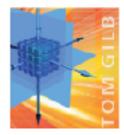
'Δ'

Δ - Value Plan-

For Top Management.



ning: Basics

(Δ) in *Mathematics:* a finite increment. Pronounced (uppercase) 'Delta'.

- 1. an 'advance'
- 2. an *incremental* result improvement, early and inexpensively (Better early real frequent consistent improvements, than late disappointments and failures)

© tom@Gilb.com, 2016. Version: June 12 2016, AUGUST 22 EDIT PICTURES IN, text edit 22auq16

This short book is really a 'Silver Bullet' for planning anything. It is worth 'Gold' for you.

Here is what this book's methods will do, when you apply them. Our 'sales' arguments !

- · Help you quickly make powerful plans, for great results, with a team too.
- Help you and your team, get really fast practical measurable results, even for large complex projects
- · Make you look like an extraordinary manager and planner: Make your team look great.

Here is how this book's methods will help you look, and become, impressive and powerful:

- · shows you how to quickly focus on the really critical results, the 'core', not the detail
- · shows you how to quantify any, and all, critical results, so you are incredibly clear about essential ideas
- shows you how to *estimate the impacts* of all your solutions and strategies, so that you can *evaluate* them and *prioritize* them, for *measurable early 'value* streams'. Increments (Δ) of priority values.
- · shows you how to complete your 'feasibility study', in less than a week, even for very large projects
- · shows you how to dive in quickly (in days), and begin to see, real measurable change
- shows you how to learn early, what works, and what it costs, and quickly find better options when results disappoint
- shows you how to connect many levels of concern: your stakeholders, your management, your team and your downstream clients, customers, users and prospects
- shows you how to understand when sales pitches, meeting presentations, and arguments, are wasted and meaningless: and what to do about it

Here is how you, your clients, managers, and team will know it works

• you will immediately, same day, experience a planning clarity, that you *never* saw before (quantified critical quality and value objectives)

- you will experience that your own ability to communicate with others (customers, and sponsors) is remarkably much better, than you ever experienced
- you will see extremely fast delivery, of real measurable results, which will give you, and other affected people, confidence in your new improved ability; and their willingness to fund you, and support you
- you will get well-documented bragging-rights, about how good you are, at planning and delivering: because the results are all quantified, early, and measurable
- you will get access to a larger, powerful, body of knowledge (Value Planning book) when you need more
 personal coaching and detail. So you can move yourself, and others, to really advanced levels; as you gain
 experience and motivation, to get even better.

1: The '1 Page Book', with all basic advice.

Here are the book's ideas in a short 'sound bite'

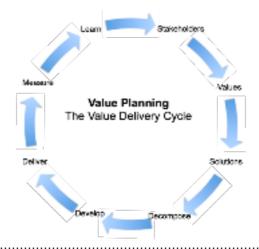
Deliver measurable stakeholder results efficiently

Basic Planning Principles: here are the mechanisms, the rules to guide your planning.

- 1. Know your many critical stakeholders, their power and priorities.
- 2. Focus your energy on their most valuable improvements (Objectives).
- 3. Rate all 'strategies' for deliver-capability of your critical objectives, quantitatively.
- 4. Break big strategies into much smaller ones (Δ), for quick wins (Δ), in direction of longer term objectives, for the most critical stakeholders.
- 5. Manage all risks of failure (failure to improve for stakeholders, failure to be profitable) early at a high level.

Basic Tools: The Planning Language 'Planguage'

- A. Multi-stakeholder focus: every powerful instance that determines success or failure
- B. Quantification, and 'enrichment' of your critical improvement objectives: the foundation.
- C. Quantification (estimation, measurement and increments) of all strategies, means, to reach your critical objectives, on time and profitably.
- D. Quantified Alignment of all levels of planning using the Value Decision Table (impact Table)
- E. The Evolutionary (Evo) 'Agile and Lean' Project Management process for value delivery, and rapid learning and correction of disappointing plans.
- F. Outsourcing contracting, based on priority results *actually* delivered: Pay for results, not for work done.
- G. Planning Quality Control: How to measure the quality of any plan or contract, and refuse to waste time on plans that will cost you more later, than doing it right the first time.



•	
•	
•	•
•	· · · · · · · · · · · · · · · · · · ·
•	•

5 of 26

1 A: 'Value Planning' is a continuous rapid cycle of learning how to delivery critical value for money to your crit-

'Value Planning' is characterized by the set of skills named in the cycle. This book will give you the core ideas and content of the value planning skills. Should you wish more detail, you can study the corresponding parts of

the books Value Planning (leanpub.com/valueplanning) 2016 and 'Competitive Engineering' (2005)

The text below will give you step-by-step explanations of the basic Value Planning process skills.

ical stakeholders.

2. Stakeholders

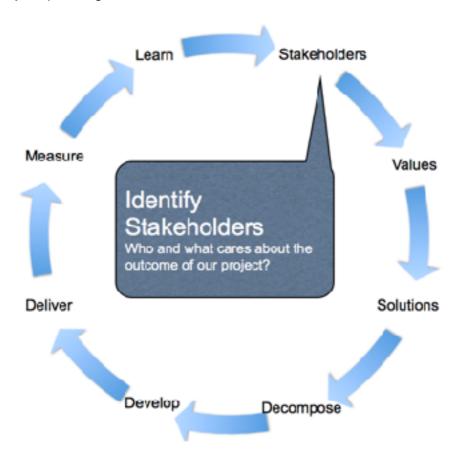
Summary:

Your projects must consider all your 'critical' stakeholders. Not just the usual customers, clients, markets, users. But potential markets, laws, agreements, plans, employees, contractors: any person, group or thing that is critical to your success, or your failure.

How to do 'stakeholders'

- 1. Do NOT begin your planning with ' what are we going to do?' (strategies).
- 2. Do NOT begin your planning with 'what *results* do we want?' (objectives)
- 3. Begin with *identification* of your most-critical stakeholders, in the domain you are planning.
- 4. There are 10 to 100 stakeholders, or more, depending on scope (size, domain).
- 5. Brainstorm a stakeholder list, and add to it, as experience and insight dictates.
- 6. Document the power of the stakeholders to help you succeed, or to cause you to fail.
- 7. List the most critical stakeholder needs (for *your* success or failure).

- 8. Analyze which levels (how good or bad) and timings (now, near term, long term) of these needs will provoke success or failure.
- 9. Validate this information with domain experts, and the stakeholders themselves
- 10. Validate this information (critical need levels for stakeholder) in practice, in early increments (Δ) of value delivery: learn what is true or false early. Correct when necessary.
- 11. Keep the stakeholder identification directly attached to your project objectives, at all times in the future, in your planning. You will need to review it, and review it with them. Need X: Stakehold-



ers are A, B, C.

2A: **Stakeholders** are instances that require value from a system, and 'critical stakeholders' (empowered individuals, groups, laws and plans) expect or want some different values from your system. (qualities, improvements, economics, conformance to regulations etc.).

Critical stakeholders, and **critical** values imply that 'failure to deliver' can mean 'failure of the whole', or important parts of your system.

Failure to identify critical stakeholders, and their critical values early enough can be costly, a delay, or a failure. It pays off to analyze stakeholders, and their needs, as early as possible. But some of them might not become visible, until you have done some early value delivery, and the unknown stakeholder or value level 'emerges'.



3. Needs

Summary: In any project, there is one core idea: get better.

Invariably, this one core need, can and must be described with a **set** of things that need to be better. We need to break down the 'better' into a list of specific types of 'better'.

The set of needs can be unmanageably large (100s, 1,000s) if we do not prioritize them intelligently. *Everybody wants everything* they can get, maximized, if it is free.

So our 'needs' process is going to try to identify two 'handfuls' (about 10) of the early, most critical needs, of the most critical, powerful, and needy stakeholders. And we will focus our *initial* energy on them.

Then, when these needs have been successfully delivered, we will continue the process, with a new batch of 'objectives', until there is no competition, no enemies, and no motivation to satisfy any critical stakeholders. In other words 'forever as long as you are in competition' (W. E. Deming)

How to do 'Needs': also known as 'setting objectives'.

- 1. Develop a shortlist (10) of the most-critical short-term-need stakeholders. The others will have to wait. Give each need a Capitalized Word Tag. As cross reference. For example: **Service Capability:**
- We are not going to sub-optimize, and not going to forget the long term. But we are also **not** going to let the short-term needs of major and critical stakeholders (like our current 'rich' and 'powerful' clients) suffer, while we attend to long-term needs, either. Balance.
- 3. Take each need and quantify it, so that we can see exactly what degree of improvement is needed in the shorter term. More about quantification below.
- 4. In larger projects, you might find it useful to first, before quantification, break down many of the major needs into a subset of *their* related needs, that define the larger need. This is a matter of getting control over essential detail, and of not overgeneralizing.

- 5. To quantify a need (or sub-set need) you should first be clear that it is a genuine *improvement variable*. That means you can use words like 'improved', 'better', 'competitive', 'critical minimum', which indicate the thing is a variable, and that numeric definition applies.
- 6. The next step is to roughly, in 5 to 20 words usually, make an **Ambition Level** statement. For example:

Ambition: to deliver the best overall service to emerging markets compared to competitors <- CMO.

- 7. Try to get agreement, or a sign-off of some kind, with your stakeholders, or other powers that be, to this Ambition Level statement. Quoting a powerful instance, a formal plan, policy, or executive, on the Ambition statement, is useful here too, like: <- CMO, Source Chief Marketing Officer.
- **8.** Now we are ready to define the objective, using a 'Scale of Quantification' (Scale for short). This allows you to 'put a number' on the need and the current situation. It defines the need in terms of a potentially numeric variable. We are improving clarity by defining Scales. And we are usually forcing ourselves to think very deeply about what we *really* need to deliver. To find reasonable Scales: use common sense and domain knowledge, or look it up in books, or Google It ('Workforce Effectiveness Metrics') for a lot of good ideas and practices. Even in areas you did not think could be quantified. For example:

Scale: the % defined [Employee Type] who was available on demand for a defined [Task].

9. Now specify, as well as you can a benchmark, on that Scale, such as your current level. For example:

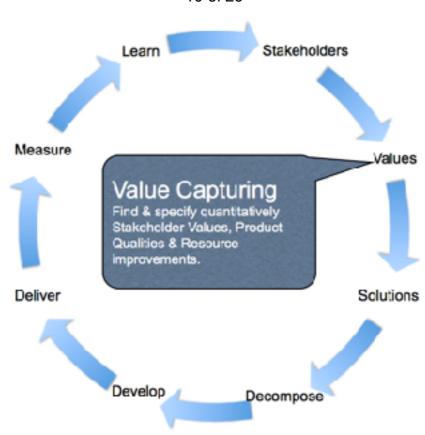
Past [This Year, EU Market, Employee Type = Permanent, Task = Engineering] 50%

10. Now try to figure out the minimum acceptable level, below which you have a 'failure' level. For example:

Tolerable [Next Year, Worldwide, Employee Type = Contractor, Task = Programming] 80%.

11. Finally, try to estimate, and then specify, the level required for *success*. For example:

Wish [Next Year, Worldwide, Employee Type = Contractor, Task = Programming] 95%.



3 A: The critical values need to be identified as clearly and correctly as possible. This demands quantification of value concepts, their levels, their delivery timing, their related stakeholders, and the penalties or benefits of delivery and non-delivery.

Our Value Planning Language ('Planguage') enables you to capture all values, to determine their correctness, and to track actual delivery progress.

You cannot deliver all values to all stakeholders immediately. But you can try to capture a clear and comprehensive picture of the critical stakeholder, critical values: so that you can intelligently prioritize the most critical things first, and prioritize within your available resources (people, skills, money).

4. Quantify Needs

Summary:

We showed you a simple example of specification for a 'needs improvement', above.

We hope you sensed that the *Ambition* statement was not enough, for clarity and management of the need delivery. We hope that you can see that the additional statements above, which 'clarify and quantify' the Ambition statement, can be a very useful basis for communicating, and for sharing a plan to improve something. There was limited space to explain everything we did in the example above. And there were lots of things we could have done to make the need statement better, So we will say more about that in this section. But we still are being very brief about the planning possibilities: so if you sense a need for more capability, or more precision, it is there in Planguage. But not in this short book alone. See 'Value Planning' the book or the Competitive Engineering book.

How to do it: more-advanced quantification possibilities.

- 1. The *Ambition* statement is a high-level and general 'needs' framework. It does not have to specify exact numbers. But *Ambition* should reflect the *need* quite well. Stakeholders should 'give it the nod', in principle (until they see more exactly what you have in store in the Wish and Tolerable levels!). Ambition is used derive quantified detail in the form of 'Scale', 'Tolerable' etc.
- 2. The set of quantified specifications (Scale, Past, Tolerable, Wish) should align reasonably well with the Ambition. The Ambition and the quantification need to be consistent, so that the Ambition can be trusted to represent a reasonable summary for executive use, and other overview purposes.
- 3. The Scale should be a good representation of the *real needs* idea. It should not be just a quantification which is 'easy to think of', or 'easy to measure in practice'. Good ideas for Scales, and for decomposition of a compound 'need' into a set of Scales, is readily found on the internet. Really useful scales are highly tailored to your domain. Cut and paste is not as powerful as paste and tailor.
- 4. Note in the example given above (8.)

Scale: the % defined [Employee Type] who was available on demand for a defined [Task].

We used 2 'Scale Parameters' (Employee Type, Task) written in square brackets and Capitalized. These are very useful and used 2 to 5 times in almost every Scale we write. They serve several purposes. They make the scale more general. It can be reused for a wide variety of quantified levels (benchmarks: Past, Status, Record, Trend: constraints: Tolerable, Fail, Catastrophe, OK: and targets Wish, Goal, Stretch) as well as multiple instances of each. Like for a series of Goal levels, for planning the long, medium and short-term needs; in different areas of who, where and under what conditions. Quite a mouthful, but a very powerful, and a useful tool for modelling your complex reality, and all its combinations. This allows us to handle any scale of project.

5. The 'Scale' defines a *quantitative scale*, but we need to define at least one *process for measuring* in practice *along* that Scale. Think 'Speed/Speedometer', 'Volt/Voltmeter'. We call this specification parameter a 'Meter' (or Test). It is usually a rough one-line sketch, with test-planning detail left for a test-planning specialist later. But it has enough detail to enable us to understand practicality, accuracy and costs within reason. For example

Meter: a survey by HR of a 5% sample of all requests for help.

For many more tools for 'needs specification', see the detailed handbooks CE and VP.



4 A: A value must be quantified so that we can manage 'value delivery' and 'value prioritization'.

This means that we must find an appropriate (relevant, practical, intelligible, acceptable) quantification scale of measure, to define what we mean by 'more or less', and enough of it. This is invariably possible, solutions abound on the internet, but most everybody needs some skills training to do this consistently and satisfactorily. This quantification will force us to think more deeply about our value delivery challenges, help us to communicate the value needs to all parties (suppliers, lawyers, technologists, managers). Quantification will help you avoid management BS.

In the diagram above, the arrow represents a scale of measure. The <u>Past</u> level is our best understanding of our current levels of performance.

A Tolerable level is a 'bare necessity' (and less than Tolerable is intolerable, a degree of failure).

A Goal level, defines 'success' (for some stakeholder, under some conditions), and less than that is probably 'tolerable'.

These concepts help us prioritize our actions, and to understand risks.

5. Means.

Summary

The 'means' are 'what we do to get our needs fulfilled'. There are many synonyms for *means*: solutions, designs, strategies, architecture, options, alternatives. Our job as 'designer' or strategic planner, is to find and successfully deploy enough 'means' in order to meet all our needs (Wish levels), within constraints (legal, practical etc.) and resources (time, people, money, space). We also need to reach each one of the individual 'needs' without bringing in any 'means' that destroy successful delivery, of any other 'needs'. We cannot for example, make the system/product/service so secure from penetration, that even normal users cannot get to it!

Finding the 'right means' is a very tricky business, even for fairly small and simple systems. Nobody knows what benefits (for our needs) will actually occur, what side-effects will occur and what costs will be paid. People have opinions, but not reliable ones. So, the only safe way forward in general seems to be to estimate impacts the best you can; select the most promising strategies to implement early and separately; to measure what many benefit-and-cost impacts they *really* give you; and make a decision to keep, modify or delete the strategy. We call this *Dynamic Design to Cost*. And it (DDtC) has a proven track record (IBM, Cleanroom) of 'perfect' project management: very few people know that, now you are among them! Not because the impact estimates are so accurate; but because of its ability to sense the need for change, and do it early, whenever we are wrong - which is often. This is because it is 'agile' (incremental) and 'lean' (early, learning).

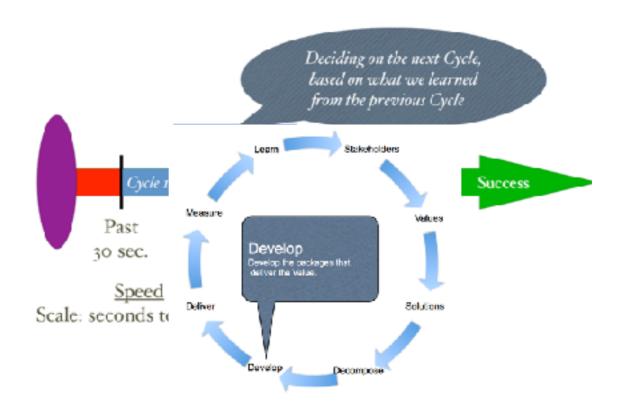
How to do it: Means Identification, specification, pilots, and deployment.

- 1. For each of your 10 or so critical needs, ask yourself or your 'experts', for the most powerful ideas available, for reaching the Wish'ed-for levels of the needs.
- 2. For ideas of similar 'power', identify the cheapest, fastest-to-implement, less-risk ideas
- 3. This should give you ideas with pretty good 'value for resources'. 'Efficient ideas'
- 4. For any need that you would like to satisfy earlier than others, try out the most-efficient ideas first.
- 5. To really deliver benefits early, you are going to have to try out your ideas on your *current* systems (products, services, organizations). If you wait until you have rebuilt the systems anew, you will be too late, and non-competitive. You can build new systems in parallel with improvements to the older systems, and then add on recently proven strategies to the 'new' systems, when they are ready for real use.
- 6. Usually your top-ten best strategies are individually too big (like 6 months, or 2 years) to deploy quickly ('next week'); and too big to deploy in a pilot ('our local city'), so you will need to master the art of decomposition of big ideas', into 'smaller deployable ideas': in order to get some results quickly, and to learn about bad ideas before they become 'bad big ideas'. See next section on decomposition.
- 7. You will also need to detail your ideas for several other reasons than enabling short-term deployment. You need to detail ideas in order to get a better idea of the many technologies involved; to get an idea of the many cost drivers (time, people, money) and other practical factors, such as interference with current systems/products/services/employees/contractors/contracts. So a reasonable basic rule is to detail each top 10 strategy idea into about 10 sub-strategies. Ideally each sub-strategy will be *individually* implementable, in *any sequence*. See next section on this. This gives better prioritization ability.
- 8. In addition to the core strategy idea itself, (*what* we are going to do) you need to collect and document a lot of 'background' information about each sub-strategy. These are for purposes of costing, sub-contracting, prioritization, risk analysis, political acceptance, motivation to use, and other purposes.
- 9. Some of the Planguage parameters we use for this are, for example: Risks, Issues, Dependencies, Mitigations, Stakeholders, Sponsors, Experts, Authority, Owner, Impacts, QC Status, and many more.

5 A: We need to 'prioritize' solution delivery, so that the most critical needs are taken care of in



time and within budget. We can do some initial and obvious prioritization. But after we have delivered the values, and seen the real costs to date, and provoked new stakeholders into coming for-



ward with new needs: we need to re-evaluate priorities - at every new value delivery cycle.

5 B: What we are going to deliver, of solutions for value, cannot be decided too far in advance. Same problem in deciding chess moves, or military actions, in advance. You have to be prepared to learn about costs and opportunities, and new enemies or unforeseen threatening circumstances.

6. Decompose The 'Means' (Solutions) by Value

Summary:

There are many advantages, some discussed above, with detailing, decomposing, and breaking down, big ideas, into a set of smaller ones.

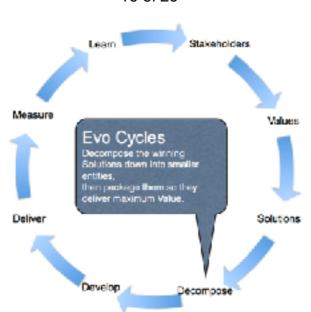
Among advantages are: earlier benefits and value delivery. Lower costs of wrong ideas. Faster discovery and learning about bad ideas. More intelligible and less complex ideas to evaluate for costs, risk and benefits. Possibility of parallel implementation. Reduced project failure. Ability to focus on critical stakeholders early, and other benefits.

There seems to be little in the way of formal methods for 'decomposition by value' and 'decomposition by independent implementation capability'. But intelligent logical domain-knowledge, as a decomposition basis, is usually sufficient when people are motivated to use it. I have personally noted about 20 basic principles that continue to serve me, as a guide, to decomposing by value. The first principle is 'Don't be so arrogant to imagine, that just because *you* cannot solve the decomposition problem in 2 minutes, that no-one else on earth can do it: 'it is impossible' the arrogant say. Intelligent people can be quite arrogant. I usually, at most, 'sleep' on the problem, and can usually solve it within a working day, often in hours.

You do not have to decompose all strategies at once, before you begin delivering. It is sufficient to extract a sub-set of a strategy for deployment 'next week', to get going. Then to re-do a new extraction every week, until the system is delivered successfully. This method is bound to give you insights from the real world, that will make later extractions more productive, than any attempt to decompose all strategies, at the outset, would be. This gradual decomposition is then faster, and smarter, at once.

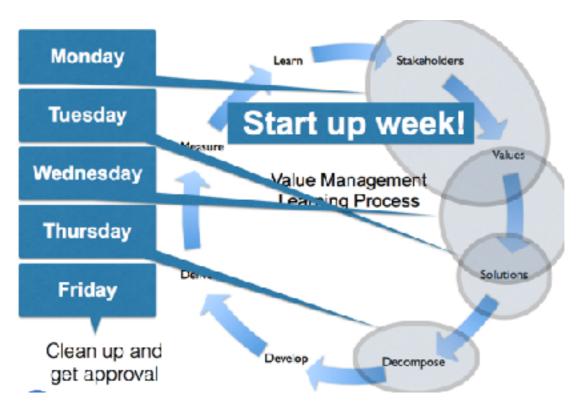
How to do it: how to find value delivery steps of small cost.

- Aim for arbitrarily small delivery steps of a week, or for no more than 2% of total time to deadline, or total budget. These step sizes enable useful value and learning, but are small enough to tolerably allow for complete step failure, on rare occasion. You get immediate learning about what fails, and finding out what works.
- Seeing interesting possibilities for decomposition requires imagination, motivation, persistence, domain knowledge and technical knowledge. One unmotivated person alone, will give up too early.
- 3. The steps you are looking for are not product/system 'construction' steps. It is not about 'building' something, step by step. It is about *improving the value* of something in increments. Consequently, ideas like, motivation, training, contracting, competition, re-organization, are at least as likely to provide results, as hardware, software, and new staff components.
- 4. One client (<u>confirmit.com</u>) allocated about 30 minutes to 'design' in their weekly value delivery cycle. By focussing on a single unfulfilled need Wish level, they brainstormed a handful of design ideas, that they think they themselves can do in a week. The team then picked the idea with best estimated impact, and goes with it. This seems to work consistently (for years). They are not necessarily decomposing a specific larger 'architecture'. But they are finding a week's worth of work, that they themselves believe, and almost always prove, can deliver numeric value delivery. This got results that wiped out their (Confirmit) competition internationally!
- 5. The Impact Estimation Table is a tool for decomposition. See Illustration 8B below. Assume you have 10 objectives and 10 strategies in a table. You then have 100 value-relationships estimated. By simply looking for the biggest value numbers, you have spotted an opportunity to deliver value, that on average is 1% of the cost of the whole. If you cannot directly implement a part of the strategy to deliver some of that value; then you try to decompose further. But usually there seems to be a direct opportunity, in fact several ways, to deliver value at that intersection.



6 A: Some solutions can take too much time and money to deploy. So a useful option is to decompose solutions so that they can be partially deployed. Perhaps for partial value, and part of the stakeholders.

There is a craft of decomposition, we offer 20 specific principles (in VP, and CE books), which makes it possible to deliver value much earlier, than if you wrongly conclude that decomposition is



not possible. Many professionals make the mistake of assuming decomposition is not a valid option.

6 B: Developing solutions means getting them ready for delivery to stakeholders in the real world. This involves financing, team building, supplier evaluation, contracting, building, testing. Moving from concept to reality.

7. Risk

Summary:

By 'risk' we refer to the possibility that we can fail to get the values we wished for, or that the costs of getting our values, exceed expectations, or exceed profitable levels of cost or deadlines.

As all history demonstrates, there seem to be a lot of risks that things will go wrong. So what can we do in planning, and in project management, to reduce risks of partial or complete failure?

We believe that Planguage, including the project management method 'Evo', and our quality control process 'Specification Quality Control' (SQC) give you a large set of powerful proven tools for managing risk.

Planguage, gives us tools for *identifying* risk at all stages of planning; early. Evo gives us quantified tools for *sensing* problems at very early stages (2nd week, where Evo begins to try to deliver) of projects. Evo co-operates with Planguage specifications to know what was expected, exactly (estimated values and costs), and to measure whether these values and costs are really delivered, or if we have a deviation problem, needing immediate attention. This reduces risk of bigger failure.

Spec QC gives us an *inexpensive way to check the quality* of all planning documentation, particularly the critical 'requirements', 'objectives', and contracts. These are the foundations for all other work, so they need to meet a high standard. For example 'less than 1 major defect per page', rather than the 'over 100 major defects per page' that we usually discover, when we first measure planning systems that are out of control.

There are hundreds of detailed tools in Planguage that help us manage risk. Almost every part of the Planning Language is designed to help us avoid and detect risks. But we can outline some of these ideas below. The *Value Planning* and *Competitive Engineering* handbooks give great detail.

How to do it: Managing Risk in Practice

- 1. Our aim when using Planguage specifications, for all levels and forms of 'ends and means', is 'near perfect' communication of ideas, to all people concerned. In practice we have reached economic levels of specification 'perfection' of 0.2 Major defects per 600 words (Intel Terzakis). This compares with 160 to over 400 defects per 600 words, that we measure normally, where no quality levels are set and managed. The key here is 'Spec QC', a quality control process, which gives you a cheap numeric measure of any planning specification. This motivates planners to meet a high, and economic, standard of error-free specification. Specs get 100, or more, times clearer. The specification defects do not proliferate downstream, towards all consequent project work. This saves total project resources, and improves productivity by 200% to 300% (Intel, Terzakis).
- 2. The simple act of *quantifying* all the critical top-level stakeholder 'value' objectives, sharply reduces a number of risks. The risk of misunderstanding the main improvement points, by employees and contractors. The risk of failed strategic planning and architecture, due to bad inputs (value objectives, constraints) to their work, leading to irrelevant 'strategic solutions.
- 3. The Impact Estimation table (III. 8B), demands that we quantify the goodness of our 'solutions' with respect to all critical objectives and costs. This is a rare assessment, in advance, for most people. Most projects seem to wait, until the unpleasant effects of a bad plan, pop up too late in practice (failure). It takes a days work to check this out with a table, in advance. I use the 3rd day of the project for the initial estimations of 100 impacts.
- 4. Evo, the Evolutionary agile project management method is unique in several risk-fighting respects. It is *systems* oriented. It is 'multi-value' and 'multiple cost' oriented. It measures results of quality and value, in multiple dimensions, early, and gives us the opportunity to correct things early. One example is correction of failing strategies, using 'dynamic design to cost', as demonstrated long ago by IBM Federal Systems Division Cleanroom method (Mills, Quinnan, 1980) and our own Evo users for decades worldwide, and sometimes corporate wide (HP). Result is projects 'always on time and under budget' (Mills)



7 A: We can begin managing risk by starting our projects with clear quantified value goals in the first week and the first day. Then we use the rest of the 'Start up Week' to get ready for real measurable value delivery the next week, and continue this value delivery every week thereafter.

7 B: The 'value deliver' part of the cycle is NOT 'build' or 'acquire'. It is somehow (possibly with no building or acquisition) actually moving at least one value measure, for at least one stakeholder, in the right direction, in practice.

8. Quantify Means: Use an Impact Estimation Table.

Summary:

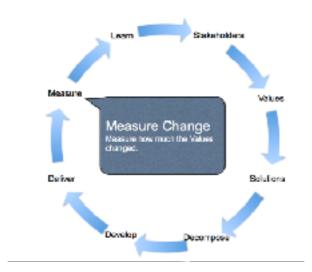
It never ceases to amaze to see grownup people arguing for this or that, without offering any serious estimate of 'how much benefit', 'when', at 'what cost'. Not just business people and professionals, but political leaders on TV and other media. Nobody knows the numeric future exactly, but we can still make responsible reasoned estimates, including error margins and risk assessment. We don't. So we fail. And nobody can, or will, take full responsibility. But they will try to shift the blame elsewhere.

Let's encourage a more responsible culture. If you believe in something, then estimate how much good it will do for the well-defined common objectives (ah! a problem here, when we do not have quantified agreed improvement objectives!). If you cannot do that, then you are unqualified to hold strong opinions about those strategies. Get another job, or at least keep silent, or say you do not know. But say you *would* like to listen to responsible people who *do* know. And can *prove* it.

How to quantify the 'means'. The structure of an Impact Estimation Table

- 1. IMPACT: For the primary intended objective of a 'strategy' (aka 'means', 'architecture', 'solution') we should always make an estimate of its 'impact'. A simple language to use here is that 100% means 'we will get to the Wish level, on time'. 50% means halfway to the Wish level, by the Wish deadline. 0% or worse and there is no basis for suggesting the idea.
- 2. UNCERTAINTY: Next step is to ask if the result could be more or less than the estimate. ±0% means you have already estimated the exact correct answer. But only a young optimistic fool would do that, so pick a larger ± number. If you do not know try ±XX%, where XX is the basic

- estimate in 1 above (45%±45%). Let us be honest, transparent. And not give false expectations to others. 90%±40% means you don't believe the impact could be less than 90-40=50%.
- 3. EVIDENCE: now if you had the courage to make any estimate, surely you have *some* basis for it. Some facts or experience? If not, just say so. *My estimate is a random number*. If you do have any experience or facts, or can find them (Google?) then write them down *together with* your estimate. 'When?', 'where?', 'how things were measured', source?, URL?. People should be able to check this out.
- 4. CREDIBILITY: rate each % estimate (all 100 on a 10x10 table) based on its evidence quality and source. Rate 0.0 for 'no credibility. 1.0 for 100% credibility, and numbers in between depending on the strength of your evidence. This forces us to take evidence seriously. It also gives us a number to multiply our estimates by: to reduce them to appropriate size.
- 5. SAFETY MARGIN: If you have estimated a set of non-exclusive strategies, S1, S2, S3... Sn, add up the impacts left to right. The sum is some idea of the total impact you have got from all strategies. It cannot be exact, because strategies don't add up in a simple way. But if the sum was 20% you need to be very worried. If it is only 100% you have to believe that 'nothing can go wrong'. Play safe, and look for a safety margin of two. 200% is a comforting number before you relax your search for more or better strategies; and start trying them out in practice.
- 6. OVERALL IMPACT: add up the estimates for any one strategy vertically. The sum is a figure of merit for the best overall strategies. The ones you should start delivering early if costs were equal.
- 7. COSTS: for each strategy, estimate the implementation costs as % of budget, and the calendar time needed to implement it as a % of total time to deadline. You can estimate additional costs, such as annual running cost and maintenance cost if you want. The point is to get some idea of the resources needed for the strategies. Silly not to try to do this. Cost vary greatly.
- 8. EFFICIENCY: The 'sum % impacts', over the 'sum of % costs' gives you a 'rough value for money' idea, for each strategy. This is a good basis for prioritizing the most-efficient strategy to be done first.



8 A: You can now measure the real effect of your change. You can compare to the estimate made earlier when you evaluated the change. You can decide to keep the change, or to try something better.

PERSINSCOM: Value Decision Table

STRATEGIES → Technology Business People Empow- Principles Business SU								
STRATEGIES → OBJECTIVES	Technology Investment	Business Practices	People	Empow- erment	Principles of IMA Management	Business Process Re- engineering	SUM	
Customer Service	50%	10%	5%	5%	5%	60%	18.5%	
?→0 Violation of agreement	1 20.0	10.0		2.70	2.0	00.10	10000	
Availability	50%	5%	5-10%	0	0	200%	265%	
90% → 99.5% Up time					_			
Usability	50%	5-10%	5-10%	50%	0	10%	130%	
200 → 60 Recuests by Users								
Responsiveness	50%	10%	90%	25%	5%	50%	180%	
70% → ECP's on time								
Productivity	45%	60%	10%	35%	100%	53%	303%	
3:1 Return on Investment								
Morale	50%	5%	75%	45%	15%	61%	251%	
72> 60 per mc. Sick Leave							l .	
Data Integrity	42%	10%	25%	5%	70%	25%	177%	
88% → 97% Data Error %	1	1					l	
Technology Adaptability	5%	30%	5%	60%	0	60%	160%	
75% Adapt Technology								
Requirement Adaptability	80%	20%	60%	75%	20%	5%	260%	
? → 2.5% Adapt to Change							l	
Resource Adaptability	10%	80%	5%	50%	50%	75%	270%	
2.1M → ? Resource Change								
Cost Reduction	50%	40%	10%	40%	50%	50%	240%	
FADS -> 30% Total Funding								
SUM IMPACT FOR EACH SOLUTION	482%	280%	395%	350%	313%	649%		
Money % of total budget	15%	4%	3%	4%	6%	4%		
Time % total work	15%	15%	20%	10%	20%	18%		
months/year								
SÚM RESOURCES	36	19	23	74	26	22		
BENEFIT/RESOURCES RATIO	16:1	14:7	13:3	27:9	12:1	29.5:1		

8 B: Value Decision Table (can be used both to estimate and to track progress). This is a real table used to estimate the effects of strategies on the value objectives, in order to get some idea of the best *value for costs* options, to prioritize first.

9. Prioritize Means by Value for Money and Risk

Summary

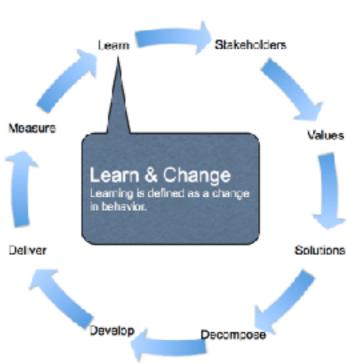
It is unnecessary to do all strategies at once (Big Bang, Waterfall culture), before seeing results. It is also unnecessary to do all of any *one* strategy, if that takes more than a weeks' time. For several good reasons you need to chop up your strategy ideas, as discussed above, into small (weekly, 2%) value deliverables. That gets you: simplification, early results, early feedback about real cost, about real value, about implementation correctness, better outsourced contracting management, and gives you a chance to correct strategies quickly; *before* they get out of control.

You could just start implementing *any random* strategy chunk, and learn fast. But since there are bound to be some big differences in the values and costs, from the strategy chunks, it makes sense to prioritize the chunks that promise 'best value for resources', with regard to *risk*. The Impact Estimation Table, above, gives the information we need to prioritize initially. Just choose the highest overall value for resources; and discount the risks, using the ± uncertainty, and the credibility numbers.

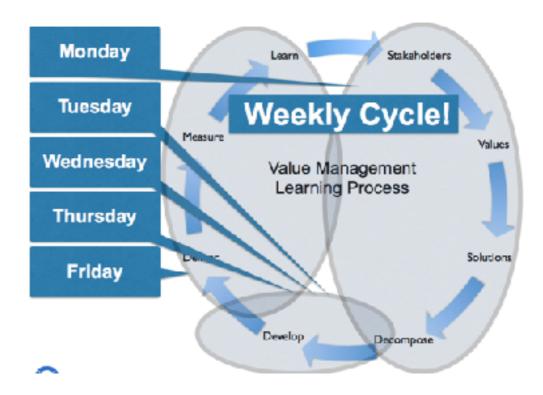
But, as the project goes on, you will want to stop prioritizing effort, when a Wish level is reached, and to prioritize efforts where a Wish level is not yet reached. Just like you would with hunger, thirst and sleep.

How to prioritize.

- 1. You are in 'value delivery' mode, after initial planning with an Impact Estimation (Value Delivery Table) Table. You need to choose a small chunk of strategy, like a week's effort, and do it. Initially it does not matter much what you choose, Just do it. But it is smart to choose estimated high-value and low-cost strategy chunks first, because if it *really* delivers *less* value at *higher* cost: you will still stand a chance of looking successful! Good for confidence, image, support, interest.
- 2. If you select high potential value, attached to high risks (credibility low, ± uncertainty high) then you will get early feedback from real systems, and *if you get lucky* the risks *might* not hit you. If you *do* get unlucky, you can dump the 'loser strategy' fast: and declare a 'success in learning what NOT to bet on'; before any real irreversible damage was done.
- 3. Step by step you need to measure, as best you can, the value increment *really* delivered in total towards your 100% of Wish level. This is 'value *accounting*'. The Value Table you initially set up was a 'value *budget*'.
- 4. When you reach a Wish level for your critical factor objectives, it is time to stop further effort aimed at that Wish (de-prioritize a Wish level objective when reached). And turn your attention to strategies which will help you move towards other, *less*-fulfilled, objectives.
- 5. When *all* objectives are at Wish level, it is time to stop. You are *done*. No point in doing any unused strategies.
- 6. If you reach a Tolerable (worst acceptable case) level, then take a break with that objective, and put resources into getting all other objectives up to the Tolerable level first; before you continue the race to the Wish Levels. If a single critical objective remains 'intolerable' you have, by definition, a 'failed' system and project. Even if all other objectives reach the Wish target levels.
- 7. If a particular strategy is a big disappointment, then you need to employ Dynamic Design to Cost (Quinnan, IBM Cleanroom) and see if you can find a much better, and/or much cheaper strategy to replace it. Then try out the new idea immediately, and see if it succeeds.
- 8. Do NOT employ static, up front, prioritization such as 'M.O.S.C.O.W.' or Balanced Scorecard fixed weights. They are foolish oversimplifications, suited for a failure-prone big-bang culture at best, but fixed weights are useless in a quantified value-driven, agile, value implementation world. Your priority is to reach your targets on time, and that is the prioritization method we suggest here.



9 A: with numeric results from reality we can quickly learn how well ideas work. Dump bad ideas and promote good ideas.



9 B: A rapid, we like weekly, cycle of testing increments of strategies will:

- · deliver real results to stakeholders early
- · give you an opportunity to get rid of bad ideas early
- give you a chance to prove that risky ideas are really going to work well

10. Book Summary

Summary of Value Planning Method.

Value Planning means that real and rapid measurable delivery of prioritized stakeholder values is our focus. Our focus is NOT building a system. It is *value delivery*, even if we do not 'build a new system'. We are in fact quite happy to avoid rocking the boat, avoid risking total failure and delays by NOT building a 'new' system. We are happy to view the old system, with an improvement to the 'success' Wish levels of our top critical values, to be the 'new system' we *really* want.

We are committed to clarity of communication about values and costs, by articulating them *numerically*; no excuses. We will quantify our critical value objectives (even if they seem difficult to quantify at first), we will estimate the effectiveness of our strategies, for reaching the quantified objectives (as best we can quickly). We will quantify uncertainty and risk of estimates. We will quantify incremental progress towards our success levels.

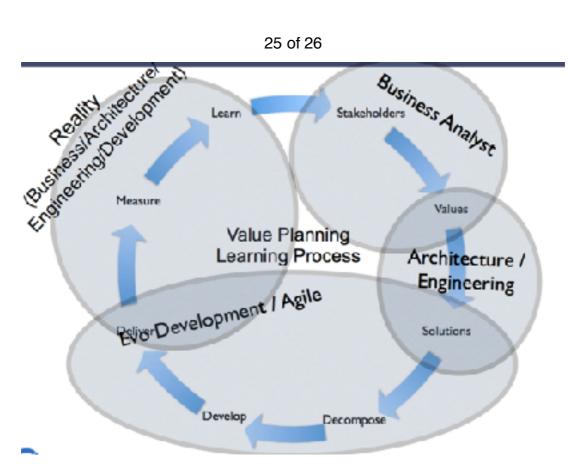
This all means we will be doing Value Efficiency Management by a process of *Value Engineering*. Not doing: Value by Interesting Emotive Words and Slogans (VIEWS). Sorry, couldn't resist.

Detailed Steps: Value Planning.

- 1. Identify your most-critical stakeholders and their critical needs, constraints and values.
- 2. Quantify the top-ten initial critical objectives (do others later). Focus, prioritize, get moving now and fast. Do not even think of 'doing it all'. You cannot. Do good immediately, and prove you can do that! Most people cannot!
- 3. Identify a set of strategies that will get you to the critical target levels
- 4. Rate the strategies quantitatively, and with regard to uncertainty and facts.
- 5. Decompose the strategies into small implementation increments: weekly or 2% of budgets and 2% of time to deadline.
- 6. Start delivering by the second week of the project. Learn fast from real experience, using current unsatisfactory systems as your immediate base.
- 7. Focus initially on getting the Tolerable levels for all current critical objectives, to avoid 'failure'.
- 8. Drive on, towards Wish levels (Success well defined) and stop, when you get there.
- 9. Repeat this: for new sets of improved critical levels, until you need no more improvement: which, if you are in competition, is 'never'. The cycle continues as long as you are in competition (W. E. Deming).
- 10. When sub-contracting with suppliers, make payment depend on quantified results, measurably delivered, and pay them for results incrementally. Make sure it is very 'profitable' (value for cost) for you, with regard to the results. Hopefully a win-win situation for competent sub-contractors. And why should you waste time, and spend money with any other contractors?

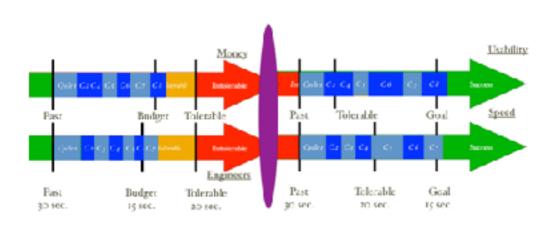
End of book:

We tried to spell out the essentials of our method in an extremely short book. But if you want more detail, you will find it; in the books *Competitive Engineering* (Amazon etc.), and *Value Planning* (leanpub.com/Valueplanning or Gilb.com. Additional Materials will be found at gilb.com. Which includes offers of training, videos, papers, slides, case studies and consultancy, if that might help you. Direct questions or comments to the author: Tom@Gilb.com



10 A: here is a view of the Value Planning cycle based on different disciplines involved in the process.

Each Evolutionary Cycle uses a constrained budget of Development



10 B: here is a graphical way of looking at the value delivery at each cycle, and the corresponding costs. Of course there are probably more than 2 value aspects, and more than 2 cost aspects you will want to track.

EDIT OF ILLUSTRATIONS CONTINUED GARDERMOEN 22 AUG 2016, and text cleanup 22-23 aug on flight to Vienna, and in Brno

1. give references to Value Planning book detail (EDITIONS OF THE VP Book) (I need a clever way to do this, ideally a live link in digital format, maybe just VP 1.2 type refs in non digital copies)

Comments to author tom@gilb.com are welcome.