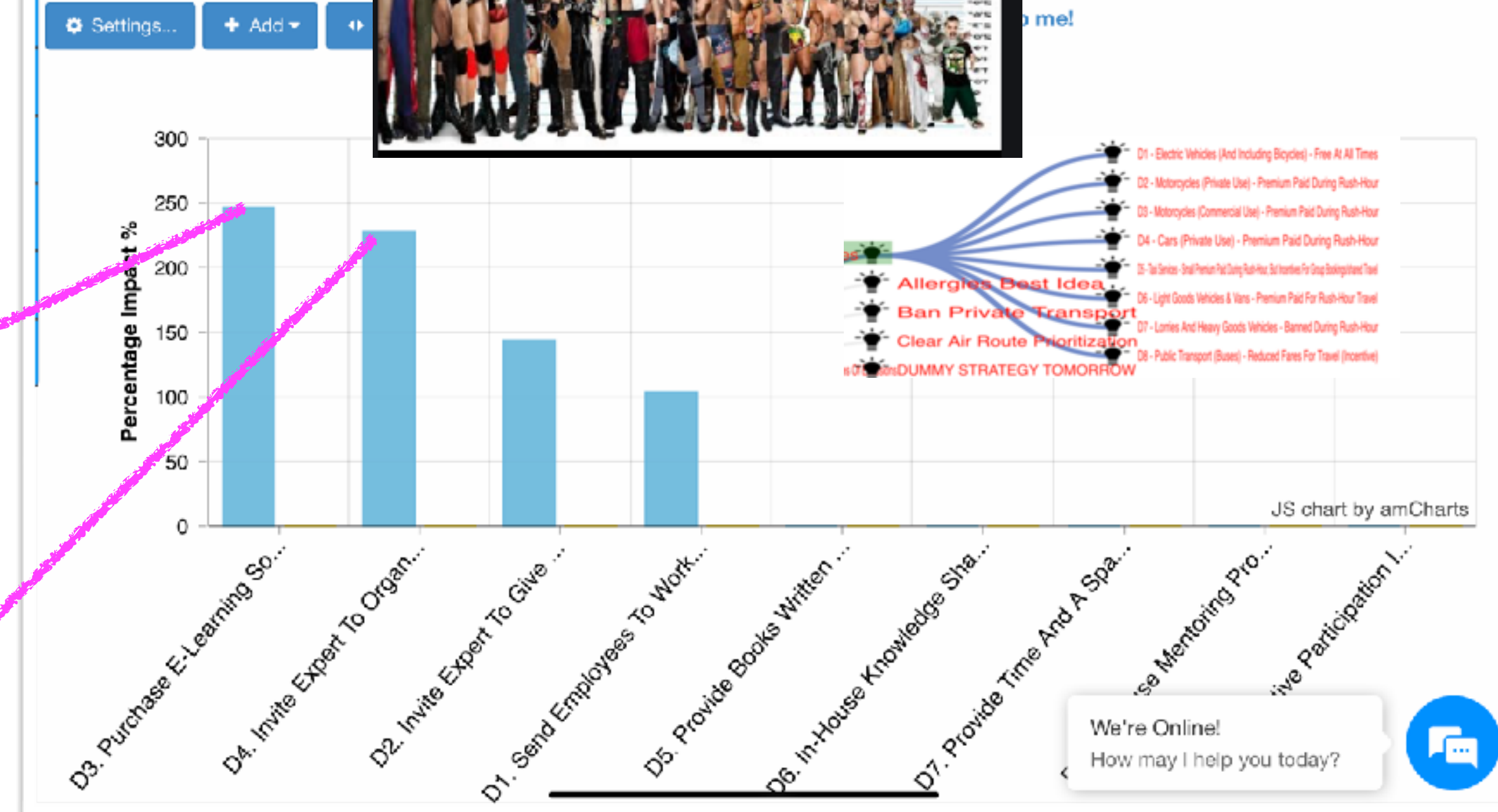


FIGURE: HERE, FROM ANOTHER PLAN, IS A VALUE TABLE FOR DECIDING WHICH ONES OF THE SUB-DESIGNS ARE TO BE PRIORITIZED NEAR TERM (SOURCE POLISH EXPORT PLAN)

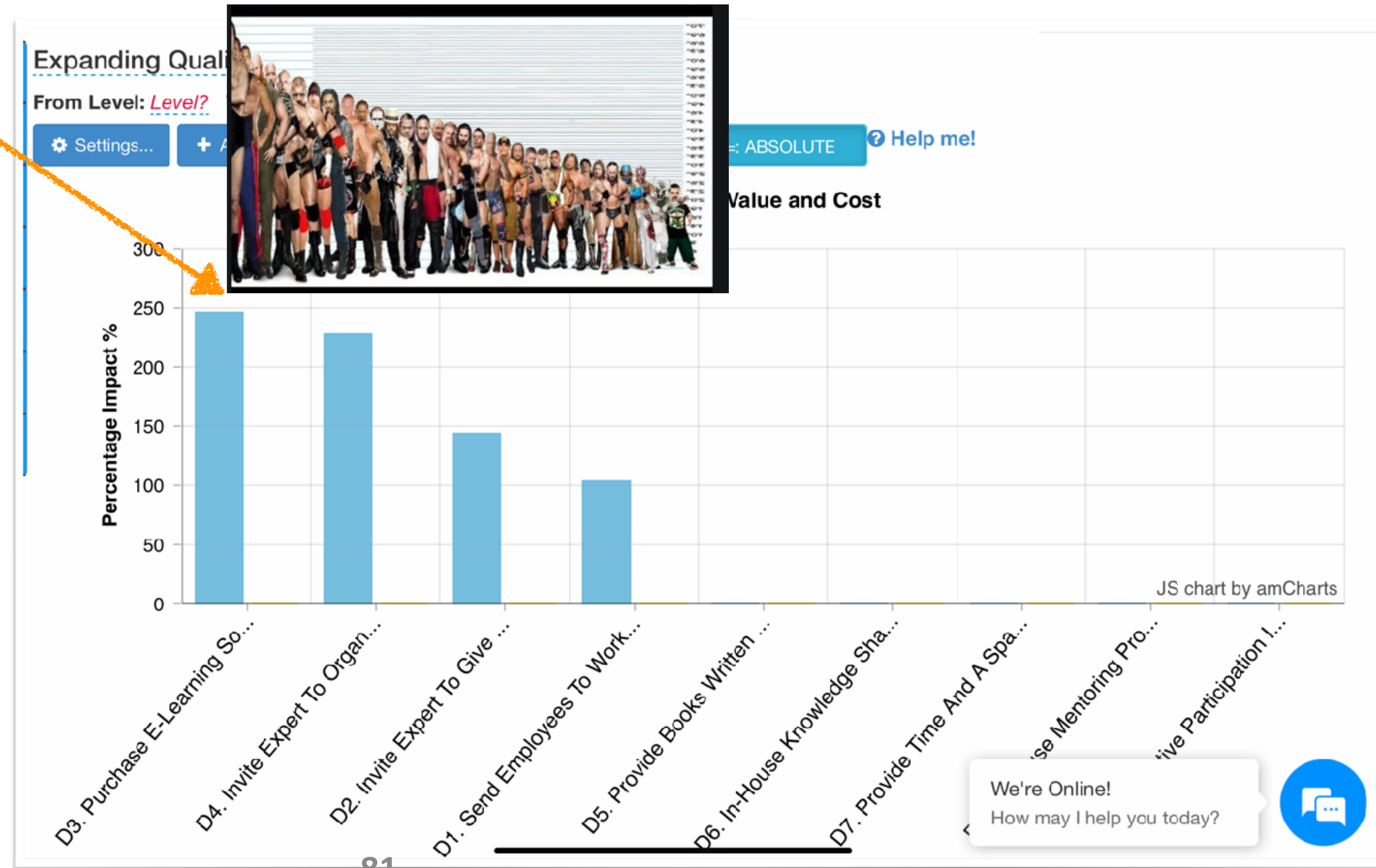
FIGURE: THIS BAR CHART IS EXTRACTED FROM THE TABLE AT LEFT, WE ASKED VALPLAN.NET TO SORT BY IMPACT TOTAL ON ALL VALUE REQUIREMENTS. LEFT-SIDE IS HEAD OF VALUE DELIVERY QUEUE THIS IS 'AUTOMATIC PRIORITIZATION OF DESIGN'. (SOURCE POLISH EXPORT PLAN)



Day 5:  
Present Plans to Management,  
ask for approval to deliver the value.



- “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?”





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.**

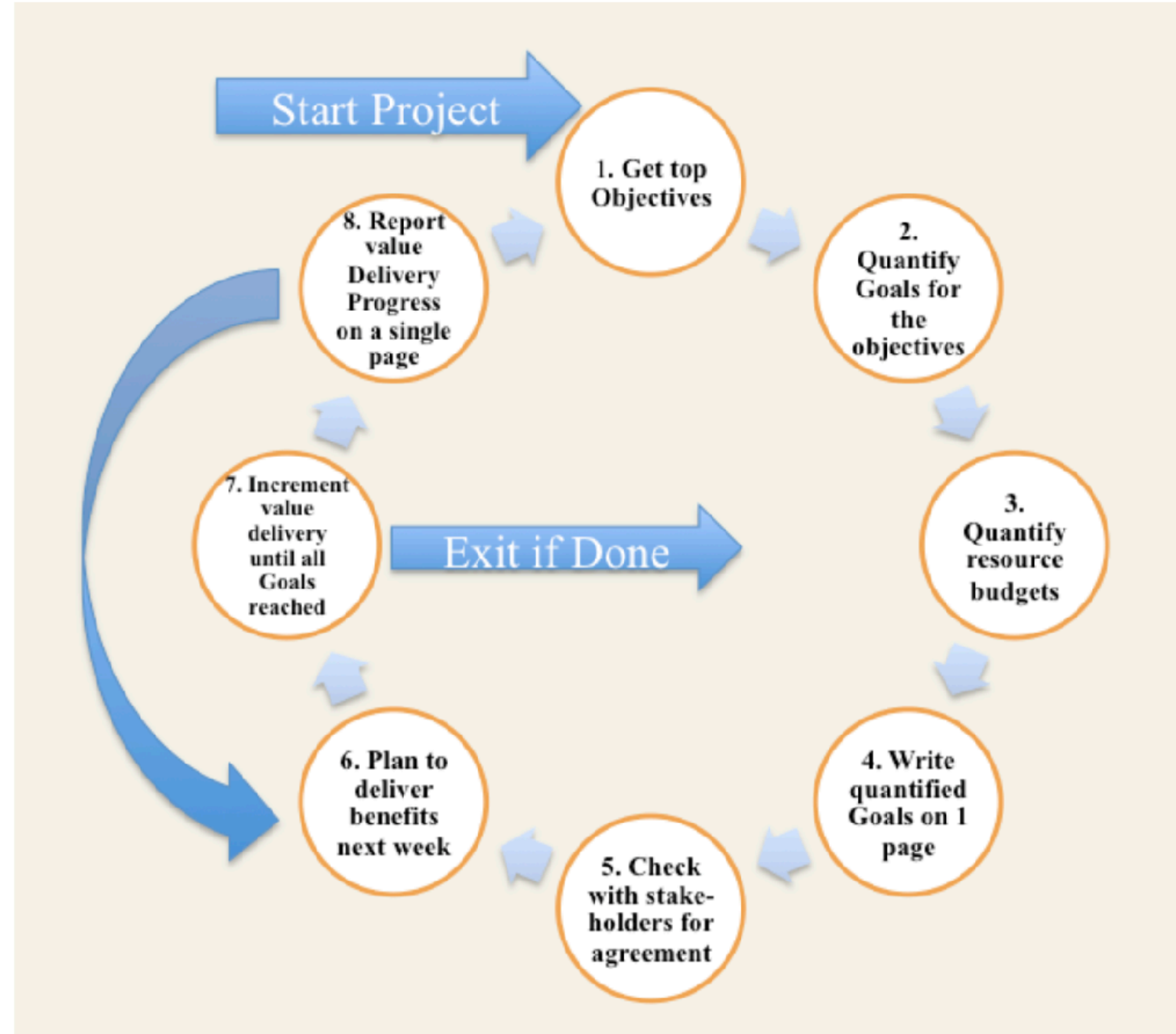


Figure 5 A. One view of the 'Evo', value delivery process.



# Value Delivery Principles

- \* You do not need to micromanage,
  - \* if your teams can manage themselves,
  - \* when they have quantified values,
  - \* and quick measurement
  - \* and quick feedback cycles.
- 
- \* If you measure value-delivery in small increments,
    - \* you can also see a need to correct bad designs immediately,
    - \* you scale them up.
      - \* (Dynamic Design to Requirements).

2		Current Status	Improvements		Goals			Step9			
3								Recoding			
4								Estimated impact		Actual impact	
5		Units	Units	%	Past	Tolerable	Goal	Units	%	Units	%
6					Usability.Replacability (feature count)			Esti			
7		1,00	1,0	50,0	2	1	0				
8					Usability.Speed.NewFeaturesImpact (%)						
9		5,00	5,0	100,0	0	15	5	ma			
10		10,00	10,0	200,0	0	15	5				
11		0,00	0,0	0,0	0	30	10		tes		
12					Usability.Intuitiveness (%)						
13		0,00	0,0	0,0	0	60	80				
14					Usability.Productivity (minutes)						
15		20,00	45,0	112,5	65	35	25	20,00	50,00	38,00	95,00
20					Development resources						
21			101,0	91,8	0		110	4,00	3,64	4,00	3,64

Priority Next

Weekly Testing

Priority  
Next

week  
Warning  
metrics  
based

Cumulative  
weekly  
progress  
metric

Co  
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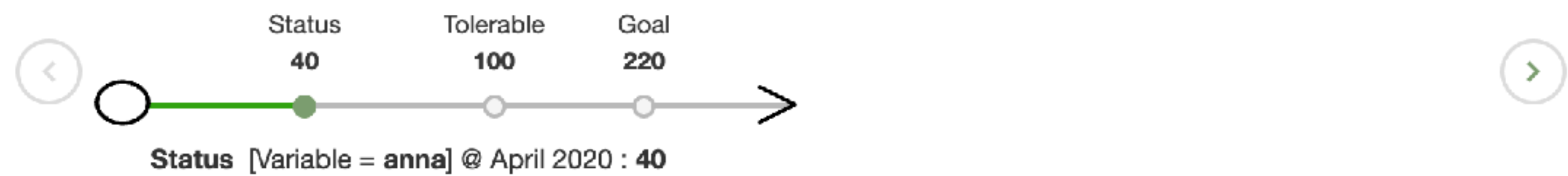
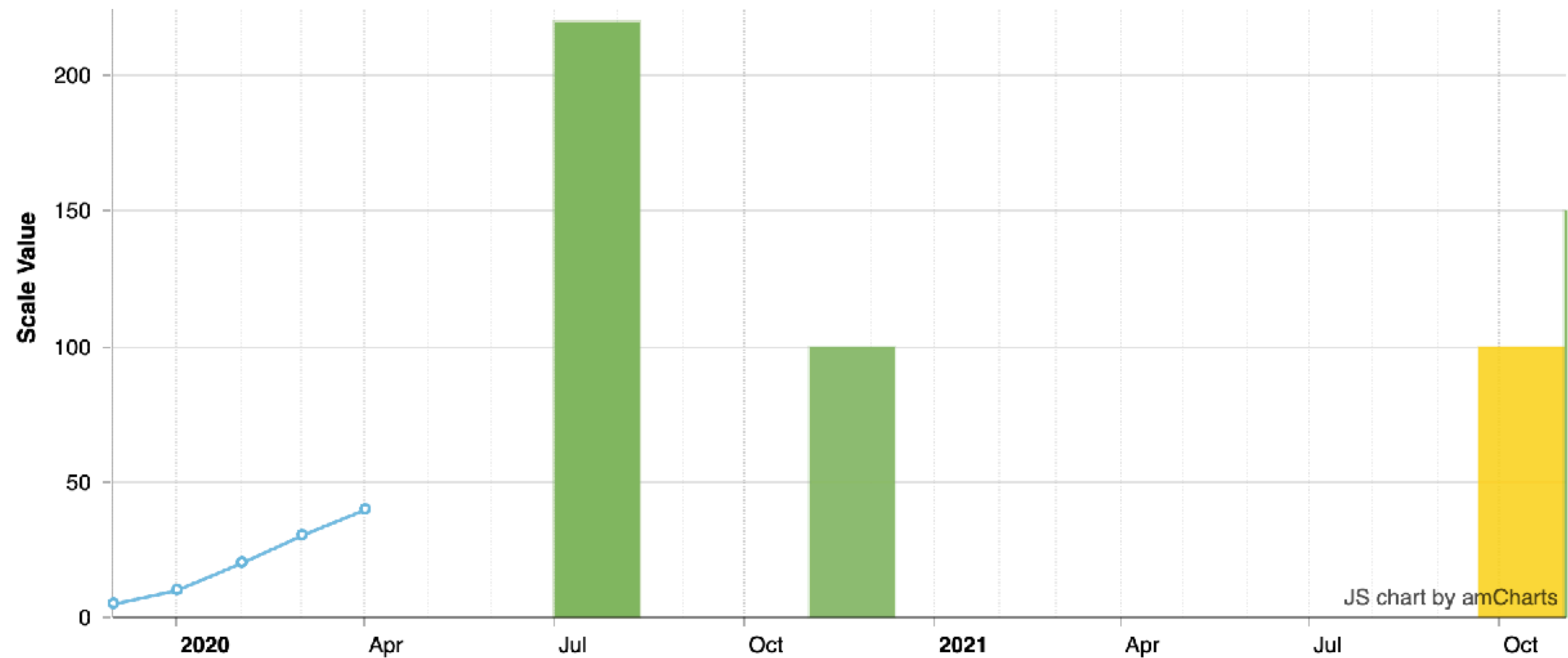
Weekly  
Testing



4 x 4 person teams  
Self managing



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



Ambition Level:
Stakeholders:
Scale: of g for defined [Variable]
Status: 40 [Variable = <b>anna</b> ] When April 2020
Tolerable: 100 [Variable = <b>anna</b> ] When November 2021
Goal: 220 [Variable = <b>anna</b> ] When July 2020



# Public Planning Ethics Pinciples

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 | 'ɛθɪk(ə)l |

adjective

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

85

• **morally good or correct:** *can a profitable business ever be ethical?*

• **avoiding activities or organizations that do harm to people or the environment:**

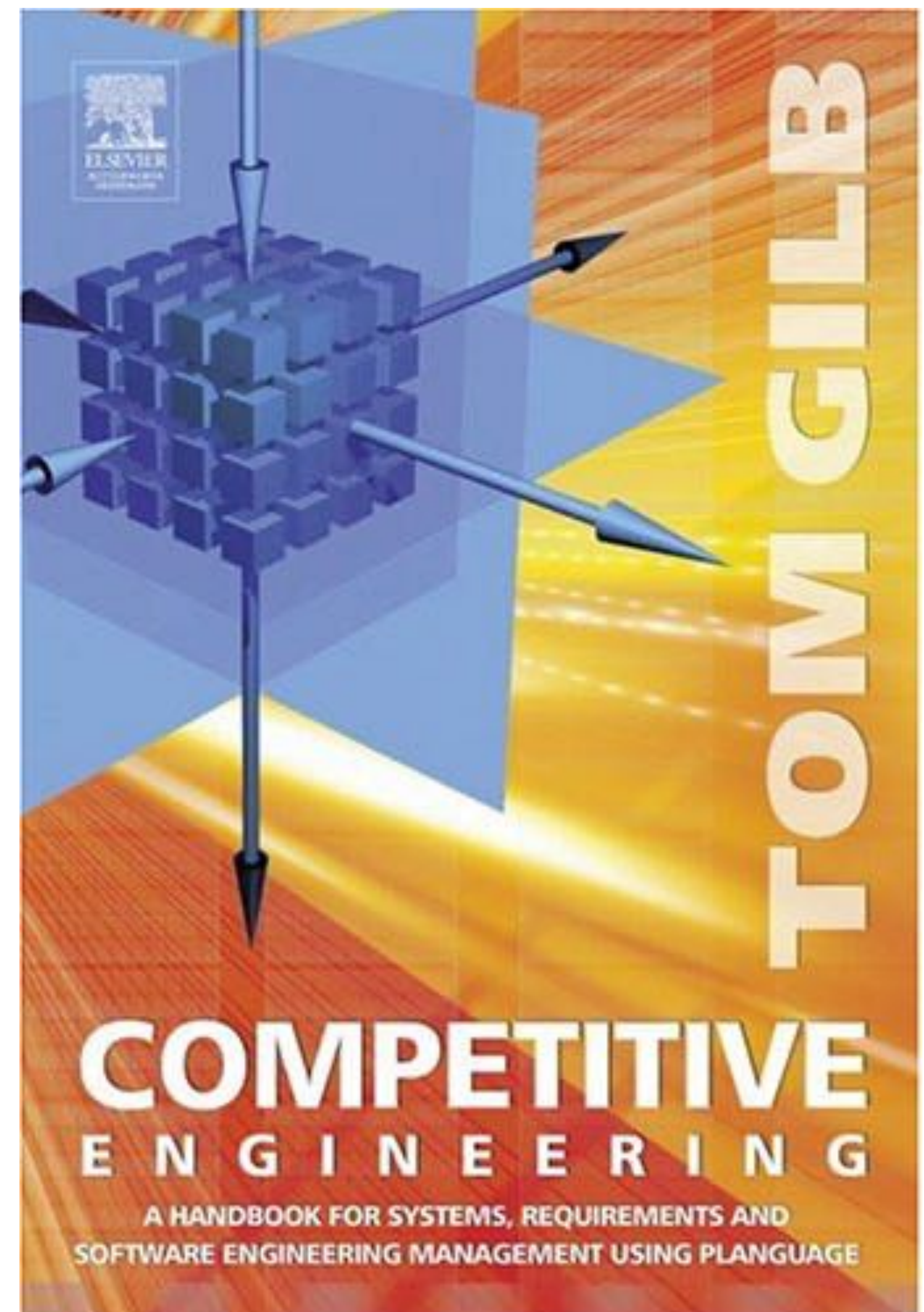
• *an expert on ethical investment* | *switching to more ethical products* | *adopt ethical shopping habits* | *ethical holidays*.



# Plan Engineering

## Why do I use the term 'engineering'

- I believe that when we are planning anything large, complex and dynamic,
- we need to move from 'less formal planning methods' to method recognisable as 'plan engineering'
  - In order to succeed in delivering value priorities within limited resources
- Talking about it, with yellow stickies
  - is too primitive a tool for public planning problems
    - It is a recipe for the failures we know happen too often.
      - Google 'Public Planning Failures'
      - 120,000,000 results

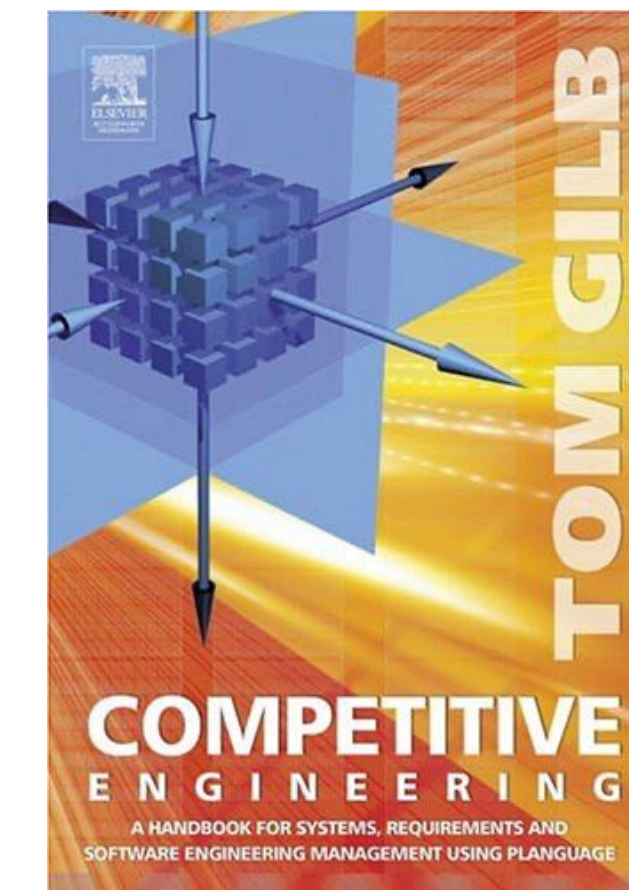
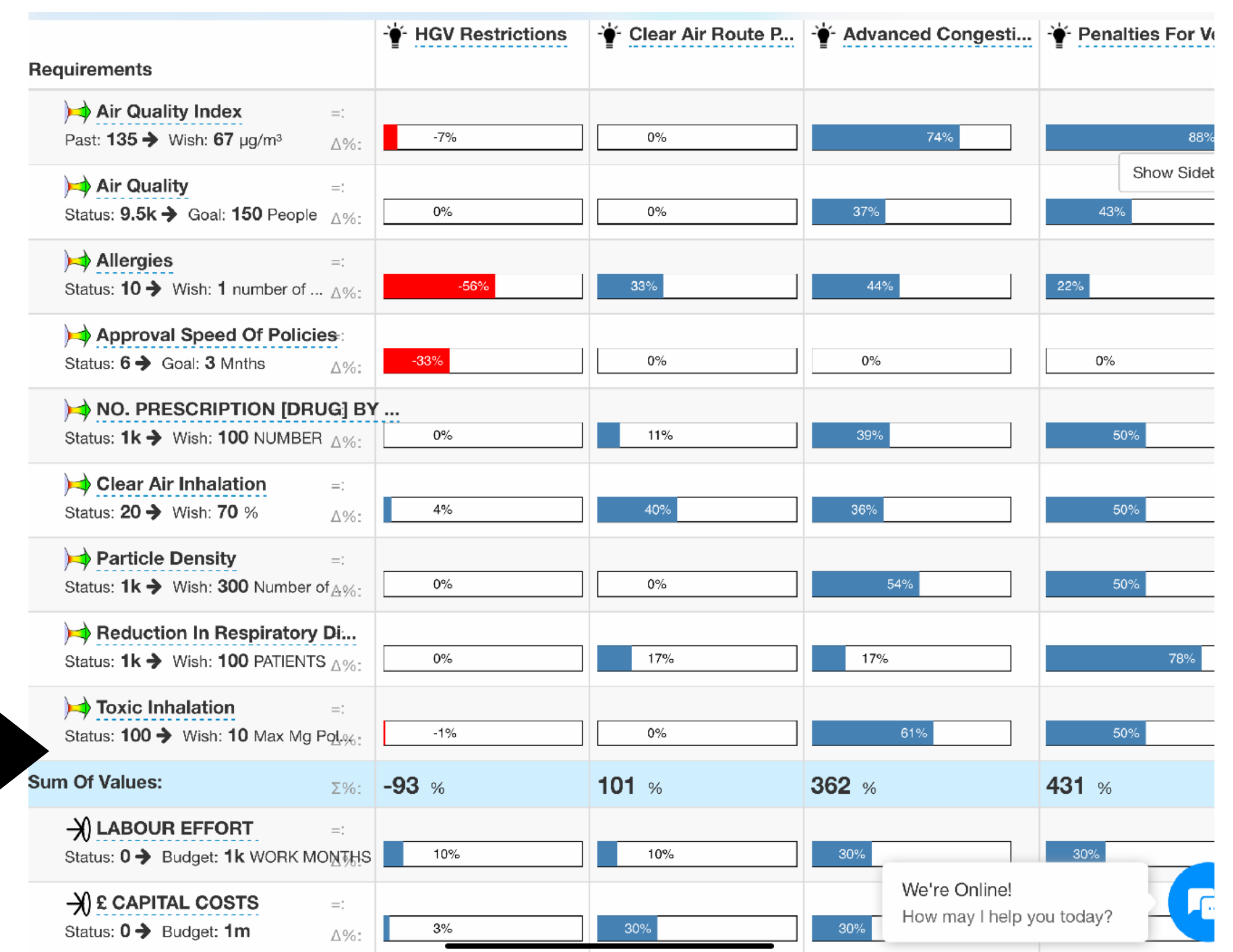




# Plan Engineering

What exactly is the '**engineering** content' of these Public Planning Methods?

- In sum, the answer is in the 500 page Competitive Engineering book
  - Quantification of Objectives (Planguage)
  - Estimation and measurement of strategy impacts on objectives and multiple resources (Impact Est.)
  - Rapid and dynamic feedback cycle of delivering value through strategies, and correcting bad plans quickly
  - Specification Quality Control, and reviews; using Rules and measurement-of-rule-conformance (plan exit levels)
  - The use of advanced digital tools
    - such as ValPlan.net and Graph metrix
    - to keep a complex plan updated
    - and to present strategy options, better.
- Examples of all this are in the slides above, and the books.



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



**One copy per BCS Lecture Participant**

**100 Practical Tools for planning**

**Free Digital Copy of  
'100 Practical Planning Principles'**

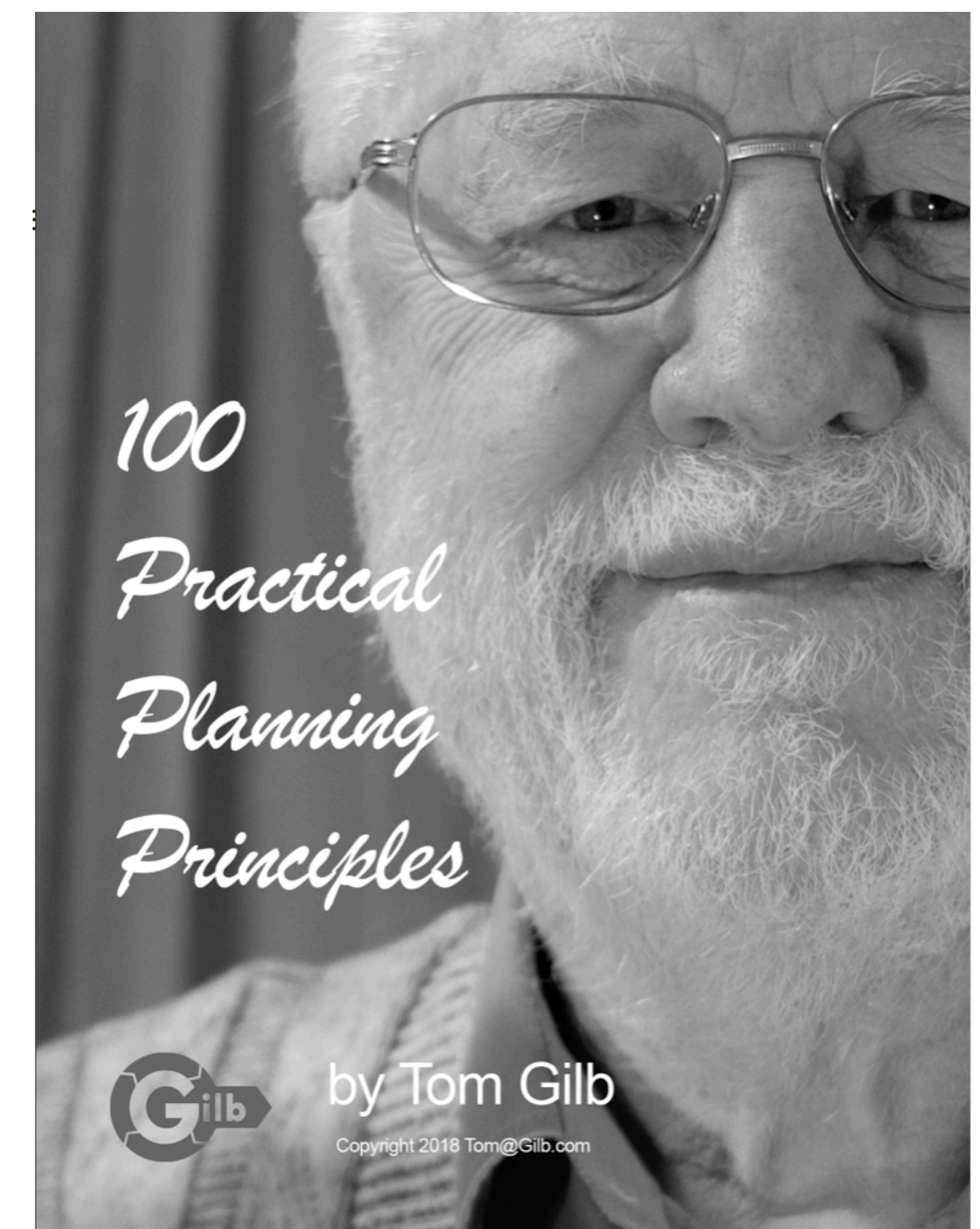
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100 Practical Planning Principles.

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<https://www.gilb.com/store?tag=books>  
Link to *Paid* Books

This booklet is based on the ideas, principles, and structure of my book Value Planning. It will avoid technical detail, and focus on principles, policies and quoted wisdom.

If the reader is interested in more technical detail, it is in the Value Planning book.

A digital version of 'Value Planning' is available <https://www.gilb.com/store/2W2zCX6z>



# Sponsored by BCS Specialist Group, Business Change, And co-sponsored by SG on Quality and SPA

“Proper Public Planning Principles”: PPPP  
‘Engineering Society Responsibly’

Slides = [https://www.dropbox.com/sh/mb7u93s8no8x2r6/AACULut4ubcH5Z-VTM9I\\_Keja?dl=0](https://www.dropbox.com/sh/mb7u93s8no8x2r6/AACULut4ubcH5Z-VTM9I_Keja?dl=0)

**100 Practical Planning Principles. (your book)**

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## Engineering Society Responsibly

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June 23 2020

by Tom Gilb





THE FOLLOWING SLIDES  
SHOULD BE DELETED  
FROM THE BCS  
PRESENTATION SET



# Some Real Cases

Some are included in the main talk

There will hardly be time to go through them during the 1 hour talk

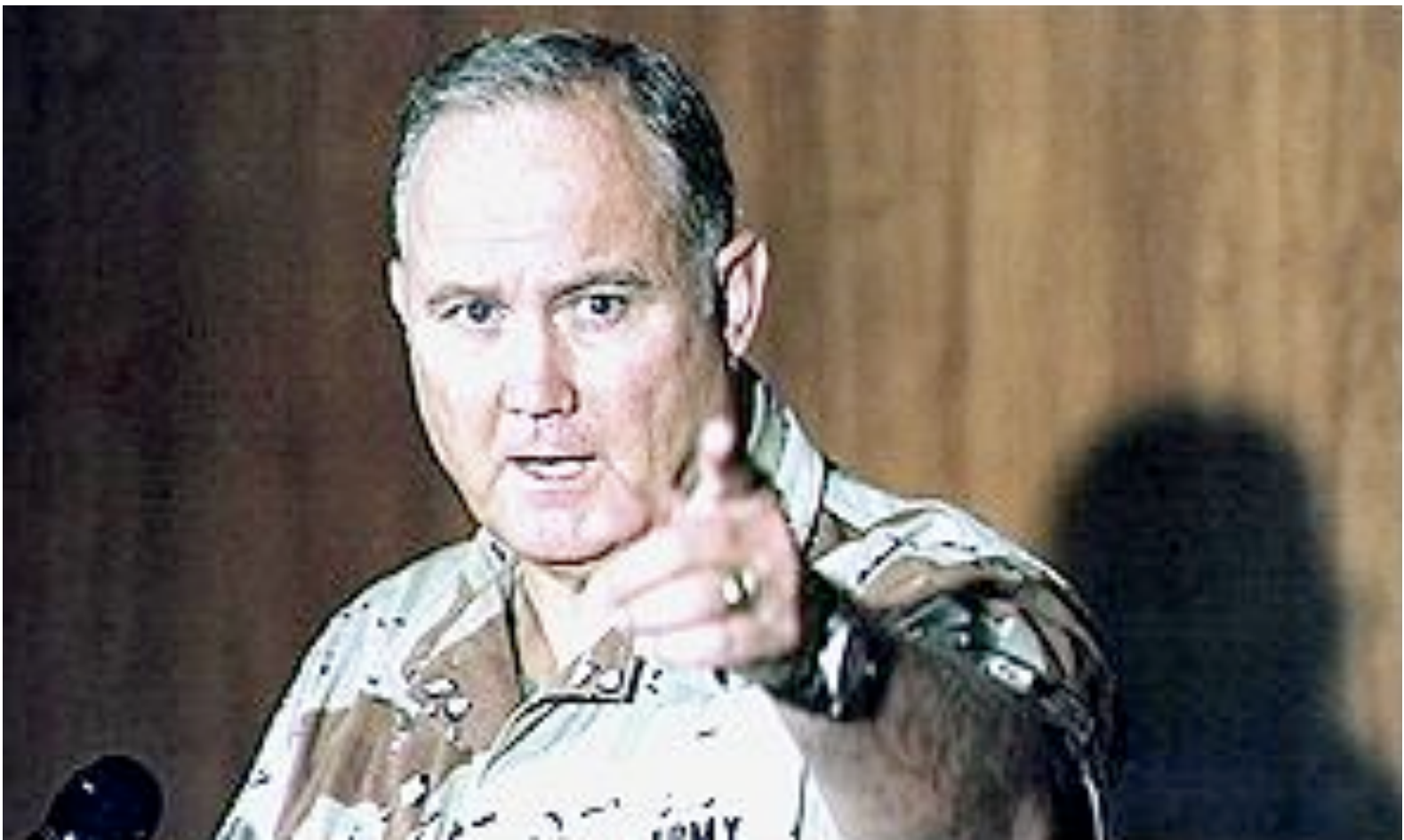
But they are included for people studying the slides who want more practical detail



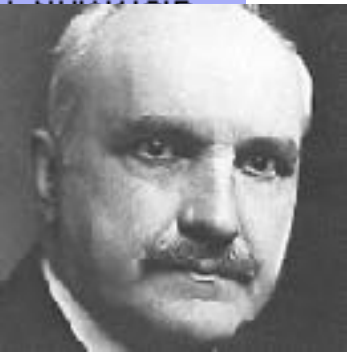
The *Persinscom IT System* Case

**Commanding General  
Norman Schwarzkopf**

**‘Stormin’ Norman’**



He who does not learn from history  
Is doomed to repeat it



A Man Who understood that  
“a bird in the hand is worth two in the Bush” <-tsg



The 'Evo' Planning Week at DoD

- **Monday**
  - Define top Ten critical objectives, quantitatively
  - Agree that thee are the main points of the effort/project
- **Tuesday**
  - Define roughly the top ten most powerful strategies
  - for enabling us to reach our objectives on time
- **Wednesday**
  - Make an Impact Estimation Table for Objectives/Strategies
  - Sanity Test: do we seem to have enough powerful strategies to get to our Goals, with a reasonable safety margin?
  - A tool for decomposing the value steps and seeing best value for resources
- **Thursday**
  - Divide into rough delivery steps (annual, quarterly)
  - Derive a delivery step for 'Next Week'
- **Friday**
  - Present these plans to approval manager (Brigadier General Pellicci)
  - get approval to deliver next week
  - (they can't resist results next week!)



US Army Example: PERSINSCOM

OBJECTIVE	Strategic	Operational	Program	Project	Activity	Task
1. Increase the number of active-duty soldiers	100%	100%	100%	100%	100%	100%
2. Increase the number of reserve soldiers	100%	100%	100%	100%	100%	100%
3. Increase the number of National Guard soldiers	100%	100%	100%	100%	100%	100%
4. Increase the number of active-duty soldiers in the Army	100%	100%	100%	100%	100%	100%
5. Increase the number of reserve soldiers in the Army	100%	100%	100%	100%	100%	100%
6. Increase the number of National Guard soldiers in the Army	100%	100%	100%	100%	100%	100%
7. Increase the number of active-duty soldiers in the Army	100%	100%	100%	100%	100%	100%
8. Increase the number of reserve soldiers in the Army	100%	100%	100%	100%	100%	100%
9. Increase the number of National Guard soldiers in the Army	100%	100%	100%	100%	100%	100%
10. Increase the number of active-duty soldiers in the Army	100%	100%	100%	100%	100%	100%

Requirements and Architecture

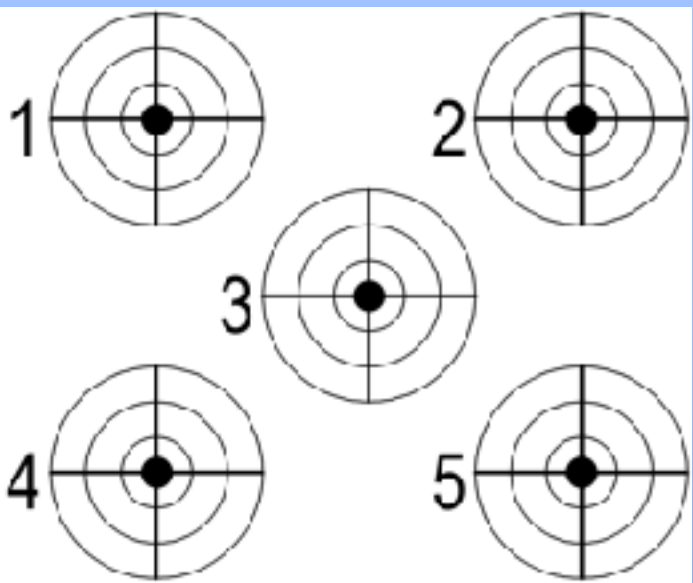
Requirements  
Design  
Quality Control  
(Construction/Acquisition)  
Testing  
Integration  
Delivery -> Stakeholder  
Measure & Study Results







STRATEGIES →
OBJECTIVES
Customer Service
?→0 Violation of agreement
Availability
90% → 99.5% Up time
Usability
200 → 60 Requests by Users
Responsiveness
70% → ECP's on time
Productivity
3:1 Return on Investment
Morale
72 → 60 per mo. Sick Leave
Data Integrity
88% → 97% Data Error %
Technology Adaptability
75% Adapt Technology
Requirement Adaptability
? → 2.6% Adapt to Change
Resource Adaptability
2.1M → ? Resource Change
Cost Reduction
FADS → 30% Total Funding



Monday

← The Top Ten  
Critical Objectives  
Were decided





- *Example of one of the Objectives:*

**Customer Service:**

**Type:** Critical Top level Systems Objective

**Gist:** Improve customer perception of quality of service provided.

**Scale:** Violations of Customer Agreement per Month.

**Meter:** Log of Violations.

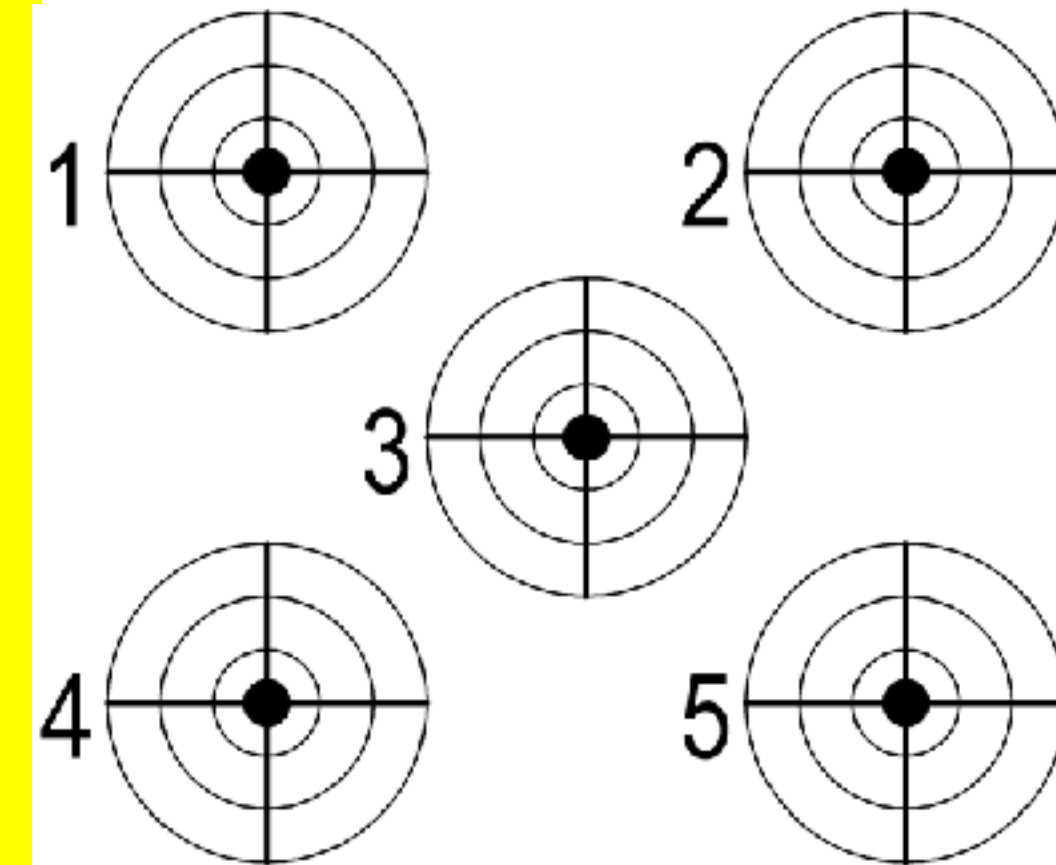
**Past** [Last Year] Unknown Number ← State of PERSCOM Management Review

**Record** [NARDAC] 0 ? ← NARDAC Reports Last Year

**Fail** : <must be better than Past, Unknown number> ← CG


**Goal** [This Year, PERSINCOM] 0 “Go for the Record” ← Group SWAG

•







STRATEGIES →  OBJECTIVES	Technology Investment	Business Practices	People	Empow- erment	Principles of IMA Management	Business Process Re- engineering	SUM
Customer Service ?→0 Violation of agreement	<div>Tuesday</div> <div>The Top Ten</div> <div>Critical Strategies</div> <div>For reaching the</div> <div>←objectives</div> <div>Were decided</div> <div></div>						
Availability 90% → 99.5% Up time							
Usability 200 → 60 Requests by Users							
Responsiveness 70% → ECP's on time							
Productivity 3:1 Return on Investment							
Morale 72 → 60 per mo. Sick Leave							
Data Integrity 88% → 97% Data Error %							
Technology Adaptability 75% Adapt Technology							
Requirement Adaptability ? → 2.6% Adapt to Change							
Resource Adaptability 2.1M → ? Resource Change							
Cost Reduction FADS → 30% Total Funding							





## *A Strategy (Top Level of Detail)*

### **Technology Investment:**

**Gist:** Exploit investment in high return technology.

**Impacts:** productivity, customer service and conserves resources.





Wednesday: Sanity Check  
Day 3 of 5 of 'Feasibility Study

- We made a rough evaluation
  - of how powerful our strategies might be
  - in relation to our objectives
- Impact Estimation Table
  - 0% Neutral, no ± impact
  - 100% Gets us to Goal level on time
  - 50% Gets us half way to Goal at deadline
  - -10% has 10% negative side effect

STRATEGIES → OBJECTIVES	Technology Investment	Business Practices	People	Empow- erment	Principles of IMA Management	Business Process Re- engineering	SUM
Customer Service ?→0 Violation of agreement	50%	10%	5%	5%	5%	60%	185%
Availability 90% → 99.5% Up time	50%	5%	5-10%	0	0	200%	265%
Usability 200 → 60 Requests by Users	50%	5-10%	5-10%	50%	0	10%	130%
Responsiveness 70% → ECP's on time	50%	10%	90%	25%	5%	50%	180%
Productivity 3:1 Return on Investment	45%	60%	10%	35%	100%	53%	303%
Morale 72 → 60 per mo. Sick Leave	50%	5%	75%	45%	15%	61%	251%
Data Integrity 88% → 97% Data Error %	42%	10%	25%	5%	70%	25%	177%
Technology Adaptability 75% Adapt Technology	5%	30%	5%	60%	0	60%	160%
Requirement Adaptability ? → 2.6% Adapt to Change	80%	20%	60%	75%	20%	5%	260%
Resource Adaptability 2.1M → ? Resource Change	10%	80%	5%	50%	50%	75%	270%
Cost Reduction FADS → 30% Total Funding	50%	40%	10%	40%	50%	50%	240%
SUM IMPACT FOR EACH SOLUTION	482%	280%	305%	390%	315%	649%	
Money % of total budget	15%	4%	3%	4%	6%	4%	
Time % total work months/year	15%	15%	20%	10%	20%	18%	
SUM RESOURCES	30	19	23	14	26	22	
BENEFIT/RESOURCES RATIO	16:1	14:7	13:3	27:9	12:1	29:5	



MEASURING HAND FOR GLOVE SIZE





## Next weeks Evo Step??

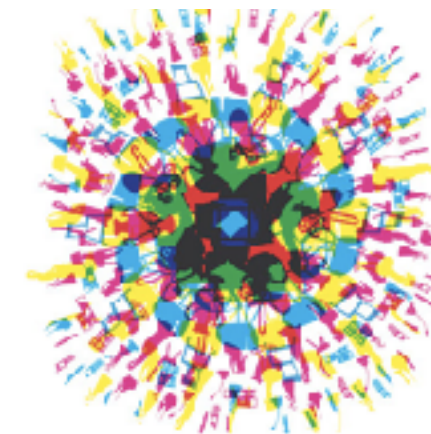
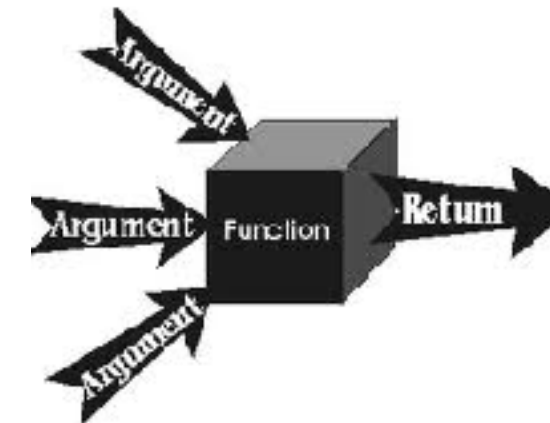
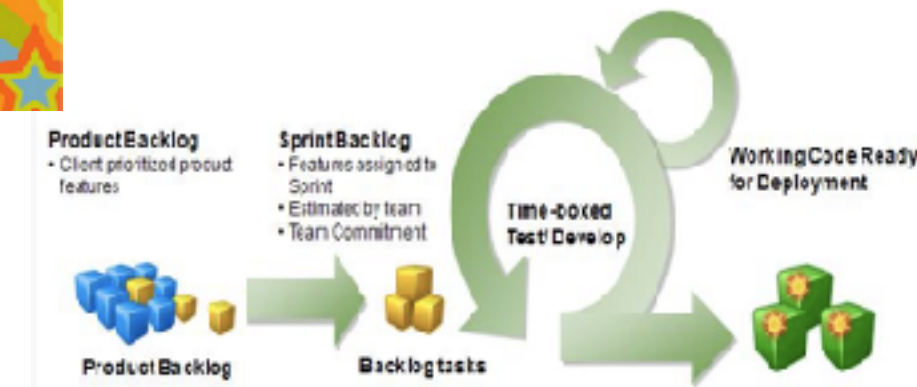
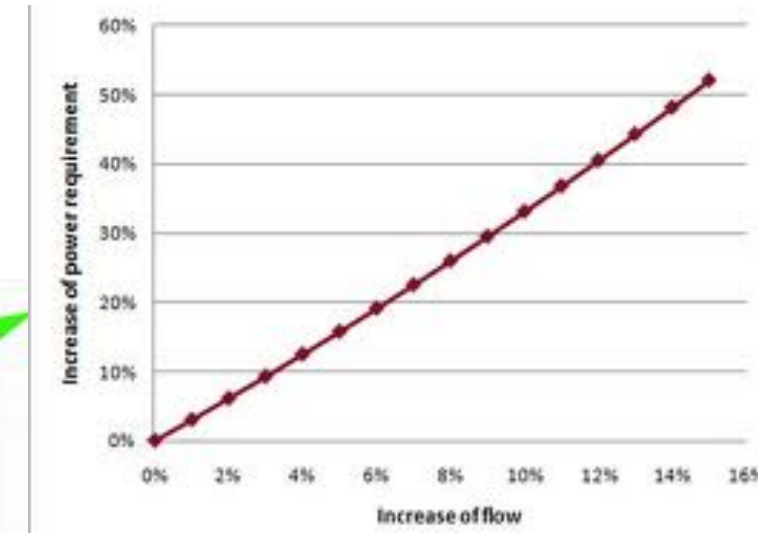
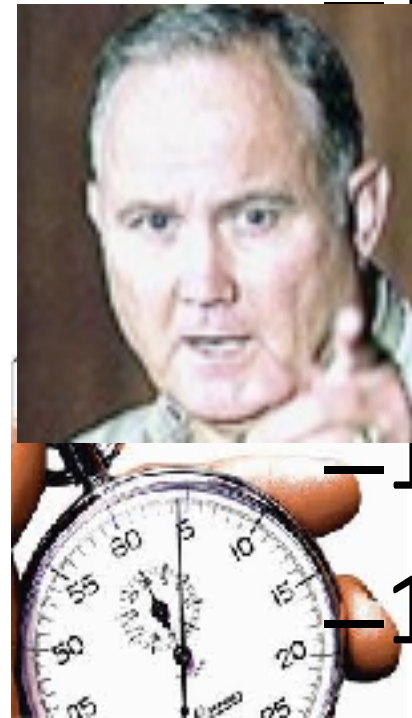
- **“You won’t believe we never thought of this, Tom!”**
- **The step:**
  - **When the Top General Signs in**
  - **Move him to the head of the queue**
    - Of all people inquiring on the system.
- **Can you deliver it next week?**
  - **Its already done: If General, move to head of queue’**





1 1 1 1 1 1 Unity

- 1% increase at least
- 1 stakeholder
- 1 quality or value
- 1-week delivery cycle
- 1 function focus
- 1 design used





## 2.2 Project Approach: Proposed Strategies to meet Business Process performance aims.

	Proposed Strategies:	Reduce Retros frequency	Reduce STAs frequency	Process / Workflow Design Improvement	Active Throughput Management	Enhance System Facilities	Raise Bus Case quality/effectiveness	Training: Bus Case writing & system User	Sum Impacts
	Key Process Aims	FR	FS	FD	PM	IT	EF		
Risks: to Manage/Contain	1. Financial Risk	30%	25%	20%	10%	5%	15%		105%
	2. Commercial Risk	40%	35%	10%	15%	10%	20%		130%
	3. Operational Risk	30%	15%	20%	20%	10%	20%		115%
	4. Legal Risk	15%	10%	30%	20%	10%	20%		105%
5. Reputational Risk	30%	20%	40%	10%	10%	15%		125%	
Customer Service	6. Process Performance	20%	10%	30%	40%	30%	20%		150%
	7. Customer Service Levels	5%	5%	25%	25%	30%	30%		
	8. Service Cost-Effectiveness	10%	10%	25%	40%	25%	20%		130%
	Sum Contributions	180%	130%	200%	180%	130%	160%		
	Improvement Budget £	£x	£x	£x	£x	£x	£x		
	Percent £% Budget	%	%	%	%	%	%		0%
	Cost-Benefit								

Example shown

In Gilb's BCS Course

By Guest Lecturer



6. Risk Management: (Illustrative) EU-exit Risk Mitigations *(Impact Estimation)*



Strategy Proposals	Market Comms plan	Comms plan to eg. Market Players + DEx-EU	Guidance to No. 10/ Negotiators	SIs / Legal strategy (eg. Baseline design)	CM Market (Contingency?) Planning	Alternate / un-mothballed Trading Systems	REMIT Capability	Economic Modelling	Joint-Planning with Regulators + Operators etc	Sum Strategy Impacts
Risks										
1. Uncertainty in Exit Negotiations (for legislation)	0%	0%	5%	25%	0%	0%	0%	10%	15%	55%
2. Market Uncertainty (supply/ investment)	15%	15%	5%	15%	5%	10%	5%	0%	15%	85%
3. Capacity / Supply shortfalls	15%	20%	10%	20%	60%	15%	0%	10%	25%	175%
4. Price increases (to unacceptable)	5%	5%	5%	5%	10%	20%	5%	10%	15%	80%
5. Trading Systems unavailable/ ineffective	0%	0%	5%	0%	0%	50%	0%	0%	5%	60%
6. Reputation Risk	30%	20%	10%	40%	60%	20%	15%	10%	25%	230%
7. Market Abuse	5%	10%	0%	5%	5%	5%	75%	0%	15%	120%
Sum Contributions	70%	70%	40%	110%	140%	120%	100%	40%	115%	
Percent £ budget					30%					
Cost/Effectiveness										

Example shown

In Gilb’s BCS Course

By Guest Lecturer

Note: provisional ‘rough & ready’ estimates for discussion purposes.



# Energy Case

## Illustrative example of an Objective Specification

➔ Consumer Costs

Stakeholder Value *Label?*

(✎ by tomgilb - 18 minutes ago)

🔗 [Permalink](#)

0.0.1

Is Part Of: **ENERGY OBJECTIVES** Group

**Ambition Level:** KEEP SAME or not much worse than they would be without Brexit

**Scale:** % relative level of [Energy Costs] for [Energy Stakeholders] and [Energy Types]

**Stakeholders:** Energy Consumers, Household Consumers, Corporate Energy Consumers, Electrical Energy Companies

**Status:** Level: **0** % Relative Cost Level [Energy Costs = { Consumer Monthly Outlay/Energy Unit }, Energy Stakeholders = { Households }, Energy Types = { Elect..

**Tolerable:** Level: **120** % Relative Cost Level [Energy Costs = { Consumer Monthly Outlay/Energy Unit }, Energy Stakeholders = { Households }, Energy Types = { .

**Wish:** Level: **100** % Relative Cost Level [Energy Costs = { Consumer Monthly Outlay/Energy Unit }, Energy Stakeholders = { Households }, Energy Types = { Elec..

**Assumption:** AssumptionConsequenceClick here to edit

**Dependencies:**

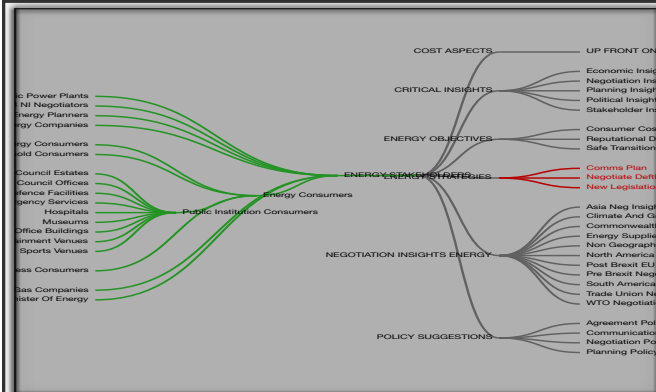
**Issue:** IssueActionClick here to edit

**Owner:** Dan

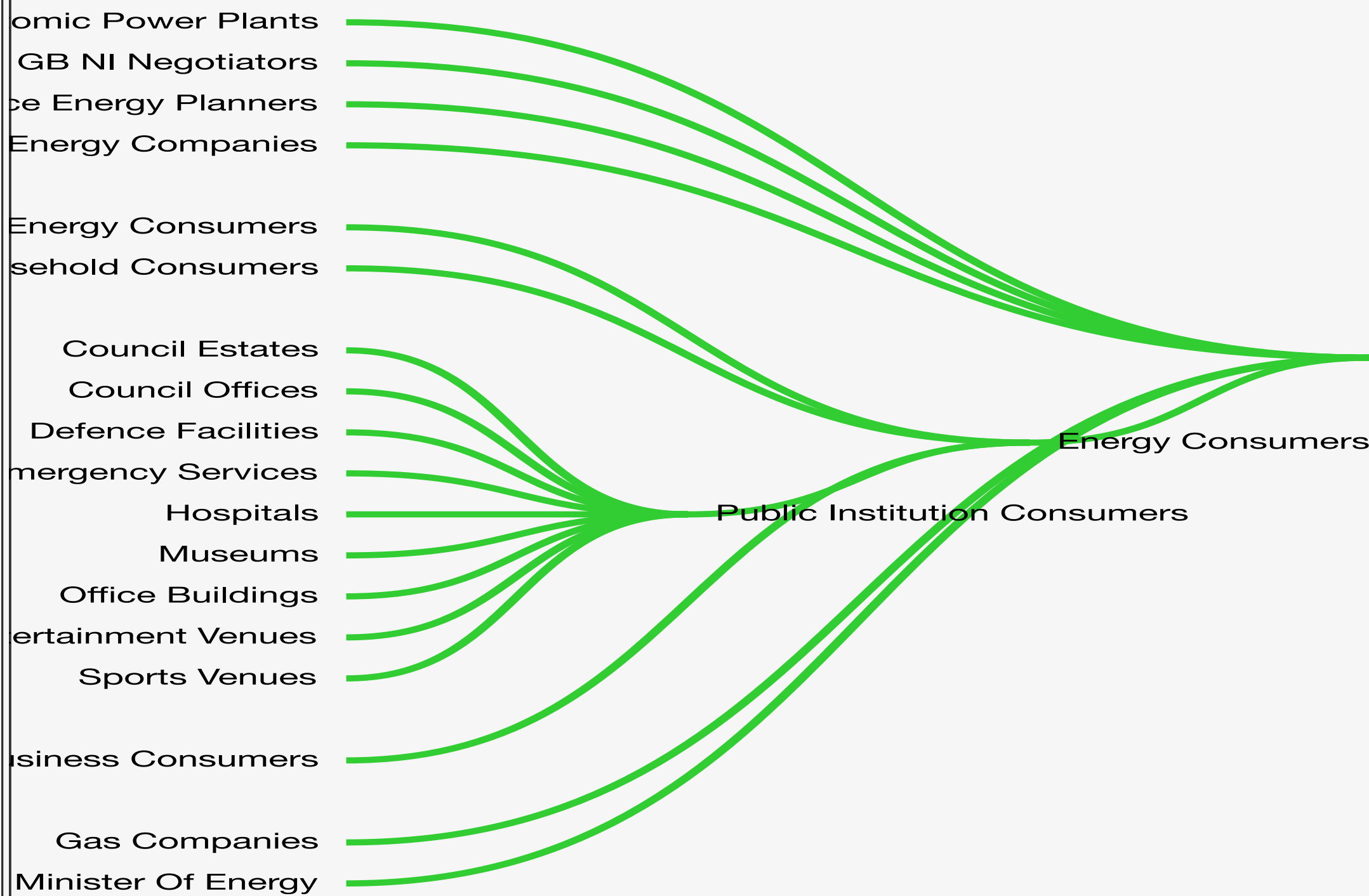


# Digital Overview: Energy Case 2017

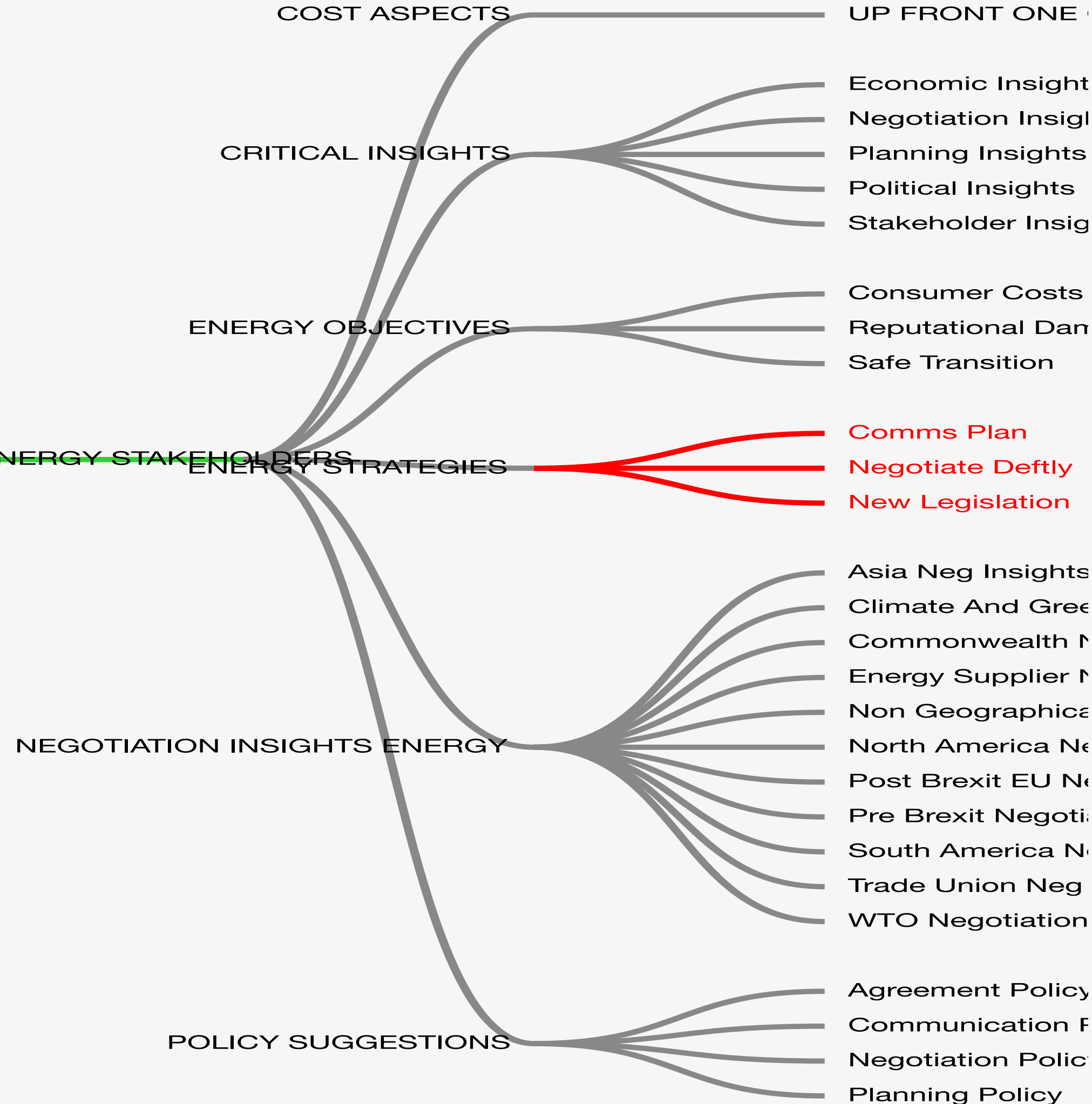
## Not official data, but to illustrate structure.



### Stakeholders



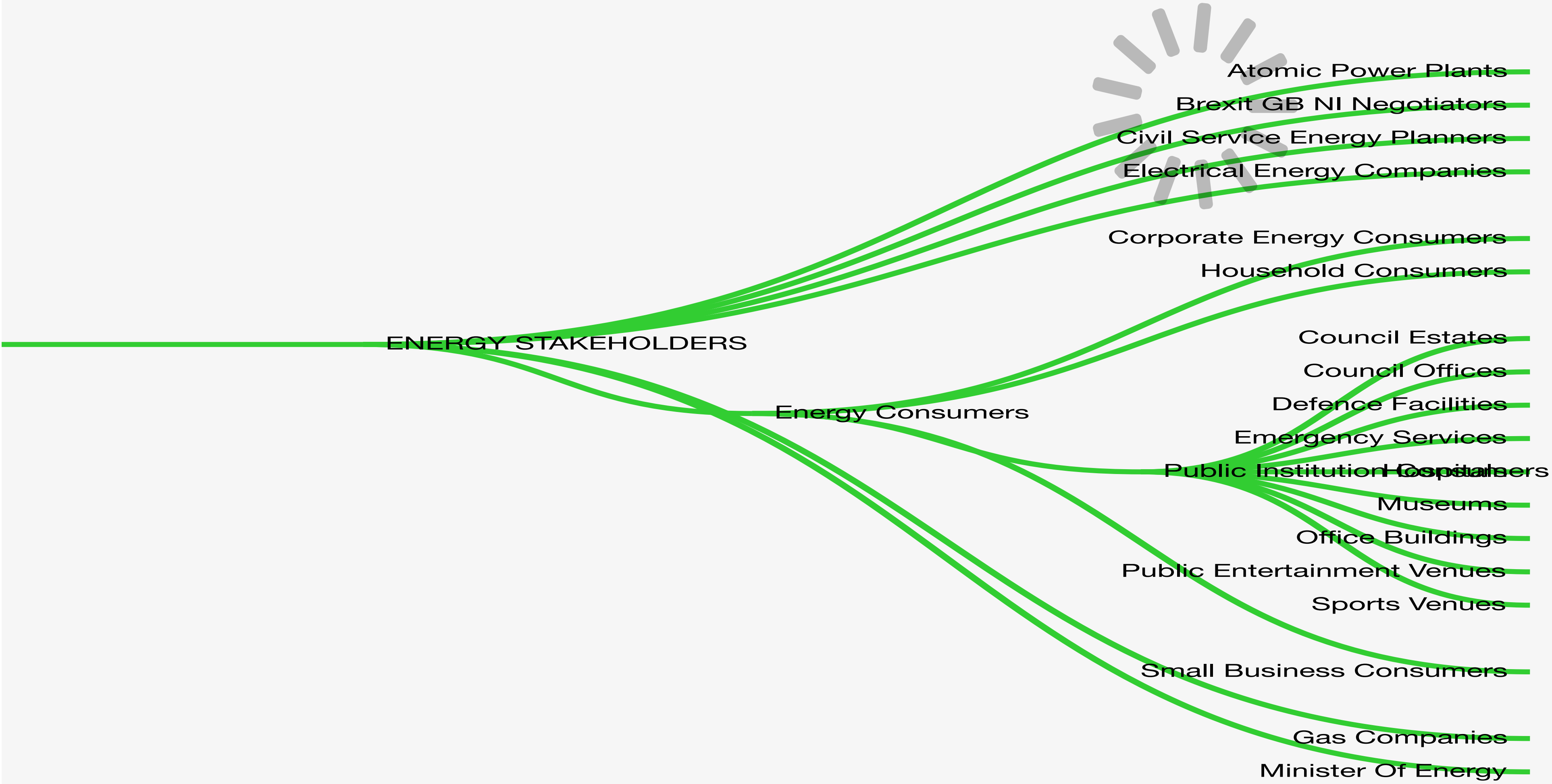
### ENERGY STAKEHOLDERS





# Energy Case 2017-8

## Stakeholders Draft Example





Draft Structure, Energy Planning

Point being to show Values over Costs model

Energy Domain Overview Table				
<div>Settings...AddSortDuplicate...INCREMENTALHelpShow Sidebar</div>				
		<input type="checkbox"/> New Legislation		<input type="checkbox"/> Comms Plan
Requirements				<input type="checkbox"/> Ne
<div><div>Consumer Costs</div><div>Status: 0 → Wish: 100 % R... Δ%: 70 %</div><div>% relative level of [Energy Costs] ...</div><div>[Energy Costs = { Consumer Monthly Ou...]</div><div>20th September 2017</div></div>		<div><div>70</div><div>50</div><div>50 %</div><div>70%</div></div>		<div><div>????</div><div>0 %</div><div></div></div>
<div><div>Reputational Damage</div><div>Status: 0 → Wish: 0 Δ%: 0 %</div><div>No qualifiers</div><div>? ?</div></div>		<div><div>????</div><div>0 %</div><div>????</div></div>		<div><div>????</div><div>0 %</div><div></div></div>
<div><div>Safe Transition</div><div>Status: 0 → Wish: 0 Δ%: 0 %</div><div>No qualifiers</div><div>? ?</div></div>		<div><div>????</div><div>0 %</div><div>????</div></div>		<div><div>????</div><div>0 %</div><div></div></div>
<div><div>Consumer Costs</div><div>Status: 0 → Tolerable: 120 % R... Δ%: 0 %</div><div>% relative level of [Energy Costs] ...</div><div>[Energy Costs = { Consumer Monthly Ou...]</div><div>20th September 2017</div></div>		<div><div>????</div><div>130</div><div>108 %</div><div>108%</div></div>		<div><div>????</div><div>0 %</div><div></div></div>
Sum Of Values:Σ%:		70 %		158 %
<div><div>UP FRONT ONE OFF PAYMENTS</div><div>Status: 0 → Budget: 10 £ B... Δ%: 10 %</div><div>£ Billion[Payment Type] to [Recipien..</div><div>[Payment Type = { &lt;All&gt; },</div><div>20th September 2017</div></div>		<div><div>3</div><div>30 %</div><div>30%</div></div>		<div><div>????</div><div>0 %</div><div></div></div>
Sum Of Development Resources:Σ%:		10 %		30 %
Value To Cost:		7.00		5.30
				0.00



# **CCC + GILB METHODS**

## **PERFORMANCE MANAGEMENT**

### **SOCIAL AND ECONOMIC IMPROVEMENT/ REGENERATION (URBAN/RURAL)**

- supporting business improvement
- providing positive conditions for growth + employment
- improving adults skills and job opportunities
- helping improve services and the economy in rural communities
- improving the quality of life across the County

### **IMPACT FACTORS (Brainstorm 18 Nov 2002)**

- Economic climate
- Adult skills
- Developing the Library Service
- Rural Strategy
- Economic Development BVR
- Social Inclusion
- Diversity Strategy



# 2003 Draft Council Example

## PERFORMANCE MANAGEMENT

MEASURE	-	PREDICTABILITY
TYPE	-	ELEMENTARY STRATEGIC OBJECTIVE (QUALITY OF LIFE / ACCESSIBILITY)
SCOPE	-	COUNTYWIDE (CHESTER)
STAKEHOLDERS	-	EMERGENCY SERVICES [FIRE SERVICE]
AMBITION LEVEL	-	IMPROVED REASONABLE PREDICTABILITY FOR CRITICAL MOVEMENT (FROM FIRE STATION TO LACHE ESTATE)
SCALE	-	% NEGATIVE TIME DEVIATION FOR [FIRE SERVICE] DURING [KNOWN BUSY PERIODS]
PAST [ , ]	-	5%
GOAL [ , ]	-	4% BY END OF 2005





# Lean Government: Getting far more value for tax money

For

Office of The Rt Hon Francis Maude  
MP and The Conservative Party

**Francis Maude was later...**

**Minister of State for Trade and Investment from 11 May 2015 to 11 April 2016.**

**Francis was previously Minister for the Cabinet Office and  
Paymaster General from May 2010 to May 2015.**





# So How? What's New (the *ideals* are not new!)

- Three Key ideas
  - 1. Quantify all critical top level VALUE notions (10-20 for each initiative)
    - Nothing 'soft', nothing can be misunderstood or ignored
    - All really important reasons for the investment are quantified in real numeric terms. No fuzzy - money wasters!
  - 2. early and frequent (weekly?) delivery of REAL VALUE to REAL PEOPLE ('stakeholders')
    - This forces projects to think holistically
    - And to focus on real results, not construction work.
  - 3. No Cure - No Pay: suppliers and contractors paid after 'taxpayers' get results.
    - Otherwise, they can 'starve'! (Survival of fittest!)
    - It is politically irresponsible to pay for failure (Labour does!)
    - And it is technically unnecessary to do so
      - But most people do not know how to make this happen! (Ignorance)
      - So, they claim "It can't be done".





# Daring Assertions: Time for a Change!

- 1. All top level critical factors for any project or investment **CAN IMMEDIATELY, RELEVANTLY AND ALWAYS BE EXPRESSED QUANTIFIED - CLEAR NUMBERS.** (or ranges of numbers)
  - Vision Engineering , part of Value Planning book (2017, [leanpub.com/ValuePlanning](http://leanpub.com/ValuePlanning))
  - Top Level Objectives: Real Case Studies of Quantification and lack of it costing a fortune (Gilb Practice) - US DoD, Ericsson, Credit Suisse, Symbian etc.
    - <http://www.gilb.com/DL180> /DL180





# Daring Assertions: Time for a Change!

- 2. All projects and investments can be ‘decomposed’ into a series of much smaller (2% of budget, weekly) cumulative increments of **VALUE TO STAKEHOLDERS**.
  - Most people don’t know this and don’t believe this
  - And claim it can’t be done
  - They are ignorant of the theory and practice of doing (which is quite old and well documented in practice)
  - Decomposition Methods:
    - <http://www.gilb.com/DL41>





# Daring Assertions: Time for a Change!

- 3. All projects and investments can be structured so that payment is based on real delivery of ‘taxpayer/voter’ results.
  - The one who has the Gold, should rule! Labour has abdicated this responsibility
  - Conservatives can make that a Conservative Responsibility to the Electorate:
    - “We will not pay your money for bad results!”
  - The key to making this work in practice is the 2 above disciplines
    - 1. Quantification of the ‘Cure’
    - 2. Incremental early delivery of the Cure
  - And too few know how to do this
  - And suppliers could not care less as long as they can fool stupid Labour Ministers into paying for failure effort
    - The “Much Ado about Nothing Government” (Labour, Vote for RESULTS)





## Conservative “Responsible Procurement” Policy and Objectives

- To Squeeze out maximum taxpayer benefit and value in the short term and long term.
- To deliver maximum usefulness and value from low and reduced taxation
- To manage the public purse that way a smart citizen, farmer or shopkeeper would
- To fight waste of all kinds, at all times, *fiercely* - like a mother protecting her cubs
- To reduce taxation of all kinds; to a minimum consistent with world-class reliable, quality, public services
- To use their procurement power to dynamically get the best deal the market has to offer
- To seriously consider all real costs, and long term costs when making commitments, contracts and evaluations. **No Unpleasant Surprises!**
- To be forthright and open about evaluations and decisions, so that we can learn from mistakes rapidly, and be clearly responsible for our government decisions.
- Be prepared to defend our record in office against the record of the Opposition - numerically.
- Conservatives Conserve:
  - Your hard earned money
  - Your quality of life





# Conservative Procurement Strategy (Basic Technical Details)

- In pursuit of “**Responsible Procurement**” Policy and Objectives.
  - 1. Numeric **Relevant** Result targets, *that citizens can understand and support*, will be the **primary** basis for all procurements, and for our judgement of **success**.
    - *(Results like: faster Health Care, better military protection and capability for our soldiers, better transport)*
  - 2. Results will be delivered early, frequently, cumulatively, provably, intelligibly, and highest stakeholder value first.
    - No black hole projects. Clear obvious priority measurable value immediately - or we know something is wrong - and must change course to get value delivered.
  - 3. Value for Money will be rewarded appropriately, failure and incompetence will NOT be tolerated or rewarded. No Tolerance Policy: Conserve Our Resources.
    - Profitability for suppliers who are cost effective: no pay for those who don't deliver value.
  - Conservatives will make sure *they earn the right* to serve the nation.
- **MEASURABLE VALUE**
  - **EARLY RESULTS**
  - **WELL PAID FOR CURE**





## “We Promise”: The Conservative Guarantee for large public investments

- **OPENNESS AND CLARITY:** Our government will not tolerate political evasiveness. You will know exactly what we will work towards, and why.
- **PROFESSIONALISM:** We will ‘engineer’ the nations systems to succeed, *not hack them together politically*, in constant failure mode.
- **RAPID CORRECTION:** we will be ready, able and willing to change course, when for any reason the projects show failure signs. We will NOT persist in wasting public money to cover up incompetence or for ideological reasons.



# Later in 2009

## Conservatives hire internet guru

The Tories wants government to be more responsive to the public

The Tories have enlisted the digital democracy innovator who built the No 10 petitions website to help them make government more open and efficient.

Tom Steinberg is the founder of mySociety, a non-aligned organisation which builds websites designed to help empower people and enhance democracy.

MySociety sites include TheyWorkForYou, which allows people to track their MP's activities and to contact them.

The Tories say they want to use the web to **boost government efficiency.**

Shadow Cabinet Office minister Frances Maude, who announced Mr Steinberg's appointment as an adviser at the Conservative conference in

Manchester, said **technology must be used more efficiently** during a time of austerity.

Civic action

He said that under a Conservative government the aim would be to engage more with the public and open up government data.

In moves the party hopes will **improve efficient government** the Tories have already said they would use open source software as much as possible and publish on a website details of all government spending over £25,000.

“ We want to unleash an army of 'armchair auditors' to crawl over the Government's accounts - ordinary members of the public who will be able to see for themselves whether their government is **really delivering value for money** for them ”

## Francis Maude

Shadow cabinet office minister

They also propose **allowing the public to comment on all legislation** before it is debated in depth by MPs and peers, and also say they aim to publish online 20 of the most socially useful government datasets online within 12 months of a General Election.

All government contacts over £10,000 being tendered by the government would also be published online, Mr Maude added.

"The UK Government spends more on ICT than any other government and yet the history of UK government ICT projects is **littered with budget overruns, delays and functional failures.** Huge centralised databases have been created, with a **thoroughly casual approach to safeguarding private data.**

"We need a fundamental rethink. We need fewer mega-projects; a rigid insistence on open standards and inter-operability; a level playing field for open source software and for smaller suppliers.

"**Trust in politics is at an all time low** and by making central government **transparent and accountable** we can start to fix our broken politics. Greater openness and accountability will improve value for money and **stop taxpayers' money being wasted.**

"We want to unleash an army of 'armchair auditors' to crawl over the Government's accounts - ordinary members of the public who will be able to see for themselves whether their government is really delivering value for money for them."

Advice sharing

He said: "Tom Steinberg has led the way in showing how government can engage with citizens online and catalyse social innovation and civic action. It's great news that he's working with us to develop the vision."

Mr Steinberg said: "A smarter use of IT by government can do more than just deliver services more quickly and efficiently, it can also open up the institutions of state and make our lives as citizens more effective and rewarding. I am looking forward to being part of this change."



[http://news.bbc.co.uk/2/hi/uk\\_politics/8290181.stm](http://news.bbc.co.uk/2/hi/uk_politics/8290181.stm)



## Defra's aim and objectives

### Aim & objectives

Public Service  
Agreement

Our vision

Defra prospectus

### Aim

Sustainable development, which means a better quality of life for everyone, now and for generation come, including:

- a better environment at home and internationally, and sustainable use of natural resources;
- economic prosperity through sustainable farming, fishing, food, water and other industries th meet consumers' requirements;
- thriving economies and communities in rural areas and a countryside for all to enjoy.

### Objectives

#### Objective 1

To protect and improve the rural, urban, marine and global environment and to lead integration of th with other policies across Government and internationally.

#### Objective 2

To enhance opportunity and tackle social exclusion in rural areas.

#### Objective 3

To promote a sustainable, competitive and safe food supply chain which meets consumers' requirements.

#### Objective 4

To promote sustainable, diverse, modern and adaptable farming through domestic and international actions.

#### Objective 5

To promote sustainable management and prudent use of natural resources domestically and internationally.

#### Objective 6

To protect the public's interest in relation to environmental impacts and health, and ensure high standards of animal health and welfare.

# Defra Aims and Objectives 2004 My Visit

Department  
for Environment  
Food & Rural Affair

<https://tinyurl.com/UNGoalsGilb>  
**See Sustainability Planning**  
**To see same level of wordy visions**  
**(not clear Objectives)**

See also more references in this slide's presenter notes



# DEFRA UK OBJECTIVE EXAMPLE

**“ Is practical and easy to use by wildlife licensing and registration staff”**

## Ease of Use.

Ambition: Is practical and easy to use by wildlife licensing and registration staff <- Benefits Realisation Plan 03. 2.1E

Type: Complex Quality Objective.

Includes: {Entry Qualification, Learning Time, Productivity, Error Rate, Intelligibility, I n t u i t i v e n e s s , F a m i l i a r i t y , Acceptability, ? }.

*METER: <Measure the process of bringing new staff “up to speed”, Measure(time)of various typical high volume transactions and compare with BCU report Review of bird registration and CITES branch dated June 2001*

## Entry Qualification

**Version: February 12, 2004 (First Draft for structure)**

Scale: The % of a defined [User Level] needed for defined [Usage] of defined [Subsystems or Facilities] that can be successfully trained or can understand on their own how to successfully use our system.

Goal [User Level = DEFRA Staff, Usage = Any DEFRA Wildlife Purpose] 99%

Goal [User Level = Cheapest Grade Agency Temps , Usage = Data Input ] 95%

Goal [User Level = Public, Usage = Any Inquiry ] 95%

Definitions:

Usage: defined as any set of activity on the system including being trained and actually doing work.

119 User Level: level or set of human physical, experiential, cultural and knowledge capabilities required to defined forms of Usage.



## An Opportunity to Use Public Finance to Mobilise Private Finance



Do you see any clear quantified objectives?

The objectives for the ICF on private finance are:

- i. To identify and implement financial instruments and solutions, that have transformative potential and have potential to be replicated at scale
- ii. To test new and innovative approaches to mobilising private climate finance to better inform future UK or other international initiatives and spending on key factors of success (or failure)
- iii. To mobilise private climate finance in ICF priority countries that would not otherwise flow to those countries so as to create a sustainable climate investment market
- iv. To mobilise private sector engagement and finance in specific sectors and/or technologies that experience difficulties in accessing private finance
- v. To create a better understanding of private finance within ICF priority country governments, HMG and internationally to inform future climate finance policy and projects.



# US AF Testing AFOTEC

## TG Suggestion for planning policy 1998

### 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.



**Mr. Tom Gilb**

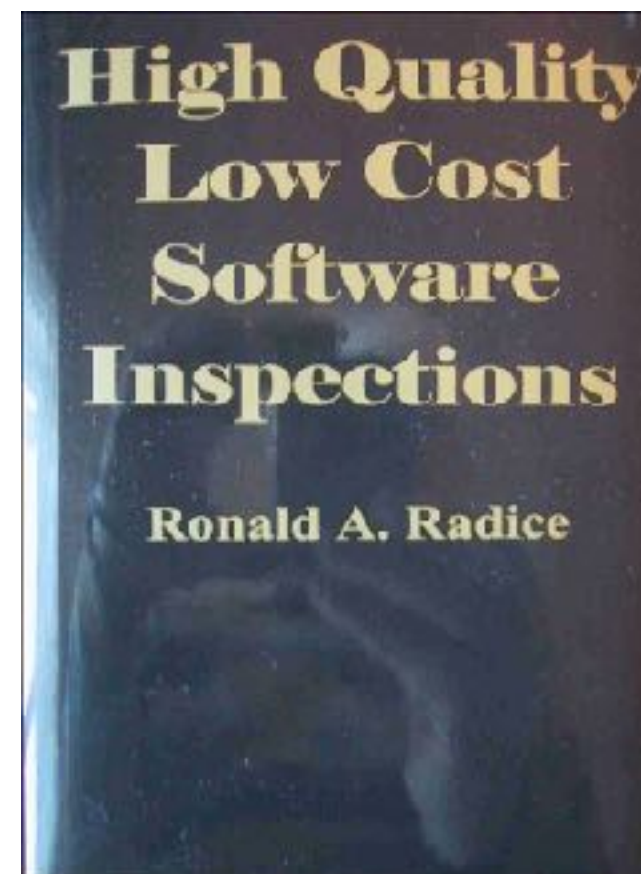
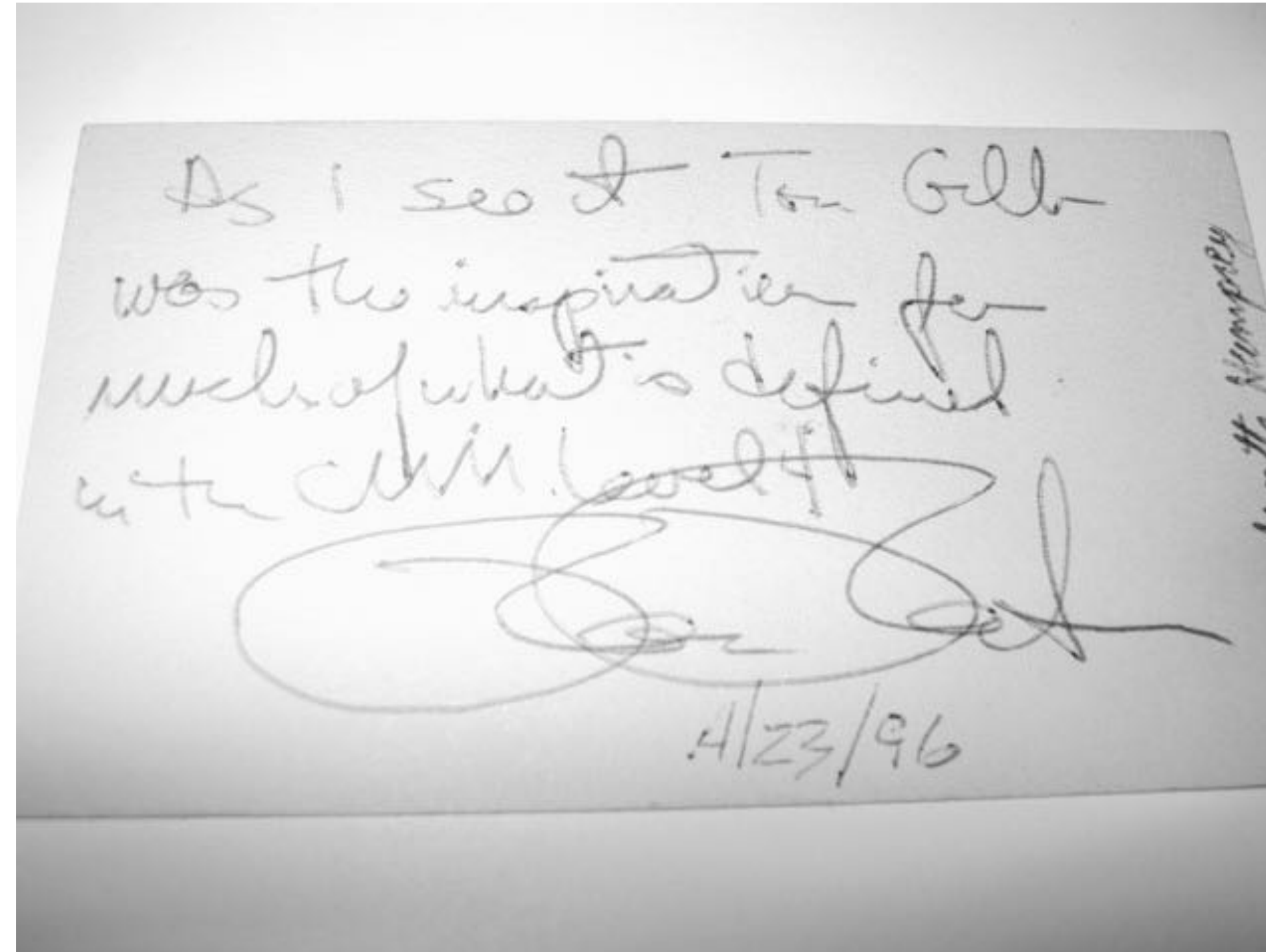
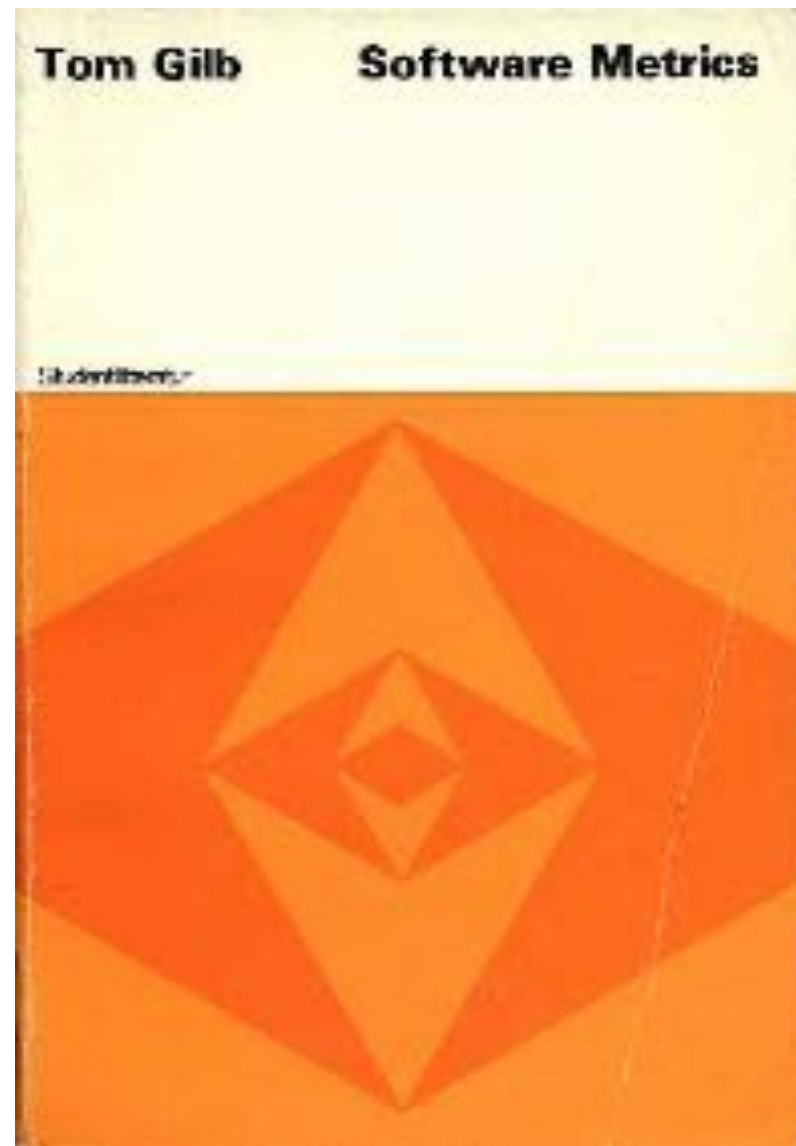
**"With Special Thanks For Your  
Exceptional Generosity"**

**Maj Gen Jeffrey Cliver  
and all at AFOTEC**

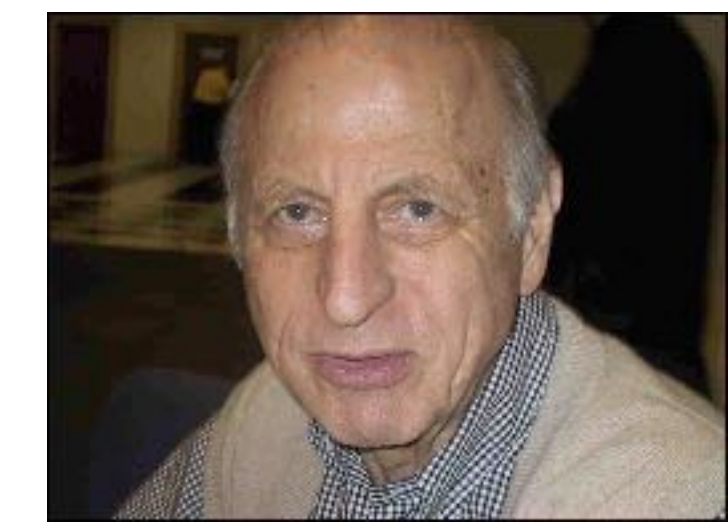


# CMM Level 4 Basis

## CMM is effectively a DoD Government Standard for Defence Suppliers, and Indian IT Companies



- **“As I see it Tom Gilb was the inspiration for much of what is defined in CMM Level 4.”**
- *Ron Radice (CMM Inventor at IBM) 1996 Salt lake City (agreed orally by Watts Humphreys - his IBM Boss)*
- *stt@stt.com, www.stt.com*





# From Tim Kasse, CMM/I Founder

,Dear Tom,

During my plane ride back to Holland I thought of something that I wanted to share with you in Finland but forgot.

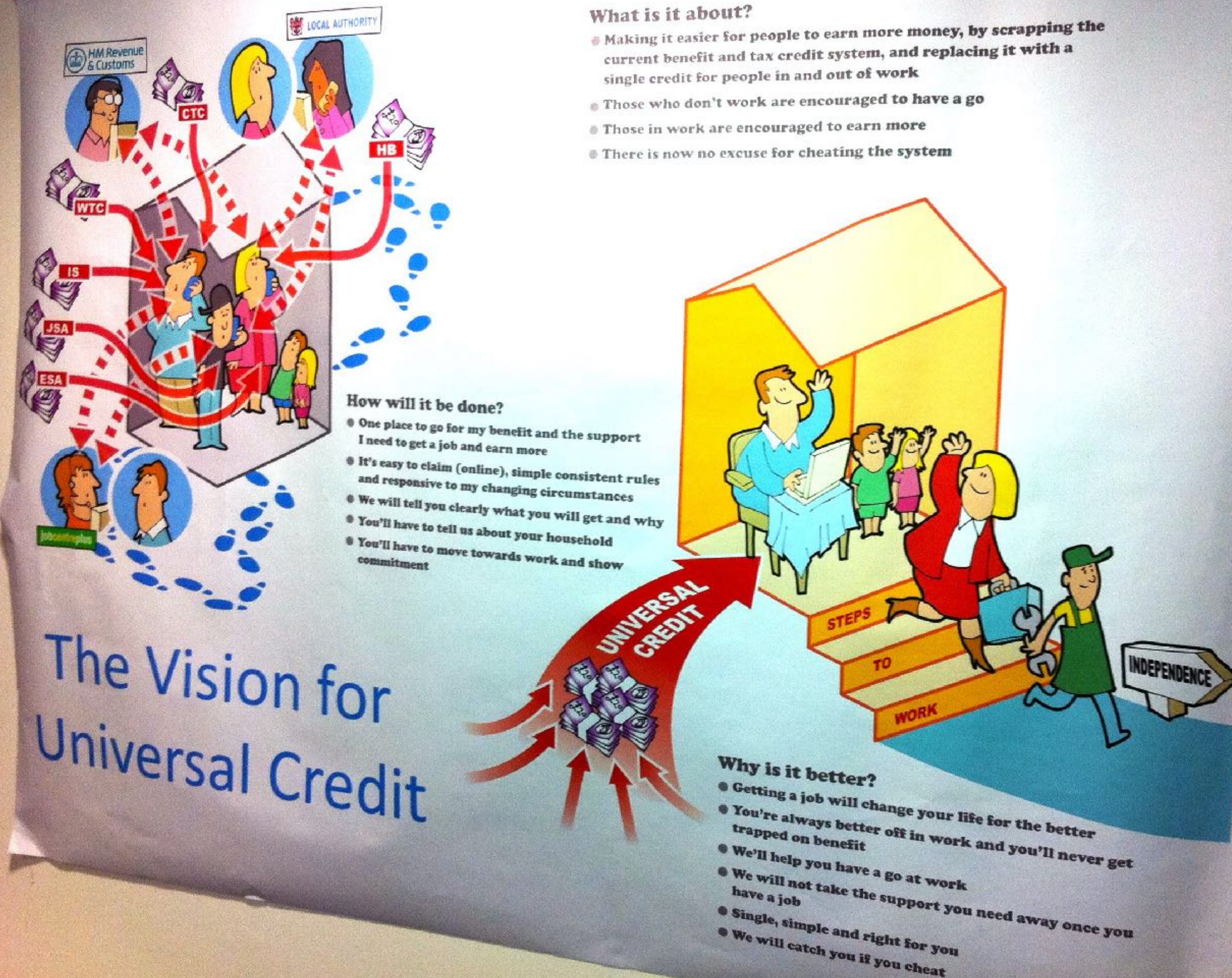
- Lo those many years ago when I hooked up with Martin Brooks, and he shared your ideas with me on Software Quality Management, you were doing quality management consulting which today we call process improvement consulting. You would talk to the projects, find out where the pain was and try to help them. You focused on SCM and SQA, and requirements, and planning and tracking to get them going.
- Your ideas and work were about 10 years ahead of the SEI.
- My point is that you should **"take credit" for being a pioneer in an area that the DoD**, the SEI and a whole lot of us used later. I wrote a paper called Back to the Future - Back to Software Quality Management to challenge people to get away from following the CMM blind and get back to quality management basice. I will attach it to this email. This is your influence!
- When people ask you about the CMM - simply tell them that it is OK - it captures ideas that you were sharing with the world about 20 years ago and soon the SEI and others will start to use your next set of ideas.
- With great respect,
- Tim Kasse
- [Tim and Jeff were contributing authors to the Capability Maturity Model for Software \(CMM\)](#)  
[Tim lead the development of the Software Process Assessment Method while he was at the SEI which started the Assessment Industry based on the CMM and now CMMI in October 1990](#)  
[http://www.linkedin.com/ppl/webprofile?action=vmi&id=10620438&authToken=zypz&authType=name&trk=ppro\\_viewmore&lnk=vw\\_pprofile](http://www.linkedin.com/ppl/webprofile?action=vmi&id=10620438&authToken=zypz&authType=name&trk=ppro_viewmore&lnk=vw_pprofile)  
<http://www.kasseinitiatives.com/>





# 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**





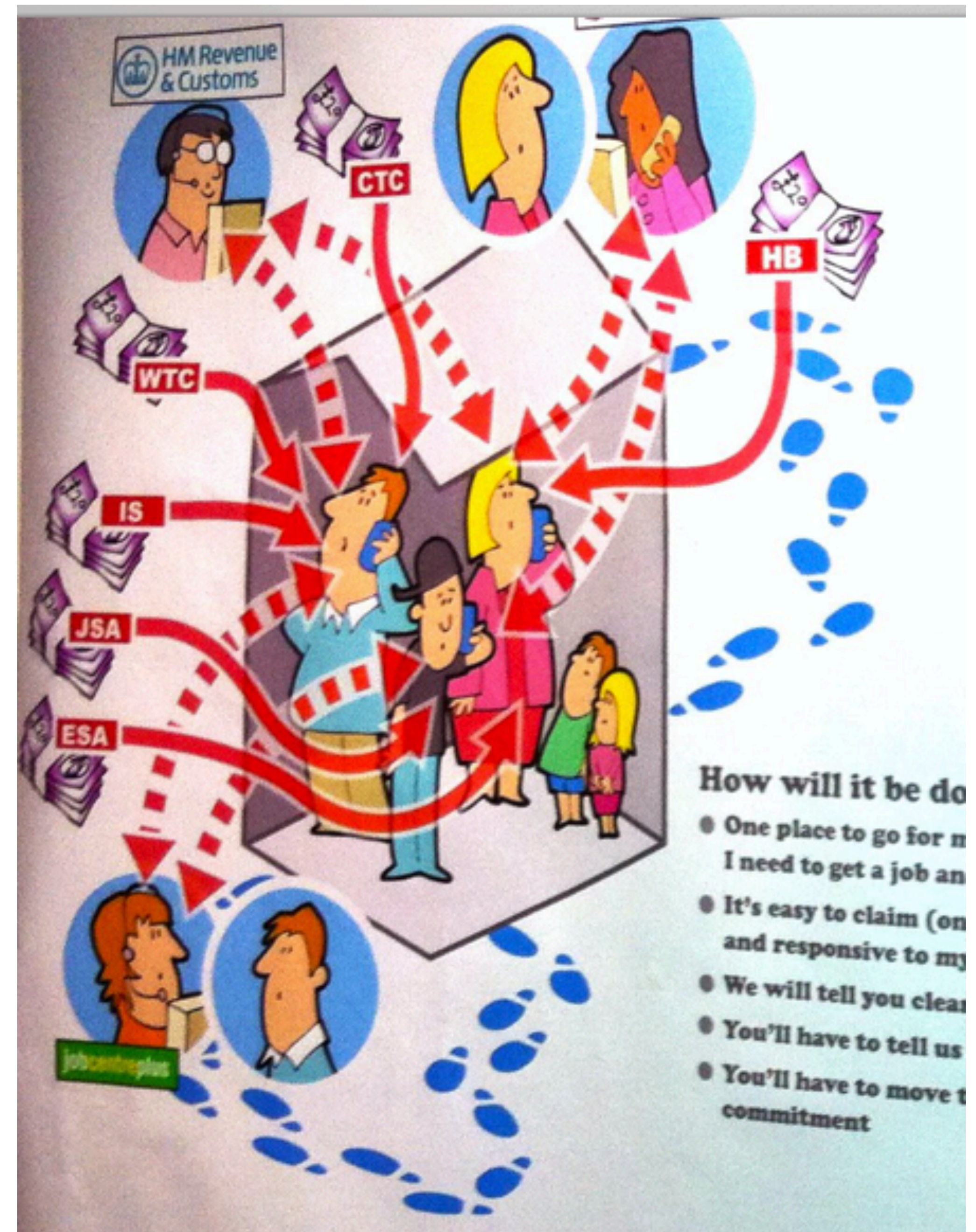
# The Civil Service Code

## 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.





# 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 ?  $\pm$  6 ? <- MW

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

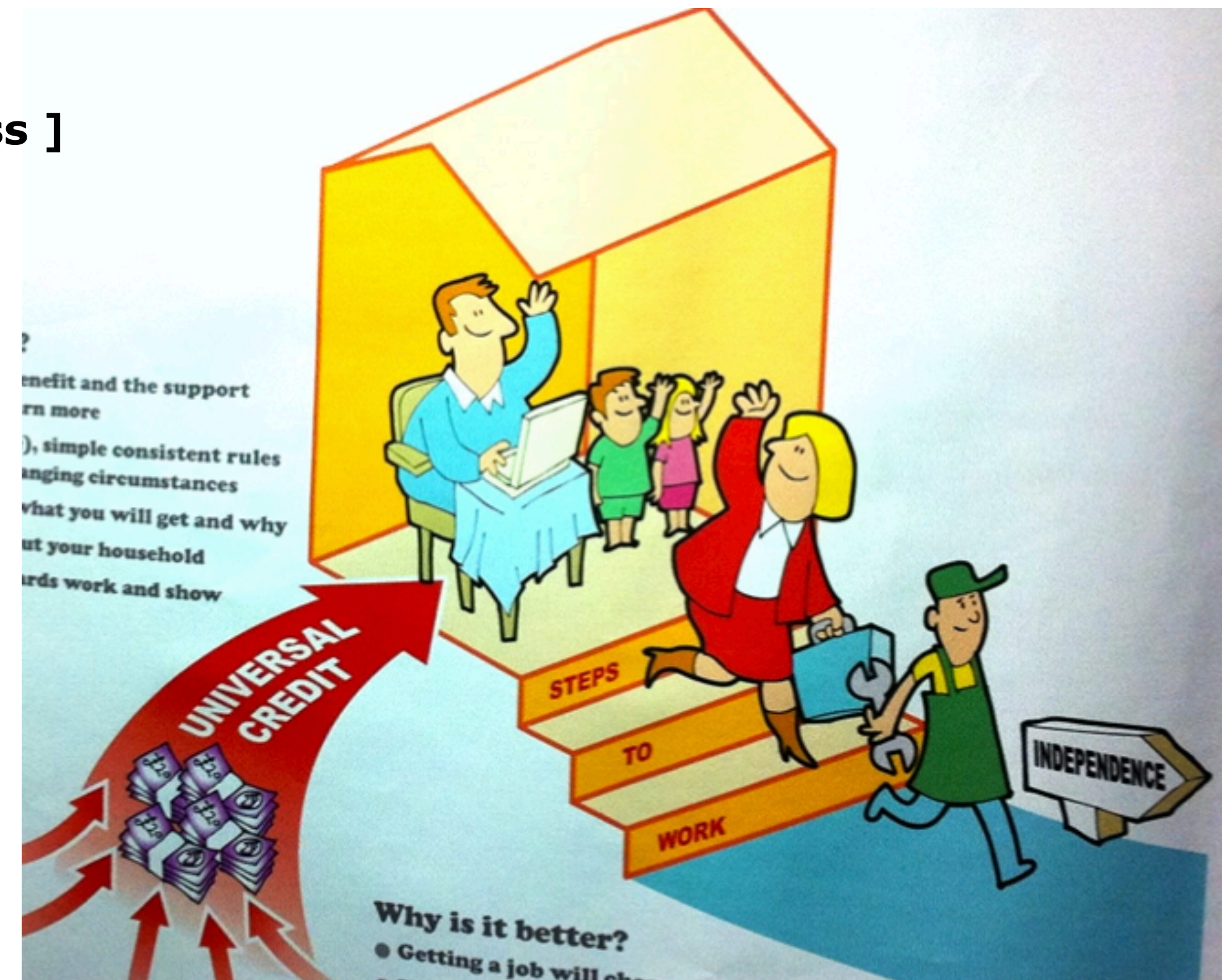
**Goal** [Deadline = Next Election + 5 years, Benefit = Employment Seekers Allowance, Claimant = {Handicapped, Single Mother}, Circumstances = Long Term Illness ] 2 years ?  $\pm$  ? <- MW

#### • 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





# Plan for Enterprise Ireland

Plan for Enterprise Ireland  
Stakeholders:Eugener C Seamus G

Objectives:

- Annual Sales:

•**Export Value**

- Ambition** Level: Increase export value significantly.
- Scale** of Measure: % Increase in Export Value for defined [Industry Classes] of defined [Size] compared to defined previous years (default the previous year), adjusted for inflation.
- Past** [Industry Class = Software , Size = over 10 people, 2004] <-5%?>. <- Seamus.
- Fail .... 2%?**
- Goal** [Industry Class = Software , Size = over 10 people, 2005] + 5%? <- SWAG TG
- Stretch** [Industry Class = Software , Size = over 10 people, 2005] + 10%? <- SWAG TG

- New HPSUs
- First Time Exporters
- Opening overseas Office.
- Selling Skills :“some think this is best impact on export %”
  - Type: Primary Strategy
  - Owner: Seamus
  - Implementor: Eugene
  - Version: April 28 2005
  - Description: International sales in foreign countries.
  - Issues:
    - Who trains?
    - Duration?
    - Costs?
    - Recruitment of Salesmen.
  - Impact [Export Value] Real= 5% %100
  - Evidence: <Indians did it> <- Seamus
  - Conclusion: do a little bit of this as an evo step and decide to do more if it provably works.
- Strategic Planning
- Marketing Support
- Competitiveness
- Productivity
- Push The Chosen

Industry Class =

- Software

Size = Number of permanent full time equivalent employees for most of the year.

Potential: defined as: judged by us as having the potential to grow more quickly than the national average for otherwise similar Size and type of company.

## Ireland's Trade in Goods 2018



On-line ISSN: 2565-6236

CSO statistical publication, 10 December 2019, 11am



**Real Example**  
**US Government Bank**

**Stakeholder:**

Direct: {Borrower, Lender, Our Corp., Investor, Broker Dealer,}  
Indirect: {Regulator, Realtor}

**Gist:**

To enhance our capability of extending our services to products and markets we do not currently serve.

Authority: Corporate Goal 2 (d) "markets we do not currently serve".

Rationale: Our Division must effectively support the technical capability to serve these new markets and products.

**Scale:** The average calendar time between request ('concept to spec' process) to Our Division for support in entering a new market, or delivering a new product, until successful first useful capability is operational and has been successfully used at all, when priority is highest.

Note: implementation delays due to assigned low priority, and consequent lack of resource to make improvements, should not be included as a measure of Our Division capability. <-TG, agreed CK

Assumption: the 'earned value' aspect of these changes will be covered by I7 (or elsewhere). <--CK

**Meter:** manual analysis/logs , by Our Division, of real requests and successful implementations.

Note: 2Q 200x we are prototyping this meter, 3rdQ 200x we will use it on past observations. <-CK

=====BENCHMARKS =====

**Past Support:** Past [New Incremental Product] 12 Months, [New Product] 24 months, [New Business Areas] 36 months.

Source CK quick approximations.

**New Product:** Defined: something incremental, but could be really new

**Record** [Construction to 'Perm'(anent Loan)] 6 months <- CK[Fixed Rate Adjustable] <6 months? <-CK ask Stephanie>, Trend

Note: we are improving this ability because of introduction of product pilots. <-C Kxxxxx

===== TARGETS =====

Wish "have to get better", [New Product] 2 months <- CK,

[New Market Area, New Channel Required] 6 months <-CK

Fail [200x] "sustain current performance<-CK" = Past Support.

Note could change Fail if investment were made. <-CK

**Fail 200q:** Fail [Year 200q] Past Support I2

Authority: Corp Goals 2 (products we do not currently serve) and 4 ( record financial performance)

**Stretch [200y] = Fail 200q,**

Rationale: we want to one of the corporate leaders in improving time to market <-CK

Assumption: we will need to have a much better understanding of our processing baseline.

Constraint: We are constrained in how much time we can cut out by the characteristics of our current core processing systems <-CK

**Goal [Long term] <ops implementation speed is not perceived as the bottleneck>**

Note: this goal needs to be seen in the light of Earned Value measurement efforts, see BSC Objective I7 <-CK

**Note I2 is a 'means strategy' for F2**



Problem was  
Trying to use  
Balanced Scorecard

Extreme Management  
Frustration  
Because the non financial  
values were not quantified

When Quantified  
They understood each  
other

What is Wrong with  
Balanced Scorecard, slides  
<http://concepts.gilb.com/dl135>



# US Government Bank - Impact Estimation Table

[illegible]



# Coherence Objective 1st Draft

- **Coherence:**

- ⇒ Ambition: improving the standard of coherence (towards 'entirely coherent') between existing systems and new systems <-G Sheldon.
- ⇒ Owner: Brig. Gen G. Sheldon
- ⇒ Type: Complex Objective {Redundancy, Gaps 'Field & Barracks', Productivity, }
- ⇒ Version: Oct 10 2001 10 58
- ⇒ Status: REJECTED AS OPTION SEE OTHER OPTIONS
- ⇒ Supports: {Productivity, Resource Efficiency, Application Mobility, War Staff work, Peacetime Planning }
- ⇒ Scale: **Probability that defined [Applications] can be fully used in defined [Environments] under defined [Conditions] for defined [Tasks] by defined [Staff].**
- ⇒ **Meter: <sample of 10 typical instances, judge if 'fully used' or not>**
- ⇒ **Past [2001] 70%**
- ⇒ **Plan [Application = GP3, Environments = {Brigade HQ, Desert} , Conditions = Battle Raging , Tasks = Operational Planning , Staff = SO3 'Captain', Delivery = End 2003 ] 80%**
- **Assumption: Past level is 70%**

Brig. Gen G. Sheldon  
His letter 23 oct 01  
'extremely  
grateful for your  
work...resulting in major  
revision of our Digitalization  
Goals ... Methods you have  
developed were  
exactly right for that purpose.



He challenged me to quantify  
the Coherence objective,  
and was vocally impressed  
when I did it on the spot




*JSIMS Maritime*  
**Certificate of Appreciation**

*SPAWAR*

***Tom Gilb***

For patriotism, effective mentoring, common sense, humor, insight, and generosity. Tom provided to the JSIMS-M team, without charge, three days of training in the disciplines of requirements engineering, quality assurance, and engineering management. Over these three days, he tailored his valuable insights and understandings on best practices in system engineering to our project. This was especially timely as JSIMS-M is currently defining its VRM2 requirements. His insights and advice have provided an invaluable impetus in the right direction.

  
Elaine Allen, D/ System Engineer, Maritime

  
Amos Jessup, A/ System Engineer, Maritime

14 June 2001







# UN Sustainability Development Goals, Case

For more detail see

<https://tinyurl.com/UNGoalsGilbVideo>







**4. 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.



Link words detect  
 ‘means’ in the ‘ends’

“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 workers **through** economic response and recovery programs;
4. Guiding the necessary surge in fiscal and financial stimulus **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](#)."



\* 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)

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



**ONE FIFTH**  
 OF YOUNG PEOPLE  
**ARE NOT IN**  
 EDUCATION,  
 EMPLOYMENT  
 OR TRAINING





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!**



**[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 Energy, ✓ ?

**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, ✓

**General term  
Subset  
Selected**

**General term  
Total Subset  
← Defined**

**← General term  
used to define Scale**

**G7 Energy Access**

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

**Is Part Of:** TOP 17 Goals

**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 <- big 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:

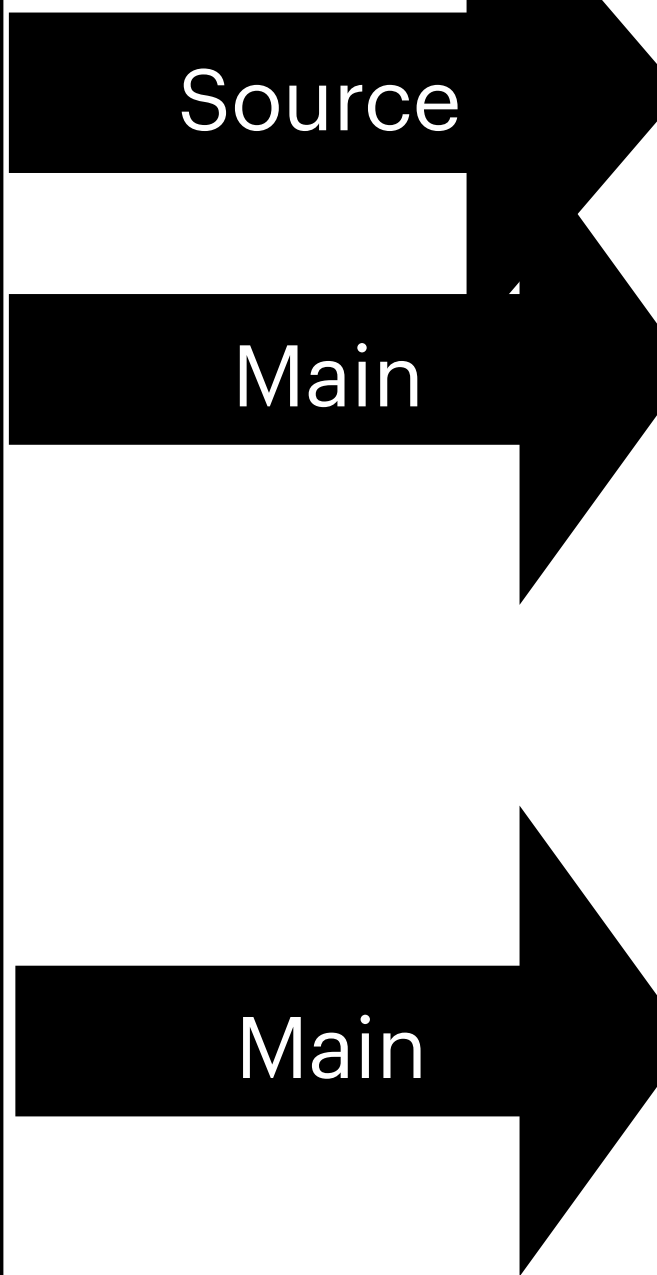


# Plan Review Rules.

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.

© tom@Gilb.com 2020



**G7 Energy Access**

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

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

Status0Goal100

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 <- tsg 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"

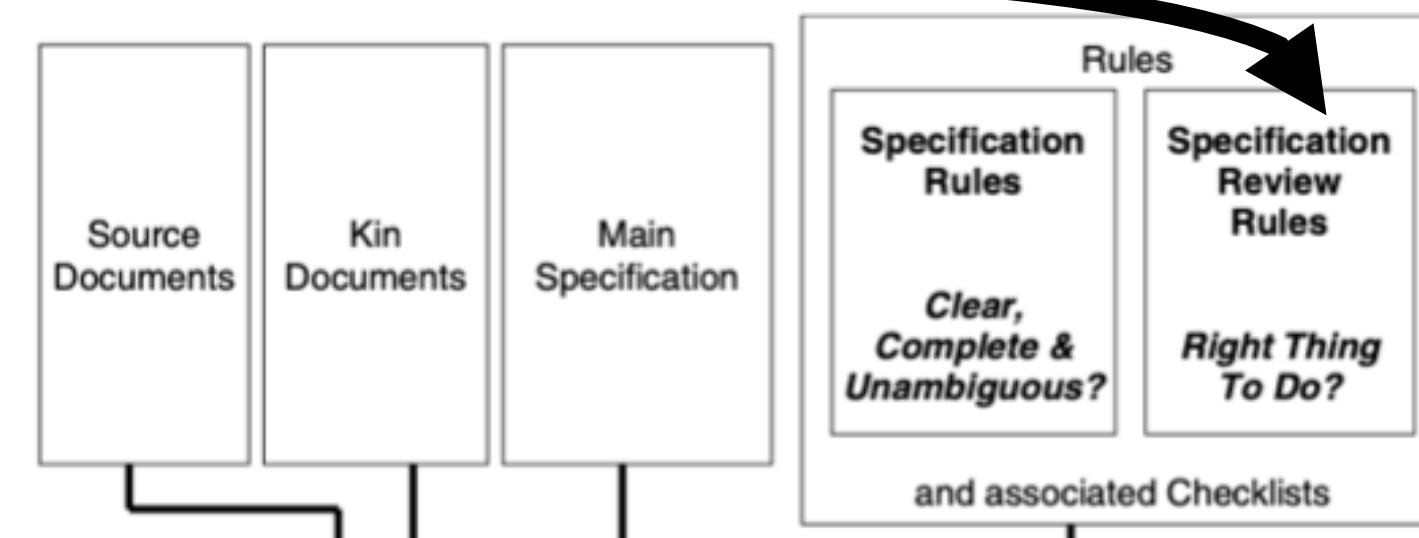
Stakeholders: Architecture Engineering And Construction (AEC), Dwelling Owner, Government Innovation Agencies

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:

Modern Energy: defined as:

Electricity, Gasoline, Diesel, Wood, Manual Generation,





# 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,  
○ which needs *clarification*, then *estimation* of impacts, then *decomposition*, then *prioritisation* for delivery.

2. The *Objective*

“Achieve higher levels of economic productivity”

- 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

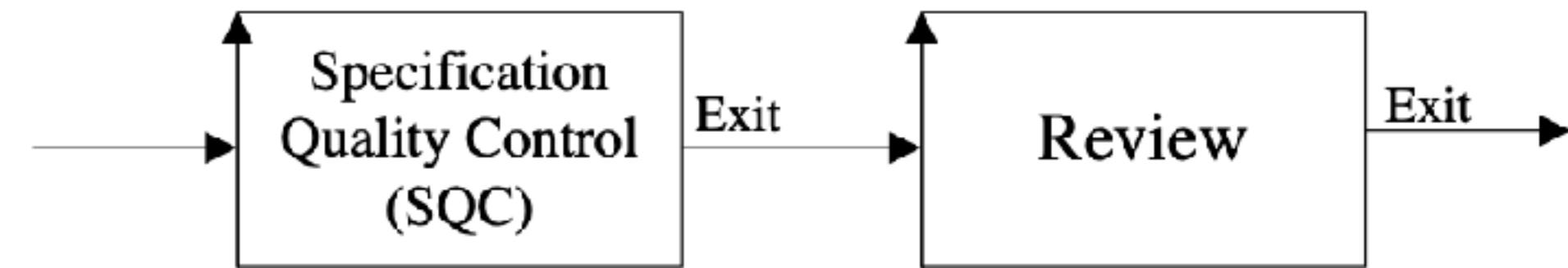


Figure 1: The two necessary distinct processes:

- Specification Quality Control (SQC) – *Is it following the standards (rules)?*
- Review – *Is it the right stuff?*

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.**



# Chapter 1.

# UN-Clear Sustainability Goals



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

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



SUSTAINABLE DEVELOPMENT GOALS  
KNOWLEDGE PLATFORM

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)

<- 20  
Pitfalls



<- 28  
Pitfalls



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.

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**.



# 1.3 What can we constructively do to improve a Goal like UN SDG 1 '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,

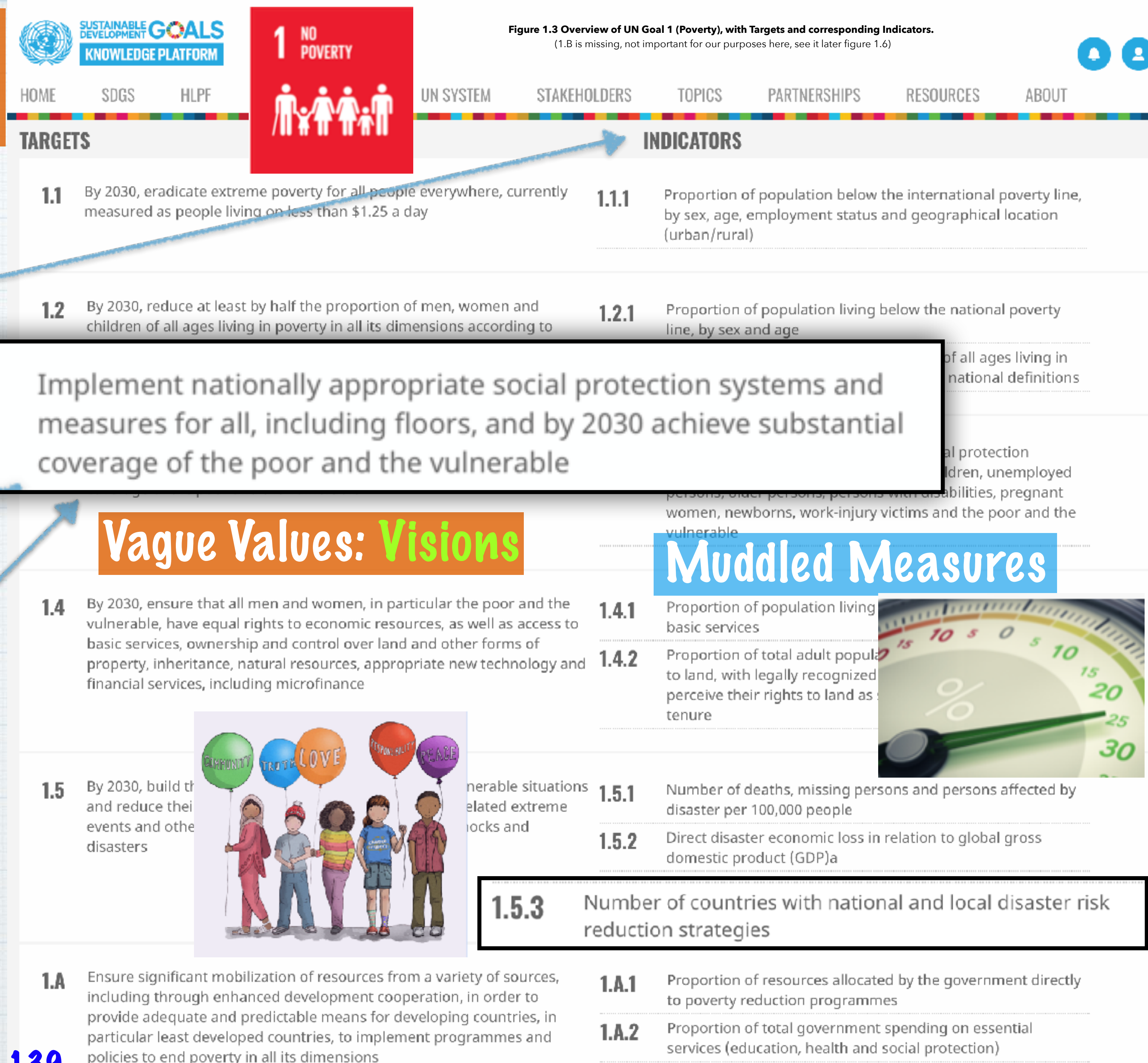
- \* **because** we need *first* to sort out the **unclear Goal, and Target** statements themselves,
- \* **before** we can even discuss if the *indicators* actually reflect our Poverty Ideas.

\* 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?**





# How to derive a Scale from a vague **Ambition Level** (or user story)

“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*.



Tag.Scale:

Figure 1.9 A Scale of measure for Target 1.5 (interpreted) is defined, and the ambiguous words are defined as sets of options, or attributes.

% #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, Commu

**Success Level:** defined as:

The attainment of Resilience for the defined

**Vulnerable:** defined as:

Poor, Physically Exposed, Weak Health, No Network Fallback, Insufficient Insurance, Insufficient Savings, Employment Problems, .

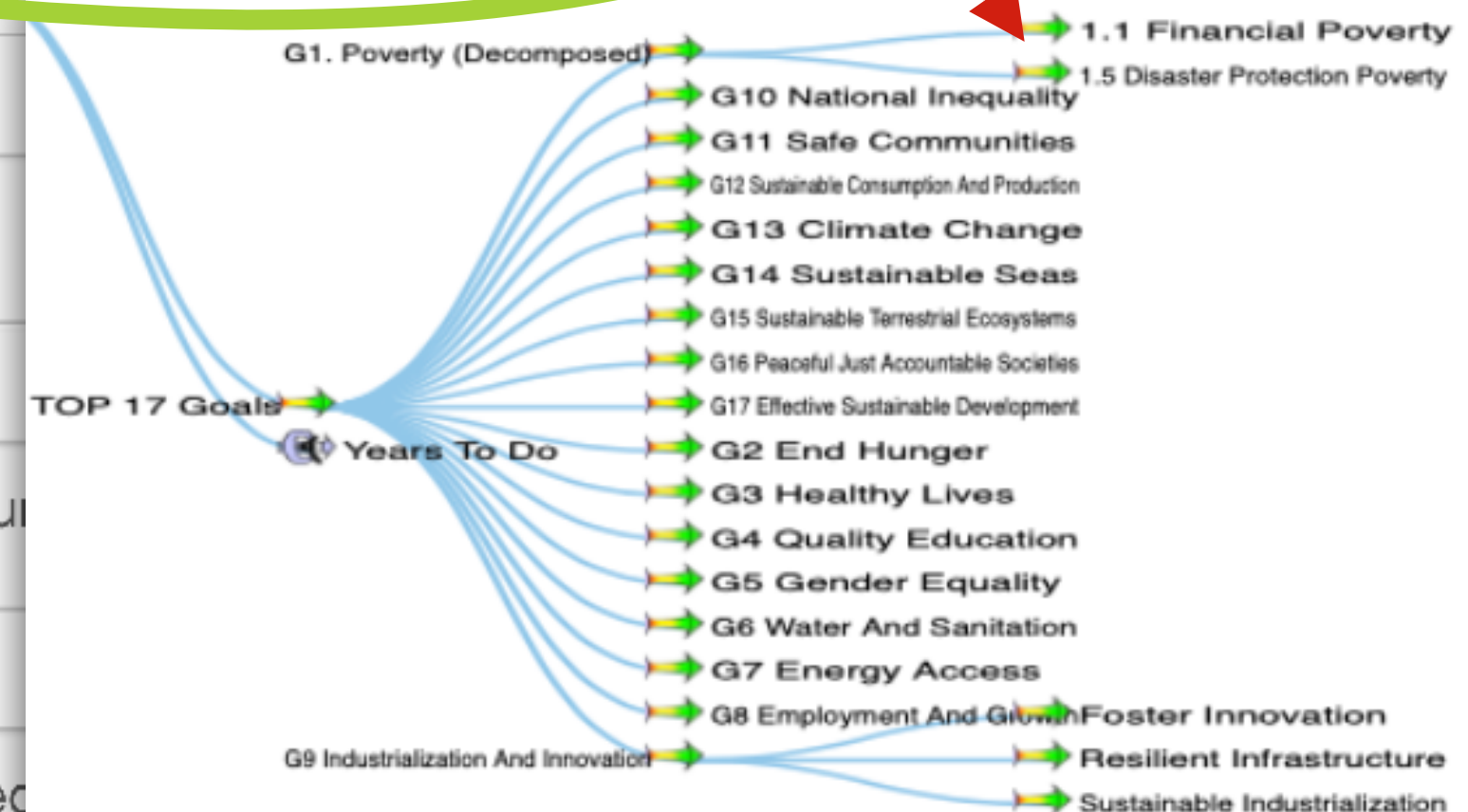
Notice 3 levels of **problem decomposition** here

1. Decompose values by defining a **Scale**

2. Decompose Scale into **[Parameters]**

3. Decompose [Scale Pars] into **Conditions**

4. Further decomposition is possible. See next slide (22, Environmental)





# Ideas for talk

- UN Sustainability examples. x
- **THE ENGINEERING And**
- **THE RESPONSIBILITY. IN THE TITLE**
- Check web [gov.uk](http://gov.uk) for samples
- Look at failed projects uk
- Look at my military projects like Persinscom, CMM 4 Sw Metrics. XXX
- BCS-Gilb Seminar Chris Dale BREXIT SLIDE 9- SANITISED 2018 Btt Ltd 21-Jun-18
- Dales recent June 2020 slides
- BREXIT ENERGY CONF 2017 X
- Lots of public sector in Valplan [gilb.com](http://gilb.com), London congestion, Housing, Traffic, Crime, see bCS
- LEAN GOVERNMENT SLIDES x
- DEFRA 2004 x then I found DECC 2020
- Look at positive example evo norway covid 16 changes to lay from march 24 to June 4 see afterposten 6 June side 14
  - 24 march 1 hours to qc the plan to be approved in cabinet (compare to sqc and to project start week)