*QUANTIFYING INNOVATIO*N:

How to Quantify innovation objectives,
and
Innovation Strategy/Architecture Power

Tom Gilb's SPIN London Presentation
1 PM to 1:30 PM
D Day 6th June 2014

http://tiny.cc/SPINGilb

SPINGilb

GILB'S
INNOVATION ENGINEERING
PRINCIPLES (written today after noon :)

1. Innovation works better by **'engineering' methods**, than by 'soft' creative methods

2. **Numbers stimulate creativity** in more relevant directions than emotive words

3. Innovation ideas are easier and **better communicated** to the team and outsiders **using numbers**, and other engineering level description

4. Identification of the innovation **stakeholders and their 'values'** (maybe 50! Some inorganic: like 'Laws') is fundamental *to practical purposeful innovation*.

5. **Prioritization** of scarce resources (time, money, talent, reputation) is much more intelligently done **dynamically** using **numeric feedback** about progress towards goals and remaining resources.

6. Innovation must develop a fairly **complete** and **balanced** idea of both **innovation objectives** (top 10 quantified), resources, and constraints (legal, practical, cultural)

7. Innovation strategies need to be **justified**, and then **measured incrementally**, in terms of how they numerically impact our quantified objectives and resources.

8. Innovation strategies must **be implemented step by step**, so that we can realistically know the impacts, and correct them if necessary.

9. Innovation planning needs to take place on **several levels of stakeholders**: *for example founders, employees, customers, funders, critics/reviewers*

10. Innovation should **plan to deliver** some **real measurable value**, to some **real stakeholder**s, from week 2 and every week thereafter. You will learn faster, and get credibility and income faster if you do; as well as motivating and encouraging your team.

CMM Level 4 Basis

High Quality Low Cost Software Inspections
Ronald A. Radice

Tom Gilb **Software Metrics**

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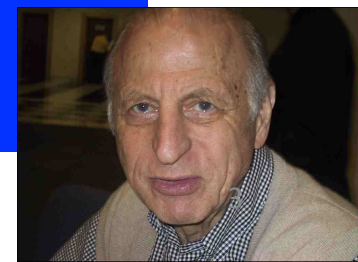
From Tim Kasse, CMM/I Founder

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

Lo those many years ago when I hooked up with Martin Brooks, and he shared your ideas with me on Software Quality Management, you were doing quality management consulting which today we call process improvement consulting. You would talk to the projects, find out where the pain was and try to help them. You focused on SCM and SQA, and requirements, and planning and tracking to get them going.

Your ideas and work were about 10 years ahead of the SEI.

My point is that you should "take credit" for being a pioneer in an area that the DoD, the SEI and a whole lot of us used later. I wrote a paper called Back to the Future - Back to Software Quality Management to challenge people to get away from following the CMM blind and get back to quality management basice. I will attach it to this email. This is your influence!

When people ask you about the CMM - simply tell them that it is OK - it captures ideas that you w sharing with the world about 20 years ago and soon the SEI and others will start to use your next of ideas.

With great respect,

Tim Kasse

Tim and Jeff were contributing authors to the Capability Maturity Model for Software (CMM)

Tim led the development of the Software Process Assessment Method while he was at the SEI which started the Assessment Industry based on the CMM and now CMMI in October 1990
http://www.linkedin.com/ppl/webprofile?
action=vmi&id=10620438&authToken=zypz&authType=name&trk=ppro_viewmore&lnk=vw_pprofile
http://www.kasseinitiatives.com/

Agile Credibility

- **Agile 'Grandfather' (Tom)**
  - **Practicing 'Agile' IT Projects since 1960**
  - **Preaching Agile since 1970's (CW UK)**
  - **Acknowledged Pioneer by Agile Gurus and Research**
    - **Beck, Sutherland, Highsmith, Cohn, Larman etc.**
    - **Ask me for details on this! I am too shy to show it here!**
- **Agile Practice**
  - **IT: for *decades* (Kai and Tom)**
  - **Organisations: for Decades (Citigroup, Intel, HP, Boeing)**
- **Books:**
  - **Principles of Software Engineering Management (1988) the book Beck and others refer to**
  - **Competitive Engineering (2005)**
  - **Evo: (Kai, evolving, 55 iterations)**
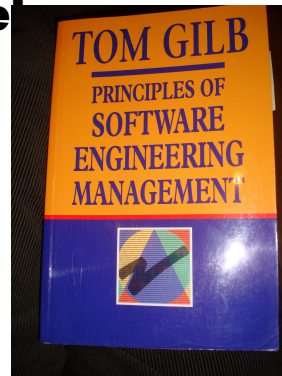
OK I am not that shy!
(the most influential!)

Agile References:

"Tom Gilb <u>invented Evo, arguably the first Agile process.</u> He and his son Kai have been working with me in Norway to align what they are doing with Scrum.

Kai has some excellent case studies where he has acted as Product Owner. He has done some of the most innovative things I have seen in the Scrum community."
Jeff Sutherland, co-inventor of Scrum, 5Feb 2010 in Scrum Alliance Email.

"Tom Gilb's Planguage referenced and praised at #scrumgathering by Jeff Sutherland. <u>I highly agree</u>" **Mike Cohn, Tweet, Oct 19 2009**

"I've always considered Tom to have been the original agilist. In 1989, he wrote about short iterations (each should be no more than 2% of the total project schedule). This was long before the rest of us had it figured out." Mike Cohn **http://blog.mountaingoatsoftware.com/?p=77**

Comment of Kent Beck on Tom Gilb's book , "Principles of Software Engineering Management": *" A strong case for evolutionary delivery – small releases, constant refactoring, intense dialog with the customer".* **(Beck, page 173).**
In a mail to Tom, Kent wrote: *"I'm glad you and I have some alignment of ideas. I stole enough of yours that I'd be disappointed if we didn't :-), Kent"* **(2003)**

Jim Highsmith (an Agile Manifesto signatory) commented*: "Two individuals in particular pioneered the evolution of iterative development approached in the 1980's – Barry Boehm with his Spiral Model and Tom Gilb with his Evo model. I drew on Boehm's and Gilb's ideas for early inspiration in developing Adaptive Software Development. …. Gilb has long advocated this more explicit (quantitative) valuation in order to capture the early value and increase ROI"* **(Cutter It Journal: The Journal of Information Technology Management, July 2004page 4, July 2004).**

**FREE BCS COURSES
AT BCS SG QUALITY**

**http://www.bcs.org/content/ConWebDoc/51930
SEE GILB.COM/COURSESCHEDULE FOR DETAILS AND LINKS LATER**

29-30 September 2014 **Requirements Engineering**, BCS London
Details Later

- 1-2 October   **Architecture Engineering**, BCS London. Details Later

- 6-7 October, **Lean Quality Assurance**, BCS London. Details Later

- 13-14 October **Project Management**

- **PROBABLY ALSO (BUT NOT DETAIL PLANNED)**
- **ANOTHER 'STARTUP PLANNING' COURSE**
- **HOPEFULL WITH BCS AND SPIN**

Quantification Helps Creativity
(PAPER AT TINY.CC/SPINGILB)

Practical Purposeful Creativity Constructs

by Tom Gilb,
Independent Consultant and Author,
Ormerudveien 4C, N-1410
Kolbotn, Norway
Telephone: +47-66-801697, Tom@Gilb.com
URL www.Gilb.com
Version Updated May 4 2006, Nov 6 2008 (address, Imagination definition at end)

Introduction

This paper is written as an invited contribution to a book "Creativity, Innovation and Cooperation" (Springer) and a special issue of "AI & Society: the Journal of Human-Centred Systems and machine Intelligence". The editor is Robert C. Muller (Fax +44-491-579750). Published around 1992.

Definitions.

Creativity: accessing ideas to improve some values.

Practical (INDUSTRIAL) Creativity: *Systematic Identification of ideas which serve useful human purposes*

Purposeful Creativity: *Identification and validation of ideas which meet specified objectives.*

Part One: A Theory of Practical Creativity.

Practical Creativity is measurable in practice.

Translating Management-Speak "Bigger Teacups for the Workers" into Quantified, Measurable Ideas
(PAPER AT TINY.CC/SPINGILB)

Vision Engineering:

How to support your core business vision

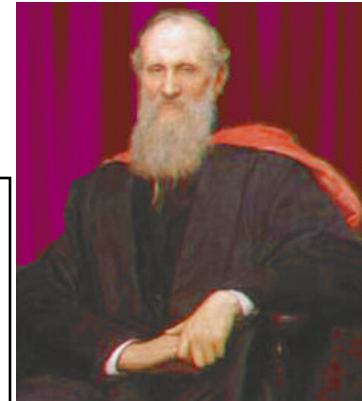*by detailed practical plans and actions*

By Tom Gilb, www.Gilb.com

Introduction

In the bestselling management book 'Built To Last' [1] a convincing
case is made that long-term successful organizations ("Visionary

•**All qualities can be expressed quantitatively,**
• *'qualitative'* does *not* **mean unmeasurable.(Gilb)**

"In physical science the first <u>*essential step*</u> in the direction of *learning any subject* is to <u>find principles of numerical reckoning</u> and *<u>practicable methods for measuring</u> some <u>quality</u>* connected with it.

*I often say that when you can <u>measure</u> what you are speaking about, and <u>express it</u> in numbers, you know something about it;*

but when you cannot <u>measure</u> it, when you cannot <u>express it in numbers,</u> your knowledge is of a meagre and unsatisfactory kind; **it may be the beginning of knowledge, but you have scarcely in your thoughts advanced to the state of Science, whatever the matter may be."**

Lord Kelvin, 1893, *Lecture to the Institution of Civil Engineers, 3 May 1883*   **From http:// zapatopi.net/kelvin/quotes.html**

Born: 26 June 1824; Belfast, Ireland Died 1907. See notes for websites.
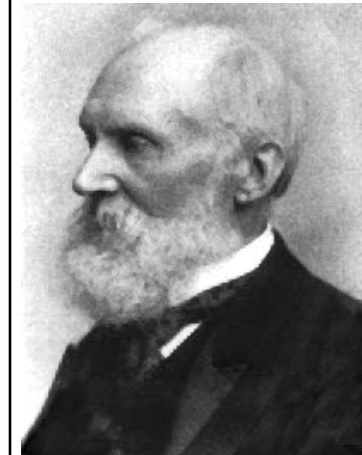
"**Startup Planning**:
Clear quantified startup objectives led to getting $1 mill. From Bill & Melinda Gates.
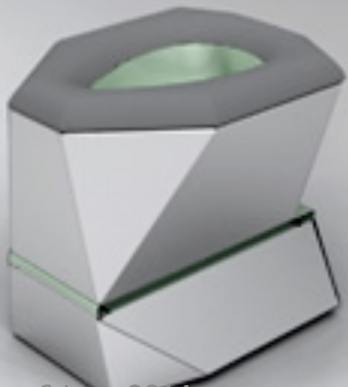# 'LooWatt' Case study.
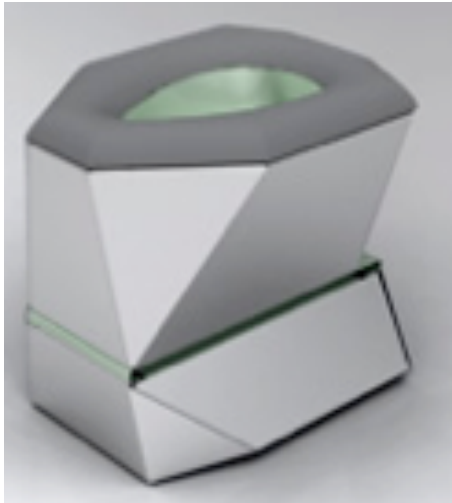
30 min presentation.
Slot from 15:30 – 16:00 on 26.2.
Dataforeningens Konferanse Software 2014
26 Februar 2013
Raddison BLU Hotel
Ved Tom Gilb og Kai Gilb
www.Gilb.com

LOOWATT: A NEW PARADIGM IN SANITATION

Nick Coutts Presenting

creativity

innovation

….. to broaden the understanding and skills of tomorrow's business leaders, creative specialists, engineers and technologists

The challenge…..get business people, engineers, technologists and designers to understand one another

Cox Review: Creativity in Business

DESIGN LONDON

Interdisciplinary **teaching** of postgraduate students and industry
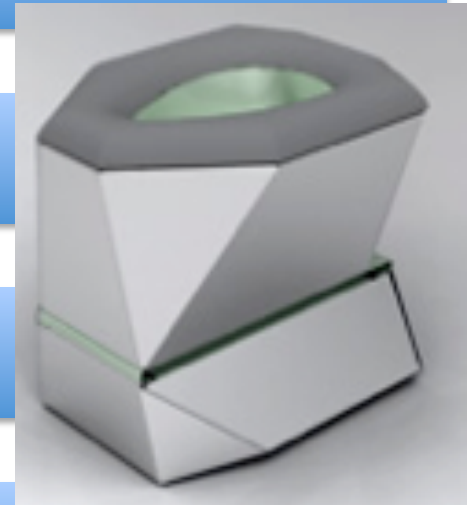
Incubate new ventures and talent

Research the role of design methods, tools and practices on business value creation

Simulation and other digital technologies for high velocity innovation

Key Values: Quantified

Improve Sanitation--------------+

Sustainability and Longevity -------+ →

Story and Data

Managing Risk

Methodology

Diffusing Knowledge
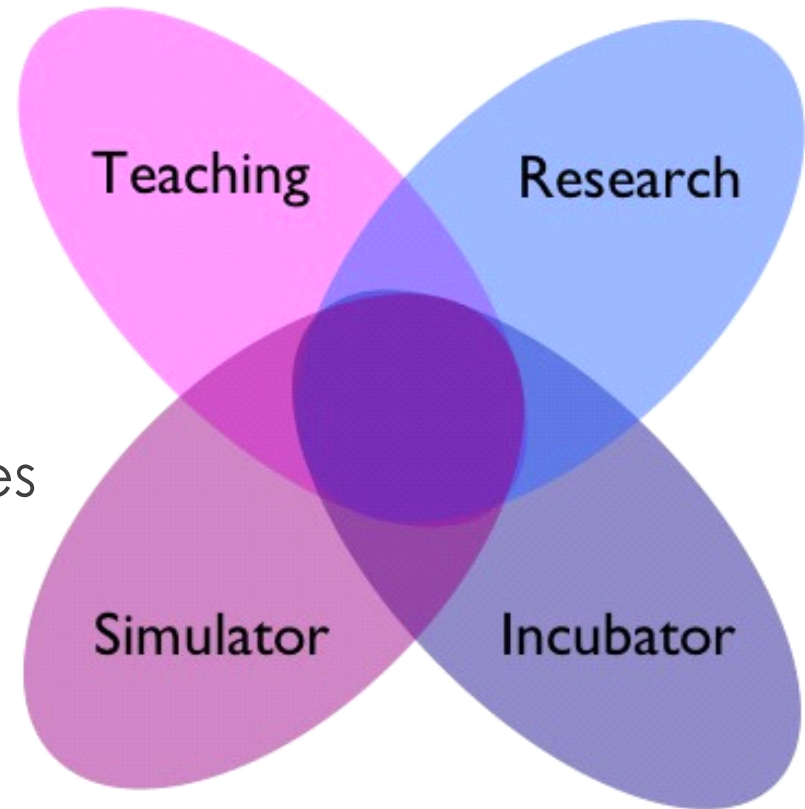
Key Values: LooWatt

- **Improve Sanitation**
Target: 25% - 75%
Unit: Waste collected / waste produced by user group

- **Sustainability and Longevity**
Target: 0$ - 0$
Unit: Cost to single user per month

- **Story and Data**
Target: 0.4 - 0.8
Unit: Average of factors rated 0.0 – 1.0

- **Managing Risk**
Target: 0.2 – 0.8
Unit: Average of factors rated 0.0 – 1.0

- **Methodology**
Target: 0.4 – 0.8
Unit: Average of factors rated 0.0 – 1.0

- **Diffusing Knowledge**
Target 0.15 – 0.8
Unit: Average of factors rated 0.0 – 1.0
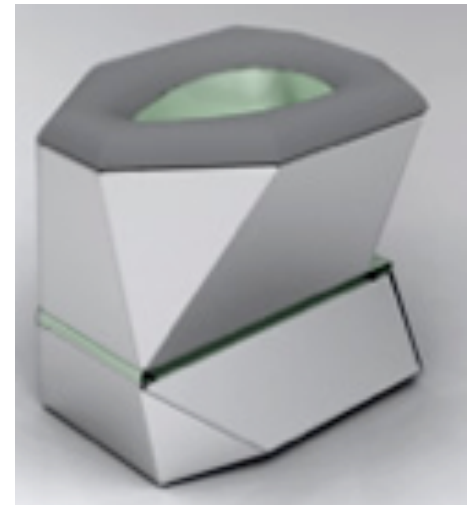
Planning Language

- **Improve Sanitation**
  Target: 25% - 75%
  ...ected / waste produced by user group

- **...d Longevity**

  ...le user per mo...

- **Story and Data**
  Target: 0.4 - 0.8
  Unit: Average of factors rated 0....

- **Managing Risk**
  Target: 0.2 – 0.8
  Unit: Average of factors rated 0.0 – 1.0
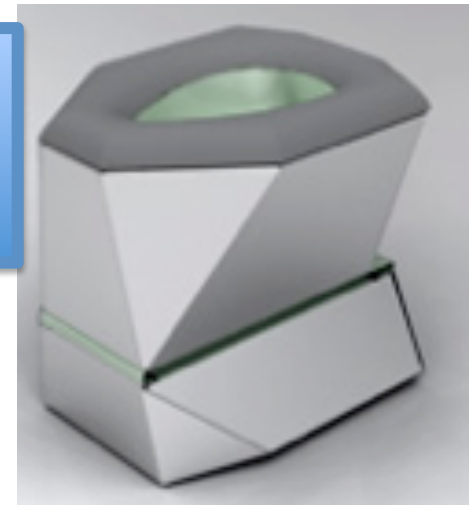
- **Methodology**
  Target: 0.4 – 0.8
  Unit: Average of factors rated 0.0 – 1.0
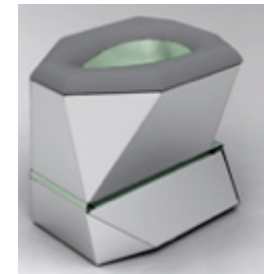
- **Diffusing Knowledge**
  Target 0.15 – 0.8
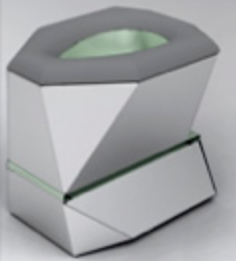 Unit: Average of factors rated 0.0 – 1.0

An Energy Producing Waterless Toilet System

Impact Estimation Table for Gates GCE Project

Designs / Actions	Detailed risk assessment with associated	Research trip to madagascar (x3)	Detailed design research	Building financial models at	Research into existing	Creation of knowledge	Codification of our acquired knowledge	etc....	Total Impact	Safety Factor
Key Values	Impact (% progress towards target from given action)								Total Impact	Safety Factor
Improve Sanitation Target: 25% - 75% Unit: Waste collected / waste produced by user group	10	20	40	18	15	0	0		103	1.03
Sustainability and Longevity Target: 0$ - 0$ Unit: Cost to single user per month	0	5	20	50	10	0	0		85	0.85
Story and Data Target: 0.4 - 0.8 Unit: Average of factors rated 0.0 – 1.0	5	35	20	15	3	15	5		98	0.98
Managing Risk Target: 0.2 – 0.8 Unit: Average of factors rated 0.0 – 1.0	50	20	20	15	15	0	3		123	1.23
Methodology Target: 0.4 – 0.8 Unit: Average of factors rated 0.0 – 1.0	15	0	0	0	0	0	10		25	0.25
Diffusing Knowledge Target 0.15 – 0.8 Unit: Average of factors rated 0.0 – 1.0	0	8	0	0	10	50	15		83	0.83
Total impact of design / action	80	88	100	98	53	65	33	0		
Total cost of design / action (person days)	8	30	20	15	5	15	4	0		
Benefit to cost ratio	10	2.9	5.0	6.5	10.6	4.3	8.3	####		

Names of major strategies or architectures

Designs / Actions

Key Values	Detailed risk assessment with associated	Research trip to madagascar (x3)	Detailed design research	Building financial models at	Research into existing	Creation of knowledge	Codification of our acquired knowledg	etc....	Total Impact	Safety Factor
Improve Sanitation Target: 25% - 75% Unit: Waste collected / waste produced by user group	10	20	40	18	15	0	0		103	1.03
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Estimates of strategy impact on the quantified goals
(0% none, 100% = Goal)

Key Values	Detailed risk assessment with associated...	Research trip to madagascar (x3)	Detailed design research...	Building financial models...	Research into existin...	Creation of knowledge...	Codificati on of our acquired knowledge...	Impact	Safety Factor
Improve Sanitation Target: 25% - 75% Unit: Waste collected / waste produced b... user group	10	20	20	18	15	0	0	103	1.03
Sustainability and Longevity Target: 0$ - 0$ Unit: Cost to single user per month	5	5	20	50	10	0	0	85	0.85
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Managing Risk Target: 0.2 – 0.8 Unit: Average of factors rated 0.0 – 1.0	50	20	20	15	15	0	3	123	1.23
Methodology Target: 0.4 – 0.8 Unit: Average of factors rated 0.0 – 1.0	15	0	0	0	0	0	10	25	0.25
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Designs / Actions

Total impact of design / action
Total cost of design / action (person days...

Benefit to cost ratio

Impact Estimation Table for Gates GCE Project

Designs / Actions Key Values	Detailed risk assessment with associated	Research trip to madagascar (x3)	Detailed design research	Building financial models at	Research into existing	Creation of knowledge	Codification of our acquired knowledg	etc....	Total Impact	Safety Factor
	Impact (% progress towards target from given action)									
Improve Sanitation Target: 25% - 75% Unit: Waste collected / waste produced by user group		20		8	5	0			103	1.03
Sustainability and Longevity Target: 0$ - 0$ Unit: Cost to single user per month	0	5	20	50	10	0	0		85	0.85
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Methodology Target: 0.4 – 0.8 Unit: Average of factors rated 0.0 – 1.0	15	0	0	0	0	0	10		25	0.25
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Total cost of design / action (person days)	8	30		15	5	15	4	0		
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Sum all Strategies ->

Value for Money

FEEDBACK FROM LOOWATT

- They continued to use the planning method throughout the 14 month project
  - Because it helped keep them on track to the real critical objectives
- They highly recommended to their 20 parallel incubator projects, that they should use these methods for planning their startups

Winners!

- The
Bill & Melinda Gates Foundation has awarded Loowatt Ltd a $1 million grant to expand its pioneering waterless toilet systems in Madagascar and Sub-Saharan Africa.

- 13.09.2013

1 week 'Project Startup' Deeper sources

The Evo method with cases Loowatt, Confirmit, US DoD
http://www.gilb.com/dl792

An Agile Project Startup Week: 'Evo Start'
http://www.gilb.com/dl568

Evo Startup Standard,
Jan 12 2013
http://www.gilb.com/dl562

Evo Project Management Standard,
 Jan 12 2013
http://www.gilb.com/dl563

Startup Process 1 & 2. day
http://www.gilb.com/dl562

- Day 1: **Project Objectives**: The top few critical objectives quantified.
  - Objective: Determine, clarify, agree critical few project objectives – results – end states
  - **Process**:
    - Analyze current documentation and slides, for expressed or implied objectives (often implied by designs or lower level

1. Quantify your top 10 critical objectives

    top critical few.
    - Detail definition in Planguage – meaning quantify and define clearly, unambiguously and in detail (a page)
    - Quality Control Objectives for Clarity: Major defect measurement. Exit if less than 1.0 majors per page
    - Quality Control Objectives for Relevance: Review against higher level objectives than project for alignment.
    - Define Constraints: resources, traditions, policies, corporate IT architecture, hidden assumptions.
    - Define Issues – yet unresolved
    - Note we might well choose to several things in *parallel*.
  - **Output**: A solid set of the top few critical *objectives* in quantified and measurable language. *Stakeholder* data specified.
  - **Participants**: anybody who is concerned with the <u>business results</u>, the higher the management level the better.
  - **End of Day Process**: meet 30 minutes with any responsible interested managers to present the outputs, and to get preliminary corrections and go-ahead.
  - **Note**: this process is so critical and can be time consuming, so if necessary it can spill over to next day. Perhaps in parallel with startup of the strategy identification. *Nothing is more critical or fundamental than doing this well.*

- Day 2: **Project Strategies and Architecture**: the top few critical strategies for reaching the critical objectives
  - **Objective**: to identify the top 'ten' most critical strategic decisions or architectures; the ones that will contribute or enable us most, to reach our primary objective goal levels on time.

2. Identify you top 10 most powerful strategies

    - Detail each top ten strategy sufficiently to understand impacts (on objectives, time and costs)
    - Specify, for each strategy all critical related information (like stakeholders, risks, assumptions, constraints, etc.)
    - Quality Control for clarity – correct unclear items. Exit based on defect level, or not.
    - Likely that work will need to be done in parallel in order to do ten strategies to a rich level of specification.
  - **Output**: A formal strategy specification, ready for evaluation, and decomposition and delivery of partial value results.
  - **Participants**: system architects, project architects, strategy planners. And members of the project team who will be in on the entire weeks process. The major input here is technical and organizational strategy (the means to reach the objectives)
  - **End of Day Process: :** meet 30 minutes with any responsible interested managers to present the outputs, and to get preliminary corrections and go-ahead.

http://www.gilb.com/dl562

Day 3: Evaluation of Strategies using Impact Estimation: our best estimates with experience and risk. How sure are of the major strategy decisions.

- **Objective**: to estimate to primary effects and all side effects of all top critical strategies on all top critical objectives, and on some resources (time, cost, effort). The estimates will be backed up by evidence, or their credibility will be rated low.
- **Process**:
  - Using the objectives and strategies developed on first 2 days as inputs
  - Populate an Impact Estimation table (aka Value Decision Table) with estimates of the expected result of deploying defined strategies. Estimate

3. Estimate the effects of suggested strategies, on your quantified goals

  - This will tell us if it is safe to proceed (we have good enough strategies)
  - And it will help us prioritize high value deliveries soon.
- **Participants**: architects, planners, anybody with strong views on any of the strategies. The team for the week.
- **Note**: *it might be necessary and desirable, now or later, to do this impact estimation process at 2 or 3 related levels (Business, Stakeholder, IT System) in order to see the Business-IT relationship clearly. This might exceed time limits and be done parallel or later.*
- **End of Day Process**: meet 30 minutes with any responsible interested managers to present the outputs, and to get preliminary corrections and go-ahead.

Day 4: **Evolutionary Step Decomposition**: what are the high value short term value delivery steps we can execute.

  - **Objective**: to identify near team candidates for real value delivery to real stakeholders. What can we do

4. Find out what you can do next week, to deliver some real value to real stakeholders

Gradual decomposition of your strategies, to independently deliverable 'value to stakeholders' steps

  - **End of Day Process:** meet 30 minutes with any responsible interested managers to present the outputs, and to get preliminary corrections and go-ahead.

Day 5
http://www.gilb.com/dl562

- Boss approves doing the next week

The 'Evo' (**Evol**utionary) Method for Project Management.

The 'Evo' (Evolutionary) Method for Project Management.

Process Description , http://www.gilb.com/dl563

1.   Gather from all the key stakeholders the top few (5 to 20) most critical goals that the project needs to deliver.

Give each goal a reference name (a tag).

2.   For each goal, define a scale of measure and a 'final' goal level.

For example: *Reliable: Scale: Mean Time Before Failure, Goal: 1 month.*

3.   Define approximately 4 budgets for your most limited resources

(for example, time, people, money, and equipment).

4.   Write up these plans for the goals and budgets

(*Try to ensure this is kept to only one page*).

5.   Negotiate with the key stakeholders to formally agree the goals and budgets.

6.   Plan to deliver some benefit

(that is, progress towards the goals)

in *weekly* (or shorter) increments (Evo steps).

7.   Implement the project in Evo steps.

Report to project sponsors after each Evo step (weekly, or shorter) with your best available estimates or measures, for each performance goal and each resource budget.

O*n a single page,* summarize the *progress to date* towards achieving the goals and the costs incurred.

8.   When all Goals are reached: 'Claim success and move on'

a.   Free remaining resources for more profitable ventures

Startup Planning: Using Quality Quantification

Dates: 4 – 5 June 2014

Place: BCS HMS President, Thames

(This course is free to attend for Spinlondon Members)
To register, please email to info@spinlondon.co.uk

How to clarify a Startup's Critical Qualitative Objectives and The impact of proposed Strategies, quantitatively on those qualitative objectives. An 'engineering' approach to complex new technologies and rapid growth into unknown markets.

Overview:

Startup Company founders love their cause. But in order to succeed quickly they might like to get some help in presenting and articulating their ideas. Both to others, to investors, and to themselves. The central idea of this course is to teach how to quantify your top few critical objectives, for your startup project, and for your startup product. These are likely to be 'qualitative', like 'capture the hearts and minds of teenagers', or 'provide a platform for entry into the automotive market'. Most people do not know how to clarify and quantify such objectives. We will show you how. Based on these quantitatively clear objectives, we will show you how to estimate, then measure and track, the multiple impacts of your critical few strategies and design ideas.

Day 1: The Startup Objectives, and its Project Requirements

Purpose: to give you the ability to quantify and clarify your critical objectives and requirements. Much better than you normally would.

Day 2: How to evaluate strategies and designs quantitatively.

Purpose: to help you evaluate the stream of ideas for reaching your objectives in a logical, balanced, and clear way.

Followup: You and your team might, depending on local circumstances and availability, to get help after the course in making initial plans tailored to your startup. Some people, however, can do a great job without such followup, just based on the course alone.

Documentation: A digital library with voluminous papers, course slides, case studies, will be made available during and after the course, in a dropbox. This includes two textbooks by the instructors.

Product Development at Lean Startup
Assumes Customers and Markets are Unknown

Customer Development Engineering

Problem: unknown

Hypotheses, experiments, insights

Data, feedback, insights

Solution: unknown

Extreme Programming Project

http://www.slideshare.net/venturehacks/the-lean-startup-2
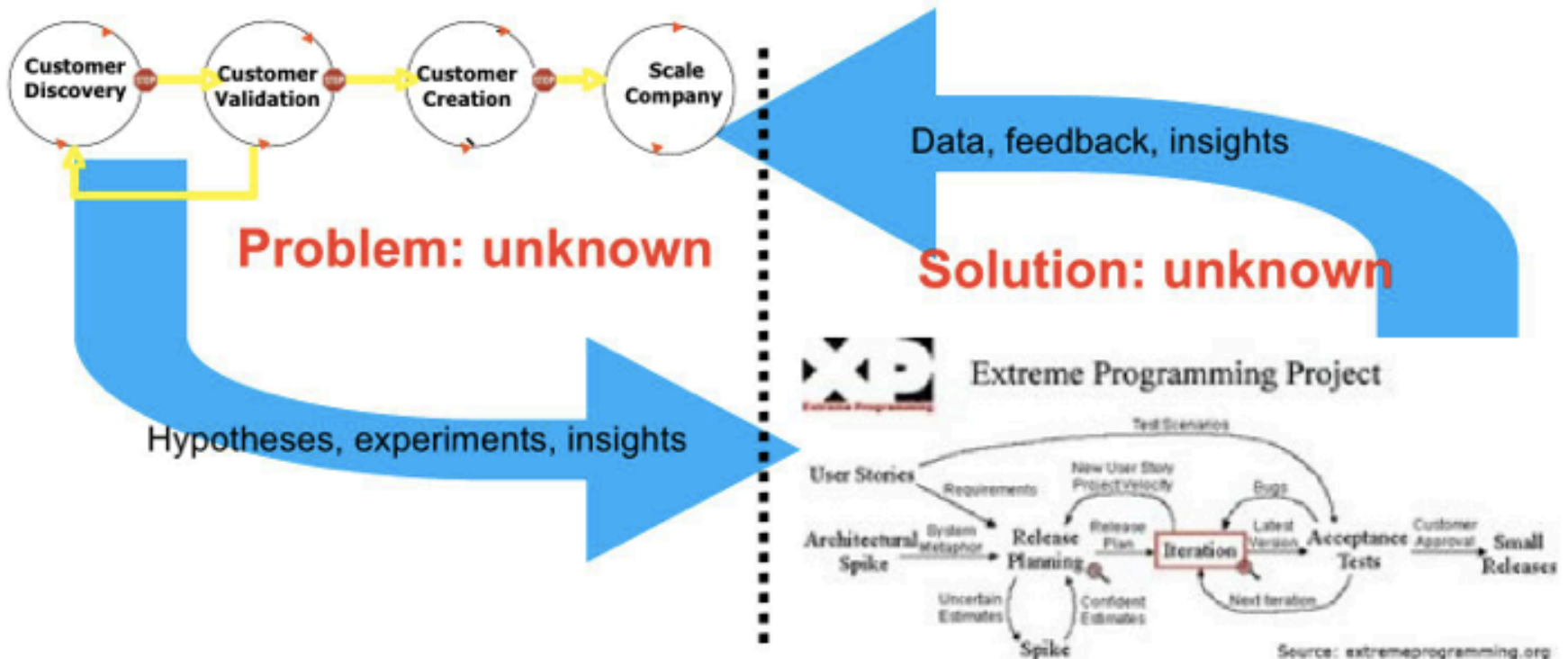
Triba Startup Case
non confidential

Helsinki March 2014

Tom@Gilb.com

Stakeholders

Draft Stakeholders list

- **Most critical stakeholders:**
  - **Students**
    - **(various types!)**
    - **University, Maths, Adult Education**
    - **? what is the 10 year horizon set of these**
  - **Teachers**
    - **Personas:**
  - **Rectors**
  - **Local (Council) Education Law**
  - **Tablets, various types**
  - **Product Reviews/Reviewers**
  - **Google**
  - **Educational Institutions**
    - **University   SEE NEEDS**
      - **University: defined as: ….**
        - » **Virtual: defined as**
        - » **Any Subjects**
        - » **Subject = Maths**
        - » **Size = About 100,000 (Saudi pilot)**
        - » **For Profit**
      -
    - **Technical College**
    - **Polytechnical   = TECHNICAL COLLEGE ???**
    - **Gymnasium**
    - **Junior Schools**

Brainstormed needs:
Top Ten Critical Objective/needs/benefits/ Requirements

Names of Objectives

- **Effectiveness: Understand the Effectiveness of their Teaching**
- **Drop Out Rate:**
- **Profitability:**
- **Scope: of content**
- **Employability:**
- **Distance Capability:**
- **Tool Real Deployment:**
- **Visibility of Learning: Transparency**
- **Ranking Effect:**
- **Collaboration Capability:**

- ## Competitive Differentiation:

- **Personal Adaptability:**
- **User Experience:**
- **Usability:**

One Objective Quantified

- **Competitive Differentiation**
- **Type: Complex Top Level University Objective**
  - **Version: 18.03.2014 11:38**
  - **Owner: CEO (Mervi)**
  - **Ambition: "disrupt the education industry" <- Vesa (Founder) 18.3.14**
  - **Includes: <subattributes>**
    - **Market Penetration Rate:**
    - **User Growth Rate:**
    - |Relative Share Price:
    - |Bottom Up Adoption:
    - |Education Policy Changes:
    - |Change of Education Methods:
    - | A N D …

  - **Customer Value**: "probably complex but not now"
    - **Type:** Elementary ? Objective.
    - **Ambition:** <customer delighted long term> <- Vesa (Founder) 18.3.14
    - **Scale:** % of defined [Customers/Users/Institutions] who retain or improve on defined [Delight Level] for defined [Periods]
    - **Meter [Universities, Introduction Year] Sampling surveys at least 20% of Users**
    - **G1:Goal** [Institution = University, Mode = Virtual, Subject = Maths, Size = 100,000, Funding = For Profit, Users = Students, Delight level = Upper 25%, Period = at least 3 years, Deadline = By End 2015 ??, Market = Saudi]   at least **90%** ?? <- SWAG TG
    - **Tolerable** [Institution = University, Mode = Virtual, Subject = Maths, Size = 100,000, Funding = For Profit, Users = Students, Delight level = Upper 25%, Period = at least 3 years, Deadline = By End 2015 ??, Market = Saudi]   **at least 70% ?? <- SWAG TG**

Draft Strategies Overview

- **For G1**
  - **G1:Goal [Institution = University, Mode = Virtual, Subject = Maths, Size = 100,000, Funding = For Profit, Users = {Students, Teachers}, Delight level = Upper 25%, Period = at least 3 years, Deadline = By End 2015 ??, Market = Saudi]   at least 90%**

- **Strategies, in order of presumed effectiveness;**
  - **S1:** Product must meet Published Expectations
  - **S2:** Product must meet Implied or Normally Expected Expectations
  - **S3:** Product must meet Expectations from the Culture (ex Moslem Uni)
  - **S4.** <Shared income model with Singapore> ?? <-Leila-Mari
- **S5.**

S1 Detail: Impacts

- **S1: Product must meet Published Expectations**

- **Impact [G1] 75% ±15% ?? <- Vesa**

- **(means "all the way to the 90% satisfaction over 3 years" on the Deadline).**

- **Cost as % of 'Budget' : about 1% of money left in Bank now from initial investors.**

- **Evidence: bits and pieces collected from various sources, Helsinki U. My and Company Experience from Various sources**

- **"100% of uni Teachers at Hel Uni, would start using Triba even if their Uni would not buy it.**

- **Source: Pilot feedback by the professor on the course. Sanna Vahtivuori URL: none known.Two hours interview .....**

- **Sources: Customers and users, potential customers.**

- **Credibility: (0.0 to 1.0) 0.2 (one case).**

Startup Policies

P1. Value for money is a good prioritization principle.

P2. Value and Cost will be evaluated with respect to <u>risk, uncertainty, and known technology</u>.

P3. Procurement will be based on Payment for defined Results (quantified values of key stakeholders), NO Cure No Pay, flexiblecontracts.com

P4. All critical values of systems, products or organization will be articulated quantitatively, so they are clear, objective, trackable and transparent (see Gilb CE Chapter 5)

5. All strategies, architecture, proposed solutions will be made responsibly transparent using Impact Estimation methods (estimation of % value, ± uncertainty, evidence, source, credibility, for ALL critical dimensions.

6. We will quality assure all decisions and plans wrt to this policy and wrt any consequent "Rules" (see CE book for Rules, like All strategies which have estimated effects on our goals).

    Reminder see Intel SQC method case, move your requirements from 300 defects/page d own to 10 in short term and 1 in longer term, for exit to next process

Q & A at the startup

1. how do know that we will achieve the outcomes we are seeking

    A1: nobody knows. Many falsely think they do.

    A2: trial and error is a necessary part of finding out

    A3 it is not about being right initially, but finding the right way faster. (Lean Startup)

    A4: selection of corresponding effective processes and policies and methods (see Risk Management paper, Gilb)

2. Are you totally ignoring excitement, motivation and the psychological factors that make things work in startups ?

    NO!

    Success, and winning are exciting

    Failure and delay is demotivating

    See paper on Practical Purposeful Creativity

    See 'Confirmit' case: empowered creativity.

3. Smart procurement?

    See no cure no pay and flexiblecontracting.com