

***“VALUE FOR MONEY –
HOW CAN ‘IT’ AND BUSINESS TOGETHER
IMPROVE I.T.’S REPUTATION FOR TIMELY
DELIVERY OF IT PROJECTS,
WITH MEASURABLE VALUE
WITH **TOM GILB.*****

REQUIRE CONFERENCE, KRÖNDAGEN
STOCKHOLM, 21 MARCH 2012

Wednesday, 21 March 12

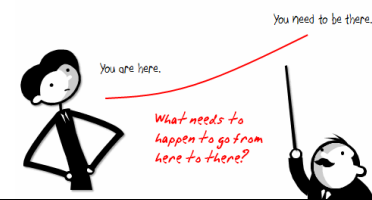
REAL CASE OF BANK PROJECT REQUIREMENTS FROM LONDON SEPT 3 2009

*How good are you
at finding critical
defects in
requirements ?*



March 21, 2012

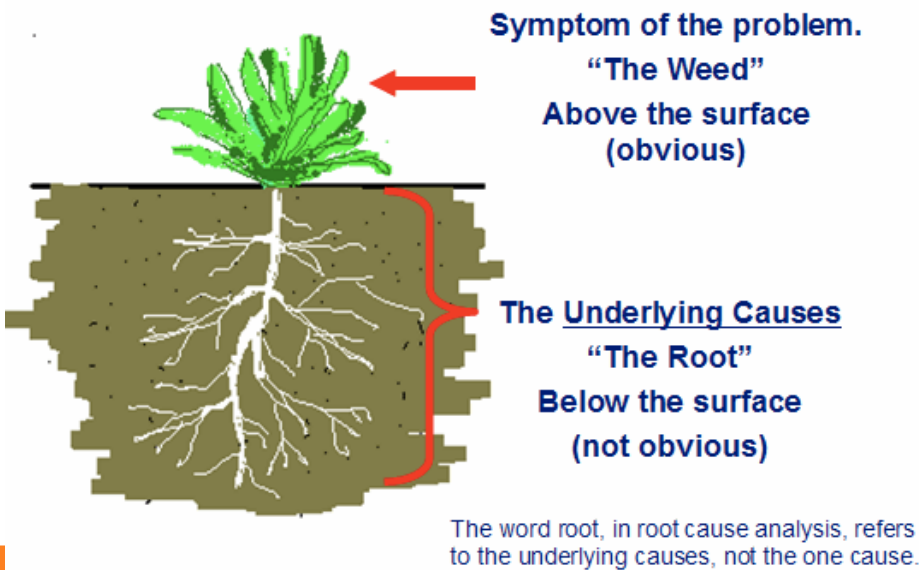
WHY ARE WE DOING THIS?
PART OF PLATFORM RATIONALISATION INITIATIVE,
THE MAIN OBJECTIVES. (REAL!)



- **Rationalize into a smaller number of core processing platforms. This cuts technology spend on duplicate platforms, and creates the opportunity for operational saves. Expected 60%-80% reduction in processing cost to Fixed Income Business levies.**
- **International Securities on one platform, Fixed Income and Equities (Institutional and PB).**
- **Global Processing consistency with single Operations In-Tray and associated workflow.**
- **Consistent financial processing on one Accounting engine, feeding a single sub-ledger across products.**
- **First step towards evolution of “Big Ideas” for Securities.**
- **Improved development environment, leading to increased capacity to enhance functionality in future.**
- **Removes duplicative spend on two back office platforms in support of mandatory message changes, etc.**

RULES ARE NEEDED

To define
specification
defects



Main Objectives Defects
(*root causes*) lead to *potential*
defects in the next stages

- Architecture
- Design
- Testing
- Construction

Any of which can result in
FAULTS in the final system

Faults can result in breakdown of
the real product.

QC RULES FOR TOP LEVEL OBJECTIVES

CLEAR: Every word and phrase should be clear enough to allow objective test of a delivery. (we need to know exactly what is required and expected)

UNAMBIGUOUS: Every word and phrase should be unambiguous to all potential intended readers. (no different than intended interpretations should be possible)

QUANTIFIED QUALITY: all qualities (good things we want to improve) shall be expressed quantitatively.

After we started the exercise I regretted not adding the usual rule:

- 4. NO DESIGN:**
objectives shall not be expressed in terms of a design or architecture
- *(a 'means' to reach the 'real' objective), when it is possible and is our real intent, to express the improvements in quality, performance, cost that are expected instead.*



*Potential consequence
of major defects
in architecture specs*

EXERCISE: COUNT MAJOR 'DEFECTS' (RULES VIOLATIONS)

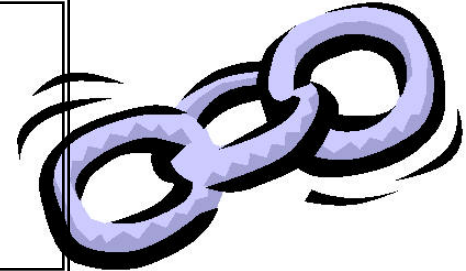
RULES REMINDER:

1. CLEAR,
2. UNAMBIGUOUS,
3. QUANTIFIED QUALITIES,
4. NO DESIGN/ARCHITECTURE



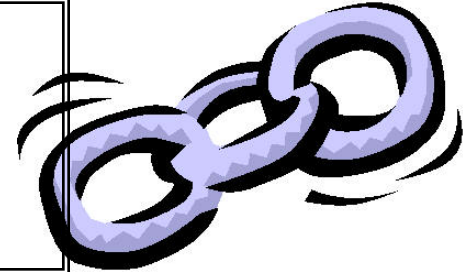
- ♦ *“Rationalize into a smaller number of core processing platforms. This cuts technology spend on duplicate platforms, and creates the opportunity for operational saves. Expected 60%-80% reduction in processing cost to Fixed Income Business lines.*
- ♦ *International Securities on one platform, Fixed Income and Equities (Institutional and PB).*
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- ♦ *Improved development environment, leading to increased capacity to enhance functionality in future.*
- ♦ *Removes duplicative spend on two back office platforms in support of mandatory message changes, etc.”*

LINK WORDS: OBJECTIVE:ARCHITECTURE RULE 4. NO **DESIGN**/ARCHITECTURE



- ♦ *Rationalize into a smaller* number of core processing platforms. This cuts technology spend on duplicate platforms, and creates the opportunity for operational saves. Expected 60%-80% reduction in processing cost to Fixed Income Business lines.
- ♦ International Securities on one platform, Fixed Income and Equities (Institutional and PB).
- ♦ Global Processing consistency with single Operations In-Tray and associated workflow.
- ♦ *Consistent financial processing on one Accounting engine, feeding a* single sub-ledger across products.
- ♦ *First step towards evolution of “Big Ideas” for* Securities.
- ♦ *Improved development environment, leading to* increased capacity to enhance functionality in future.
- ♦ *Removes duplicative spend on two back office platforms in support of* mandatory message changes, etc.

LINK WORDS: OBJECTIVE:ARCHITECTURE
RULE 4. NO DESIGN/ARCHITECTURE



- ♦ *Rationalize into a smaller number of core processing platforms. This*

*Improved development environment,
leading to
increased capacity
to
enhance functionality in future.*

- ♦ *Improved development environment, leading to increased capacity to enhance functionality in future.*
- ♦ *Removes duplicative spend on two back office platforms in support of mandatory message changes, etc.*

AGILE SPEC QC RESULTS



Reported major defects =
Last week: 15, 17, 21
Later = 18, 15, 15, 13
other
June 3 2011: 35 and
more, 50

Estimated appx. Total defects found
by a small team (2-4 people) =

36±6

- 2x highest found.

Estimated appx. Total Majors in the
110 words = 100±10

- (3x group total. 30% effectiveness of team)

Estimated approximate total defects
in normalized page (300 words) =

280±20

- (Majors in 110 words x 3)



HOW CAN WE IMPROVE SUCH BAD SPECIFICATION? ('PLANGUAGE')



Development Capacity: aka 'Improved Development Environment'

Version: 3 Sept 2009 16:26, Edit June 6 2011

Type: Main 'Means' Objective for a project. Impacts: Functionality Enhancement.

Ambition Level: radically increase the capacity for developers to do defined tasks. <- Tsg

Scale: the Calendar Time for defined [Developers] to Successfully carry out defined [Tasks].

Owner: Tim Fxxx

Calendar Time: defined as: full working days within the start to delivery time frame.

Past [2009, {Bxx, Lxx, Gxx}, If QA Approved Processes used, Developer = Architect, Task = Draft Architecture] 15 days ± 4 ?? <- Rob

Goal [2011, { Bxx, Lxx, Gxx }, If QA Approved Processes used, Developer = Architect, Task = Draft Architecture] 1.5 days ± 0.4 ?? <- Rob

Justification: Really good architects are very scarce so we need to optimize their use.

Risks: we use effort that should be directed to really high volume or even more critical areas (like Main Objective).

MANAGEMENT FEEDBACK: PROGRAMME DIRECTOR LEVEL

Management Conclusion:

“The defect density is completely unacceptable in the ‘Main Objectives’ section”

- **They wondered how to improve it (see example earlier)**
- **They emailed me afterward:**
- ***“Thanks for your time today Tom, very useful talking to you and perfect timing for the stage we’re at in our reengineering program. There are some concepts I definitely want to take forward and will spend some time over the next few days discussing this with Pxx and Pxx , but may then get some more of your time to think through how we take things forward.***
-
- ***Once again, thanks for your time, Kxx “***

VALUE REQUIREMENTS
QUANTIFYING WHAT THE BANK'S
STAKEHOLDERS ARE *SUPPOSED* TO HAVE AS
IMPROVEMENTS,
***NOT* JUST FEATURES AND STORIES.**

VALUE CLARITY:

QUANTIFY THE MOST-CRITICAL PROJECT OBJECTIVES ON DAY 1

P&L-Consistency&T P&L: Scale: total adjustments btw Flash/Predict and Actual (T+1) signed off P&L. per day. Past 60 Goal: 15

Speed-To-Deliver: Scale: average Calendar days needed from New Idea 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 STP across the transaction cycle. Past [April 20xx, Trades=Voice Trades] 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 quarter, the P&L information is not delivered timely to the defined [Batch-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.

Operational-Control.Timely.Trade-Bookings Scale: number of trades per day that are not booked on trade date. Past [April 20xx] 20 ?

Front-Office-Trade-Management-Efficiency Scale: Time from Ticket 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?

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 metrics is delayed by more than 0.5 sec. Past [April 20xx, NA] 1% Past [April 20xx, EMEA] ??? Past [April 20xx, AP] 100%
Goal [Dec. 20xy] 0%

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 = E 1 – 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 %

A DETAIL OF ONE CORE PROJECT REQUIREMENT

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 %



Wednesday, 21 March 12

EXAMPLE OF ESTIMATING THE **BUSINESS VALUE** OF A TECHNICAL IT SYSTEM IMPROVEMENT (20XX)

TIME.HEDGE - Time for hedge execution of average-sized trade

Ambition:	Reduce the average time taken from verbal agreement ("done") to hedge execution of an <average-sized> trade
Scale:	Seconds
Past:	[2Q10; Region=NA] 30 seconds
Goal:	[2Q12; Region=ALL] 3 seconds
Business Value:	[Type=Revenue; Reason=Improved Hedging P&L; Goal Scale=3 seconds; Region=Global] Revenue= +\$1mm to +\$2mm

SPEED.CODE – Mean elapsed time for code changes

Ambition:	Reduce the mean elapsed time for code changes from business request to end-user go live
Scale:	Mean time in calendar days over <three> months
Past:	[2009; Market=Eurex; Task=Bond execution] <60 - 90> days
Goal:	[2Q12; Market=Eurex; Task=Bond execution] 5 days
Business Value:	[Type=Revenue; Reason=Earlier P&L from faster time to Market; Goal Scale=5 days; Region=Global] Revenue= +\$2mm to +\$5mm

This is an example made to reason about specification standards and is not supposed to be a real spec. Just realistic.

EXAMPLES OF TOP MANAGEMENT BANK IT PLANNING

March 21, 2012

THE 'OFFICIAL' FORGOTTEN CIO OBJECTIVES: (\$60 MILLION WAS SPENT FOR THIS IN 1 YEAR)

NOTICE: <ENDS> THROUGH/BY MEANS OF <MEANS>

The business problem and opportunities to be addressed are:

Business Problem

As a result of the merger of the IT Functional Areas of [REDACTED] IT many processes and tools exist. In the merged areas of Corporate Systems and Technology Infrastructure Services the problem is more severe where system and process duplication exists. The IT Portfolio Management strategic Program seeks to rationalize the processes and tools to support the "One Bank" vision. IT Portfolio Management combines elements of both Project Management, Portfolio Management and Time Recording to provide IT leadership with a holistic view of [REDACTED]

- Achieve "One Bank" vision through globally integrated IT Portfolio Management, by implementation of a single toolset supporting existing (and consistent) processes across [REDACTED] IT.
- Perform accurate measurement and tracking of project and non-project related IT expenses.
- Track and allocate human resources based on skills, level of work commitment and timing.
- Enable Business alignment through the ability to manage critical initiatives on a portfolio basis and support faster time to market, resulting the potential for increase in revenues.
- Enable the business and SMT to make sound management decisions around the portfolio and optimize IT spend so as to effectively prioritize IT spend and maximize business value.
- Replace resource intensive and disparate Portfolio Management tools with industry "best in breed" capabilities.
- Improvement in the time it takes IT to respond to business changes.
- Reduction in costs through eliminating redundant projects.
- Better planning and tracking capabilities so as to reduce project cost and time overruns.

INITIAL CIO OBJECTIVES

Benefits:

Reduce the costs associated with managing redundant / regionally disparate systems.

Single global portfolio management system.

Reduce overall spending with a reduction in redundant initiatives.

Governance structures - system agnostic.

All projects in IT Portfolio system.

Reduce IT spend on low priority work with better alignment between IT and business demand.

IT Portfolio Framework, Business Value metrics for prioritization.

Reduction in cost over runs.

Definition criteria for project success.

Metrics and exception reporting for cost management.

Linkage of actual costs to forecast.

Increase revenue with a faster time to market.

Knowledge management, project ramp up templates.

Provide quantitative & qualitative benefits. State the consequences of project cancellation.

These need quantification, and then a plan for delivery and delivery measurement focus – on results not the process.

REMINDER OF C.O.O.'s INITIAL 4 MAIN OBJECTIVES FOR SINGLE IT

- 1. “Make sure it is for key business goals.” <- COO,**
- 2. “avoid duplication” <- COO,**
- 3. “not re-inventing the wheel” <- COO**
- 4. “I am interested in the MIS. I’d like some good metrics about what’s coming off the 1 billion production line,
(are we delivering on time, under budget, are customer satisfied, and are we delivering the value).” <- COO My View**

SPEC TEMPLATE:

<Tag>:

Ambition:

_____ *Measurement* _____

Scale:

Past:

Goal:

Meter:

_____ *Relationships* _____

Type:

Supports:

Supported By:

_____ *Objective Admin* _____

Version:

Owner:

Status:

Scope:

_____ *Definitions* _____

BUSINESS RESULT ALIGNMENT:

Ambition: Maximize delivery speed, and satisfaction level, of the Change the Bank Book of Work to achieve 'key business goals'

Scale: % of Planned Value actually Delivered to the Business by defined [Time].

**Past [Corp., Time = Deadline, 2007]: X% (guess
X < 30%??) <- tg**

Goal [Corp., Time = Deadline, 2009]: < 50%, maybe much more?

Issue: can The Tool be exploited to track Value?

AVOID DUPLICATION:

***Ambition: eliminate corporate efforts
that duplicate other corporate efforts.***

**Scale: % of project investment that is
Duplicated**

Past [2007]: > 30%?? Wild guess

Goal [2010] < 5% hope

EXPLOITING EXISTING TOOLS:

Ambition: make use of existing tools, avoid reinventing the wheel.

Scale: % by Total Investment Value that Arguably could be avoided by Profitably making use of Existing Tools

Past: 30%±30% ?? wild initial guess to start discussion tg

Goal [2012?, Corp. Wide]: ~ 100%

RESULTS MIS:

Ambition: deliver high-significance real-time metrics, on critical aspects, of project results and resources.

Scale: % of defined [Key Project Data] available to management in real time.

Key Project Data: default: {% of Goal Delivered to date, Stakeholder Satisfaction level, Value for Money}

Past [Corp., 2007]: 0%

Goal [Corp., 2010]: > 90%

HERE ARE THE SAME OBJECTIVES,
WITH MORE REAL DETAIL

Quick peek
We need not study them now

BUSINESS RESULT ALIGNMENT: BRA:

Ambition: *Maximize delivery speed, and satisfaction level, of currently prioritized business improvements, for 'key business goals'*

Measurement

Scale: % of Planned Value actually Delivered to the Business by defined [Time].

Past [Corp., Time = Deadline, 2007]: X% (guess X < 30%??) <- tg

Goal CS, Time = Deadline, 2009: < 50%, maybe much more?

Meter: <The Tool?>

Issue: can The Tool be exploited to track Value?

Relationships

Type: IT COO Level Project Objective

Supports:

1. Portfolio Management Strategic Initiative {Management Framework, Change Drivers, Driving Issues, Results}. Not Quantified.
2. Business problem statement (PID 2.00. 9 areas. Not Quantified.
3. High Level Business Requirements: OMSC3 (Align Business Needs), OMSC6 (Resource Allocation), OMSC7 (Change Alignment). All quantified!

Supported By: <The Tool>, Planguage, Evo

Objective Admin

Version: 23 Sept 2007

Sponsor: CIO

Owner: , IT COO

Status: draft tg for COO? -> TS

Scope: : the 1/3 of IT spend for New Demand <- COO

Definitions

Planned Value:

The monetary benefit estimated for a given scope and duration, that we have formally estimated the organization would get as a result of meeting defined project requirements, at defined levels.

For example if a project had a requirement to save 1 hour per employee of learning to use a new IT application, and that hour was measurably saved, then the value would be the cost of employee time and overheads saved for a defined period, for a set of employees that needed to learn to use the system. For example for 1,000 employees learning the system in one year, the value would be the cost saving of their 1,000 hours save that year.

Delivered:

'Delivered' means actually put into place; so that there are no restraints on obtaining the benefits (savings, productivity, and consequent value) that was formally planned in the project.

Business:

'Business' means a real defined set of stakeholders, that we need to give the improved systems to in order to derive benefits and consequent value, when they access or apply the improved system. These stakeholders can be any set of employees, contractors, or customers.

Planguage:

a Corp.Tailored planning language, for projects, that demands formal planning of Planned Value for all critical project performance (Improvement) requirements. *Planguage has been used in Corp.Swiss, and is judged to a be a necessary supplement to Corp.requirements to deal with non-use case requirements.*

Evo:

a project management discipline that focuses on delivering measurable critical requirements and consequent value, to stakeholders, in practice, early and continuously. Evo is about value maximization for the business. The frequent measured delivery of projects Business improvement, can be reported in terms of value delivery. It will keep projects and managers focussed on value delivery to the business.

AVOID DUPLICATION:

Ambition: *eliminate corporate efforts that duplicate other corporate efforts.*

———— **Measurement** ————

Scale: % of project investment that is Duplicated

Past [2007]: > 30%?? Wild guess

Goal [2010] < 5% hope

Meter: <manual estimate of all projects.>

———— **Relationships** ————

Type: IT COO Level Project Objective

Supports:

1. Portfolio Management Strategic Initiative {Management Framework, Change Drivers, Driving Issues, Results}. Not Quantified.

2. Business problem statement (PID 2.00. 9 areas. Not

Quantified.

3. High Level Business Requirements: OMSC1 (One IT), OMSC2 (Top Down), OMSC4 (Common Methods), OMSC6 (Resource Allocation). All quantified!

Supported By: <strategy not identified yet>. <-tg

———— **Objective Admin** ————

Version: 23 Sept 2007

Sponsor: CIO

Owner: -, IT COO

Status: draft tg for COO? -> TS

Scope: : the 1/3 of IT spend for New Demand <- COO

———— **Definitions** ————

Duplicated:

Work that could to a substantial degree (30% or more) be avoided and saved, by making use of another similar effort or investment – is ‘duplicated’.

EXPLOITING EXISTING TOOLS:

Ambition: make use of existing tools, avoid reinventing the wheel.

Version: 23 Sept 2007

Sponsor: - CIO

Owner: COO, IT COO

Status: draft tg for COO? -> CIO

Scope: : the 1/3 of IT spend for New Demand <- COO

—— Definitions ——

Total Investment Value:

Entire IT budget, both new investments, and Run the Business costs.

Arguably:

A CORP. appointed human expert would argue that the cost could profitably be avoided if we reused some Existing Tool.

Existing Tools:

Tools {software, databases, hardware, contracts, development projects, methods, processes, and any other tool} for delivering/operating/maintaining an IT system for the business.

—— Measurement ——

**Scale: % by Total Investment Value that
Arguably could be avoided by
Profitably making use of Existing
Tools**

**Past: 30%±30% ?? wild initial guess to
start discussion tg**

Goal [2012?, Corp.Wide] : ~ 100%

**Meter: <human evaluation of case by
case basis, possibly a sample>.**

—— Relationships ——

Type: IT COO Level Project Objective

Supports:

1. Portfolio Management Strategic Initiative {Management Framework, Change Drivers, Driving Issues, Results}. Not Quantified.
2. Business problem statement (PID 2.00. 9 areas. Not Quantified.
3. High Level Business Requirements: OMSC4 (Common Financial Mgt Methods). All quantified!

Supported By: <strategies not identified yet> <-tg

—— Objective Admin ——

RESULTS MIS:

Ambition: deliver high-significance real-time metriCorp., on critical aspects, of project results and resources.

the Business), OMSC4 (Financial Transparency), OMSC5 (IT Risk Control), OMSC6 (Resource Allocation), OMSC7 (Change Alignment). All quantified!

Measurement

Scale: % of defined [Key Project Data] available to management in real time.

Key Project Data: default: {% of Goal Delivered to date, Stakeholder Satisfaction level, Value for Money}

Past [CORP., 2007]: 0%

Goal [CORP., 2010]: > 90%

Meter: < manual evaluation of projects not feeding a defined as useful set of data to The Tool, or another useful system for management>.

Relationships

Type: IT COO Level Project Objective

Supports:

- 1. Portfolio Management Strategic Initiative {Management Framework, Change Drivers, Driving Issues, Results}. Not Quantified.**
- 2. Business problem statement (PID 2.00. 9 areas. Not Quantified.**
- 3. High Level Business Requirements: OMSC1 (One IT), OMSC3 (Aligning**

Supported By:

Objective Admin

Version: 23 Sept 2007

Sponsor: - CIO

Owner: - IT COO

Status: draft tg for COO? -> TS

Scope: : the 1/3 of IT spend for New Demand <- COO

Definitions

Goal Delivered:

defined as: The Goal refers to a formally defined and approved quantified level of performance that a project is committed to delivering. Goal satisfaction is the primary priority of the project team. The Goal level is needed to enable or drive business performance. 100% of a goal means that the numeric goal is reached measurably in practice. 0% means that no progress from a benchmark level has been made.

Value for Money:

defined as:

Project Value is defined as the estimated (or measured) stakeholder consequence from the delivery of the main project objectives. This can be expressed in money terms. It will be for a defined set of assumptions and for a defined time period and scope. Money is the current real cost of getting that Value in place (investment and operational costs).

Stakeholder Satisfaction Level:

Defined as: a survey set of measures from defined stakeholders about satisfaction with a set of questions about current operational situation, and results of new technology implementation.

THE RELATIONSHIP BETWEEN YOUR VALUE *REQUIREMENTS* AND YOUR SOLUTIONS, DESIGNS, STRATEGIES, AND ARCHITECTURE

*How to estimate, and later measure, the quantified
effects of any proposed means to deliver your
value requirements*

SOLUTION RESPONSIBILITY:
QUANTIFY IMPACT OF ALL SUGGESTED STRATEGIES,
ARCHITECTURES,
ON ALL CRITICAL OBJECTIVES, DEADLINE, AND BUDGET.

YES !

NOT



Just name an idea/design
Assert the design is good
Fail to explain how you know
Fail to take responsibility
Fail to measure results
Fail to consider all requirements
Fail to even estimate costs

***“Tool Simulators, Reverse Cracking Tool,
Generation of simulated telemetry frames
entirely in software, Application specific
sophistication, for <our domain>– recorded
mode simulation by playing back the dump
file, Application test harness console”
<-6.2.1 HFA***

Describe detail for estimation
Estimate the impact on Goals
Estimate the \pm uncertainty
Specify the estimate evidence
Estimate all objectives
Estimate all resources

DON'T WE NEED MORE DETAIL, TO ESTIMATE COSTS, AND OTHER ATTRIBUTES, OF A DESIGN ?

SIMPLE DESIGN
DESCRIPTION

ASK THE FOLLOWING QUESTIONS
ABOUT SUCH BRIEF DESIGN
DESCRIPTIONS

“Design Spec:

■ *Risk and
P/L
aggregation
service.”*

- 1 What will it cost to develop?
- 2 What will it cost to operate?
- 3 Will we deliver any or all of the quality and performance Goal levels on time?
- 4 What are the critical assumptions, that might fail or be untrue?
- 5 What are the known risks?
- 6 Do we actually understand anything of consequence from such a short design specification?

See enlarged view of this slide in following slides. This is a 1-page overview

DEFINING A DESIGN/SOLUTION/ARCHITECTURE/STRATEGY (PLANGUAGE, CE DESIGN TEMPLATE)

1. ENOUGH DETAIL TO ESTIMATE, 2. SOME IMPACT ASSERTION, 3. ASSUMPTIONS, RISKS, ISSUES

Orbit Application Base: (formal Cross reference Tag)

Type: Primary Architecture Option

===== **Basic Information** =====

Version: Nov. 30 20xx 16:49, updated 2.Dec by telephone and in meeting. 14:34

Status: Draft

Owner: Brent Barclays

Expert: Raf Shell, London

Authority: for differentiating business environment characteristics, Raf Shell, Brent Barclays(for overview)

Source: <Source references for the information in this specification. Could include people>. Various, can be done later BB

Gist: risk and P/L aggregation service, which also provides work flow/adjustment and outbound and inbound feed support. Currently used by Rates ExtraBusiness, Front Office and Middle Office, USA & UK.

Description: <Describe the design idea in sufficient detail to support the estimated impacts and costs given below>.

D1: ETL Layer. Rules based highly configurable implementation of the ETL Pattern, which allows the data to be onboarded more quickly. Load and persist new data very quickly. With minimal development required. -> Business-Capability-Time-To-Market, Business Scalability

D2: high performance risk and P/L aggregation processing (Cube Building). -> Timeliness, P/L Explanation, Risk & P/L Understanding, Decision Support, Business Scalability, Responsiveness

D3: Orbit supports BOTH Risk and P/L -> P/L Explanation, Risk & P/L Consistency, Risk & P/L Understanding, Decision Support

D4: a flexible configurable workflow tool, which can be used to easily define new workflow processes -> Books/Records Consistency, Business Process Effectiveness, Business Capability Time to Market

D5: a report definition language, which provides 90+% of the business logic contained with Orbit, allows a quick turnaround of new and enhanced reports with minimal regression testing and release procedure impact. -> P/L Explanation, Risk & P/L Understanding, Business Capability Time to Market, Business Scalability

D6: Orbit GUI. Utilizes an Outlook Explorer metaphor for ease of use, and the Dxx Express Grid Control, to provide high performance Cube Interrogation Capability. -> Responsiveness, People Interchangeability, Decision Support, Risk & P/L Understanding

D7: downstream feeds. A configurable event-driven data export service, which is used to generate feeds. -> Business Process Effectiveness, Business Capability Time to Market

===== **Priority and Risk Management** =====

Assumptions: <Any assumptions that have been made>.

A1: FCCP is assumed to be a part of Orbit. FCxx does not currently exist and is Dec 20xx 6 months into Requirements Spec. <- Picked up by TSG from dec 2 discussions AH MA JH EC.

A2: **Costs**, the development costs will not be different. All will base on a budget of say \$mm and 3 years. The o+ costs may differ slightly, like \$n mm for hardware. MA AH 3 dec

A3: Boss X will continue to own Orbit. TSG DEC 2

A4: the schedule, 3 years, will be constrained to a scope we can in fact deliver, OR we will be given additional budget. If not "I would have a problem" <- BB

A5: the cost of expanding Orbit will not be prohibitive. <- BB 2 dec

A6: we have made the assumption that we can integrate Orbit with PX+ in a sensible way, even in the short term <- BB

Dependencies: <State any dependencies for this design idea>.

D1: FCxx replaces Px+ in time. ? tsq 2.12

Risks: <Name or refer to tags of any factors, which could threaten your estimated impacts>.

R1: FCxx is delayed. Mitigation: continue to use Pxx <- tsq 2.12

R2: the technical **integration** of Px+ is not as easy as thought & we must redevelop Orbit

R3: the and or scalability and cost of **coherence** will not allow us to meet the delivery.

R4: **scalability** of Orbit team and infrastructure, first year especially <- BB. People, environments, etc.

R5: re Cross Desk reporting Requirement, major impact on technical design. **Solution not currently known.** Risk no solution allowing us to report all P/L

Issues: <Unresolved concerns or problems in the specification or the system>.

I1: Do we need to put the fact that we own Orbit into the objectives (Ownership). MA said, other agreed this is a huge differentiator. Dec 2.

I2: what are the time scales and scope now? Unclear now BB

I3: what will the success factors be? We don't know what we are actually being asked to do. BB 2 dec 20xx

I4: for the business other than flow options, there is still a lack of clarity as to what the requirements are and how they might differ from Extra and Flow Options. BB

I5: the degree to which this option will be seen to be useful without Intra Day. BB 2 dec

DESIGN SPEC ENLARGED 1 OF 2

SPEC HEADERS

DETAILED DESCRIPTION AND -> IMPACTED OBJECTIVES

Orbit Application Base: (formal Cross reference Tag)

Type: Primary Architecture Option

==== Basic Information =====

Version: Nov. 30 20xx 16:49, updated.
2.Dec by telephone and in meeting.
14:34

Status: Draft (PUBLIC EXAMPLE EDIT)

Owner: Brent Barclays

Expert: Raj Shell, London

Authority: for differentiating business environment characteristics, Raj Shell, Brent Barclays(for overview)

Source: <Source references for the information in this specification. Could include people>. Various, can be done later BB

Gist: risk and P/L aggregation service,

which also provides work flow/ adjustment and outbound and inbound feed support. Currently used by Rates Extra Business, Front Office and Middle Office, USA & UK.

Description: <Describe the design idea in sufficient detail to support the estimated impacts and costs given below>.

D1: ETL Layer. Rules based highly configurable implementation of the ETL Pattern, which allows the data to be onboarded more quickly. Load and persist new data very quickly. With minimal development required. -> Business-Capability-Time-To-Market, Business Scalability

D2: high performance risk and P/L aggregation processing (Cube Building). -> Timeliness, P/L Explanation, Risk & P/L Understanding, Decision Support, Business Scalability, Responsiveness.

D3: Orbit supports BOTH Risk and P/L -> P/L Explanation, Risk & P/L Consistency, Risk & P/L Understanding, Decision Support.

D4: a flexible configurable workflow tool, which can be used to easily define new workflow processes -> Books/Records Consistency, Business Process Effectiveness, Business Capability Time to Market.

D5: a report definition language, which provides 90+% of the business logic contained with Orbit, allows a quick turnaround of new and enhanced reports with minimal regression testing and release procedure impact. -> P/L Explanation, Risk & P/L Understanding, Business Capability Time to Market, Business Scalability.

D6: Orbit GUI. Utilizes an Outlook Explorer metaphor for ease of use, and the Dxx Express Grid Control, to provide high performance Cube Interrogation Capability. -> Responsiveness, People Interchangeability, Decision Support, Risk & P/L Understanding.

D7: downstream feeds. A configurable event-driven data export service, which is used to generate feeds. -> Business Process Effectiveness, Business Capability Time to Market.

DESIGN SPEC ENLARGED 2 OF 2

==== Priority & Risk Management =====

Assumptions: *<Any assumptions that have been made>.*

A1: FCCP is assumed to be a part of Orbit. FCxx does not currently exist and is Dec 20xx 6 months into Requirements Spec. <- Picked up by TsG from dec 2 discussions AH MA JH EC.

Consequence: FCxx must be a part of the impact estimation and costs rating.

A2: Costs, the development costs will not be different. All will base on a budget of say \$ nn mm and 3 years. The ops costs may differ slightly, like \$n mm for hardware. MA AH 3 dec

A3: Boss X will continue to own Orbit. TSG DEC 2

A4: the schedule, 3 years, will be constrained to a scope we can in fact deliver, OR we will be given additional budget. If not “I would have a problem” <- BB

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A6: we have made the assumption that we can integrate Orbit with PX+ in a sensible way, even in the short term <- BB

Dependencies: *<State any dependencies for this design idea>.*

D1: FCxx replaces Px+ in time. ? tsg 2.12

Risks: *<Name or refer to tags of any factors, which could threaten your estimated impacts>.*

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R2: the technical integration of Px+ is not as easy as thought & we must redevelop Orbit

R3: the and or scalability and cost of coherence will not allow us to meet the delivery.

R4: scalability of Orbit team and infrastructure, first year especially <- BB. People, environments, etc.

R5: re Cross Desk reporting Requirement, major impact on technical design. Solution not currently known. Risk no solution allowing us to report all P/L

Issues: *<Unresolved concerns or problems in the specification or the system>.*

I1: Do we need to put the fact that we own Orbit into the objectives (Ownership). MA said, other agreed this is a huge differentiator. Dec 2.

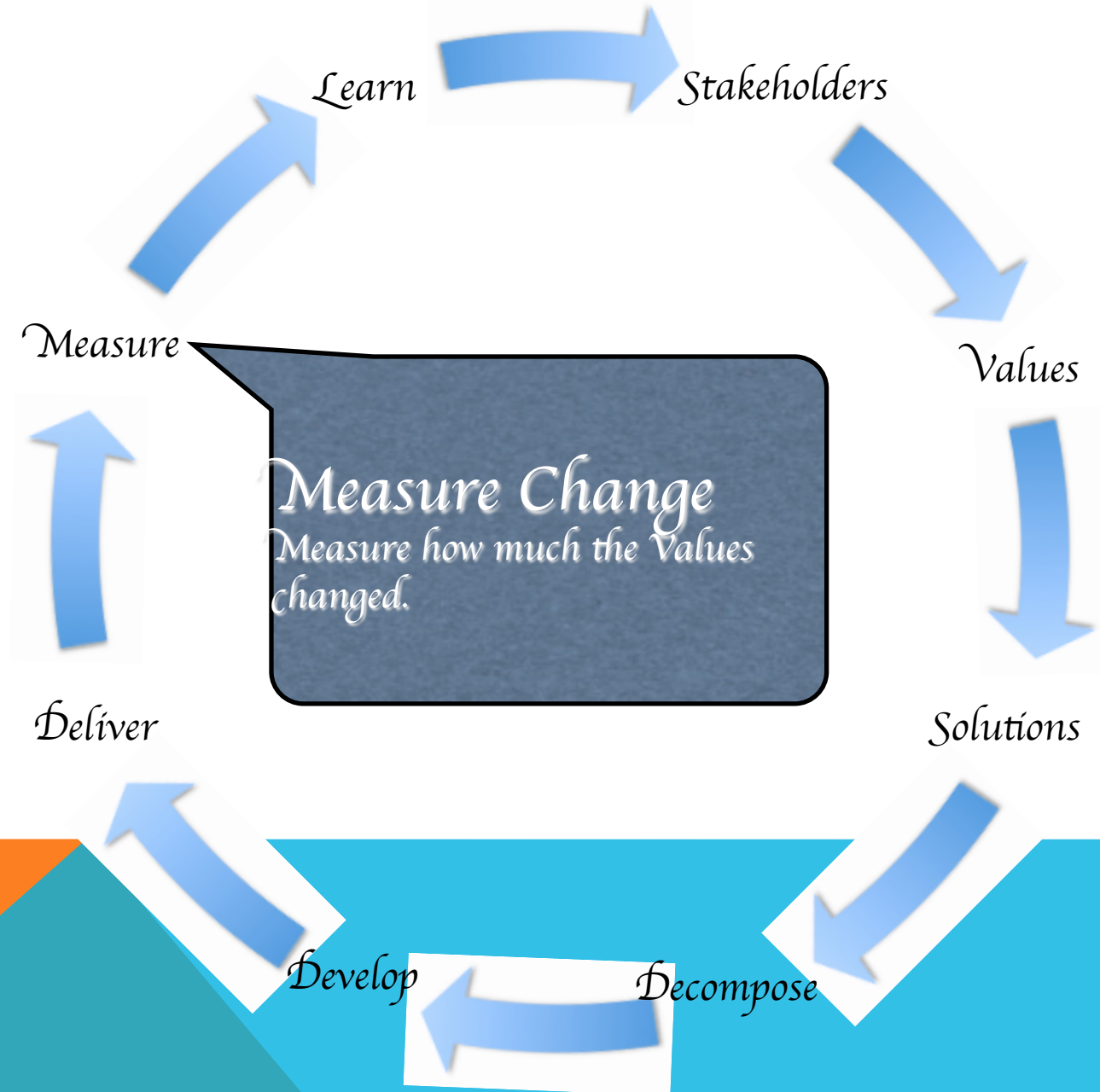
I2: what are the time scales and scope now? Unclear now BB

I3: what will the success factors be? We don't know what we are actually being asked to do. BB 2 dec 20xx

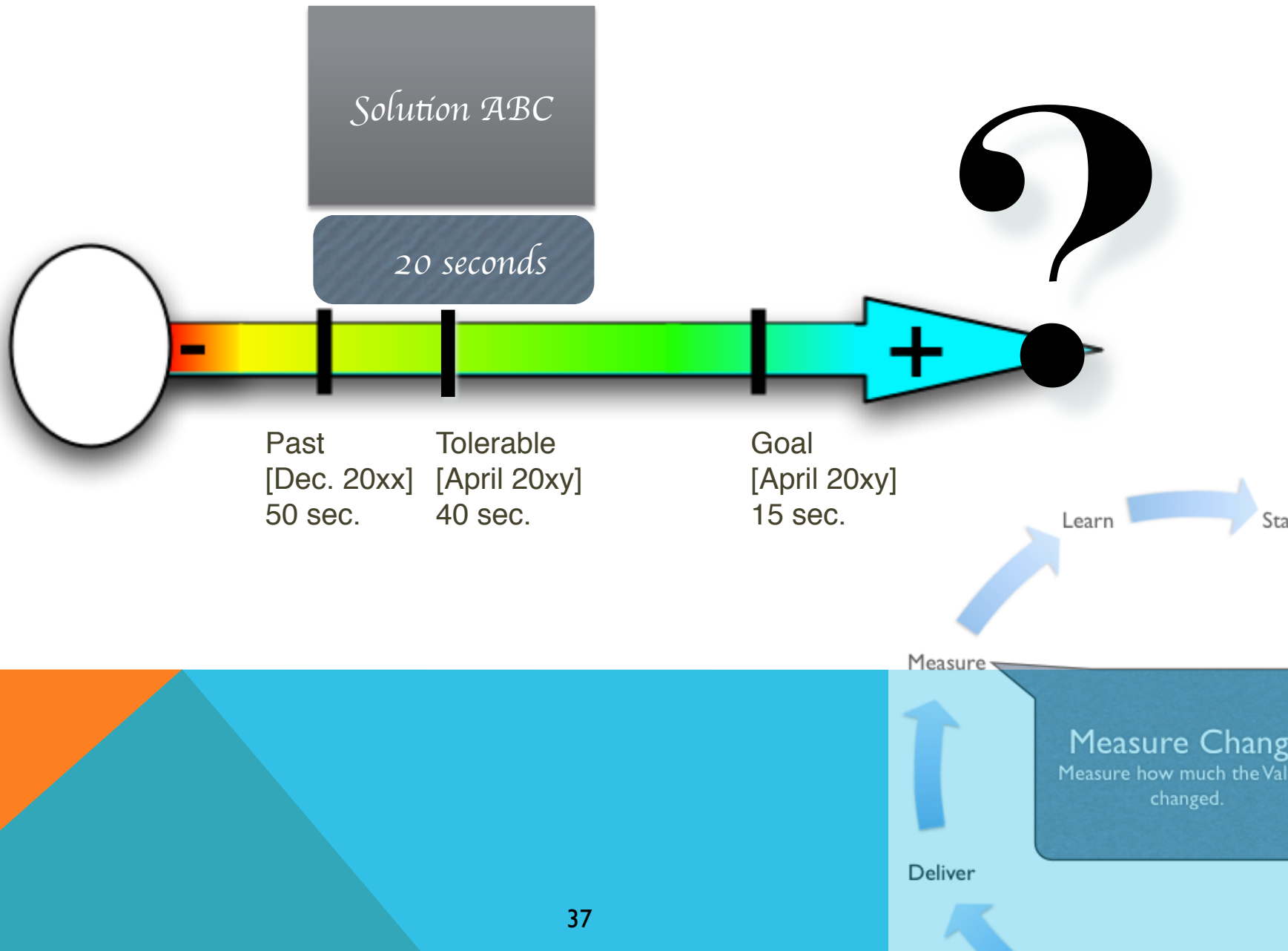
I4: for the business other than flow options, there is still a lack of clarity as to what the requirements are and how they might differ from Extra and Flow Options. BB

I5: the degree to which this option will be seen to be useful without Intra Day. BB 2 dec

VALUE DELIVERY CYCLE: MEASURE



THE REAL-SCALE IMPACT OF A SOLUTION ON A SINGLE IMPROVEMENT OBJECTIVE GOAL



IMPACT ESTIMATION TABLES

Improvement

Value Requirements				Operating Model Consistency	
Status when	Tolerable when	Goal when		units	% of Goal
P&L-Consistency&T P&L				-20	44%
60	0	15		-10	22%
0	0	0		0.1	4%
Speed-To-Deliver				-20	29%
75	30	5		-7	10%
0	0	0		0.1	3%
Operational-Control.Accurate				5	50%
90	99	100		5	50%
0	0	0		0.1	5%
Operational-Control.Consistent				1	50%
97	0	99		0.2	10%
0	0	0		0.2	10%
Operational-Control.Timely.End&Overnight				-1	200%
1	1	0.5		-0.5	100%
0	0	0		0.2	40%
Operational-Control.Timely.IntradayP&L					
1	2	3			
0	0	0			
Operational-Control.Timely.Trade-Booking				-15	75%

Estimate
Units & %

± Uncertainty
Worst Case
range

Credibility
Adjustment
to 0.0 to 1.0

Based on tool built by Kai Gilb
21 Mar 2012

IMPACT ESTIMATION CONCEPTS

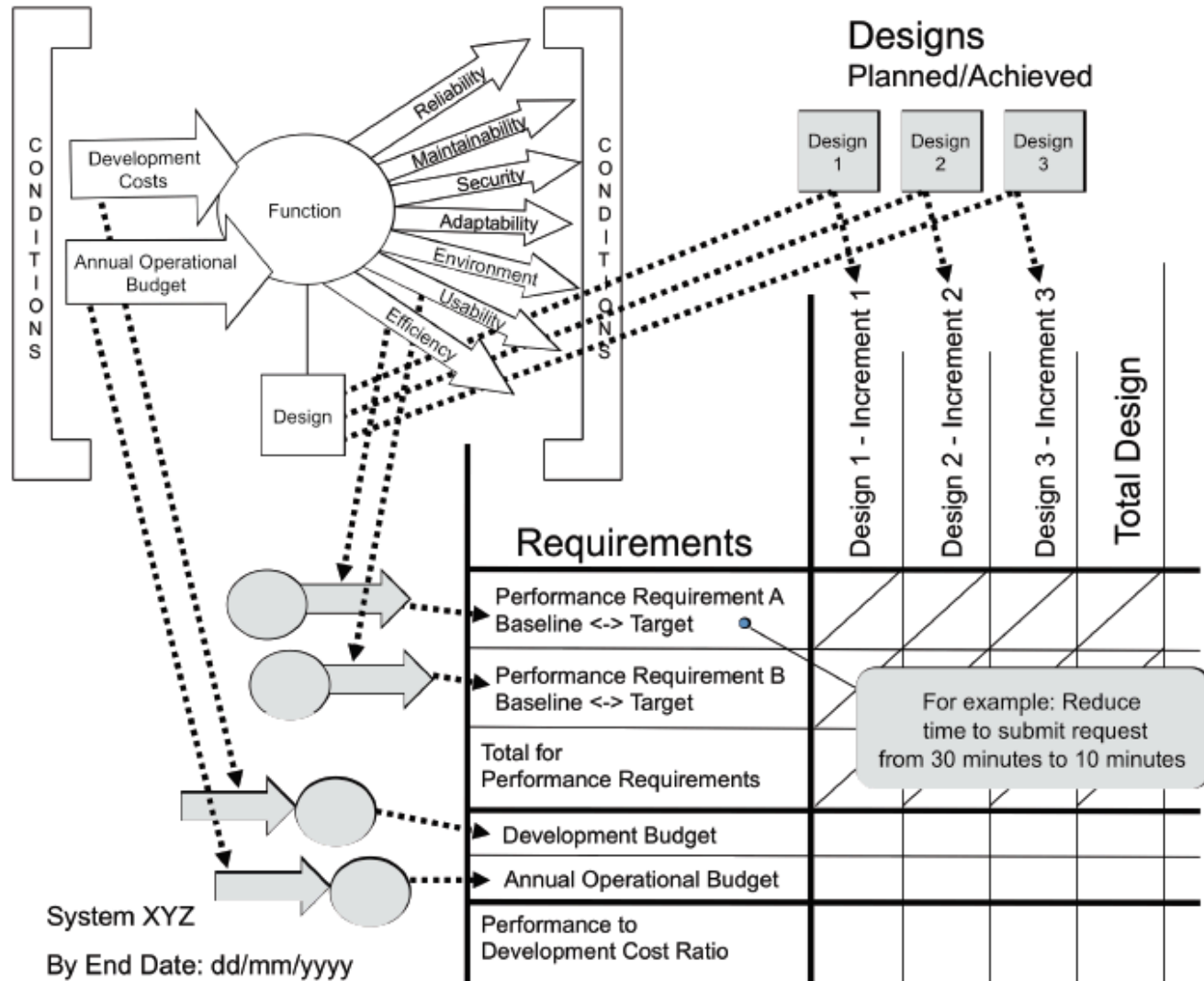
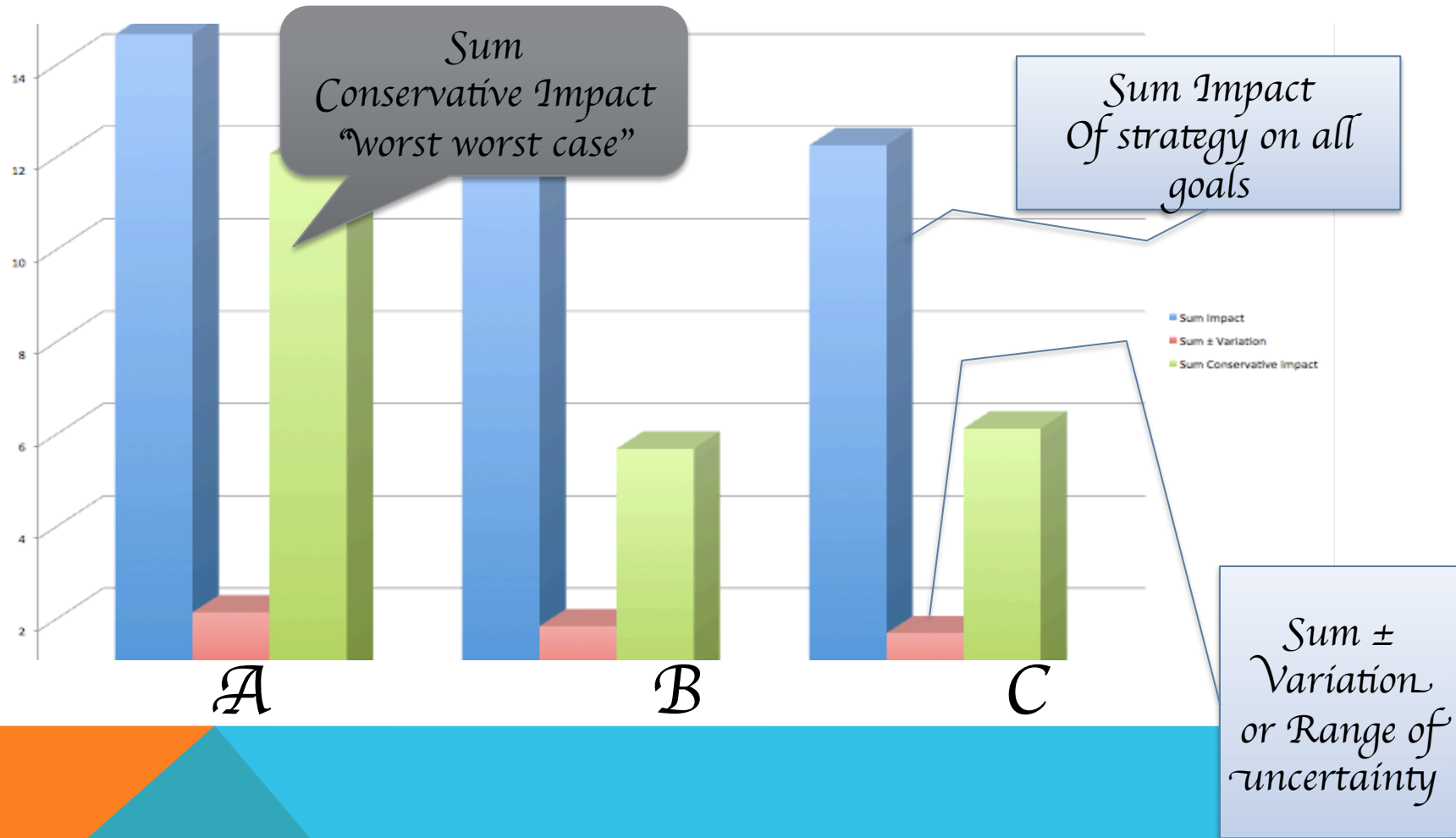


Fig. 3 Mapping of the system concepts to an IE table

SUMMARY OF OPTIONS, CONSIDERING RISK (20XX)



21 March 2012

Based on work done by Kai Gilb

QUANTIFYING THE COMPLEXITY

Impact Estimation

*makes us think deeply
& communicate clearly
& commit and take responsibility.*

*Scary,
for the incompetent!*

A decorative footer consisting of three overlapping geometric shapes: a large light blue triangle on the right, a medium teal triangle on the left, and a small orange triangle at the bottom left corner.

IMPACT ESTIMATION FOR A SINGLE 'DESIGN'

Strategy XX Impact -> Objectives (below)	Est. Impact on Requirements	Uncertainty	Evidence	Source	Credibility	Actual To date	
Human Communication Ability 80<->1 def./p	100% End 2013	±20%	Major Bank London experience 2011-2012	T. Gilb	0.8	0% before start	
Quality Weakness (possible side effect)	> 10% ?						
Reliability (possible side effect)	> 10% ?						
Premier level (possible side effect)	3%?						
Regulation Conformance (possible side effect)	2%?						
Development Quality Levels (possible side effect)	20%?						
Data Security (possible side effect)	7%?						

IMPACT ESTIMATION

100% MEANS “MEETS NUMERIC GOAL ON TIME” (GOOD ENOUGH DESIGN)

Strategy XX Impact -> Objectives (below)	Est. Impact on Requirements	Uncertainty	Evidence	Source	Credibility	Actual To date	
Human Communication Ability 80<->1 def./p	100% End 2013	±20%	Major Bank London experience 2011-2012	T. Gilb	0.8	0% before start	
Quality Weakness (possible side effect)	> 10% ?						
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Premier level (possible side effect)	3%?						
Regulation Conformance (possible side effect)	2%?						
Development Quality Levels (possible side effect)	20%?						
Data Security (possible side effect)	7%?						

IMPACT ESTIMATION

FACT-BASED ESTIMATES

Strategy XX Impact -> Objectives (below)	Est. Impact on Requirements	Uncertainty	Evidence	Source	Credibility	Actual To date	
Human Communication Ability 80<->1 def./p	100% End 2013	±20%	Major Bank London experience 2011-2012	T. Gilb	0.8	0% before start	
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Premier level (possible side effect)	3%?						
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Development Quality Levels (possible side effect)	20%?						
Data Security (possible side effect)	7%?						

Fact-Based Estimates

IMPACT ESTIMATION <- CE CH 9

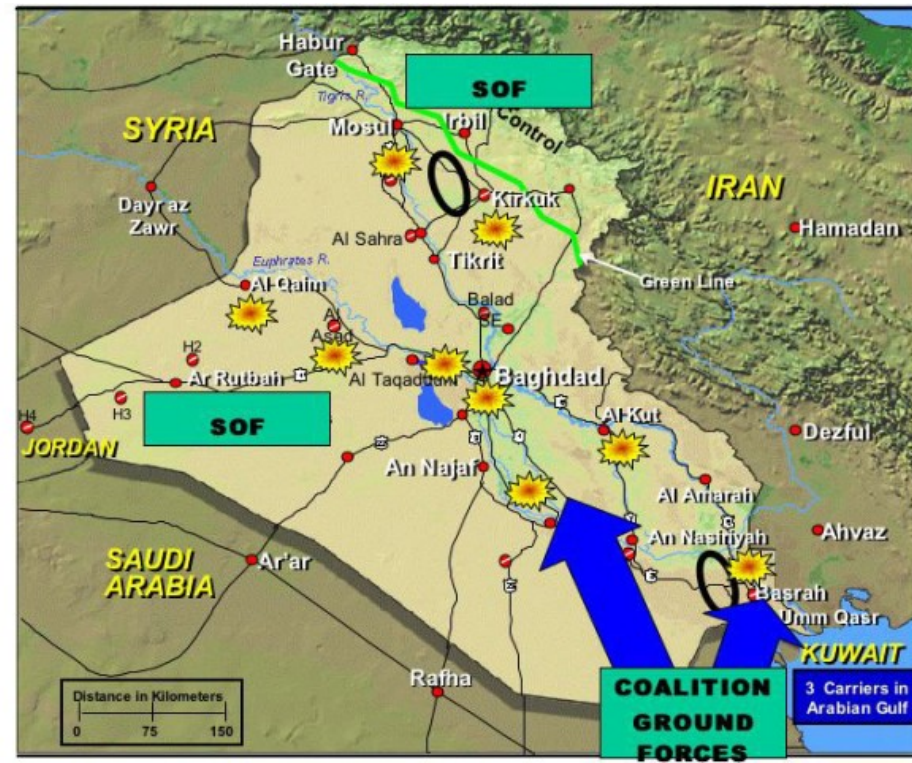
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Side-effect
consideration

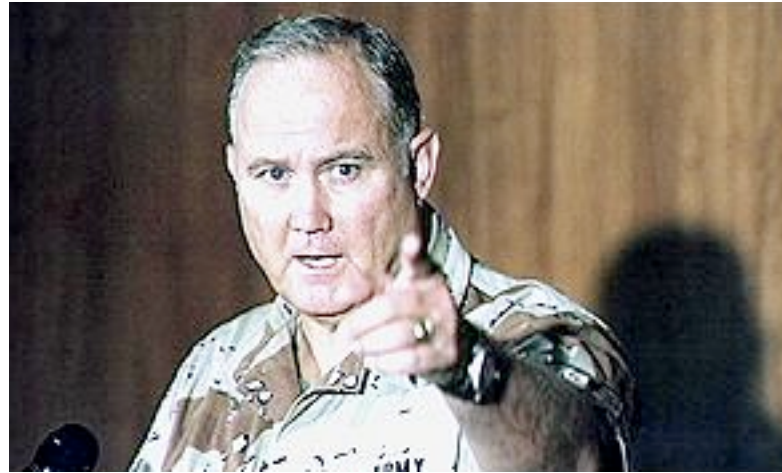
AND NOW A TRUE WAR STORY AND AN OVERVIEW OF THE 'COMPETITIVE ENGINEERING' PROJECT STARTUP METHOD USING ONE WEEK

About Why Bad IT Requirements

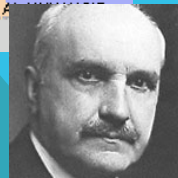
- Can lose a war in Iraq
- Or at least make it drag on for years



THE PERSINSCOM IT SYSTEM CASE



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



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



- Tuesday*

- Wednesday

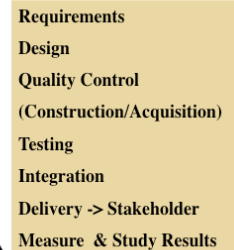
- | US Army Example: PERSINSCOM | | | | | | |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|----------------------------------|
| Activity | Activity | Activity | Activity | Activity | Activity | Activity |
| 1. Personnel Management | 2. Training Management | 3. Logistics Management | 4. Health Management | 5. Financial Management | 6. Information Management | 7. Legal Management |
| 8. Public Affairs Management | 9. Safety Management | 10. Environmental Management | 11. Quality Management | 12. Compliance Management | 13. Risk Management | 14. Security Management |
| 15. Contract Management | 16. Procurement Management | 17. Construction Management | 18. Transportation Management | 19. Communications Management | 20. Intelligence Management | 21. Operations Management |
| 22. Maintenance Management | 23. Medical Management | 24. Dental Management | 25. Veterinary Management | 26. Chaplain Management | 27. Social Work Management | 28. Recreation Management |
| 29. Civil Affairs Management | 30. Public Works Management | 31. Utilities Management | 32. Food Management | 33. Lodging Management | 34. Clothing Management | 35. Personal Services Management |
| 36. Religious Management | 37. Cultural Management | 38. Language Management | 39. Education Management | 40. Research Management | 41. Development Management | 42. Innovation Management |
| 43. Policy Management | 44. Planning Management | 45. Program Management | 46. Project Management | 47. Task Management | 48. Work Management | 49. Performance Management |
| 50. Evaluation Management | 51. Reporting Management | 52. Documentation Management | 53. Data Management | 54. Information Management | 55. Knowledge Management | 56. Expertise Management |
| 57. Skills Management | 58. Competency Management | 59. Knowledge Management | 60. Expertise Management | 61. Innovation Management | 62. Creativity Management | 63. Problem Solving Management |
| 64. Decision Making Management | 65. Leadership Management | 66. Team Management | 67. Organization Management | 68. Structure Management | 69. Process Management | 70. Method Management |
| 71. Tool Management | 72. Technology Management | 73. Equipment Management | 74. Material Management | 75. Supply Management | 76. Inventory Management | 77. Distribution Management |
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| 302. Technology Management | 303. Equipment Management | 304. Material Management | 305. Supply Management | 306. Inventory Management | 307. Distribution Management | 308. Logistics Management |
| 309. Transportation Management | 310. Communications Management | 311. Information Management | | | | |

Thursday

- Divide into rough delivery steps (annual, quarterly)
- Derive a delivery step for 'Next Week'

Friday

- Present these plans to approval manager (Brigadier General Palicci)
- get approval to deliver next week



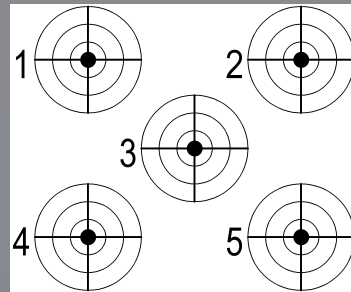
US ARMY EXAMPLE: PERSINSCOM: PERSONNEL SYSTEM



STRATEGIES →

OBJECTIVES

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



Monday
 ← *The Top Ten*
Critical Objectives
Were decided

SAMPLE OF OBJECTIVES/STRATEGY DEFINITIONS

US ARMY EXAMPLE: PERSINCOM: PERSONNEL SYSTEM



Example of one of the Objectives:

Customer Service:

Type: Critical Top level Systems Objective

Gist: Improve customer perception of quality of service provided.

Scale: Violations of Customer Agreement per Month.

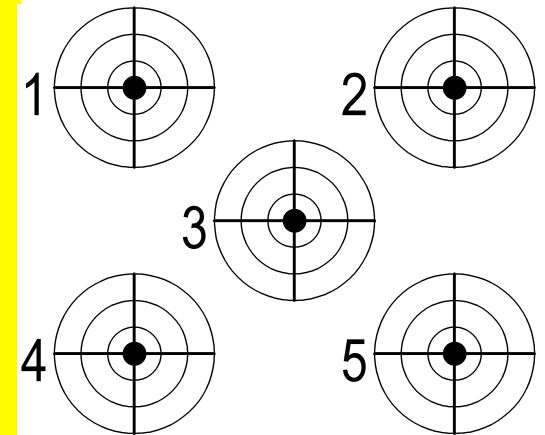
Meter: Log of Violations.

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

Record [NARDAC] o ? ← NARDAC Reports Last Year

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

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



US ARMY EXAMPLE: PERSINSCOM: PERSONNEL SYSTEM



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





A Strategy (Top Level of Detail)

Technology Investment:

Gist: Exploit investment in high return technology.

Impacts: productivity, customer service and conserves resources.



WEDNESDAY:

DAY 3 OF 5 OF 'FEASIBILITY STUDY

We made a rough evaluation

- of how powerful our strategies might be
- in relation to our objectives

Impact Estimation Table

- 0% Neutral, no \pm impact
- 100% Gets us to Goal level on time
- 50% Gets us half way to Goal at deadline
- 10% has 10% negative side effect

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



MEASURING HAND FOR GLOVE SIZE

US DOD. PERSINSCOM IMPACT ESTIMATION TABLE:

Designs

<i>Design Ideas -></i>	<i>Technology Investment</i>	<i>Business Practices</i>	<i>People</i>	<i>Empowerment</i>	<i>Principles of IMA Management</i>	<i>Business Process Re-engineering</i>	<i>Sum Requirements</i>
Requirements	50%	10%	5%	5%	5%	60%	185%
Availability 90% <-> 99.5% Up time	50%	5%	5-10%	0%	0%	200%	265%
Usability 200 <-> 60 Requests by Users	50%	5-10%	5-10%	50%	0%	10%	130%
Responsiveness 70% <-> ECP's on time	50%	10%	90%	25%	5%	50%	180%
Productivity 3:1 Return on Investment	45%	R → D Impacts			100%	53%	303%
Morale 72 <-> 60 per month on Sick Leave	50%				15%	61%	251%
Data Integrity 88% <-> 97% Data Error %	42%	10%	25%	5%	70%	25%	177%
Technology Adaptability 75% Adapt Technology	5%	30%	5%	60%	0%	60%	160%
Requirement Adaptability ? <-> 2.6% Adapt to Change	80%	20%	60%	75%	20%	5%	260%
Resource Adaptability 2.1M <-> ? Resource Change	10%	80%	5%	50%	50%	75%	270%
Cost Reduction FADS <-> 30% Total Funding	50%	40%	10%	40%	50%	50%	240%
<i>Sum of Performance</i>	<i>482%</i>	<i>280%</i>	<i>305%</i>	<i>390%</i>	<i>315%</i>	<i>649%</i>	
Money % of total budget	15%	4%	3%	4%	6%	4%	36%
Time % total work months/year	15%	15%	20%	10%	20%	18%	98%
<i>Sum of Costs</i>	<i>30</i>	<i>19</i>	<i>23</i>	<i>14</i>	<i>26</i>	<i>22</i>	
<i>Performance to Cost Ratio</i>	<i>16:1</i>	<i>14:7</i>	<i>13:3</i>	<i>27:9</i>	<i>12:1</i>	<i>29:5</i>	

US ARMY EXAMPLE: PERSINSCOM: PERSONNEL SYSTEM



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

DAY 4 OF 5,

THURSDAY:

DECOMPOSE BY VALUE

We looked for a way to deliver some stakeholder results, next week

1 1 1 1 1 1 or 'Unity' Method

- 1 increase from 0%
- 1 stakeholder
- 1 quality
- 1 week
- 1 function
- 1 design idea

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■ Think Simple



NEXT WEEKS EVO STEP??

"You won't believe we never thought of this, Tom!"

The step:

- *When the Top General Signs in*
- *Move him to the head of the queue*
 - *Of all people inquiring on the system.*





*UNITED STATES ARMY
PERSONNEL INFORMATION
SYSTEMS COMMAND*



CERTIFICATE of APPRECIATION

is awarded to

MR. TOM GILB

for

SELFLESS AND DEDICATED SERVICE IN SUPPORT OF THE PERSONNEL INFORMATION SYSTEMS COMMAND. AS A MANAGEMENT CONSULTANT IN RESULT DELIVERY PLANNING, HIS PATRIOTISM, PROFESSIONAL COMPETENCE AND PERSONAL SACRIFICES ARE HIGHLY COMMENDABLE. TOM GILB'S DEDICATION AND THE EXCEPTIONAL MANNER IN WHICH HE PERFORMED HIS DUTIES HAD A DIRECT AND SIGNIFICANT IMPACT ON PERSINSCOM'S MISSION. HIS OUTSTANDING CONTRIBUTIONS AND DISTINGUISHED SERVICE REFLECT GREAT CREDIT ON HIM AND THE UNITED STATES ARMY. CONGRATULATIONS FOR A JOB WELL DONE.

30 AUGUST 1991

Personnel Information Systems Command

Jack A. Pellicci
JACK A. PELLICCI
Brigadier General, USA
Commanding

SUMMARY OF TALK

- 1. The top ten stakeholder improvements - are by far the most important requirements**
- 2. Most managers and analysts deliver the top ten, in a vague and woolly manner**
- 3. You can quality-control them, in less than an hour**
- 4. You can rewrite them in a day, to be clear and quantified**
- 5. You can then relate your architecture and design**
 - ◆ **directly to the quantified requirements**
 - ◆ **using Impact Estimation Tables**
- 6. You can use the one week startup process to kick off any major project (see Link below for details)**

The One week project startup process

[http://homepage.mac.com/tomgilb/filechute/ Evo %20Project %20Initiation%20Syllabus.pdf](http://homepage.mac.com/tomgilb/filechute/Evo_%20Project%20Initiation%20Syllabus.pdf)

Wednesday, 21 March 12

FURTHER STUDY ? SEE WWW.GILB.COM

And, if you want a free digital copy of the handbook on these methods, “Competitive Engineering”

email TOM@GILB.com with “BOOK” in subject

