

# Project Success, every time!

Novatec Stuttgart
05. December 2014
Tom @ Gilb .com
These slides and some book links are at tinyurl.com/Novatec-Gilb



# Our Agenda

#### Project Success, every time! Keynote & Face2Face Sessions with Tom Gilb 05. December 2014

Success is usually defined well at the financial level. But success is usually poorly defined for the Stakeholders, the Product and the Sub-Product.

To be part of a team delivering success we must be able to describe successes, not only at the financial level but directly at the level you are working on. How do you define success well at your level? We will show you how.

With success clearly specified, how do you architect, engineer and prioritize all the technical solutions, so as to achieve that success? And with all the elements in place to create success, how do you execute in order to ensure that you successfully deliver the success? We will show you how.

Tips, Principles and Ideas gathered from years of experience on focusing product development towards creating success. When people at all levels know how to define success, when they prioritize all solutions towards creating that success, and all actions towards delivering that success, something remarkable happens. This will be shown with case studies and examples.

Do you have any specific requests to Tom Gilb, you do not want to discuss in a big group? No problem! Sign up for an exclusive private conversation.



Jetzt kostenlos anmelden!

#### Target group

- · Requirement authors and engineers
- Architects
- Product Owners
- Managers
- Decision makers; people responsible for project success

#### You will learn

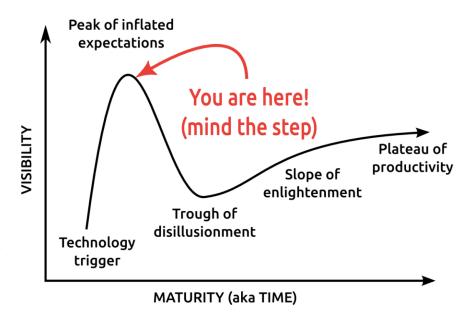
Tom Gilb will present a well proved approach about

- how to define Success
- how to architect Success
- how to develop and deliver Success.



# **Limitation - Expectations**

- Please Keep in mind,
- This presentation is NOT a training course
- It is an overview of a week of basic training
- You will learn a lot of exciting and useful ideas today
  - But you will not be ready to practice, teach or use them
  - Unless
    - You are quite exceptional (1 in 100 IT Experts)
    - And do a lot of reading of books and papers (600 pages)
    - And work hard experimenting (and learning the 'HARD' way)





# **Project Success: is**

- Delivering expected improvements
- On time
- On budget

- And, not disappointing in the longer term
  - By having systems difficult to maintain
  - By having systems break down



## The Problem

## What is wrong

- Projects fail
- Projects partly fail
- Good Results are not visible early
- Project teams do not learn fast enough, if they are on wrong path

#### How we fix it

- We define success in measurable terms, that project sponsors can relate to
- We make real results visible very early, and continuously
- We prioritize value/cost
- We manage risks very systematically
  - Feedback real measurable results early and frequently



## Introduction

## What we teach you to do

#### **Project Objectives**

All critical stakeholder objectives The critical value requirements, quantified

#### **Project Architecture**

The top level architecture and strategies: quantified, and measurable Priority to most value first Design in hands of developers, not users

#### **Project Management**

Early increments of value delivery Quantified value reporting and feedback Total focus on value delivery, not 'construction

#### The effect it has on your success

- 1. success values are agreed with stakeholders, and are quantified and cannot be misunderstood
- 2. All architecture, strategy and design is quantitatively related to the quantified value objectives at all times
- 3. Project management can self monitor the degree of success they produce, numerically: early frequently



# Why are these methods better?

## Compared to conventional IT

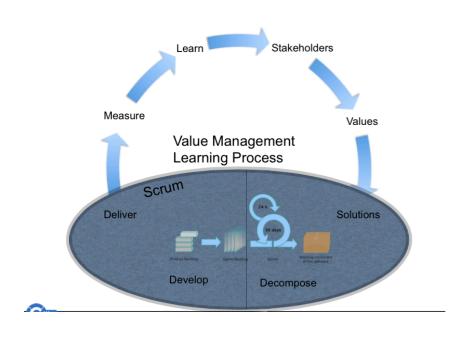
- They are stakeholder oriented
- 2. Value orientation
- 3. Quantification
- 4. Measurement
- 5. Dynamic Prioritization
- 6. Deep Risk Management

## **Compared to Agile**

- Focus on value, not code
- Can 'manage' a Scrum programming team to deliver value
- Can relate to users, sponsors, stakeholders better: in terms of their results



# Relation to Agile and Scrum



- We introduce intelligent value management
- Primary focus on measurable value delivery

# 1. Defining Success

- Policy
- Principles
- Practices
- Cases
- Results



# Policy

- Project and Product success will be formally defined
- As a set of quantified critical stakeholder values

#### **TTMP: Predictability of Time To Market:**

**Ambition**: From Ideas created to customers can use it. Our ability to meet agreed specified customer and self-determined targets.

## Scale: % overrun of actual Project Time compared to planned Project Time

**Project Time: Defined:** time from the date of Toll-Gate 0 passed, or other Defined Start Event, to, the Planned- or Actually- delivered Date of All [Specified Requirements], and any set of agreed requirements.

**Specified Requirements: Defined:** written approved Quality requirements for products with respect to Planned levels and qualifiers [when, where, conditions].

And, other requirements such as function, constraints and costs.

Meter: Productivity Project or Process Owner will collect data from all projects, or make estimates and put them in the Productivity Database for reporting this number.

Past [1994, A-package] < 50% to 100%> <- Palli K. guess. [1994, B-package] 80% ?? <- Urban Fagerstedt and Palli K. guess

Record [IBM Federal Systems Division, 1976-80] 0% <- RDM 9.0 quoting Harlan Mills in IBM SJ 4-80

"all projects on time and under budget"

Record [Raytheon Defense Electronics, 1992-5] 0% <- RDE SEI Report 1995 Predictability.

Fail [All future projects, from 1999] 5% or less <- discussion level TG

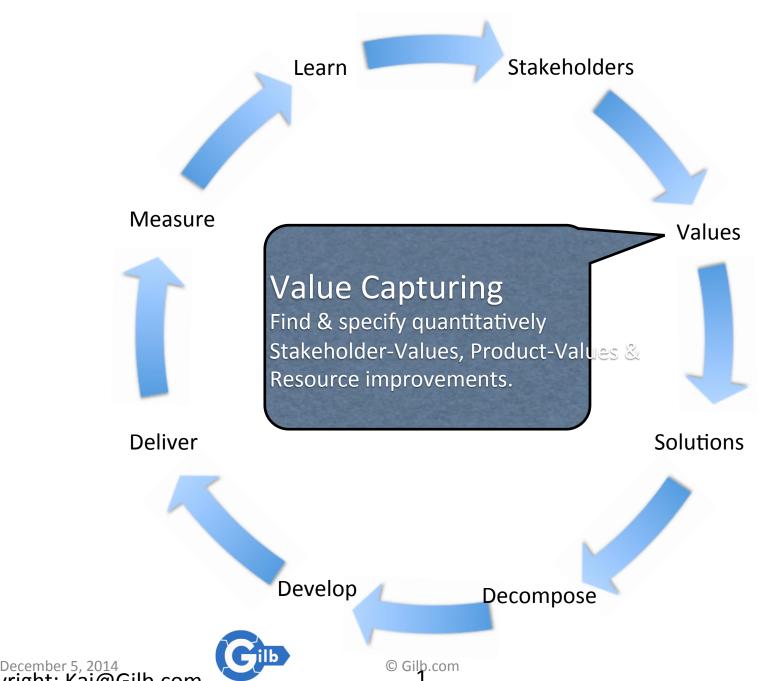
## Goal [All future projects, from 1999] 0% or less <- discussion level TG

From Real Case Study, Ericsson Engineering Productivity <a href="http://www.gilb.com/tiki-download\_file.php?fileId=144">http://www.gilb.com/tiki-download\_file.php?fileId=144</a><a href="http://www.gilb.com/dl559">http://www.gilb.com/dl559</a>



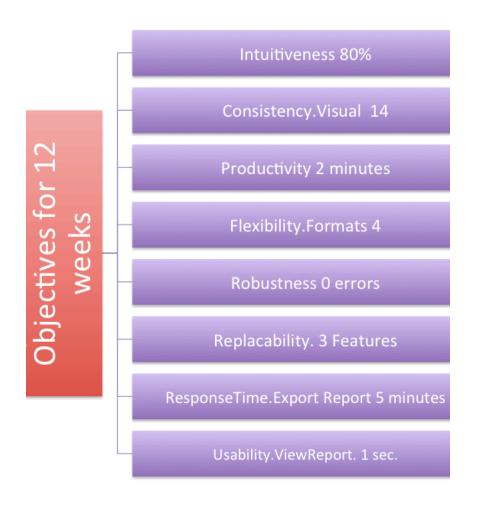
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# Principles

- The top level critical values will drive all decisions and practices
- The critical values will always be quantified, measurable, trackable







## **Practices**

- We apply 'Planguage'
  - A well defined value specification language
- We define 'scales of measure'
  - Benchmarks
  - Constraints
  - Targets
  - Useful Background, like ...
    - Sponsor
    - Rationale
    - Known risks and dependencies
- Specification Quality Control (SQC);
  - measurement of critical specification in relation to our standards.
  - No Garbage out.

#### **Contract Flexibility**:

**Type**: Project level Critical Objective.

Owner: Project Manager

**Supports**: CTO Objectives, especially Technical

Adaptability.

**Scale**: The Speed which a Contract can be Changed at minimum cost of loss to reflect

Circumstances.

Goal: < 1 month

**Contract**: All IT Services and IT Products

**Changed:** Deleted or modified

**Circumstances**: changed economics, or failure to

live up to expectations

**Deadline**: This Year

**Supporting Strategies:** 

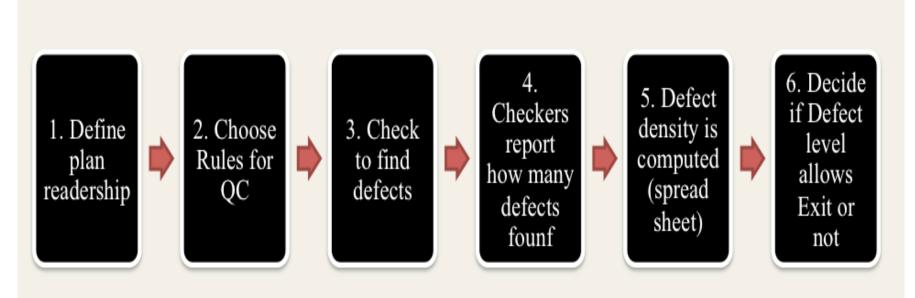
FlexiCon: www.FlexibleContracts.com

**Supporting Objectives:** 

Legal Dept: % of Flexible Contracts in Force.



# The Specification QC Process





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# Intel Example of Our QC Method

Application of Specification Quality Control by a SW team resulted in the following defect density reduction in requirements over several months:

4	# of Defects	# of Pages	Defects/ Page (DPP)	% Change in DPP
0.3	312	31	10.06	
0.5	209	44	4.75	-53%
0.6	247	60	4.12	-13%
0.7	114	33	3.45	-16%
0.8	45	38	1.18	-66%
1.0	10	45	0.22	-81%
Overall % change in DPP revision 0.3 to 1.0:				-98%

#### Downstream benefits:

- Scope delivered at the Alpha milestone increased 300%, released scope up 233%
- SW defects reduced by ~50%
- Defects that did occur were resolved in far less time on average
- Source: http://selab.fbk.eu/re11 download/industry/Terzakis.pdf

## Cases

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- Horror Project and definition of Robustness
  - \$160 million spent
  - 8 years
  - 90 people
  - 5 project managers
  - No delivery
- Banking top ten on a page
  - Success on time
  - Letting top ten values drive projects, especially the design

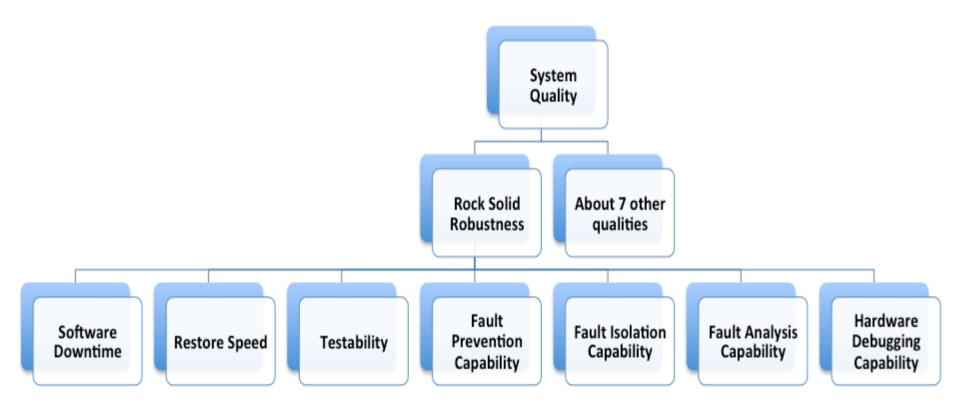
#### **The Horror Project Objectives**

- 1. Central to The Corporations business strategy is to be the world's premier integrated\_ <domain> service provider.
- 2. Will provide a much more efficient user experience
- 3. Dramatically scale back the time frequently needed after the last data is acquired to time align, depth correct, splice, merge, re-compute and/or do whatever else is needed to generate the desired products
- 4. Make the system much easier to understand and use than has been the case for previous system.
- 5. A primary goal is to provide a much more productive system development environment than was previously the case.
- 6. Will provide a richer set of functionality for supporting next-generation logging tools and applications.
- 7. Robustness is an essential system requirement
- 8. Major improvements in data quality over current practices



# **Project Value Hierarchy**

'Decomposition' allows clarity and quantification







## **Rock Solid Robustness:**

Type: Complex Product Quality Requirement.

Includes: { Software Downtime, Restore Speed, Testability, Fault Prevention Capability, Fault Isolation Capability, Fault Analysis Capability, Hardware Debugging Capability}.



## Software Downtime:

## **Software Downtime:**

Type: Software Quality Requirement.

**Ambition**: to have minimal downtime

due to software failures <- HFA 6.1

**Issue**: does this not imply that there is a system v

requirement?



## Scale: <mean time between forced restarts for defined [Activity], for a defined [Intensity].>

**Fail** [Any Release or Evo Step, Activity = Recompute, Inrensity = Peak Level] **14 days** <- HFA 6.1.1

**Goal** [By 2008?, Activity = Data Acquisition, Intensity = Lowest level] **: 300 days** ??

Stretch: 600 days





## Restore Speed:

**Restore Speed:** 

Type: Software Quality Requirement.

**Ambition**: Should an error occur (or the user otherwise desire to do so), Horizon shall be able to restore the system to a previously saved state in less than 10 minutes. <-6.1.2 HFA.

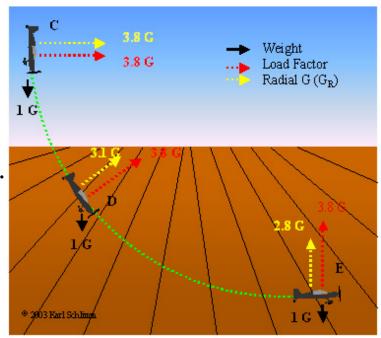
**Scale**: Duration from Initiation of Restore to Complete and verified state of a defined [Previous: Default = Immediately Previous]] saved state.

**Initiation**: defined as {Operator Initiation, System Initiation, ?}. Default = Any.

**Goal** [ Initial and all subsequent released and Evo steps] 1 minute?

**Fail** [Initial and all subsequent released and Evo steps] 10 minutes. <- 6.1.2 HFA

Catastrophe: 100 minutes.





**Testability**:

**Type**: Software Quality Requirement.

**Version**: 20 Oct 2006-10-20

Status: Demo draft,

**Stakeholder**: {Operator, Tester}.

**Ambition**: Rapid-duration automatic testing of <critical complex tests>, with extreme operator setup and

Testability:

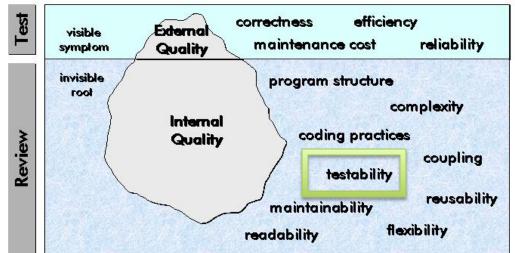
initiation.

# Scale: the duration of a defined [Volume] of testing, or a defined [Type], by a defined [Skill Level] of system operator, under defined [Operating Conditions].

**Goal** [All Customer Use, Volume = 1,000,000 data items, Type = WireXXXX Vs DXX, Skill = First Time Novice, Operating Conditions = Field, {Sea Or Desert}. <10 mins.

<u>Design Hypothesis:</u> Tool Simulators, Reverse Cracking Tool, Generation of simulated telemetry frames entirely in software, Application specific sophistication, for drilling – recorded mode simulation by playing back the dump file, Application test harness console <-6.2.1 HFA

## The Software Quality Iceberg





## **Real Bank Project: Project Progress Testability** Quantification of the most-critical project objectives on day 1

<u>P&L-Consistency&T P&L</u>: Scale: total adjustments btw Flash/Predict and Operational-Control. Timely. Trade-Bookings Scale: number of trades Actual (T+1) signed off P&L. per day. Past 60 Goal: 15 per day that are not booked on trade date. Past [April 20xx] 20?

Speed-To-Deliver: Scale: average Calendar days needed from New Idea Front-Office-Trade-Management-Efficiency Scale: Time from Ticket Approved until Idea Operational, for given Tasks, on given Markets. Past [2009, Market = EURex, Task = Bond Execution] 2-3 months? Goal [Deadline = End 20xz, Market = EURex, Task = Bond Execution] 5 days

Operational-Control: Scale: % of trades per day, where the calculated economic difference between OUR CO and Marketplace/Clients, is less than "1 Yen" (or equivalent).

Past [April 20xx] 10% change this to 90% NH Goal [Dec. 20xy] 100%

Operational-Control.Consistent: Scale: % of defined [Trades] failing full metrics is delayed by more than 0.5 sec. Past [April 20xx, NA] 1% Past STP across the transaction cycle. Past [April 20xx, Trades=Voice Trades] [April 20xx, EMEA] ??% Past [April 20xx, AP] 100% Goal [Dec. 20xy] 0% 95%

Past [April 20xx, Trades=eTrades] 93%

Goal [April 20xz, Trades=Voice Trades] <95 ± 2%>

Goal [April 20xz, Trades=eTrades] 98.5 ± 0.5 %

Operational-Control.Timely.End&OvernightP&L Scale: number of times, per guarter, the P&L information is not delivered timely to the defined [Bach-Run].

Past [April 20xx, Batch-Run=Overnight] 1 Goal [Dec. 20xy, Batch-Run=Overnight] <0.5> Past [April 20xx, Batch-Run= T+1] 1 Goal [Dec. 20xy, Batch-Run=End-Of-Day, Delay<1hour] 1

Operational-Control.Timely.IntradayP&L Scale: number of times per day the intraday P&L process is delayed more than 0.5 sec.

Launch to trade updating real-time risk view Past [20xx, Function = Risk Mgt, Region = Global] ~ 80s +/- 45s ?? **Goal** [End 20xz, Function = Risk Mgt, Region = Global] ~ 50% better? Managing Risk - Accurate - Consolidated - Real Time

**Risk.Cross-Product Scale:** % of financial products that risk metrics can be displayed in a single position blotter in a way appropriate for the trader (i.e. – around a benchmark vs. across the curve).

Past [April 20xx] 0% 95%. Goal [Dec. 20xy] 100%

Risk.Low-latency Scale: number of times per day the intraday risk Risk.Accuracy

Risk. user-configurable Scale: ??? pretty binary – feature is there or not - how do we represent?

Past [April 20xx] 1% Goal [Dec. 20xy] 0%

Operational Cost Efficiency Scale: < Increased efficiency (Straight through processing STP Rates )>

**Cost-Per-Trade Scale**: % reduction in Cost-Per-Trade

Goal (EOY 20xy, cost type = I 1 - REGION = ALL) Reduce cost by 60% (BW)

Goal (EOY 20xy, cost type = I 2 - REGION = ALL) Reduce cost by x % Goal (EOY 20xy, cost type = E1 – REGION = ALL) Reduce cost by x %

Goal (EOY 20xy, cost type = E 2 - REGION = ALL) Reduce cost by 100% Goal (EOY 20xy, cost type = E 3 - REGION = ALL) Reduce cost by x %

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## Results

Confirmit Results



- Generic expectations
  - 2<sup>nd</sup> week and on; real visible stakeholder value improvements
  - Early frequent feedback and correction from real stakeholders
  - Willingness to participate to get early results

Description of requirement/work task	Past	Status
Usability.Productivity: Time for the system to generate a survey	7200 sec	15 sec
Usability.Productivity: Time to set up a typical specified Market Research-report (MR)	65 min	20 min
Usability.Productivity: Time to grant a set of End-users access to a Report set and distribute report login info.	80 min	5 min
Usability.Intuitiveness: The time in minutes it takes a medium experienced programmer to define a complete and correct data transfer definition with Confirmit Web Services without any user documentation or any other aid	15 min	5 min
Performance.Runtime.Concurrency: Maximum number of simultaneous respondents executing a survey with a click rate of 20 sec and an response time<500 ms, given a defined [Survey-Complexity] and a defined [Server Configuration, Typical]	250 users	6000

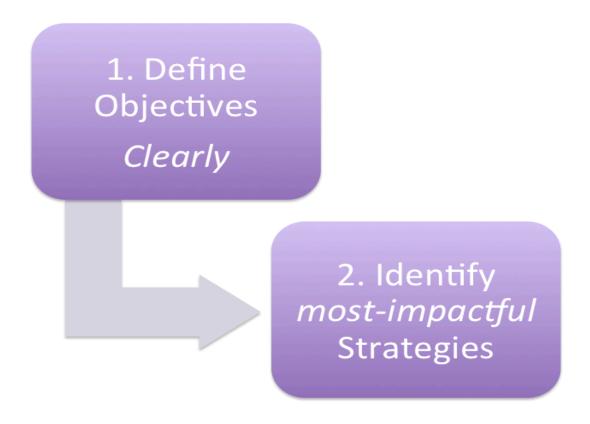
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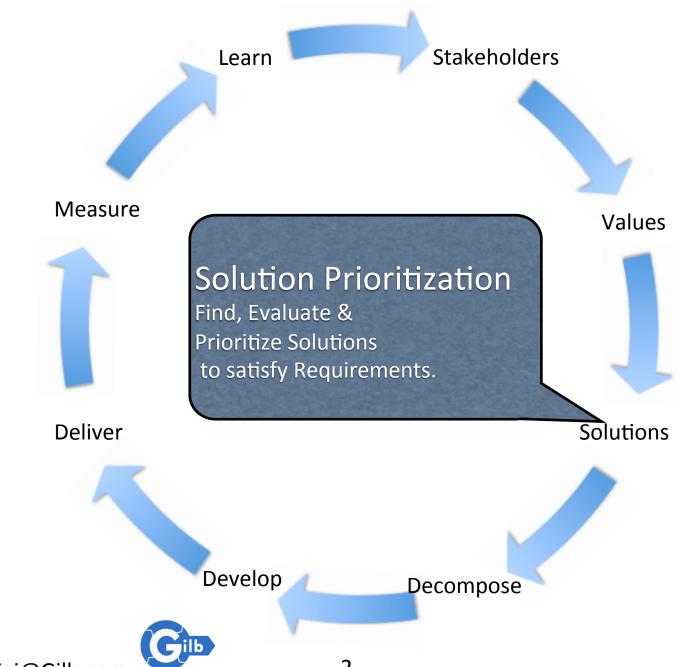
December 5, 2014

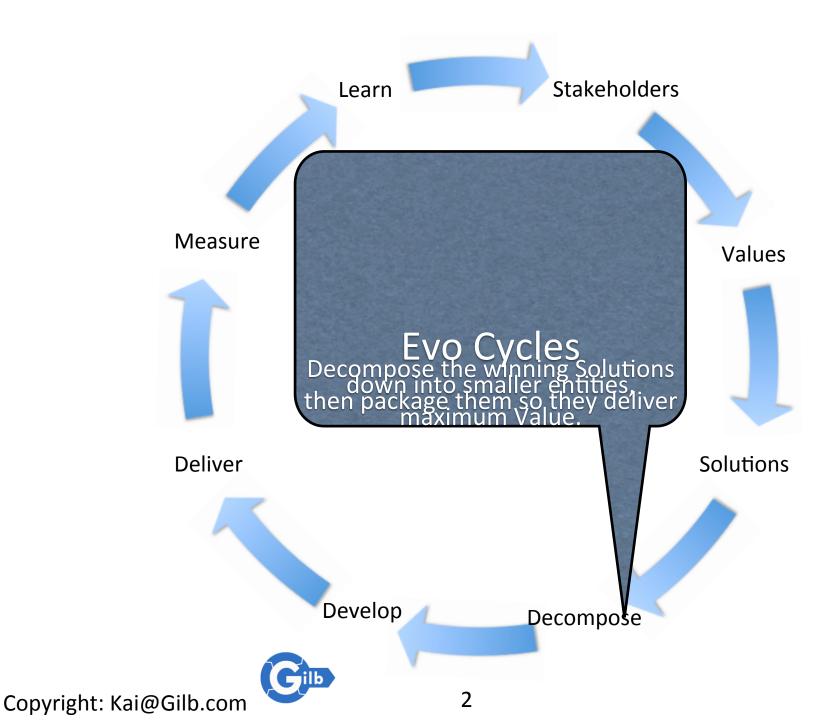
# 2. Designing Success

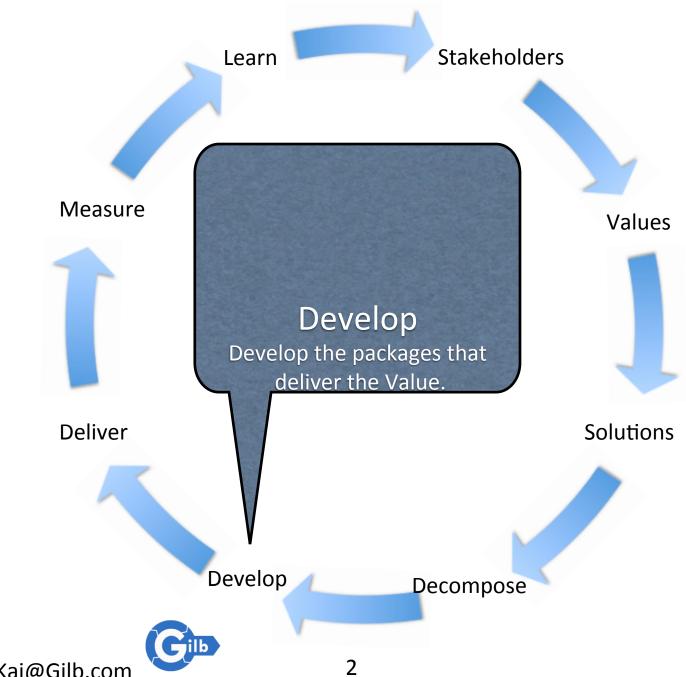
- Policy
- Principles
- Practices
- Cases
- Results

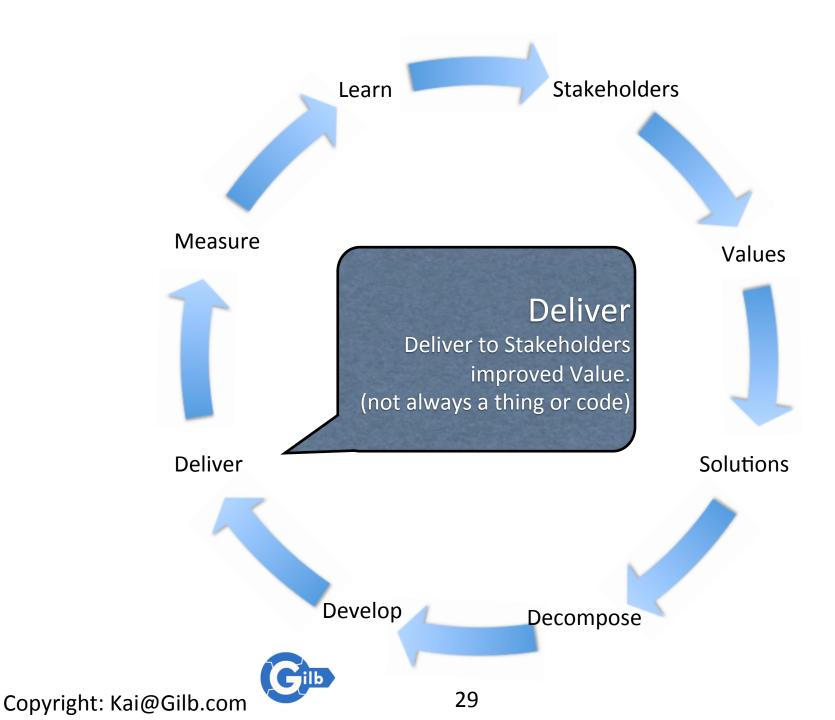


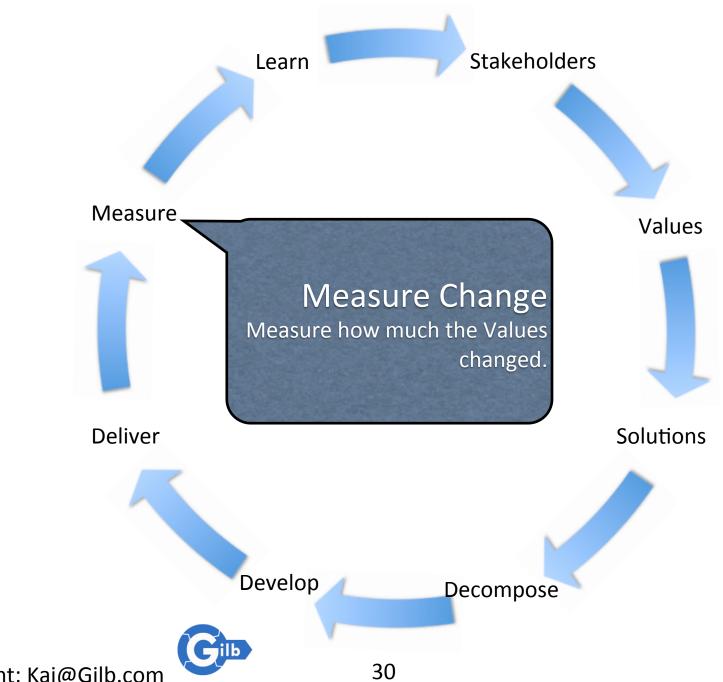




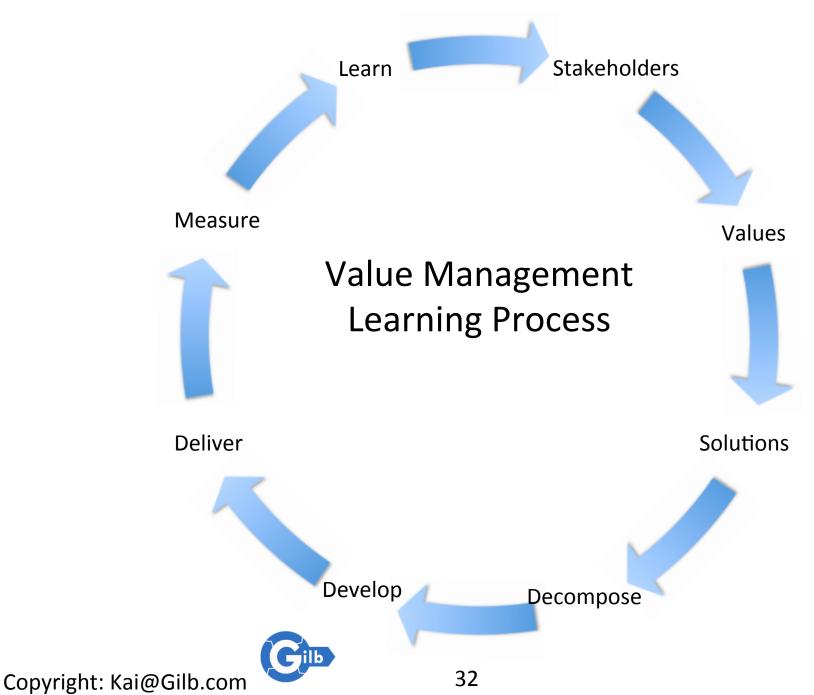






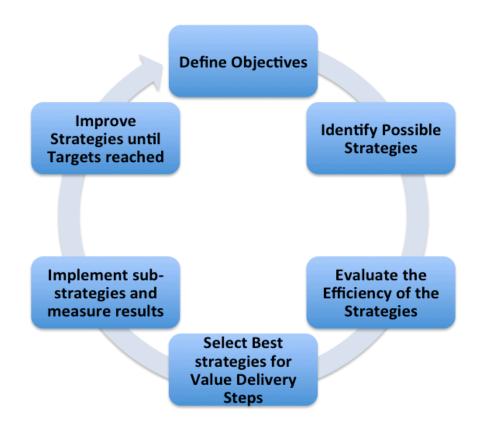






# Policy

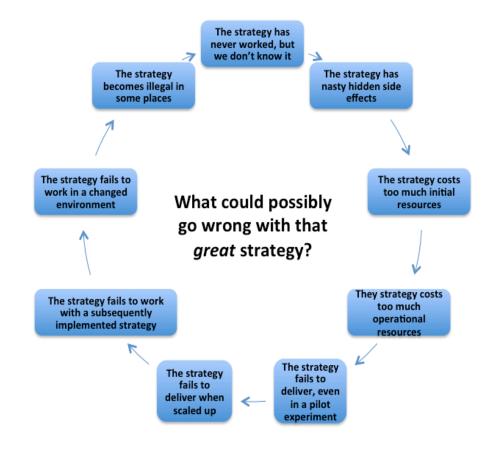
All 'means'
to get the values
will be evaluated
quantitatively





# Principles

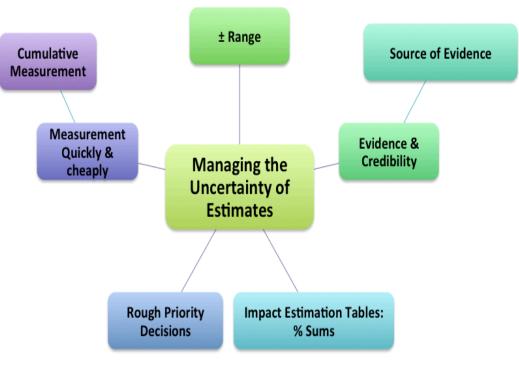
- All 'architecture' (design, strategies) can be estimated for our values in advance.
- All estimates can be rated by 'credibility'
- All 'architecture' can be decomposed into small implementation steps
- All architecture can be measured early, frequently and gradually, for value delivered
- Designing all qualities in
  - Usability, maintainability, security, availability, testability





## **Practices**

- Impact estimation
  - Quantified value
  - Directly Related to requirements
  - Based on facts 'evidence'
- Value decision tables
  - Quantified prioritization
  - Risk understanding
  - Dynamic updating as we experience
- Automated Tools
  - Several existing options
  - Simple to make your own



•



Scale: Time,
from Trader wants access to trades,
until they are provided with the information
onscreen.





Scale: Time,
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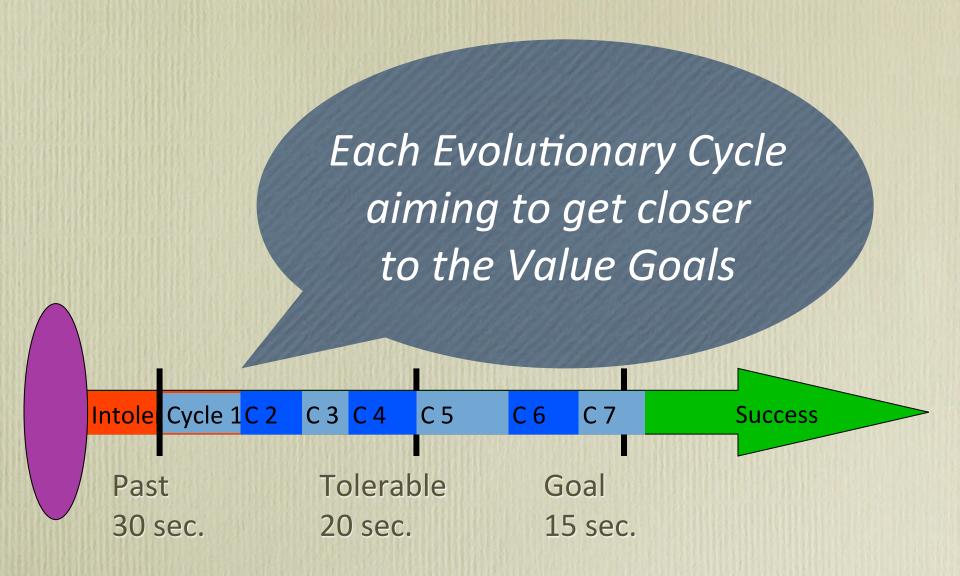




Scale: Time,

from Trader wants access to trades, until they are provided with the information onscreen.





Speed

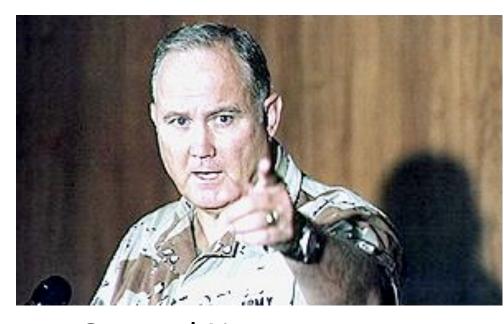




## Cases

• Persinscom: basic table

Bring Case: multi level



General NormanSchwartzkopf

#### Persinscom Impact Estimation Table:

Designs

Requirements	Technology Investment	Business Practices	People	Empowerment	Principles of IMA Management	Business Process Re-engineering	Sum Requirements
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 Morale 72 <-> 60 per month on Sick Leave	45% 50%	R→	D Imp	pacts	100% 15%	53% 61%	303% 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 of Performance	482%	280%	305%	390%	315%	649%	
Money % of total budget	15%	4%	3%	4%	6%	4%	36%
Time % total work months/year	15%	15%	20%	10%	20%	18%	98%
Sum of Costs	30	19	23	14	26	22	
Performance to Cost Ratio	16:1	14:7	13:3	27:9	12:1	29:5	



#### Value Decision Tables: Impact Estimation Tables

<b>Business Goals</b>	Training Costs	User Productivity
Profit	-10%	40%
Market Share	50%	10%
Resources	20%	10%

Stakeholder Val.	Intuitiveness	Performance
Training Costs	-10%	50 %
User Productivity	10 %	10%
Resources	2 %	5 %

Product Values	GUI Style Rex	Code Optimize
Intuitiveness	-10%	40%
Performance	50%	80 %
Resources	I %	2 %

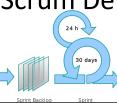
Prioritized List

I. Code Optimize

2. Solution 9

3. Solution 7

Scrum Develops



We measure improvements Learn and Repeat



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Prioritized	List
Ι.	
2. Solution	9
3. Solution	7



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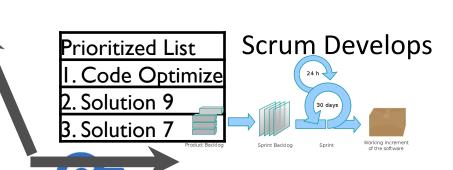


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We measure improvements Learn and Repeat

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### Results: of Impact Estimation

- Basis for development of architecture
- Basis for intelligent discussion of options
- Basis for presentation of ideas and strategies
- Basis for analysis of decision making retrospectives





### 3. Delivering Success

- Policy
- Principles
- Practices
- Cases
- Results

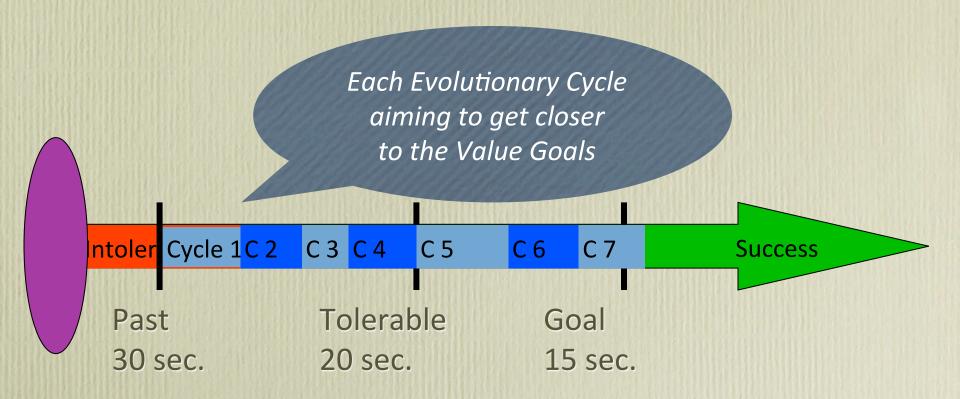
- Startup Week Project initiation process
- 111111 Decomposition
- Project management
- Value delivery process
- Spreading value by scaling up
- Technical Debt management: Green weeks





Speed

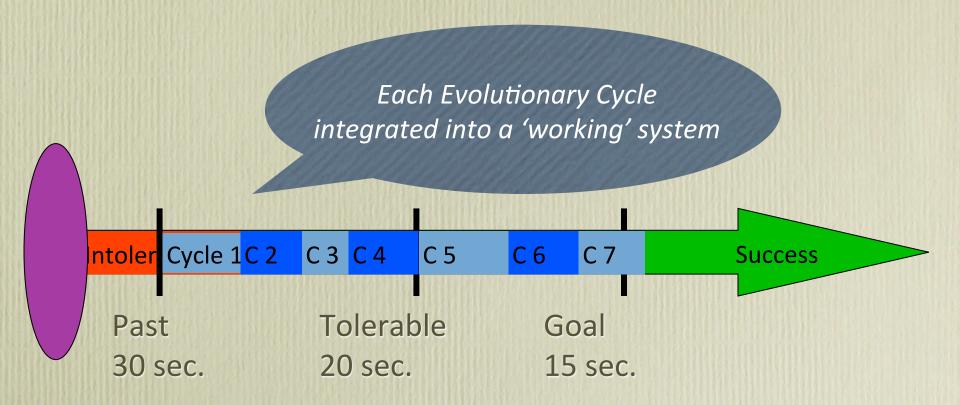




#### Speed



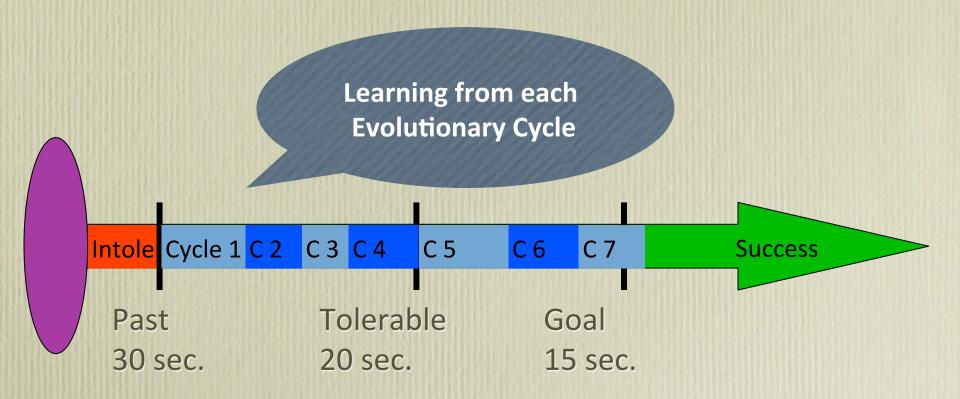




#### Speed



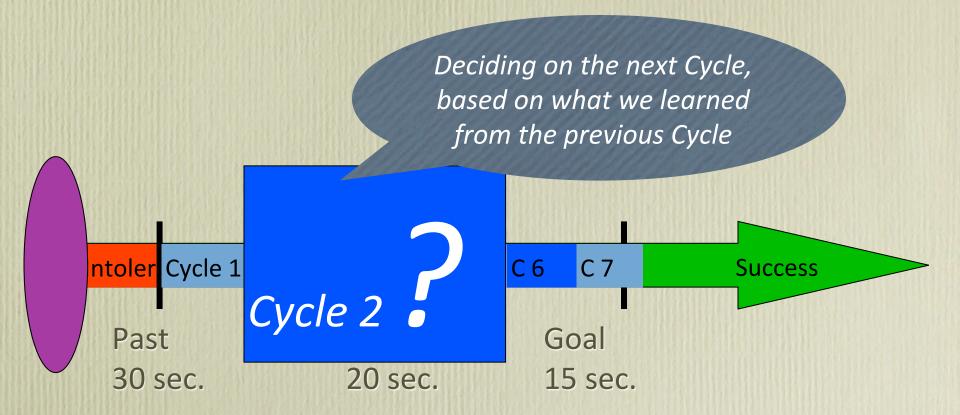




#### Speed



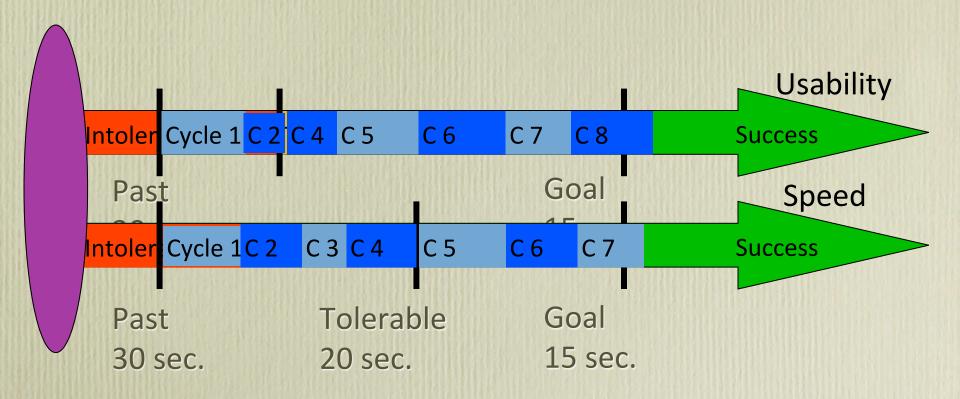




#### Speed



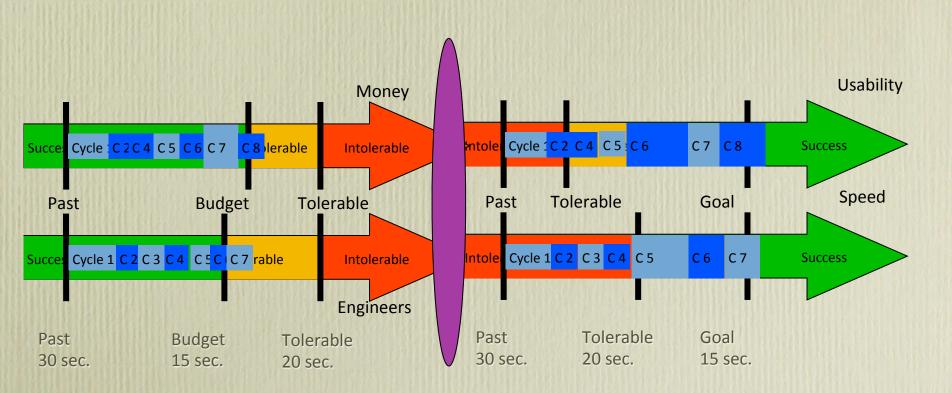








## Each Evolutionary Cycle uses a constrained budget of Development Resources

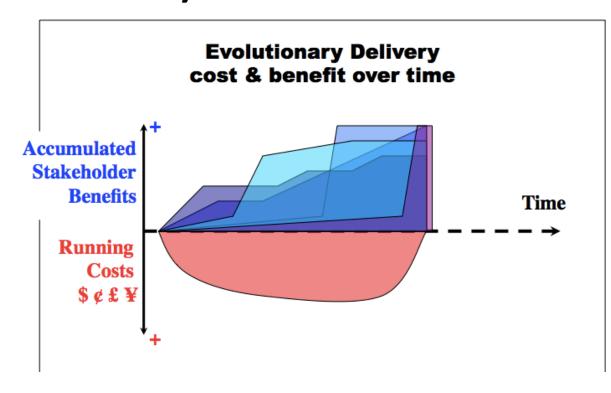






### **Policy**

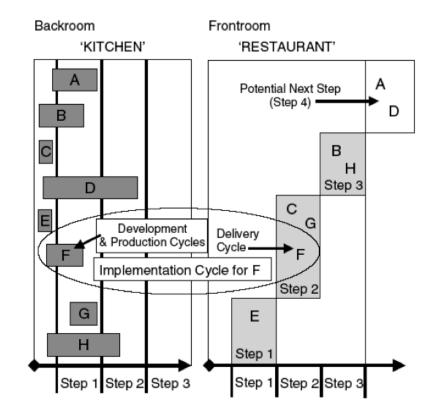
 We will deliver some value early, frequently, cumulatively, profitably, prioritized, quantitatively, visible to real stakeholders.





### Principles

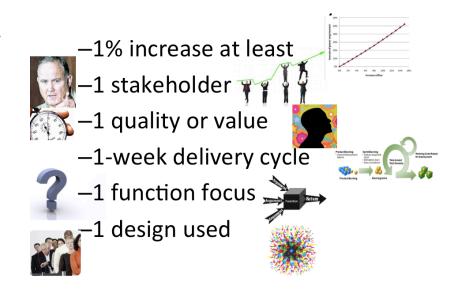
- Every week will deliver measurable value
- We will not delay value delivery while we build infrastructure (we build it in Backroom)
- We will depart from existing systems: revolution through safe evolution





#### **Practices**

- Project Startup week to develop quantified management framework
- 111111 Decomposition to allow flow of value early and frequently
- Value Decision Table to manage overall long-term and short-term picture.
- Weekly value delivery cycles
- Frontroom for value delivery of existing product build
- Backroom for longer structure build processes
- Engineering mentality: quantified, measurable, logical, fact based





## Evo Project Startup Week: What is behind the process steps?





### On First Monday: Set this Project's Goals

1.1 Brainstorm Top Ten Critical Objectives

1.5 TARGETS: work out Wish/Goal, and possible Stretch

1.2 Work out Ambition Level for Each one

1.5 CONSTRAINTS:
Work out a Tolerable
and or OK Level for
given time, place, and
conditions

1.3 Work out A Scale or set of Scales for each one

1.4 Work out a Past Level for given time, place, and conditions



## Tuesday: Identify Most-Effective Strategies

2.1 Brainstorm a list of the intuitively most powerful strategies for reaching all goals within resources

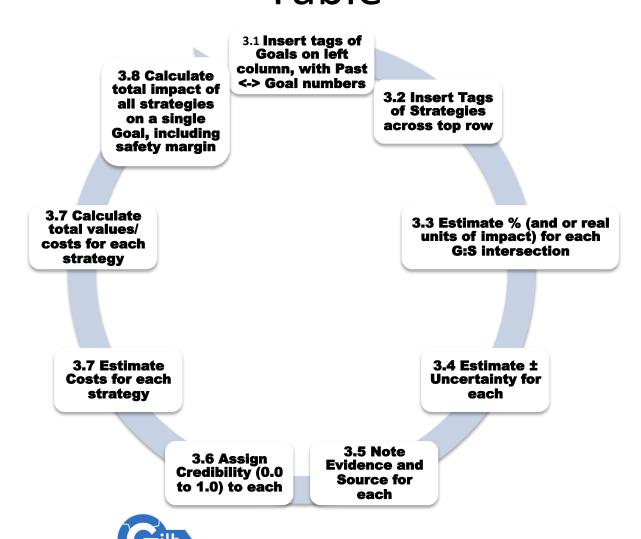
2.4 Product is about 1 page each strategy

2.2 Detail the top 10 strategies, into independently implementable substrategies

2.3 Complete the strategy template, with issues, experts, impact relationships (S1->O3)



## Wednesday: Build Impact Estimation Table



## Thursday: Find what we can deliver next week

4.1 Look at most values/costs strategy

4.5 Option: several parallel deliveries, parallel teams

4.2 Decompose it if necessary into 1 or more weekly implementations

4.4 Agree to one value delivery next week

4.3 Estimate which one of several options would give best effect



## Friday: Get Management Approval to try to deliver real measurable value next week

5.1 Present the 4 days of planning to management

5.5 Ask them if, most all weeks deliver value in practice, we can keep on delivering until Goals are reached

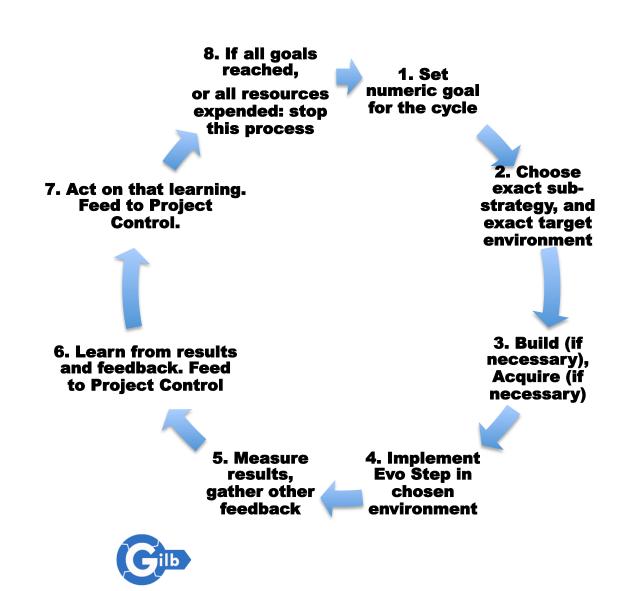
5.2 Ask if they agree to the plans: the objectives, the strategies, the estimations; at least roughly OK

5.4 Ask them to formally approve only next week, as a trial.

5.3 Ask if they like the plan for what to do next week, or have other ideas?



#### Evo Weekly Cycle after Startup Week (week 2, 3, 4, ... n)



#### Cases

- Confirmit
  - Small scale project management
  - Green week
- Smith Citigroup



## We gave them a 1 day briefing on our Evo method and Planguage

That's all they needed to succeed!

They were Real engineers



Concurrent Quantified 'Empowered Creativity' \*
The Software Engineers can **use** ANY design that they
believe delivers the planned value.

And keep what really works

Team 2 3 Team 3

Team 1 Team 4

<sup>\*</sup> Empowered Creativity: Term coined by Trond Johansen, Confirmit, 2003

#### Each Quality Requirement has this 'Planguage' format: Real Example

**Scale:** Time in minutes to set up a typical specified market research-report

Meter [Weekly Step]: Candidates with Reportal experience, and with knowledge of MR-specific reporting features

Past [Release 8.0] 65 minutes

Tolerable [Release 8.5] 35 minutes

Goal [Release 8.5] 25 minutes

Usability Productivity



# Quantified Value Delivery Project Management in a Nutshell Quantified Value Requirements, Design, Design Value/cost estimation, Measurement of Value Delivery, Incremental Project Progress to Date

	Α	В	С	D	E	F	G	BX	BY	BZ	CA	
1												
3 4		Current						Step9				
3		Status	Improv	ements	Goa	ls			Reco	ding		
4		Julus						ted impact		Actual i	Actual impact	
5		Units	Units	%	Past	Tolerable	Goal		%	VAV	%	
6					Usability.Replacability (fea	ture count)					<b>e</b>	
7		1,00	1,0	50,0	2	1	0			9		
8					Usability.Speed.NewFeatu	resImpact (	%)			<b>e</b>		
		5,00	5,0	100,0		15	5					
10		10,00	10,0	200,0		15	5					
11		0,00	0,0	0,0	0	30	10	E				
12					Usability.Intuitiveness (%)							
13		0,00	0,0	0,0	0	60	80				<b>_9</b>	
14					Usability.Productivity (min	utes)						
15		20,00	45,0	112,5	65	35	25	20,00	50,00	38,00	95,00	
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21	יטוןו	ook	101,0	91,8	0		_110	4,00	3,64	4,00	3,64	
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# ACTUAL RESULTS IN SECOND 12 WEEKS OF USING THE NEW METHOD

Evo's impact on Confirmit 9.0 product qualities

Product quality	Description	Customer value
Intuitiveness	Probability that an inexperienced user can intuitively figure out how to set up a defined Simple Survey correctly.	Probability increased by 175%
Productivity	Time in minutes for a defined advanced user, with full knowledge of 9.0 functionality, to set up a defined advanced survey correctly.	Time reduced by 38%

<b>Product quality</b>	Description	Customer value
Productivity	Time (in minutes) to test a defined survey and identify 4 inserted script errors, starting from when the questionnaire is finished to the time testing is complete and is ready for production. (Defined Survey: Complex survey, 60 questions, comprehensive JScripting.)	Time reduced by 83% and error tracking increased by 25%

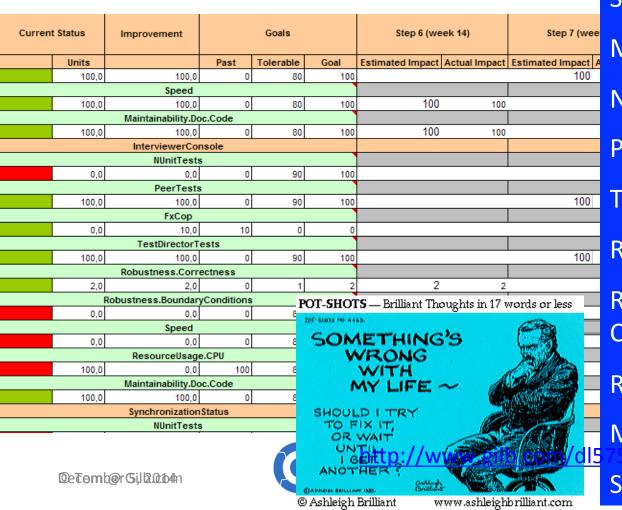
## MORE ACTUAL RESULTS IN SECOND 12 WEEKS OF USING THE NEW METHOD

Evo's impact on Confirmit 9.0 product qualities

<b>Product quality</b>	Description	Customer value
Performance	Max number of panelists that the system can support without exceeding a defined time for the defined task, with all components of the panel system performing acceptable.	Number of panelists increased by 1500%
Scalability	Ability to accomplish a bulk-update of X panelists within a timeframe of Z sec.	Number of panelists increased by 700%
Performance	Number of responses a database can contain if the generation of a defined table should be run in 5 seconds.	Number of responses increased by 1400%

# Code quality – "green" week, 2005 "Refactoring by Proactive Design Engineering!"

- In these "green" weeks, some of the deliverables will be less visible for the end users, but more visible for our QA department.
- We manage code quality through an Impact Estimation table. TJ



Speed

Maintainability

**Nunit Tests** 

**PeerTests** 

**TestDirectorTests** 

Robustness.Correctness

Robustness.Boundary Conditions

ResourceUsage.CPU

Maintainability.DocCode 75 = Paper SynchronizationStatus<sup>Nunit T</sup>

## The Monthly 'Green Week'

### User Week 1

Select a Goal

**Brainstorm Designs** 

Estimate Design Impact/ Cost

Pick best design

Implement design

Test design

**Update Progress to Goa** 

#### User Week 2

Select a Goal

**Brainstorm Designs** 

Estimate Design Impact/ Cost

Pick best design

Implement design

Test design

Update Progress to Goa

### User Week 3

Select a Goal

**Brainstorm Designs** 

Estimate Design Impact/ Cost

Pick best design

Implement design

Test design

Update Progress to Goa

## Developer Week 4

Select a Goal

**Brainstorm Designs** 

Estimate Design Impact/ Cost

Pick best design

Implement design

Test design

**Update Progress to Goal** 





# 20 Sept, 2011 Report on Gilb Evo method (Richard Smith, Citigroup)



- http://rsbatechnology.co.uk/blog:8
- Back in 2004, I was employed by a large investment bank in their FX e-commerce IT department as a business analyst.
- The wider IT organisation used a complex waterfall-based project methodology that required use of an intranet application to manage and report progress.
- However, it's main failings were that it almost <u>totally missed the ability to track delivery of actual value improvements</u> to a project's stakeholders, and the ability to react to changes in requirements and priority for the project's duration.
- The toolset generated lots of charts and stats that provided the illusion of risk control. but actually provided very little help to the analysts, developers and testers actually doing the work at the coal face.
- The proof is in the pudding;
  - I have <u>USEd EVO</u> (albeit in disguise sometimes) on two large, high-risk projects in front-office investment banking businesses, and several smaller tasks.
  - On the largest critical project, the original business functions & performance objective requirements document,
     which included no design, essentially remained unchanged over the 14 months the project took to deliver,
  - but the detailed designs (of the GUI, business logic, performance characteristics) changed many many times, guided by lessons learnt and feedback gained by delivering a succession of early deliveries to real users.
  - In the end, the new system responsible for 10s of USD billions of notional risk, <u>successfully went live</u>
     over one weekend for 800 users worldwide, and was seen as a big success by the sponsoring stakeholders.

"I attended a 3-day course with you and Kai whilst at Citigroup in 2006"

## Results of Evo

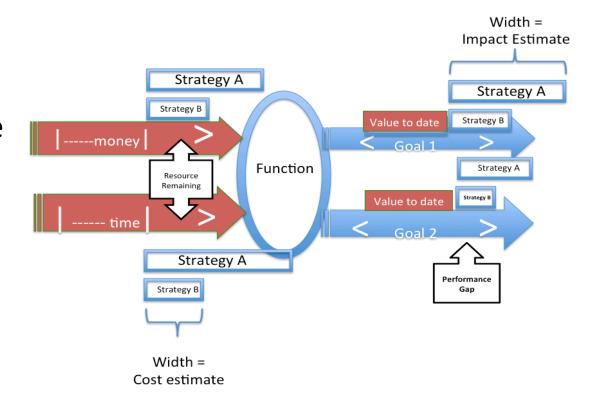
- Immediate flow of measurable valued results
- Projects can selfmanage and correct, towards long term objectives
- Low, and 'managed' technical debt





## **Summarizing Success**

- Clear Critical Goals
- Clear knowledge about strategies
- Deliver Value to Stakeholders
  - Early,frequently,continuously





#### The Training Courses, January

#### http://anmeldung.novatec-gmbh.de

#### January 2015 Stuttgart Area

#### 2 x 2 days courses on Requirements and design

- How we learn
  - Lectures
  - Questions and answers
  - Exercises
  - Solve your own selected real problems
  - Small group work
  - Access to extensive literature
  - Practice back at work
  - Access to teachers after the course



#### What we learn

- To clarify
- To question intelligently
- To quantify critical objective
- To estimate power of strategies
- To evaluate complex systems
- To communicate better
- To present technology better

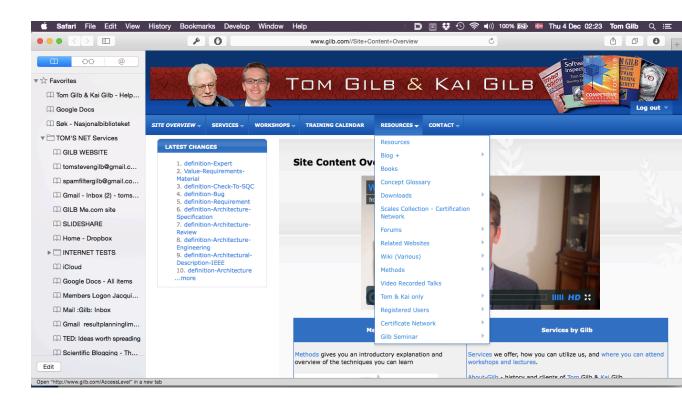
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To learn new methods



### Resources

- Books
- Papers
- Training
- Coaching
- Cases
- Consultancy





# Examples of Workshop Meeting Topics This afternoon

- Show us how to quantify the following critical objective for our project
- Show us how to decompose a large system into small incremental deliverables
- Show us how to quantify the quality values of a strategy/design/architecture
- What is the limitation with Scrum?
- How can we get started delivering value?



## Thank You!

- And welcome to get 'serious' training in January!
- http:// anmeldung.novatecgmbh.de
- January 2015 Stuttgart Area
- 2 x 2 days courses on Requirements and design



