

Agile Manifesto: 10 Years On, What can we do better? – A rewrite

The intent of Agile has always been to focus on delivering value to our stakeholders.

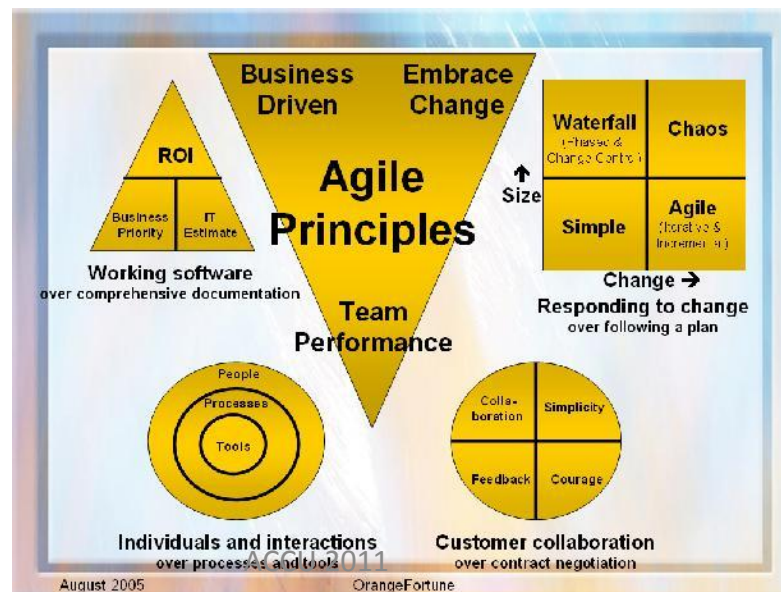
But,

I think we need to be a lot more specific about what this means,

because

some people think it means delivering bug free code to a user or customer, even if the stakeholder gets no real value!

By Tom Gilb
Tom@gilb.com
www.gilb.com



ACCU 2011
Conference
Held on 13 April

These slides will be available at ACCU site and Gilb.com downloads, Slides

Gilb's 'Value Driven Planning' Principles:

- 1. Critical *Stakeholders* determine the values**
- 2. Values can and must be quantified**
- 3. Values are supported by Value Architecture**
- 4. Value levels are determined by timing, architecture effect, and resources**
- 5. Value levels can differ for different scopes (where, who)**
- 6. Value can be delivered early**
- 7. Value can be locked in incrementally**
- 8. New Values can be discovered (external news, experience)**
- 9. Values can be evaluated as a function of architecture (Impact Estimation)**
- 10. Value delivery will attract resources.**

Value Driven Planning Principles in Detail:

Published in www.agilerecord.com

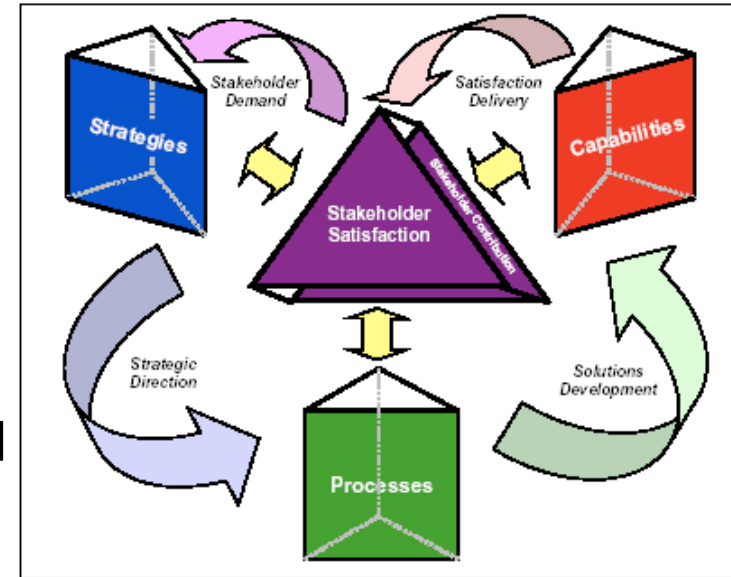
2010 Part 1 and 2

- *Value-Driven Development: Principles and Values – Agility is the Tool, Not the Master.*
- http://www.gilb.com/tiki-download_file.php?fileId=431
- Part 2
- *“Values for Value”*
- http://www.gilb.com/tiki-download_file.php?fileId=436

1. Critical Stakeholders determine the values

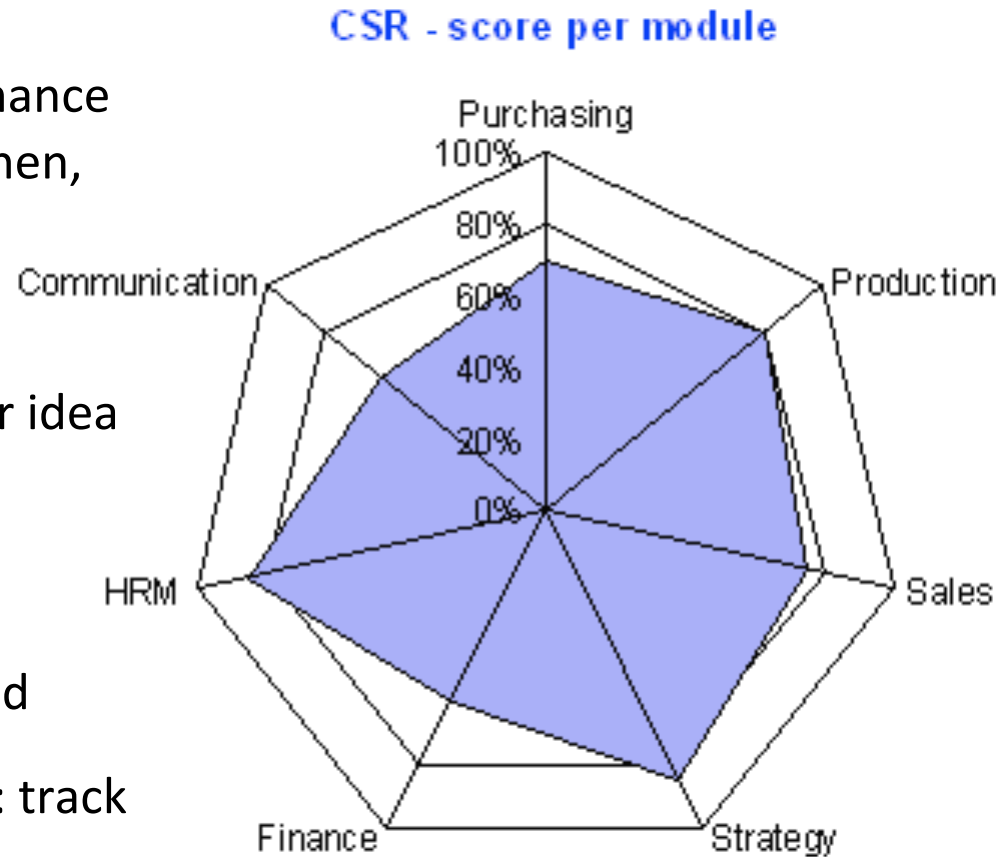
Critical: “having a decisive or crucial importance in the success or failure of something” <-Dictionary

- The primary and prioritized values we need to deliver are determined by
 - analysis of the needs and values of stakeholders
 - stakeholders who can determine whether we *succeed or fail*.
- We cannot afford to satisfy *other (less critical)* levels, at other times and places, yet.
 - Because that might undermine our ability to satisfy the more critical stakeholders –
 - and consequently threaten our overall project success.



2. 'Values' can and must be *quantified*

- Values can, if you want, be expressed numerically.
 - With a defined scale of measure
 - with a deliverable level of performance
 - and with qualifier info [Where, When, If]
- Quantification is useful:
 - to clarify your own thoughts
 - to get real agreement to one clear idea
 - to allow for varied targets and constraints
 - to allow direct comparison with benchmarks
 - to put in Request for bids, bids and contracts
 - to manage project evolutionarily : track progress
 - as a basis for measurement and testing
 - to enable research on methods



•Figure 1: Real (NON-CONFIDENTIAL version) example of an initial draft of setting the objectives that engineering processes must meet.

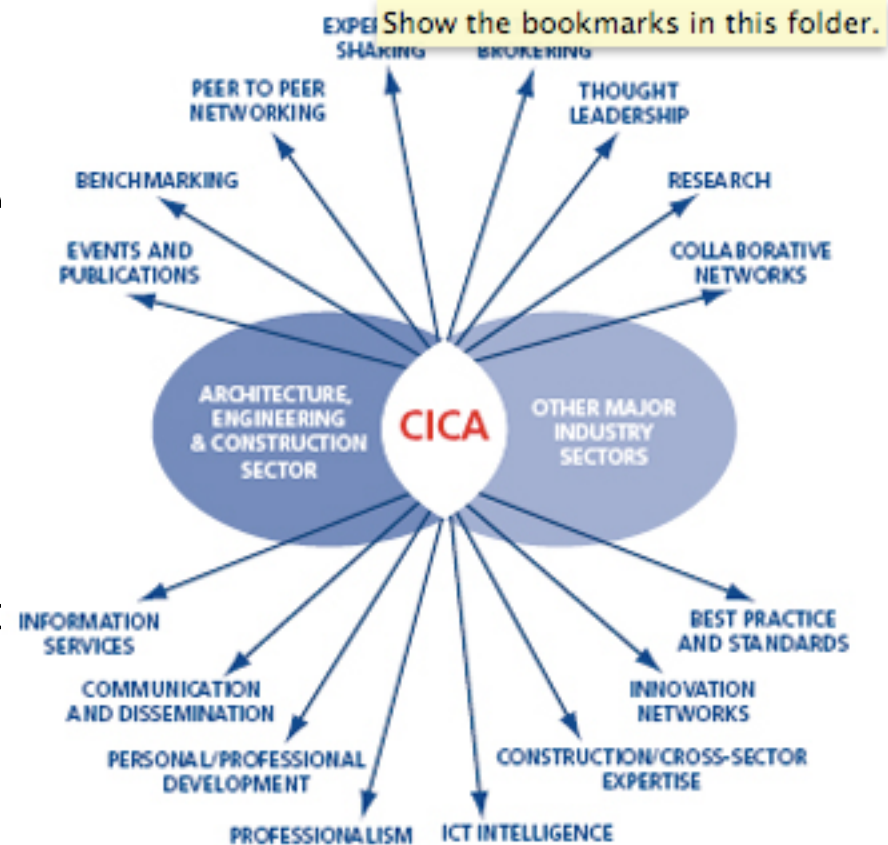
Business objective	Measure	Goal (200X)	Stretch goal ('0X)	Volume	Value	Profit	Cash
Time to market	Normal project time from GT to GT5	<9 mo.	<6 mo.	X		X	X
Mid-range	Min BoM for The Corp phone	<\$90	<\$30	X		X	X
Platformisation Technology	# of Technology 66 Lic. shipping > 3M/yr	4	6	X		X	X
Interface	Interface units	>11M	>13M	X		X	X
Operator preference	Top-3 operators issue RFQ spec The Corp	1	2	X		X	X
Productivity							X
Get Torden	Lyn goes for Technology 66 in Sep-04	Yes		X		X	X
Fragmentation	Share of components modified	<10%	<5%		X	X	X
Commoditisation	Switching cost for a UI to another System	>1yr	>2yrs		X	X	X
Duplication	The Corp share of 'in scope' code in best-selling device	>90%	>95%		X	X	X
Competitiveness	Major feature comparison with MX	Same	Better	X		X	X
User experience	Key use cases superior vs. competition	5	10	X	X	X	X
Downstream cost saving	Project ROI for Licensees	>33%	>66%	X	X	X	X
Platformisation IFace	Number of shipping Lic.	33	55	X		X	X
Japan	Share of of XXXX sales	>50%	>60%	X		X	X

Numbers are intentionally changed from real ones

Business
Values
Quantified

3. Values are supported by Value Architecture

- Value Architecture: defined as:
 - anything you *implement* with a view to satisfying stakeholder values.
- Value Architecture:
 - includes product/system objectives
 - Which are a ‘design’ for satisfying stakeholder values
 - Has a multitude of performance and cost impacts
 - can impact a given system differently, depending on what is in the system, or what gets put in later
 - Needs to try to maximize value delivered for resources used.



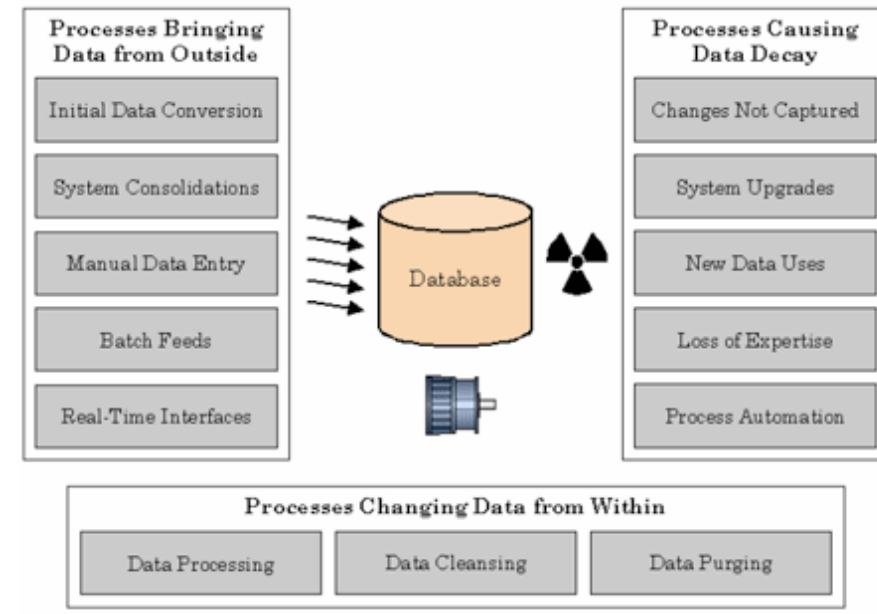
4. Value levels are determined by *timing, architecture effect, and resources*

Value levels: defined as:

the degree of satisfaction of value needs.

Value level:

- depends on *when* you observe the level
 - The environment, the people, other system performance characteristics (security, speed, usability)
- depends on the *current incremental power of particular value architecture* components
- depends on *resources available* both in development and operation

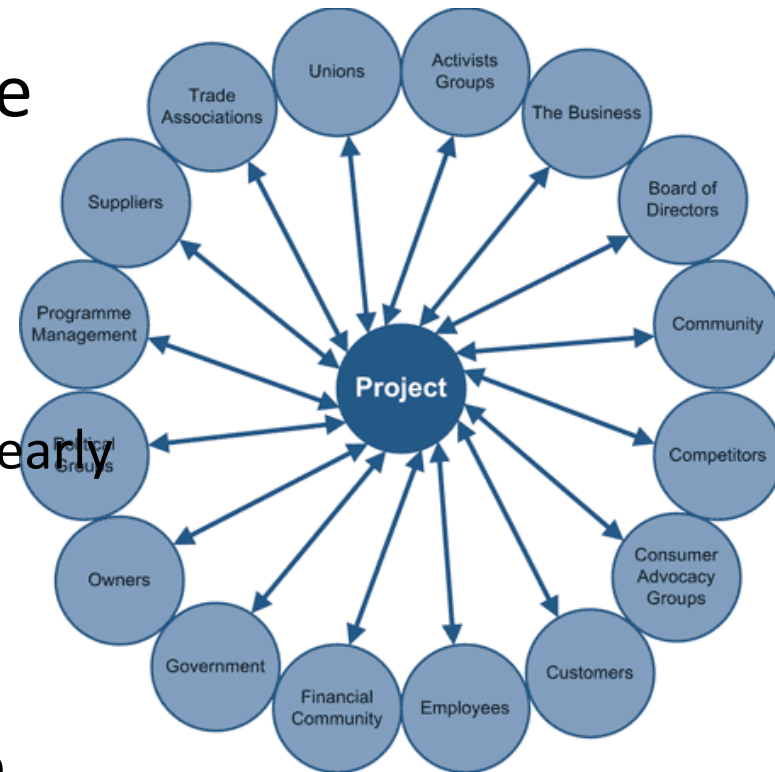


5. Required Value *levels* can differ for different scopes (where, who)

The level of value needed, and the level of value delivered - for a single attribute dimension (like Ease of Use) can vary for:

- different stakeholders
- at different times
 - (peak, holiday, slack, emergency, early implementation)
- for different ‘locations’
 - countries, companies, industries

There is nothing simple like ‘one level for all’



- 6. Value can be delivered early

You do not have to wait until 'the project is done' to deliver useful stakeholder value satisfaction.

You can intentionally target the highest priority stakeholders, and their highest priority value area, and levels.

You can deliver them early and continuously

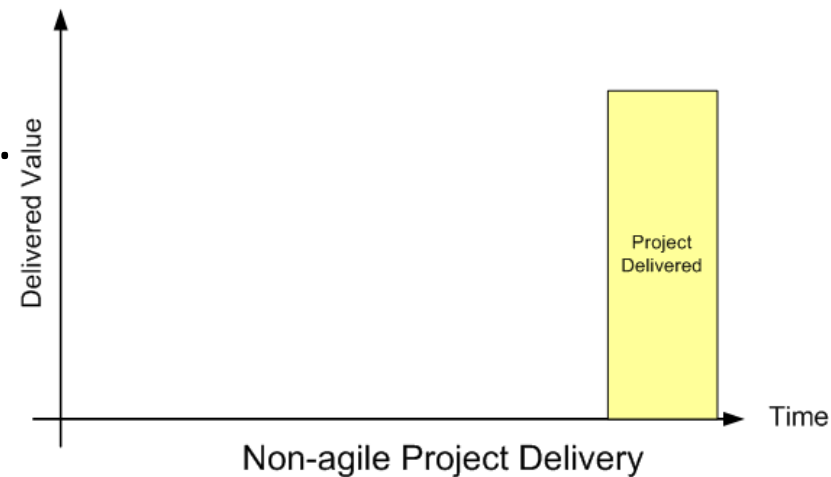
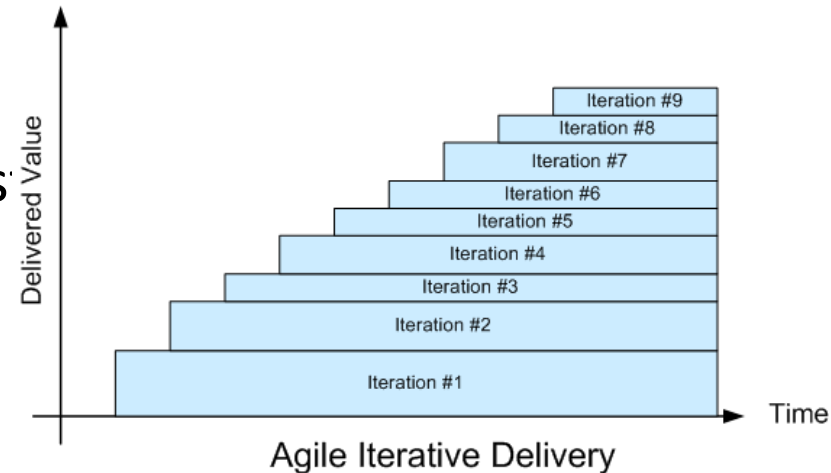
You can learn what is possible

And what stakeholders really value.

Discover new value ideas

Discover new stakeholders

Discover new levels of satisfaction



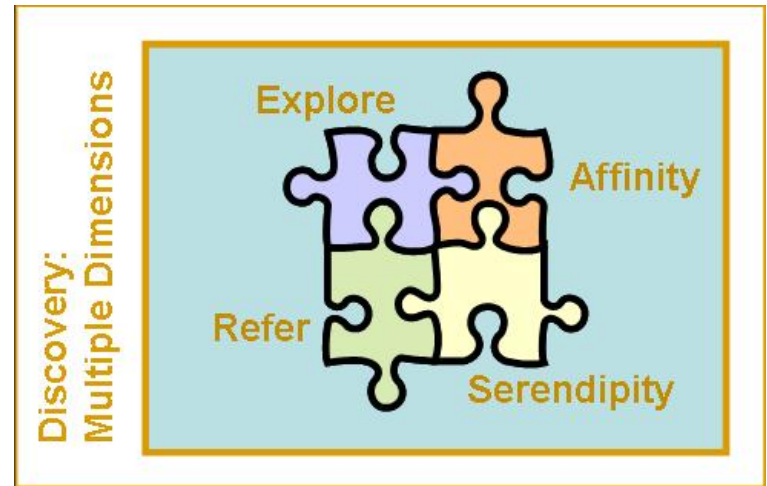
- 7. Value can be locked in incrementally

- You can increment the value satisfaction
 - *towards* longer term Goal levels
- You can spread the value deliveries
 - that are *proven* in *some* places,
 - more widely in the next increments
- This probably assumes that you have really handed over real results to real people.
 - Not just developed systems without delivery



8. New Values can be discovered (external news, experience)

- *Expect*, and try to discover,
 - entirely new stakeholder values.
- These will of course emerge *after you start delivering* some satisfaction, because:
 - Stakeholders believe you can help
 - Things *change*



9. Values can be *evaluated* as a function of *architecture* (using 'Impact Estimation')

- It is possible to get an **overview** of

- the totality of impacts
- that your **architecture**
- (all designs and strategies)
- **might** have
- on all your defined stakeholder ne

Business Objective	Weight	Viking Deliverables												
		hardware adaptation	Telephony	Reference designs	IFace	Modularity	Delend vs Technology 66	Tools	User Experce	GUI & Graphics	Security	Defend vs OOD	Enterprise	
Time to market	20%	20%	10%	30%	5%	10%	5%	15%	0%	0%	0%	5%	5%	
Mid-range	10%	15%	0%	15%	0%	30%	15%	5%	10%	5%	5%	0%	0%	
Platformisation Technology	5%	25%	10%	30%	0%	0%	10%	0%	5%	0%	10%	0%	5%	
Interface	5%	5%	15%	15%	0%	5%	0%	5%	0%	0%	10%	0%	10%	
Operator preference	10%	0%	10%	0%	15%	5%	20%	5%	10%	10%	20%	5%	10%	
Get Torden	10%	25%	10%	10%	-10%	0%	20%	0%	10%	-20%	10%	10%	5%	
Commoditisation	5%	20%	10%	20%	10%	-20%	25%	15%	0%	0%	5%	10%	5%	
Duplication	10%	15%	10%	10%	0%	0%	40%	0%	0%	0%	5%	20%	5%	
Competitiveness	5%	10%	15%	20%	0%	10%	20%	10%	10%	20%	10%	10%	10%	
User experience	5%	5%	0%	0%	0%	20%	0%	0%	30%	10%	0%	0%	0%	
Downstream cost saving	5%	15%	5%	20%	0%	10%	20%	0%	10%	0%	0%	10%	5%	
Platformisation IFace	5%	10%	10%	20%	40%	0%	20%	5%	0%	0%	0%	0%	5%	
Japan	5%	10%	5%	20%	0%	10%	0%	0%	10%	5%	0%	0%	0%	
Contribution to overall result		15%	9%	17%	4%	7%	15%	6%	6%	1%	6%	6%	5%	
Cost (£M)		£ 2.85	£ 0.49	£ 3.21	£ 2.54	£ 1.92	£ 2.31	£ 0.81	£ 1.21	£ 2.68	£ 0.79	£ 0.62	£ 0.60	
ROI Index (100=average)		106	358	109	33	78	137	148	107	10	152	202	174	

- Use an Impact Estimation table

- and you will be able to spot *opportunities* for
 - high value and
 - low cost early deliveries
 - by analyzing the numbers on the table

See next slide
For enlargement

Strategy Impact Estimation:
for a \$100,000,000 Organizational Improvement Investment

Technical Strategies

Objectives



Defined
In earlier slide

Viking Deliverables

Business Objective	hardware adaptation	Telephony	Reference designs	IFace	Modularity	Defend vs Technology 66	Tools	User Experce	GUI & Graphics	Security	Defend vs OCD	Enterprise
Time to market	20%	10%	30%	5%	10%	5%	15%	0%	0%	0%	5%	5%
Mid-range	15%	10%	30%	5%	10%	5%	5%	10%	5%	5%	0%	0%
Platformisation Technology	25%	10%	30%	0%	5%	10%	0%	5%	0%	10%	0%	5%
Interface	5%	15%	15%	0%	5%	0%	5%	0%	0%	10%	0%	10%
Operator preference	0%	10%	10%	0%	0%	20%	5%	10%	10%	20%	5%	10%
Get Torden	25%	10%	10%	-10%	0%	20%	0%	10%	-20%	10%	10%	5%
Commoditisation	20%	10%	20%	10%	-20%	25%	15%	0%	0%	5%	10%	5%
Duplication	15%	10%	10%	0%	0%	40%	0%	0%	0%	5%	20%	5%
Competitiveness	10%	15%	20%	0%	10%	20%	10%	10%	20%	10%	10%	10%
User experience	5%	10%	10%	0%	0%	0%	0%	30%	10%	0%	0%	0%
Downstream cost saving	15%	10%	10%	0%	0%	20%	5%	10%	0%	0%	10%	5%
Platformisation IFace	10%	10%	20%	40%	0%	20%	5%	0%	0%	0%	0%	5%
Japan	10%	5%	20%	0%	10%	0%	0%	10%	5%	0%	0%	0%
Contribution to overall result	15%	9%	17%	4%	7%	15%	6%	6%	1%	6%	6%	5%
Cost (£M)	£ 2.85	£ 0.49	£ 3.21	£ 2.54	£ 1.92	£ 2.31	£ 0.81	£ 1.21	£ 2.68	£ 0.79	£ 0.62	£ 0.60
ROI Index (100=average)	106	358	109	33	78	137	148	107	10	152	202	174

"Benefits"

Cost

Strategy

Impacts

on Objectives

358!

10. Value delivery will attract

- If you are really good at delivering value
 - You can expect to attract
 - even more funding
 - Managers like
 - to be credited with success
 - Money seeks
 - best interest rates

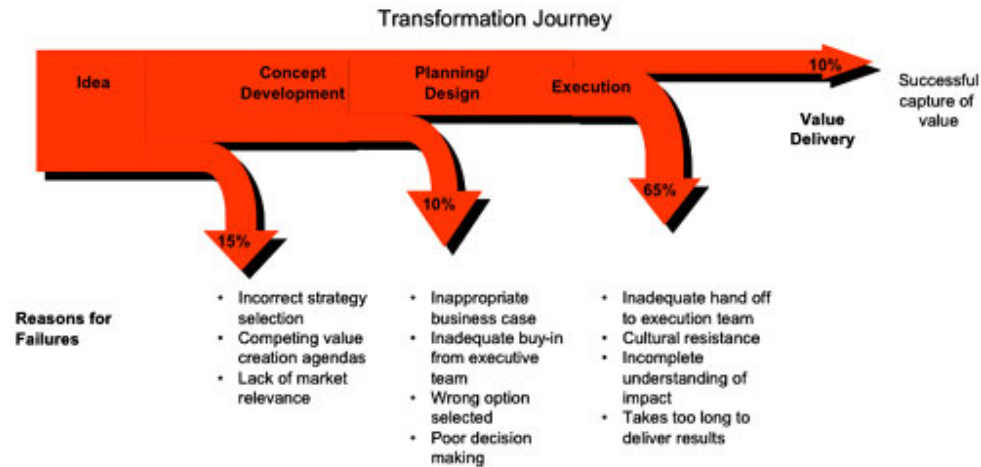


End of ACCU Lecture

- In practice after 40 minutes.
- The rest of the slides are for additional documentation

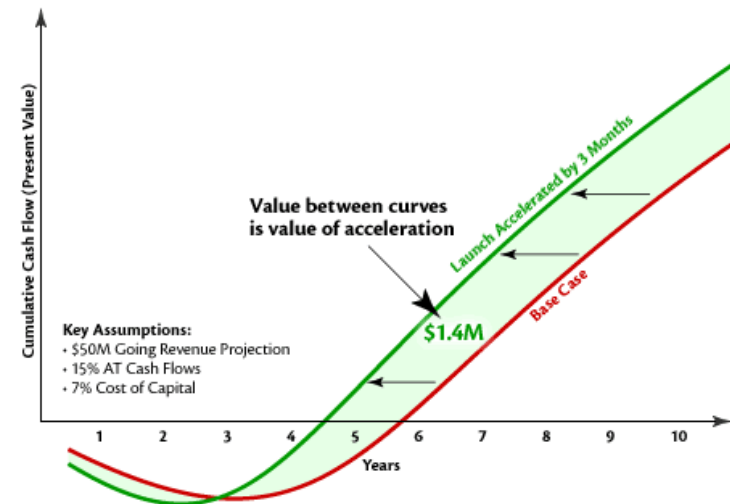
Gilb's Value Manifesto: A Management Policy?

- Really useful value, for real stakeholders will be defined measurably.
No nice-sounding emotive words please.
- Value will be seen in light of total long term costs as a decent return on investment.
- Powerful management devices, like motivation and follow-up, will make sure that the value for money is really delivered –
or that the failure is punished, and the success is rewarded.
- The value will be delivered evolutionarily –
not all at the end.
- That is, we will create a stream of prioritized value delivery to stakeholders, at the *beginning* of our value delivery projects;
and continue as long as the real return on investment is suitably large.
- The CEO is primarily responsible for making all this happen effectively.
 - The CFO will be charged with tracking all value to cost progress.
 - The CTO and CIO will be charged with formulating all their efforts in terms of measurable value for resources.



Source: Survey 100 Global Companies 2001-2002

Cumulative Present Value of Accelerating Cash Flows



Source "Value Delivery in Systems Engineering" available at www.gilb.com
Unpublished paper http://www.gilb.com/community/tiki-download_file.php?fileId=137

The Value Delivery Problem

- Sponsors who order and pay for systems engineering projects, must justify their money spent based on the expected consequential effects (hereafter called ‘value’) of the systems.
-
- The value of the technical system is often expressed in presentation slides and requirements documents as a set of nice-sounding words, under various titles such as “System Objectives”, and “Business Problem Definition”

Some Assertions

Assertion 1. **When top management allows large projects to proceed, with such badly formulated primary objectives, then**

- they are responsible as managers for the outcome (failure).
- They cannot plead ignorance.

Assertion 2. **The failure of technical staff (project management) to react to the lack of primary objective formulation by top management is also a total failure** to do reasonable systems engineering.

- Management might have a poor requirements culture, but we should routinely save them from themselves.

Assertion 3. **Both top managers and project personnel can be trained and motivated to clarify and quantify critical objectives routinely.**

- But until the poor external culture of education and practice changes, it may take strong CEO action to make this happen in your corporation.
- My experience is that no one else will fight for this.

Assertion 4. **All top level system performance improvements, are by definition, variables.**

- So, we can expect to define them quantitatively.
- We can also expect to be able to measure or test the current level of performance.
- Words like ‘enhanced’, ‘reduced’, ‘improved’ are not serious systems engineering requirements terms.

THESE ARE SAME PRINCIPLES AND VALUES

- BUT WITH NO DETAILED TEXT FOR EACH AND NO GILB EXAMPLES
- FOR USE WHEN LITTLE TIME AND NOT TOO DEMANDING AUDIENCE

Gilb's Ten Key Agile Principles

to avoid bureaucracy and give creative freedom (Summary)

Control projects by quantified critical-few results. 1 Page total !

(not stories, functions, features, use cases, objects, ..)

Make sure those results are business results, not technical

Align your project with your financial sponsor's interests!



Give developers freedom, to find out *how* to deliver those results

Estimate the impacts of your designs, on *your* quantified goals

Select designs with the best impacts for their costs, do them first.

Decompose the workflow, into weekly (or 2% of budget) time boxes

Change designs, based on quantified experience of implementation

Change requirements, based on quantified experience, new inputs

Involve the stakeholders, every week, in setting quantified goals

Involve the stakeholders, every week, in *actually using* increments

Gilb's Ten Key Agile Principles (Sum)

to avoid bureaucracy and give creative freedom



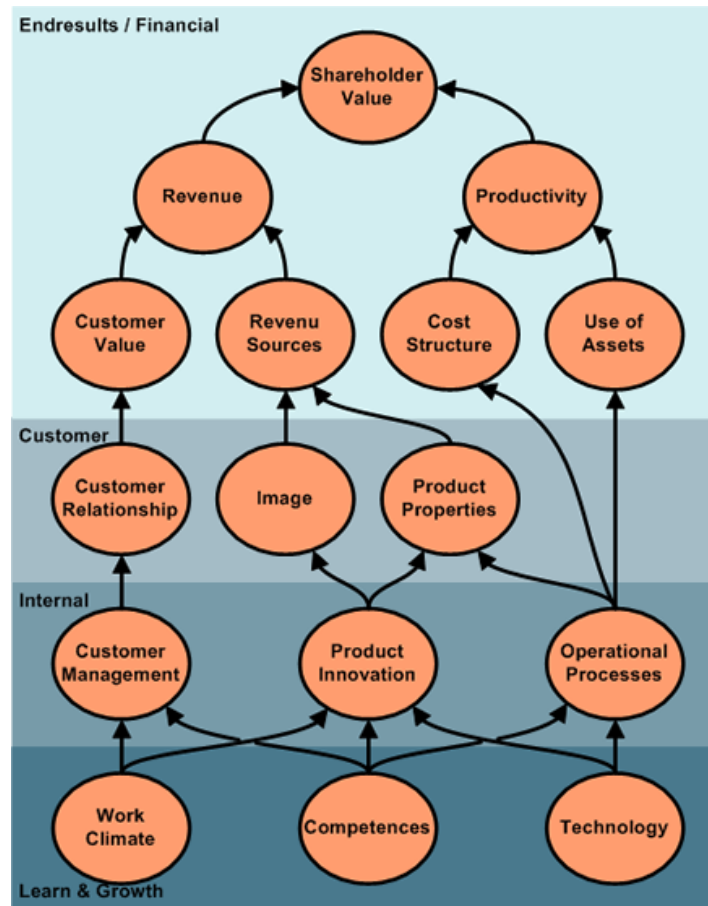
Main Idea:

Get early and frequent real stakeholder net value delivered

	VALUE TO CREATE	VALUE TO PRESERVE	VALUE TO SACRIFICE
EMPLOYEES			
CUSTOMERS			
SUPPLIERS AND PROFESSIONAL ADVISERS			
INVESTORS			
TRADES UNIONS			
GOVERNMENT			
MEDIA			
COMMUNITY			
OTHER STAKEHOLDER GROUPS			

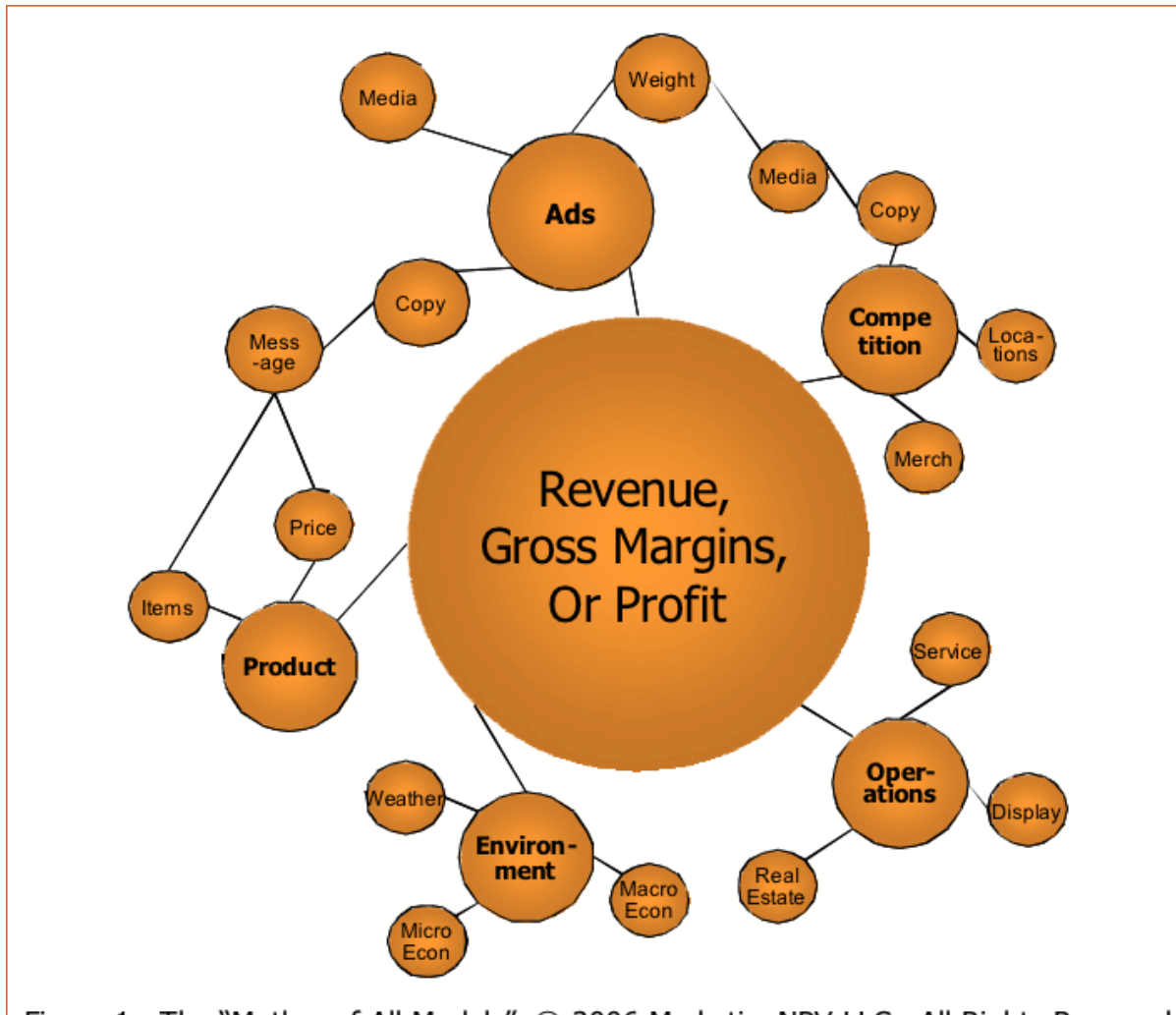
Control projects by quantified critical-few results. 1 Page total !

(not stories, functions, features, use cases, objects, ..)



Make sure those results are business results, not technical

Align your project with your financial sponsor's interests!



**Give developers freedom,
to find out *how*
to deliver those results**

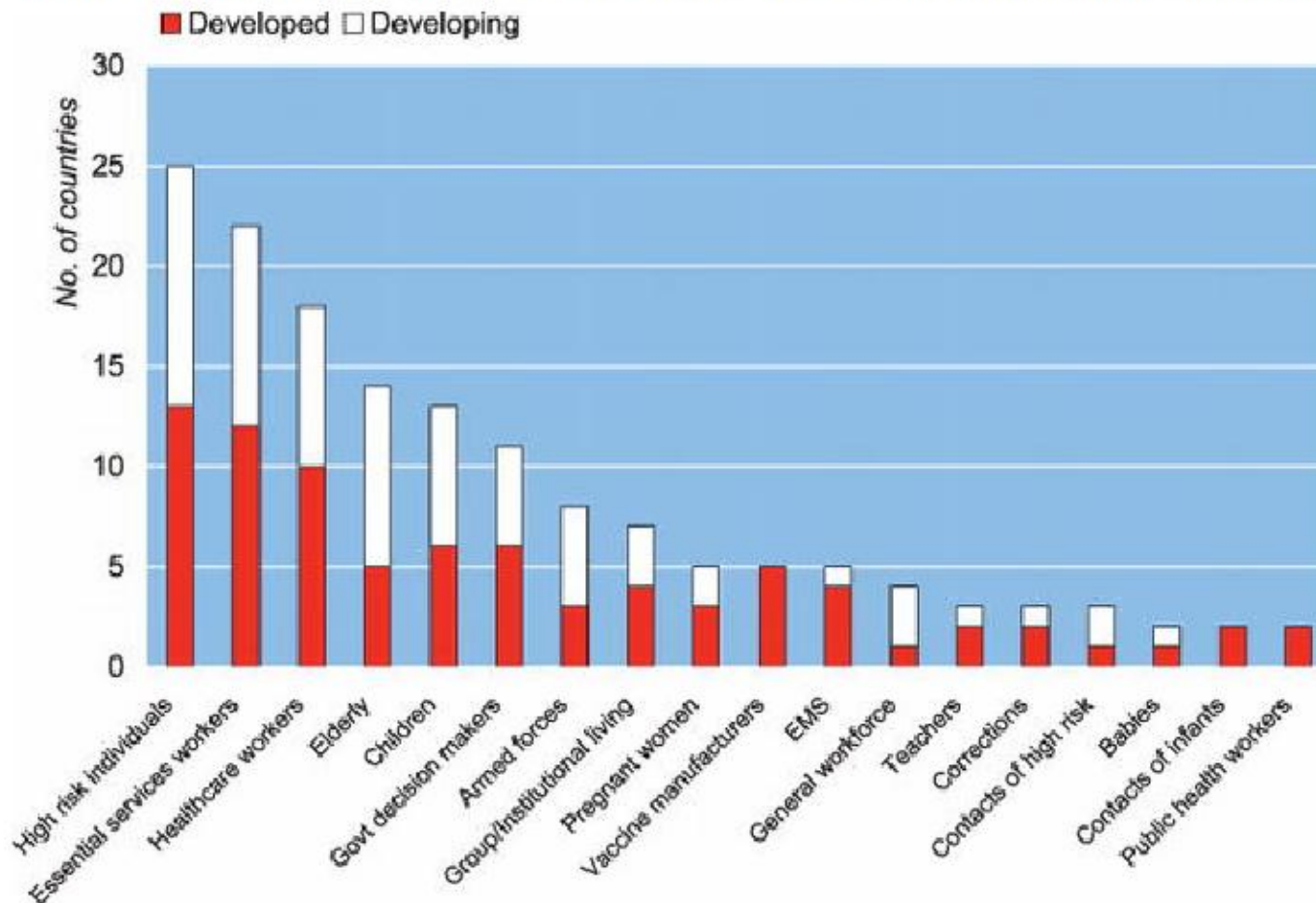


Estimate the impacts of your designs, on *your* quantified goals



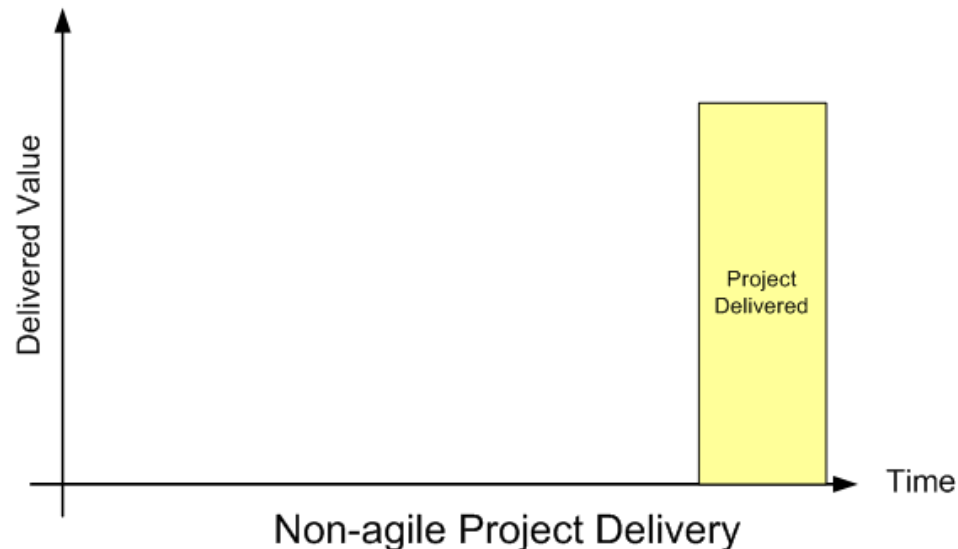
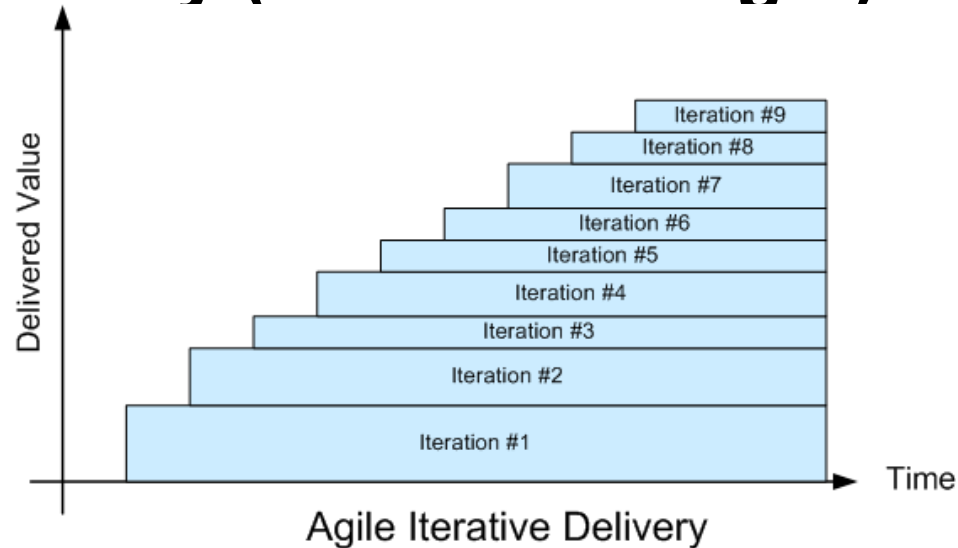
Select designs with the best impacts for their costs, do them first.

Figure 1: Vaccine Priority Groups by Development Status - Listed in at Least Two National Plans



Source: Uscher-Pines et al. Priority setting for pandemic influenza: An analysis of national preparedness plans. *PLoS ONE* 2013; 8(12): e81112. doi:10.1371/journal.pone.0081112

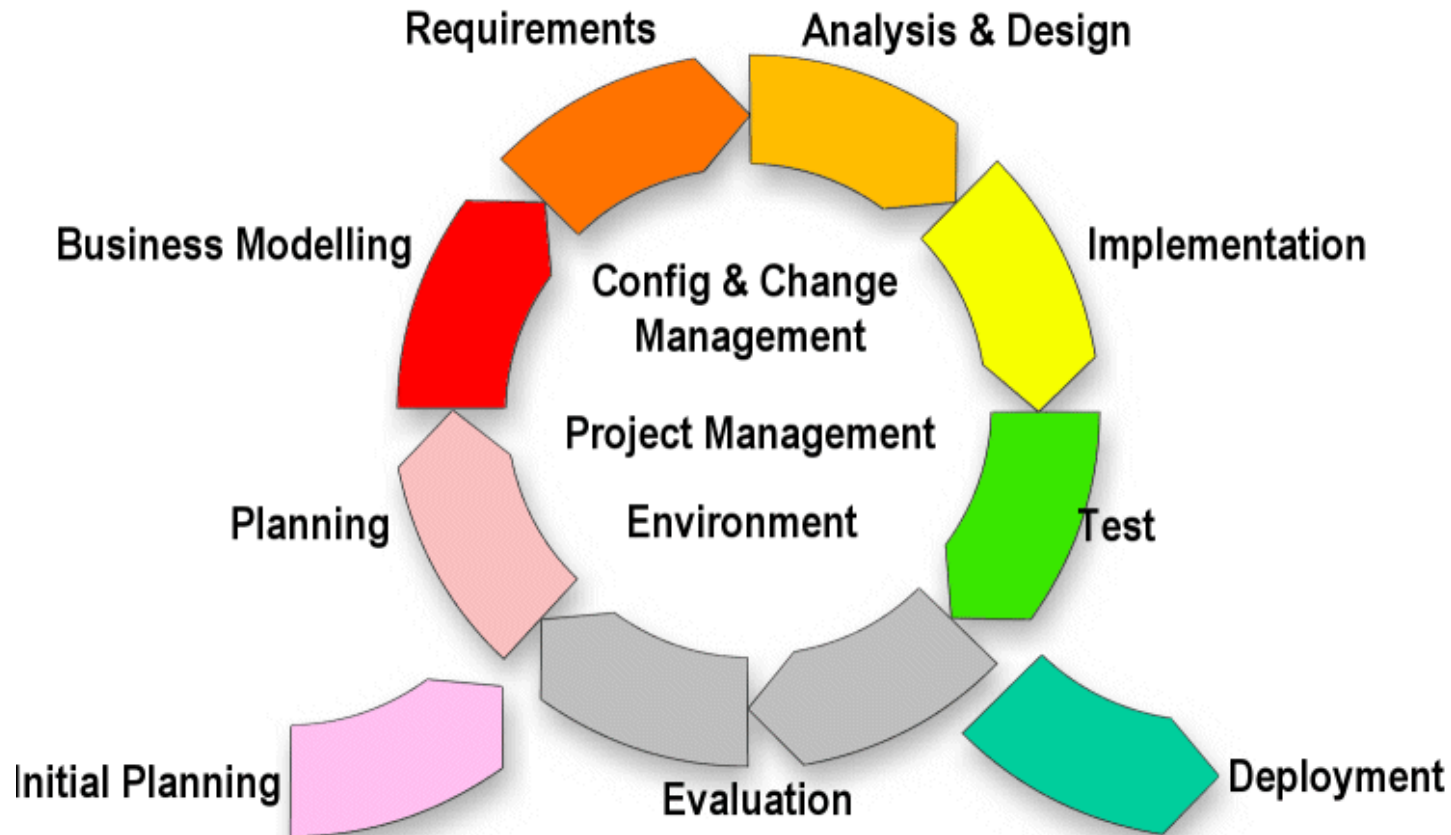
Decompose the workflow, into weekly (or 2% of budget) time boxes



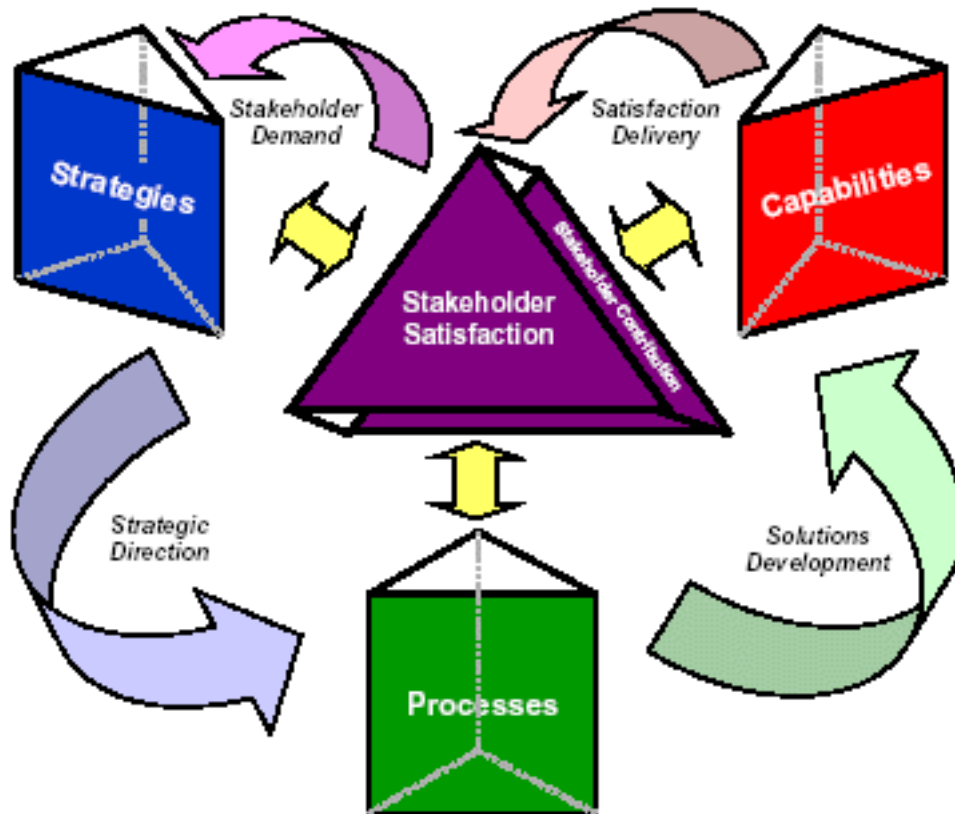
Change designs, based on quantified experience of implementation



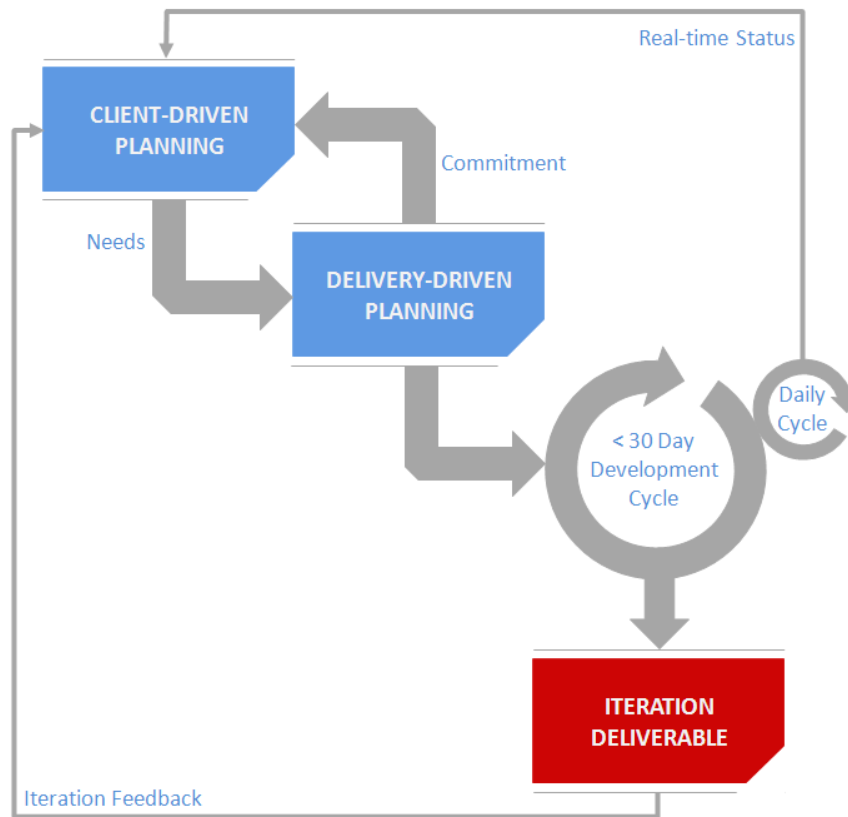
Change requirements, based on quantified experience,



**Involve the stakeholders,
every week,
in setting quantified goals**



**Involve the stakeholders,
every week,
in *actually using* increments**



My 10 Agile *Values*? (Summary)

- **Simplicity**
 - 1. Focus on real stakeholder values
- **Communication**
 - 2. Communicate stakeholder values quantitatively
 - 3. Estimate expected results and costs for weekly steps
- **Feedback**
 - 4. Generate results, weekly, for stakeholders, in their environment
 - 5. Measure all critical aspects of the improved results cycle.
 - 6. Analyze deviation from your initial estimates
- **Courage**
 - 7. Change plans to reflect weekly learning
 - 8. Immediately implement valued stakeholder needs, next week
 - *Don't wait, don't study (analysis paralysis), don't make excuses.*
 - *Just Do It!*
 - 9. Tell stakeholders exactly what you will deliver next week
 - 10. Use any design, strategy, method, process that works quantitatively well - to get your results
 - Be a systems engineer, not a just programmer (a 'Softcrafter').
 - Do not be limited by your craft background, in serving your paymasters



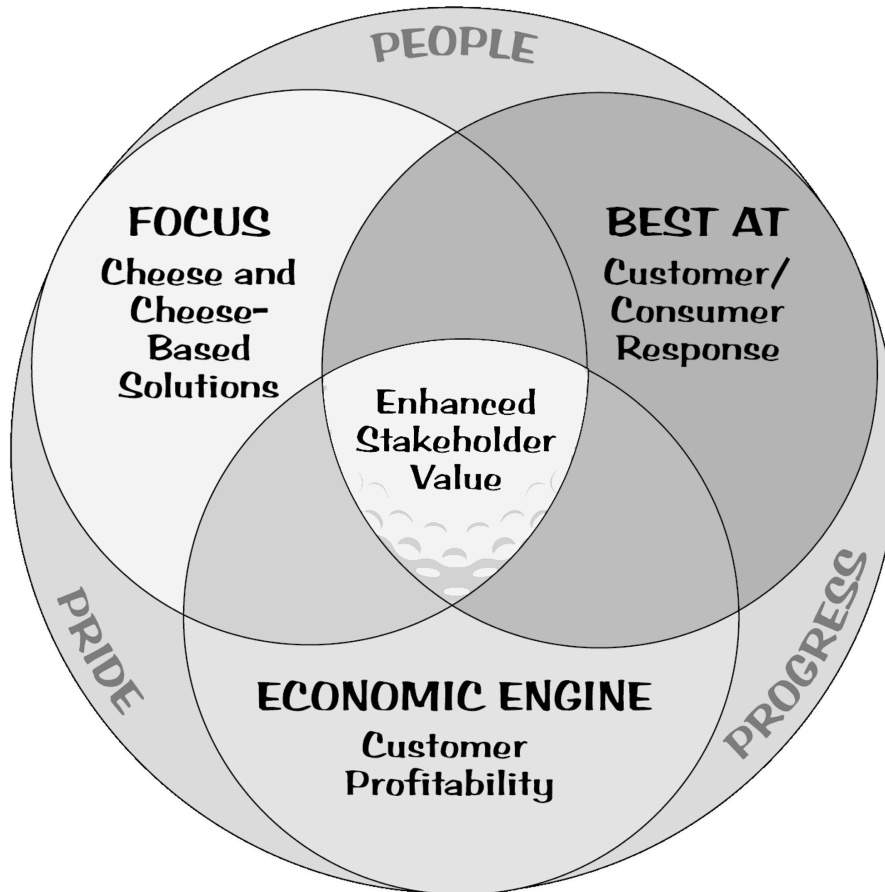
My 10 Agile *Values*? (Detail)

- **Simplicity**
- **Communication**
- **Feedback**
- **Courage**



Simplicity

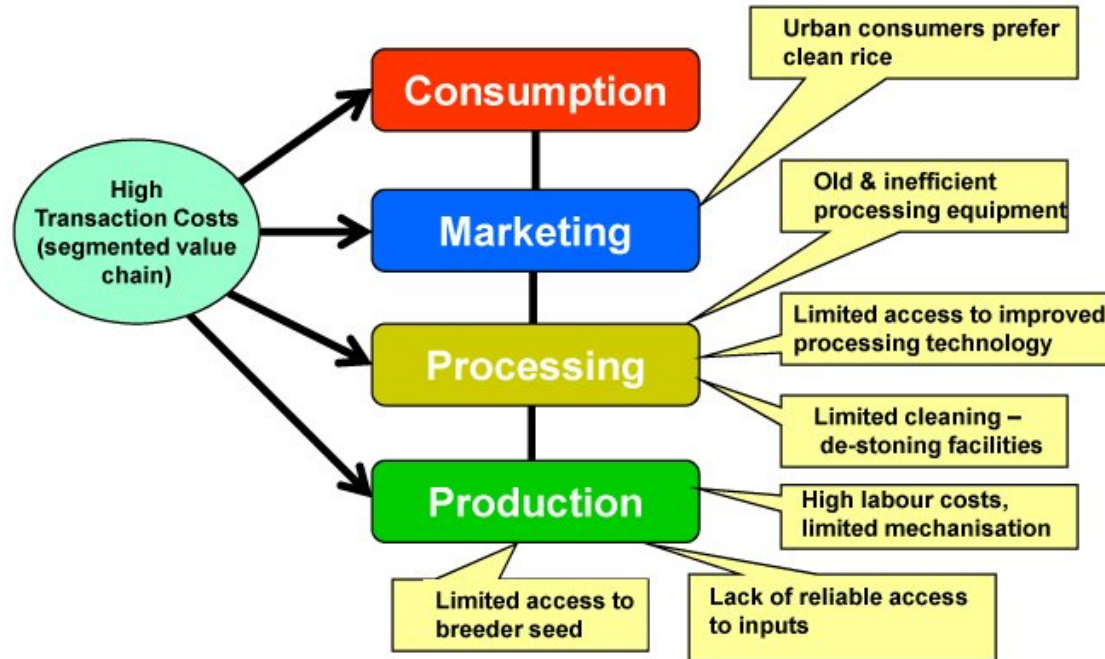
– 1. Focus on real stakeholder values



Communication

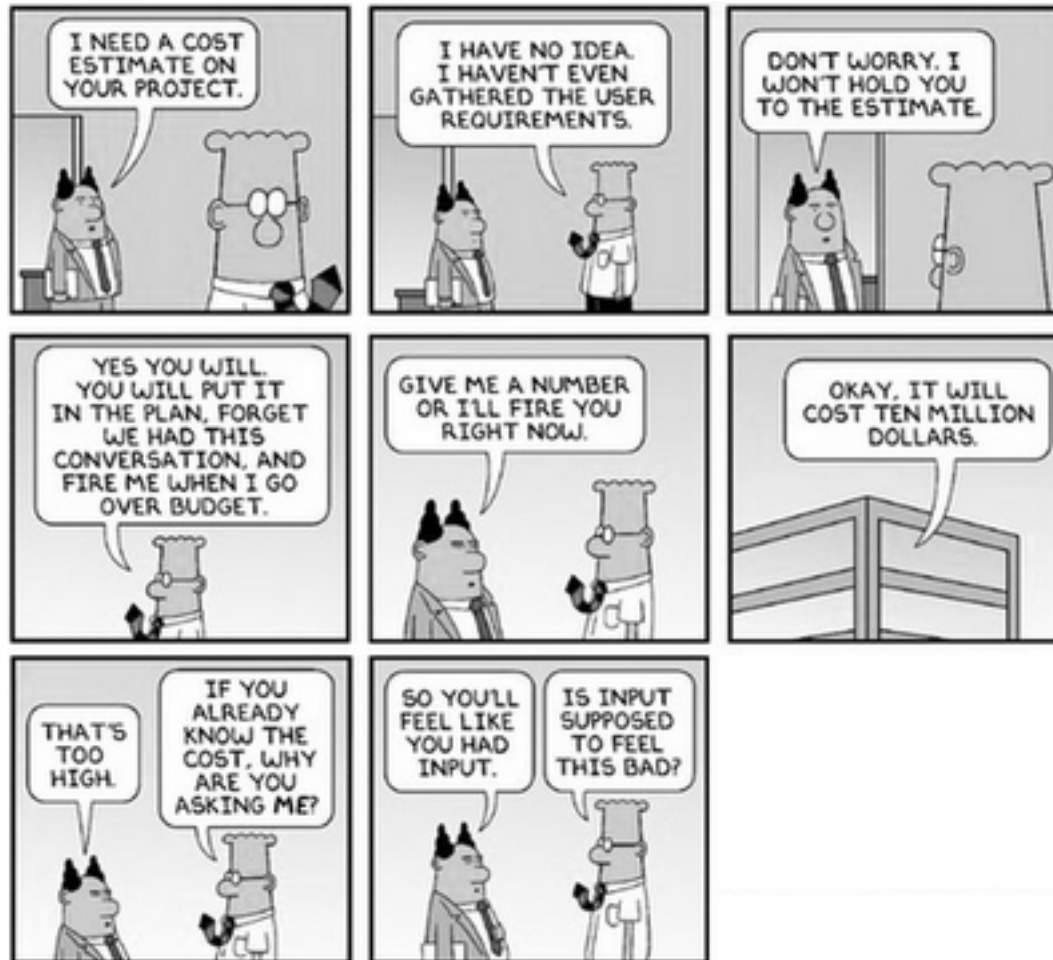
– 2. Communicate stakeholder values quantitatively

Kura - Kano Rice Value Chain



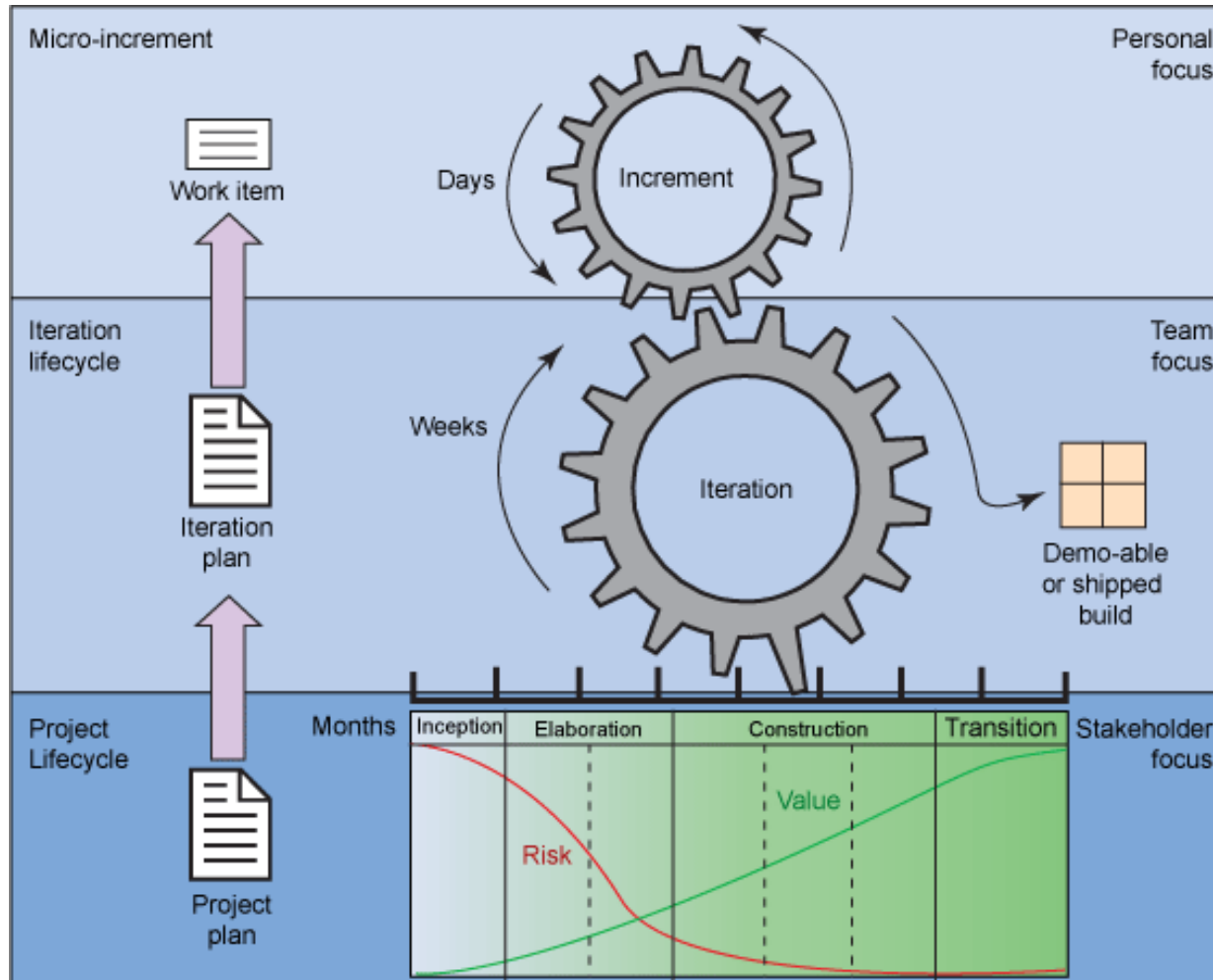
Estimate Often

- **3. Estimate expected results and costs for weekly steps**



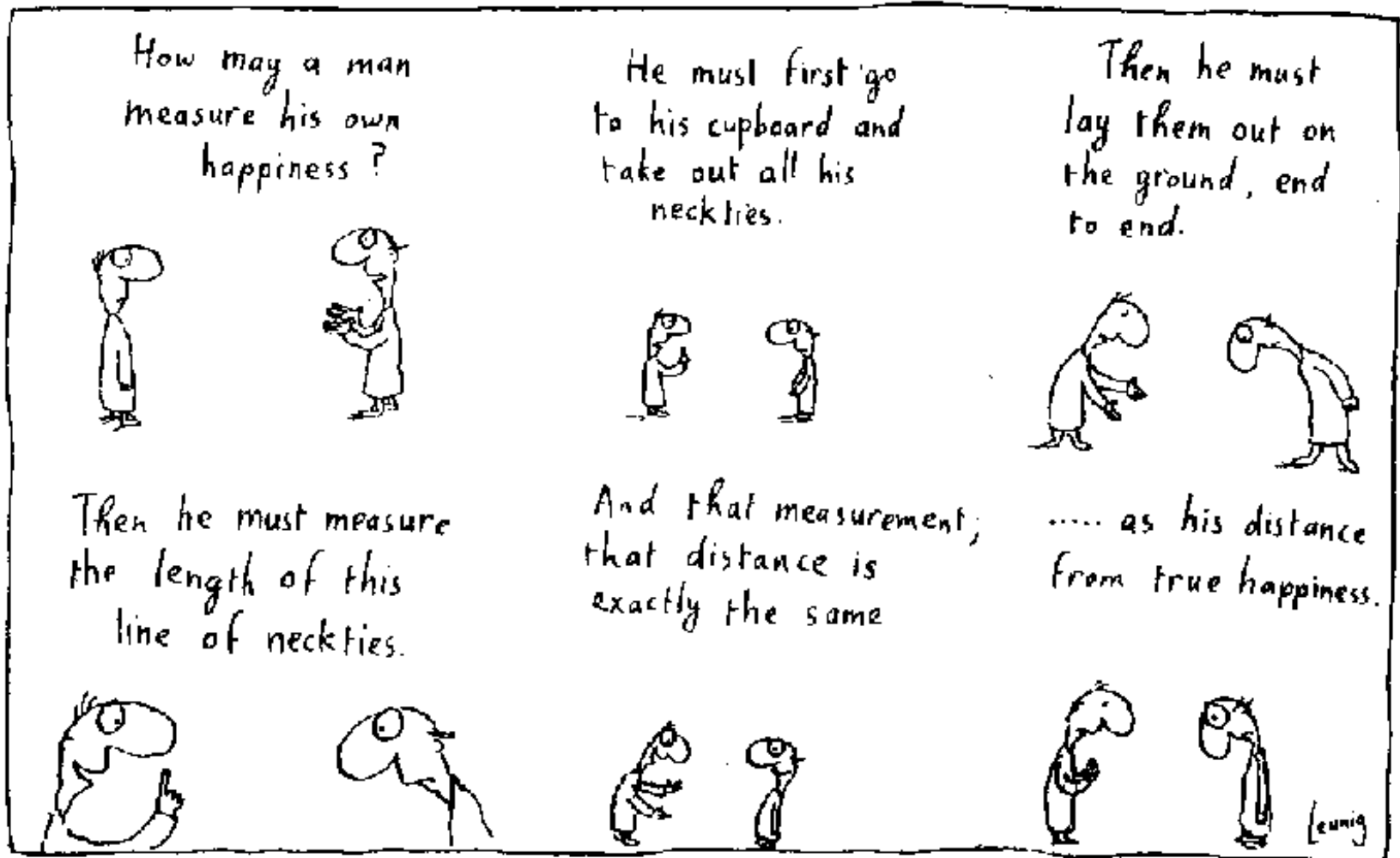
Feedback

- 4. Generate results, weekly, for stakeholders, in their environment



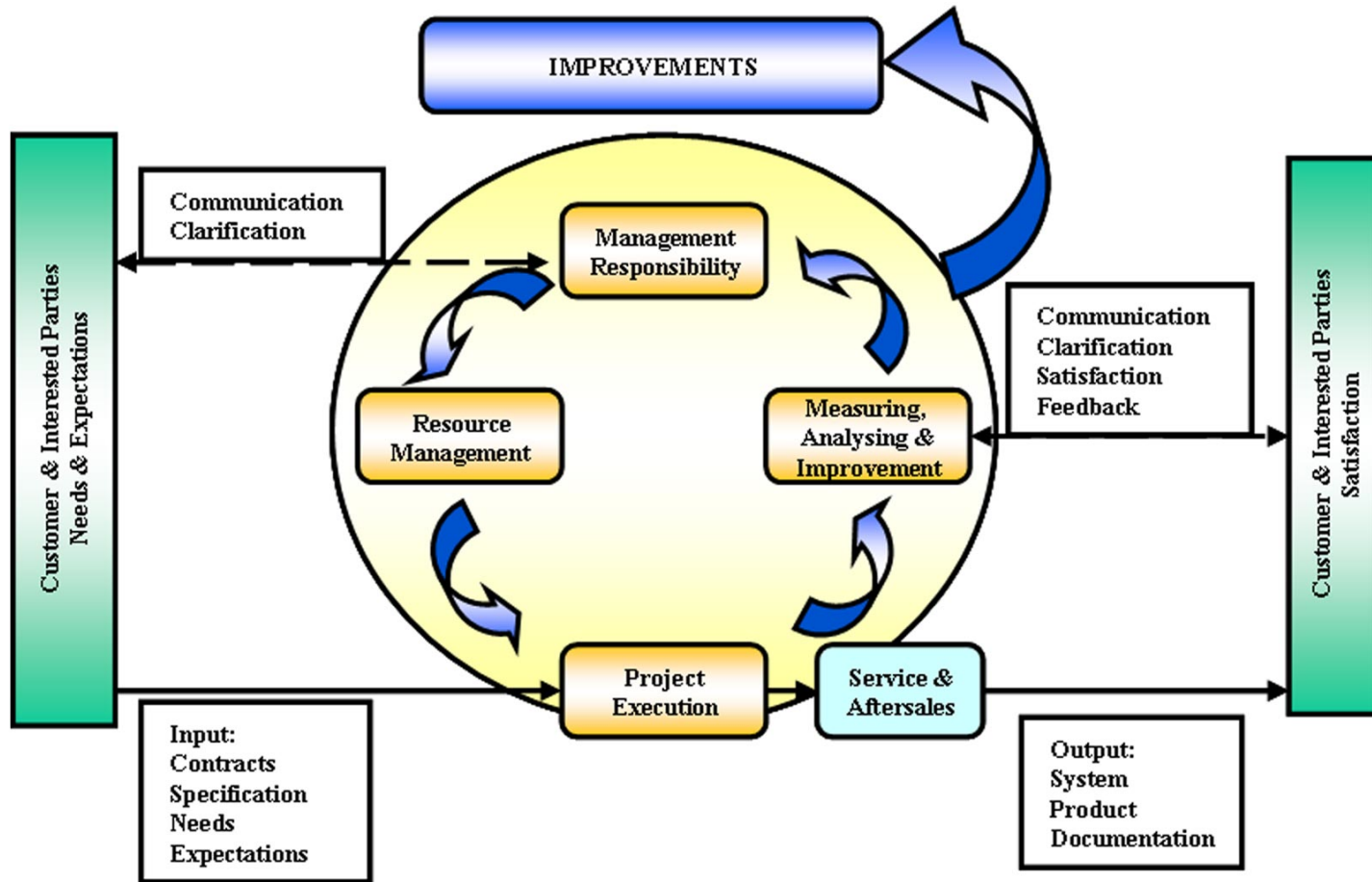
Measure Critical Stuff

- 5. Measure all critical aspects of the improved results cycle.



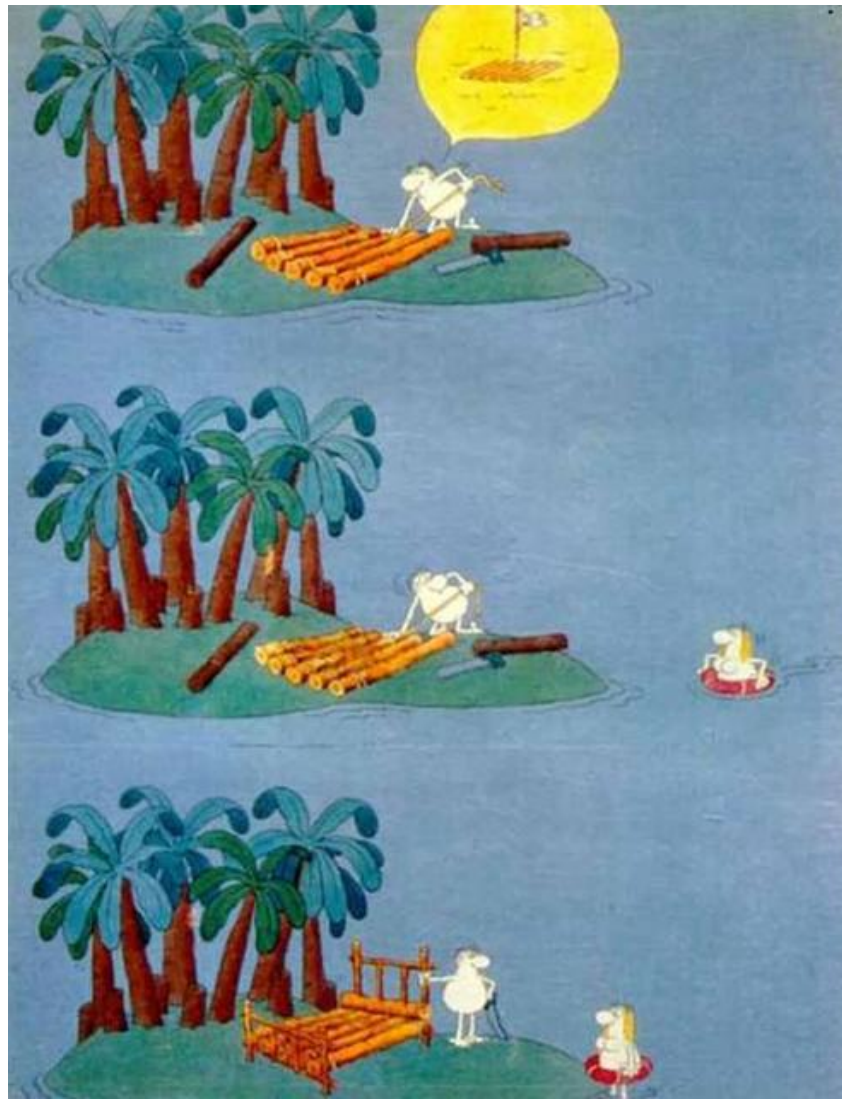
Learn from Deviations

- 6. Analyze deviation from your initial estimates



Courage

– 7. Change plans to reflect weekly learning



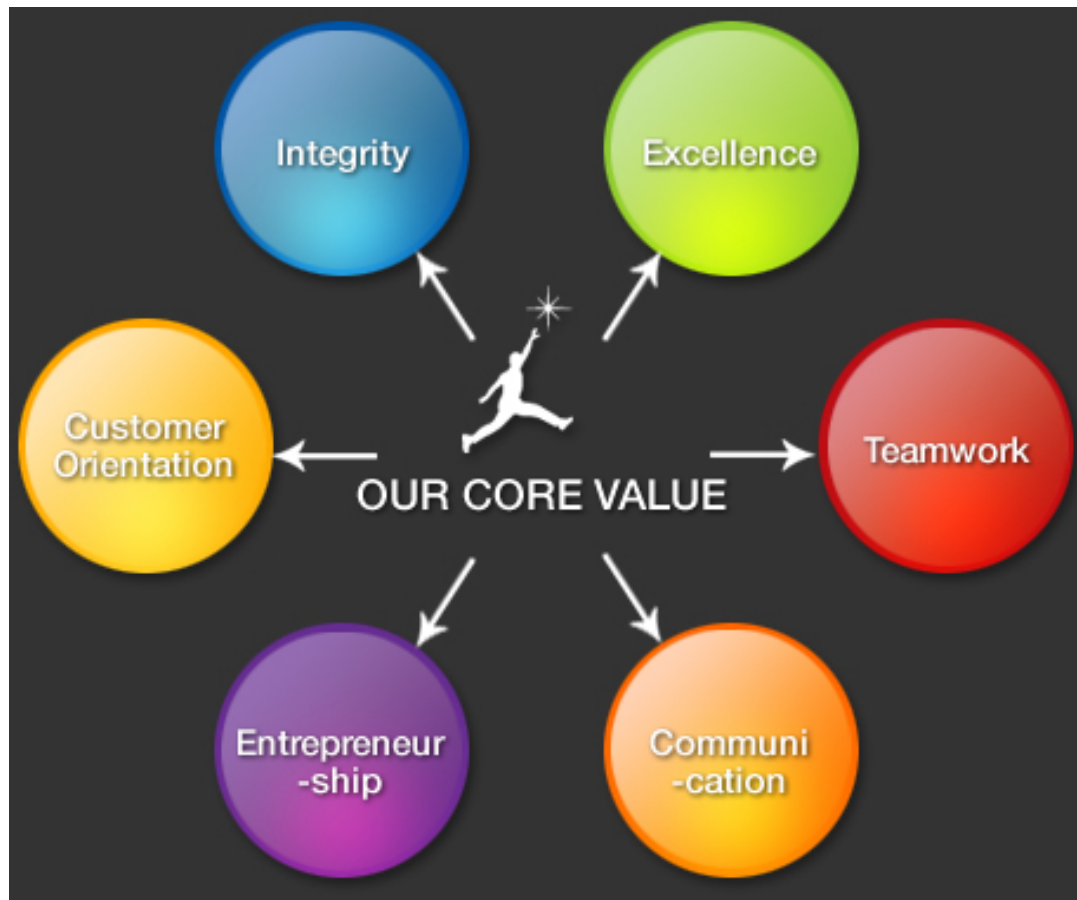
Deliver Value Now

- **8. Immediately implement valued stakeholder needs, next week**
 - *Don't wait, don't study (analysis paralysis), don't make excuses.*
 - *Just Do It!*



Tell Stakeholders What's next

- **9. Tell stakeholders exactly what you will deliver next week**



If it works, do it!

- **10. Use any design, strategy, method, process that works quantitatively well - to get your results**
 - Be a systems engineer, not a just programmer (a 'Softcrafter').
 - Do not be limited by your craft background, in serving your paymasters



Last slide

- Ecstatic Stakeholder!

