

IT Value Maximisation for Business Analysts

A Closer Look At The Elephant Part I – The Basic Principles

for

IIBA UK North & Scotland

David P Jacobs BSc, MBCS, BVMS

29th August 2023





Oh dear, oh deary me...



**This makes me think of
burgers and chips and
Fish Finger Syndrome...
why a 1 hr wait?!**

Agenda

Background

Polls 1-3

Deciding on best methods/approaches

The challenge/s we all face

The questions we need to answer (x3 sets)

The answers:

What value is

How value arises (at design time and run time)

The ingredients of value

How the ingredients work together, (poll 4)

Introduction to the business value equation (BV EQ)

Poll 5: are we getting better at value maximisation?

Parting thought – top challenge

Contact details

Q&A

**Bonus slides including Agenda for A Closer Look (Part II) in
January 2024, Part III in spring 2024 and beyond...**

Career (day job)

1973 to 1976 BSc Hons Management Science, Warwick University Business School

1976 (1970) to 1985 marketing information analysis and research

1981 to 1997 computer analysis/programming

1997 to 2023 business analysis (with project leading/management)

R&D

1980s conceived Business Value Maximisation Framework (BVMF®)

1990s gave birth to BVMF®, first article published (1995)

2000s put BVMF® through its childhood and teens

2010-2019 matured BVMF® into the world of work...

2020 to 2023 refined BVMF® into adulthood, now growing and maturing!

The Combined Journey

70s/80s understood how organisations use business data and management information

80s started computer analysis/programming to become one of the infamous business/IT hybrids (gap bridgers)

80s/90s expanded the hybridism/gap bridging skills to be multifaceted

90s+ focused the multilingual gap bridging, a means to an end, on the end itself, the maximisation of value, success and ROI from IT and 'digital'!

Poll 1

**Who is (most)
responsible for
maximising value,
success and ROI from
IT/'digital
transformation'?**

Poll 2

What type of result are we aiming at?

Poll 3

What are the best methods/approaches for maximising business value, success and ROI from IT/'digital transformation'?

Method Selection to determine the best methods for maximising BV (Q0)

The question of whether to use waterfall, agile, wagile, V model, prince2, etc. should not be the driver, not the first question considered (it depends on a number of factors...)

A blanket approach of adoption in an org/company/business is unlikely to be optimal – standardisation is rarely beneficial in net terms when deployed for its own sake

None of the available/existing approaches/methods, used singly or in combination, vanilla or tailored, will be as optimally strong/powerful as when underpinned by the fundamental principles of (IT) business value maximisation, encapsulated by BVMF[®]

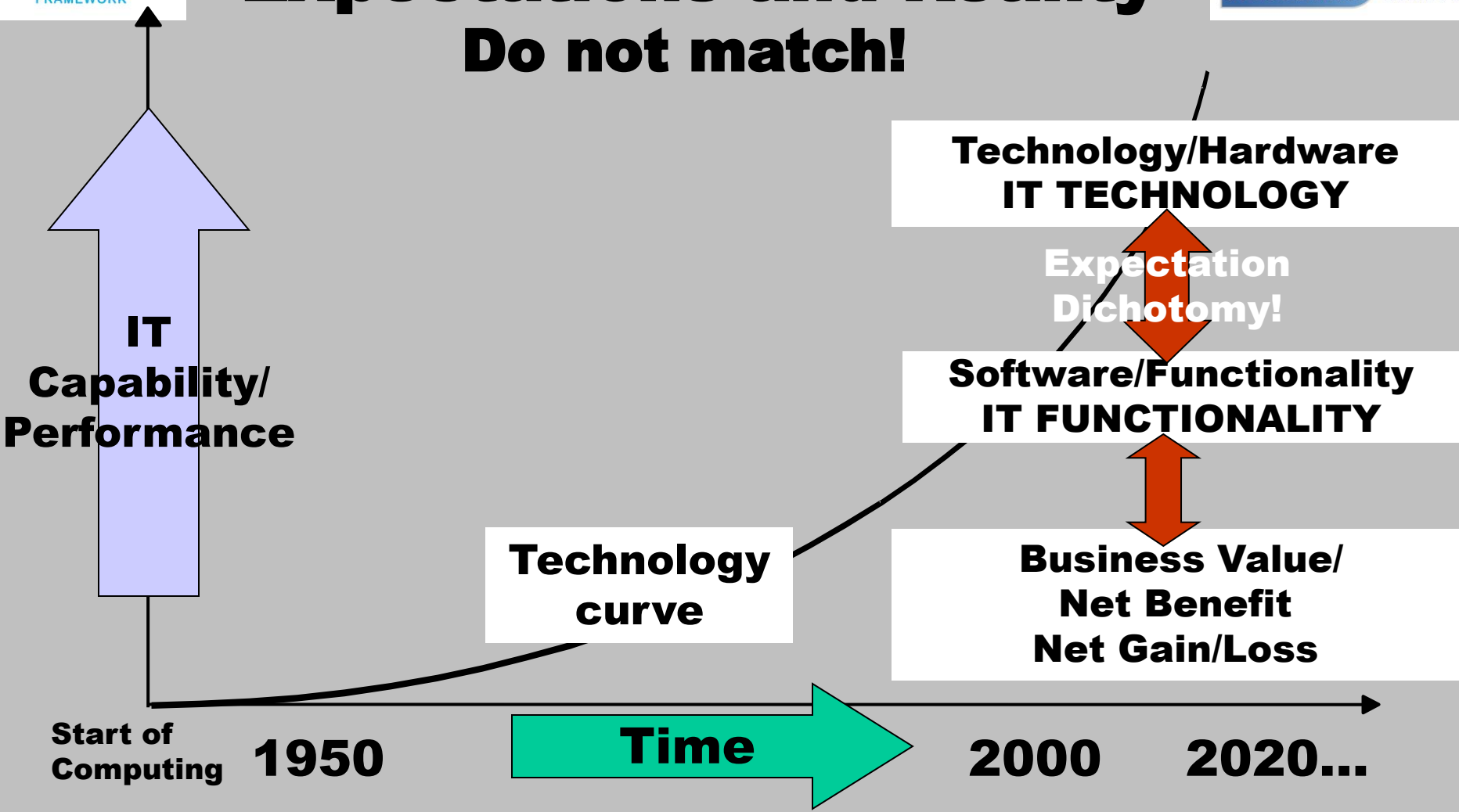
Types, Aspects & Dimensions

Landscape Value Characteristics (LVCs 1)

<u>Macro/big picture/high</u>	<u>Mid-level</u>	<u>Micro/detail/low</u>
General/generic		Specific
Predictable	Less predictable	Unpredictable
Design time	Dvt & Test time	Run time
Predicted/expected/forecast		
Tangible		
Quantifiable		
Quantitative		
Conceptual/abstract		
Negative		
Dependent		
Objective		
Absolute		
Ongoing/at a point		
Objectives part of		
First past the post		
Perceived		Real/actual
High propensity	Medium propensity	Low propensity
High representivity	Medium representivity	Low representivity

These criteria are not by any means the only key factors for choosing the best methods to use... What type of organisation are we? What are the bus/org persons used to doing/using? Have they 'understood' waterfall? Do they 'understand'/favour agile? Do the SMEs want to be familiar with such approaches/methods or see it as IT's responsibility?! What are the dependencies in our work wrt timing, funding, 'signing off', etc...

Expectations and Reality Do not match!



The 1934 Model

To optimise value against (high) expectations and to hit the moving target, we need to cut steps into the Technology capability (growth) curve

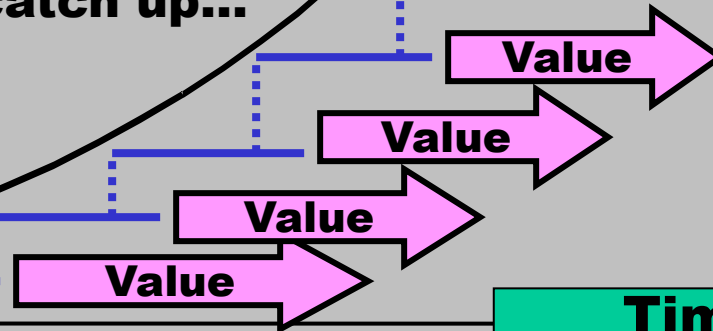
Technical Capability

Our industry is(still) young – tech capability is rising exponentially and, ditto potentially business value, but manifestly we have a (long) way to go with bus value max... here's one way to proceed...

To balance/optmise, for each piece of work/increment/iteration, time vs progression in tech, func and bus objectives achievement... including architectural catch up...

Continuous steps of project, programme & support work*

Technology curve



This helps you optimise your efforts against a moving target...

The Step Diagram

* A celluloid film's 24 frames a second looks like seamless moving pictures...!

Bridging the Gap

The Activity/Role Spectrum (simplified)

Business
real world

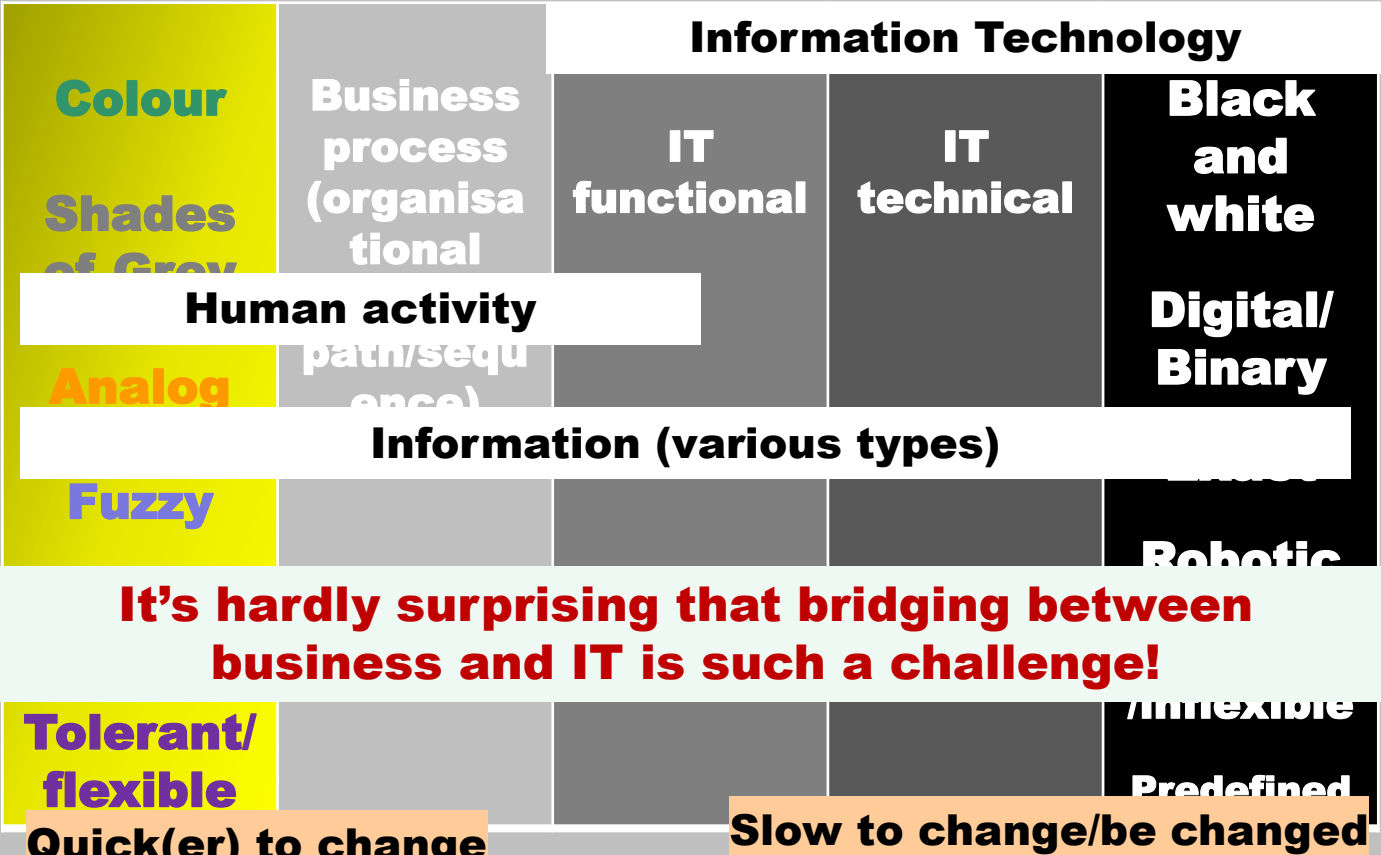
people

IT/

computers

Markets

Computer
hardware



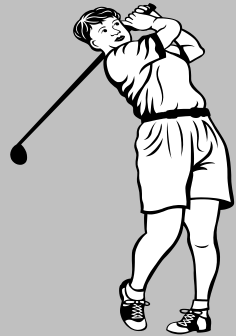
The Mightily Cruel Ratio

**There are very many ways
to get this wrong, and only a
few ways to get it right;
sometimes only one!**

David P Jacobs, 2022

Elephant Maxims

The IT value jig-saw has pieces missing or not fitting properly



A set of golf clubs is not the primary determinant for the golfer winning or losing the match/tournament

You would not drive your car all the way to work in reverse (although occasionally reverse gear is valid, even essential)



You can't bake a great cake without knowing what kind of cake is required, what the ingredients are and how to mix and cook the ingredients optimally



The First Question (Q1)

If I want maximum business value (MBV)

**from IT enabled process, ‘digital’
transformation, BAU, CI, etc.**

**for my stakeholders/value interested
parties (VIPs)...**

**what do I need to focus on, think about
and, most importantly, do ...**

... practically and pragmatically?!

Specifically... (Qs2)

- **What *is* value?**
- **How does value arise?**
- **Where will the value come from (how much is there to be had?)**
- **What are the elements that need to be combined (the value cake's ingredients)?**
 - **How best/optimally to combine the elements/ingredients?**
 - **How do you get more value?**
 - **How do you avoid getting less value?**
 - **How do you measure/quantify value?**

Furthermore...(Qs3)

When moving from a currently manual or IT/'digitally' supported situation to a future auto-assisted one:

Will we be better off?

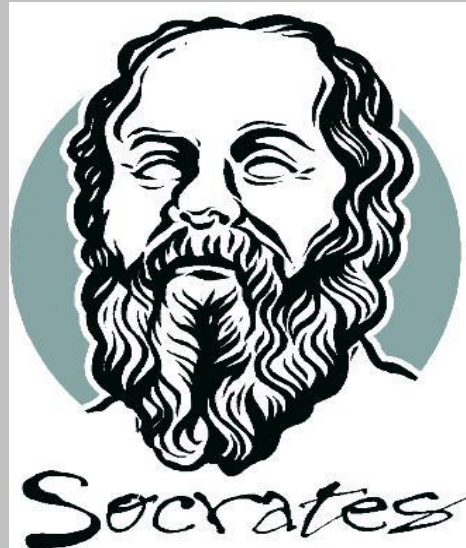
By how much will we be better off?

What's the likely net gain – and (latterly) did we get it?

How do we make sure we'll be the best off possible?

How will we stay the best off possible?

Right, let's put our thinking caps on...



... factoring in some Aristotelian syllogism, a few bits of Plato's writings on Socratic Questioning and a bit of basic philosophical logic... plus 30 years of research and development coupled with first, second and third hand experience with some very good project results along the way, here we go...

What is Value?

The achievement/meeting of business/organisational goals, objectives and expectations of stakeholders/value interested parties (*VIPs)

PLUS

**Value is achievement
against objectives**

The exceedance of business/organisational goals, objectives and expectations of stakeholders/value interested parties (VIPs)**

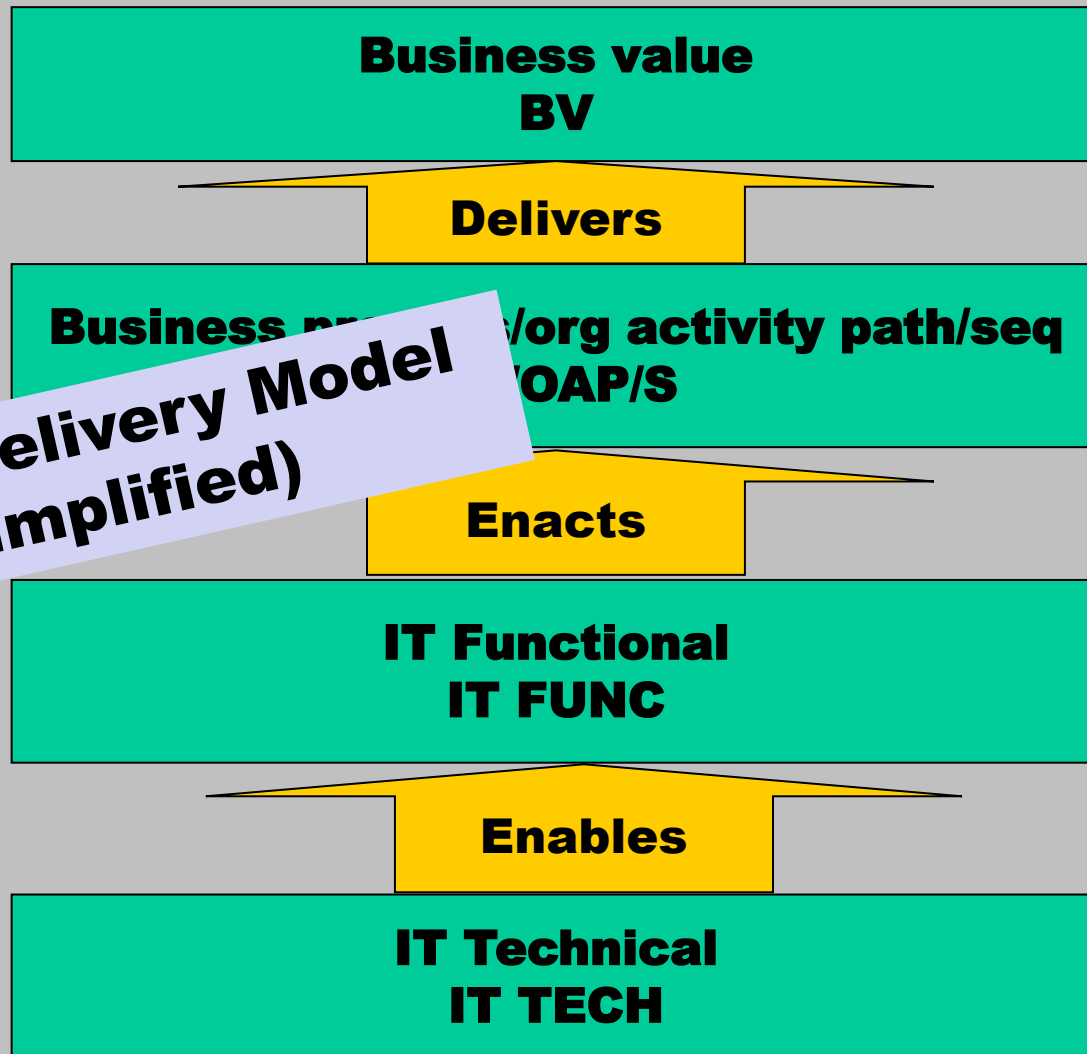
*** VIPs include all parties affected, involved in any way; their positions reconciled optimally**

**** I want to maximise the harder to predict value as well as the easier to predict value**

It's not easy to predict all value and it accrues (or gets wasted) at micro level – ‘business cases’ have tended to be “macro-assumptive” and bounded/limited ...

Value is net benefit – all tangible and less tangible costs and benefits must be factored in/weighed up - it is possible to ‘equate’ the two

How value arises at run-time, fully 'automated'



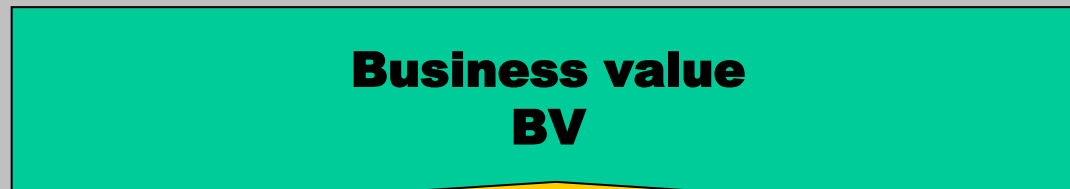
Improved
revenue/margin,
productivity,
information
quality, cost
reduction, etc.

Produces
the value

What IT
does

What IT
is/how IT
works

How value arises at run-time, auto-assisted



Delivers

Bus process/org activity with/sequence

**Value Delivery Model
(VDM)**

This includes
'pure' BP/OAP/S
which is not
auto-assisted
and BP/OAP/S(IT)
which *is*

The BP/OAP/S-IT
part of this
process can only
be what it is
because of the IT
enablement

This includes
'pure' human
activity not
associated with
the IT system but
may be auto-
simulated ...
MAN Pure
MAN/IT, and
(mechanical)
equipment
function

**Manual
MAN**

**IT Functional
IT FUNC**

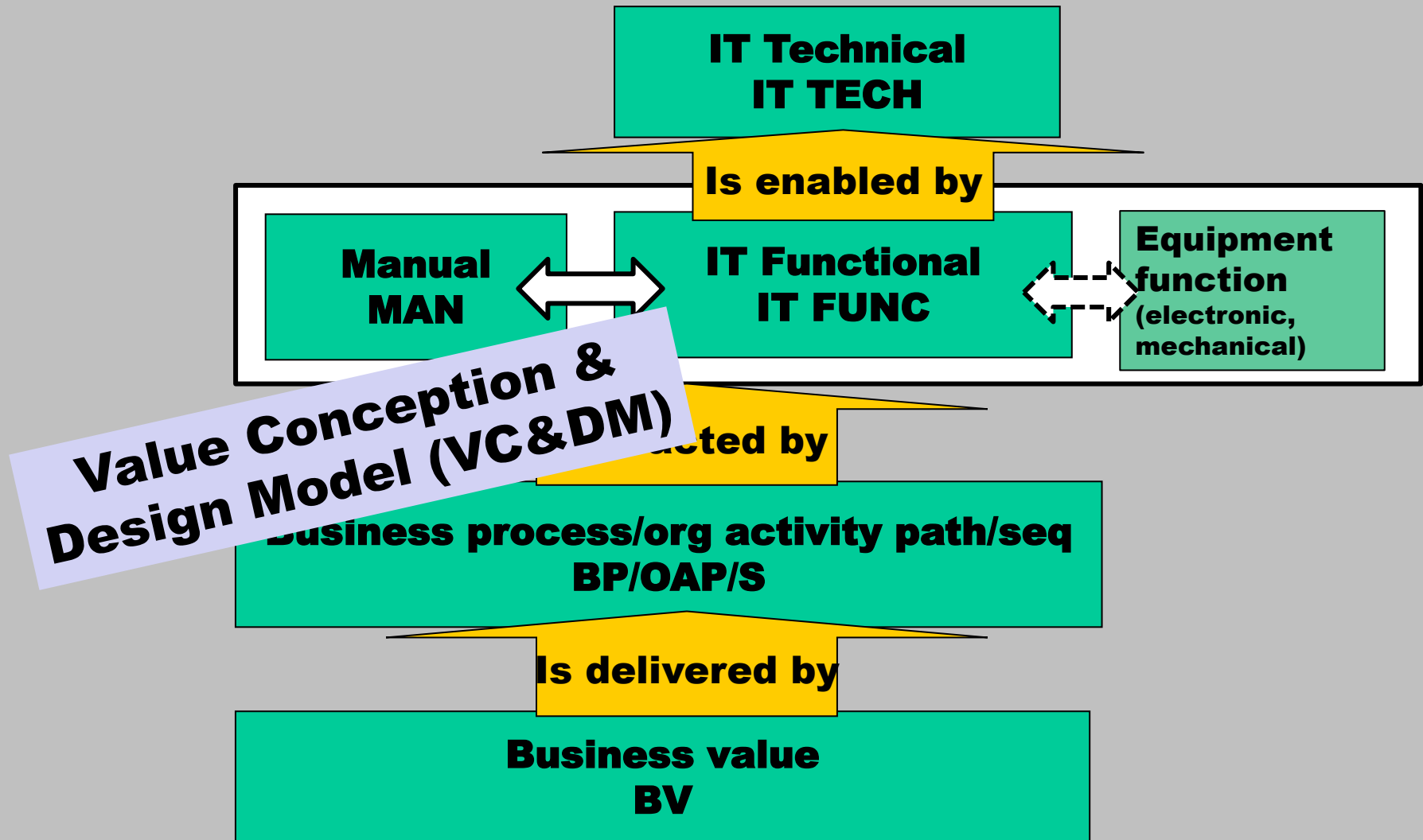
**Equipment
function
(electronic,
mechanical)**

This includes
auto-
assistance at
various levels
by software
and fully
'automated'
processes

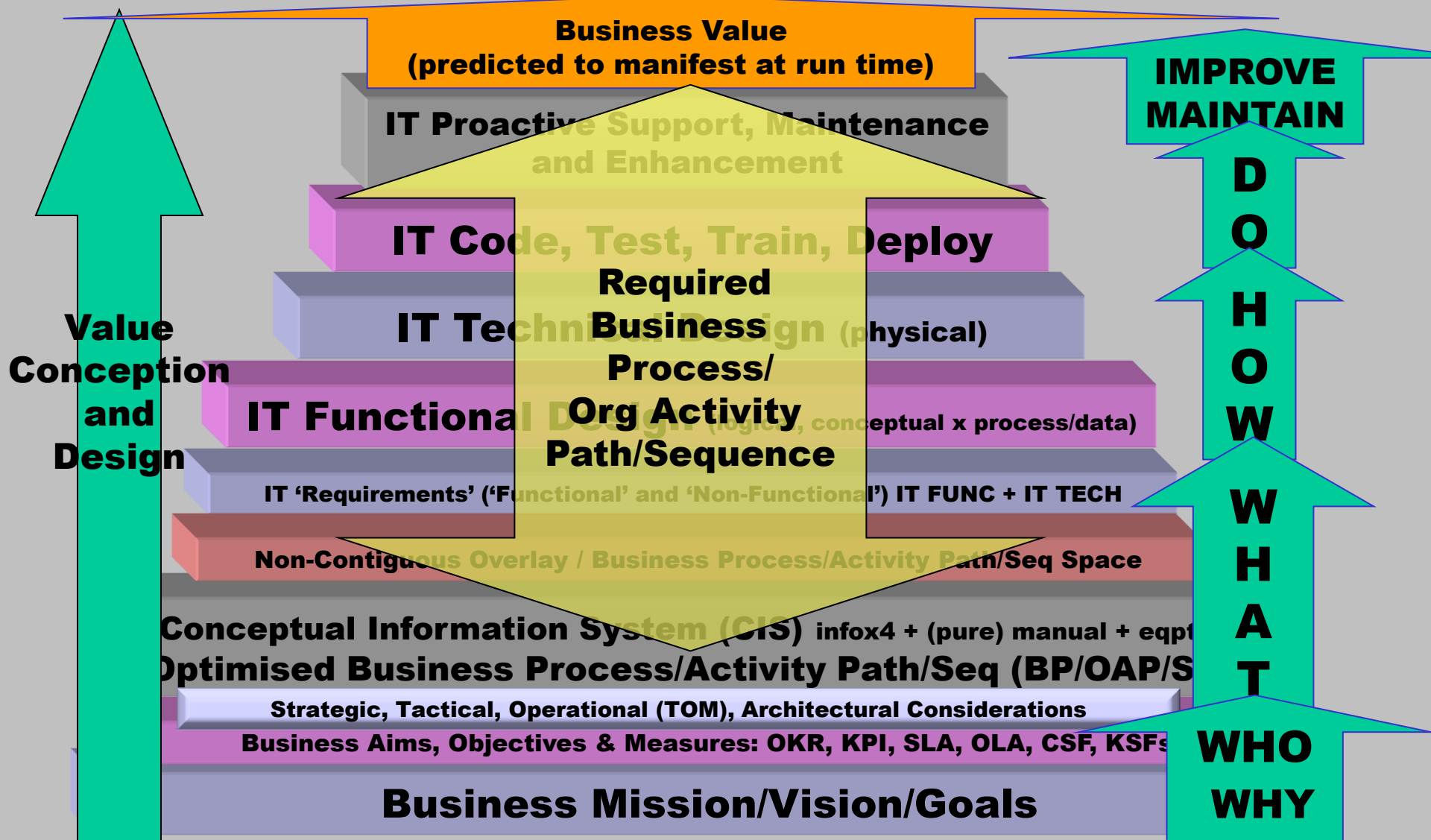
Enables

**IT Technical
IT TECH**

How value is conceived and designed at design time, auto-assisted



Value Conception and Design Layers of Focus (LoF)



Thanks are due to A Maslow,
Cranfield University, R Wallsgrove
and most brides and grooms ...

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The layer cake, chain
links, dependent jig-
saw pieces...

Where will our value come from?
What will the ingredients be?
How much value can we get from each ingredient, i.e., what's the **Propensity?***

<u>Ingredient description</u>	<u>Ingredient name</u>	<u>% of total value to be realised*</u>
Business process/org activity path/seq (incl. creation and use of information INFO)	BP/OAP/S	25?
Human capital	HUMAN	10?
Human capital	HUMAN	10?
IT functionality	IT FUNC	25?
IT technicality/technology	IT TECH	10?
Morale, PR, image, reputation, goodwill, perception, kudos, prestige, motivation (less tangible)	MISC	5?
Cost (£s absolute/reduction delta)	COST	15?

Origins of Value, Ingredients and Propensity

* These value ingredients are not completely mutually exclusive; it depends how you look at them... also we must factor in mechanical equipment's (non-IT'd) functionality ...

Estimating the Power of Re/'Automation'

What do we expect the value of 'IT FUNC(-N)' to be?

I.e., how much value (uplift in bus process/org act path/sequence performance) do we expect to get?

**In an averagely worthwhile, acceptably successful project,
to what extent do we (expect to) boost the reengineered
business process's ability to do its job by using (improved)
'automation'... as a starting point/general guideline,
consider projects over the last 20 years...**

What is the general
number?
What do we want *our*
number to be – on our
specific project/s?
How will we get
there?

+10% (*1.1)
+25% (*1.25)
+50% (*1.5)
+75% (*1.75)
+100% (*2.0)
+Other?

Poll 4

(Will we be faster, more
accurate, better quality, more
available/accessible/
centralised? Are we prepared for
the negatives as one tiny fault
can cause huge damage? And
wrt **visibility**, computerised
functionality (and errors) can be
harder to see for the humans
involved...)

Answers to this will be revealed in a future presentation ...

Introduction to the Business Value Equation (BV EQ)

**How much better off do we
expect to be?**

The Business Value Equation (1)

**Net Business Gain (or Loss)
is/will be proportional to
the Performance of the
Reengineered/Reviewed Business
Process/Org Activity Path/Sequence
as helped (or hindered) by the
IT Functionality
as supported (or degraded) by the
IT Technicality/Technology
plus (or minus) a miscellaneous element of
Image, Morale, Reputation, etc...
...all subject to Cost**

The Business Value Equation (2)

This combines the value factors (ingredients) together *numerically* to show how much value we expect to achieve (at design time) and do achieve (at run time) and ... how very **easy** it is to do more **harm** than good!

We have:

Net **Business Gain/Loss (NBG/L)** is proportional to the power of the **reengineered business process/org activity path/sequence (BP/OAP/S-R/A)** as boosted (or hindered) by **IT functionality (IT FUNC)** as enabled (or degraded) by **IT technicality (IT TECH)** plus or minus **less tangible/qualitative factors (MISC)** all minus **cost (COST)**

Prediction and verification of value by process and sub-process

Symbolically:

$$\text{NBG/L} \propto \text{BP/OAP/S(R/A)} * (\text{IT FUNC} * \text{IT TECH}) \pm \text{MISC} - \text{COST}$$

Terms: R=reengineered/reviewed/redesigned, A=auto-assisted/'automated'

Value = *net* benefit/gain, ISBV = Information Systems Business Value

Gross (theoretical) ISBV = IT FUNC, Net (Actual) ISBV = IT FUNC * IT TECH

IT Effectiveness/performance for IT TECH = Uptime * Efficiency/Effectiveness, e.g., 90% up * 90% efficient/effective = 81%...

Assess absolute/ongoing value (at T0/1) or incremental value (from T0/1 to T1/2, or from T{N} to T{N}+1) against the 4 stages of business process:

1 Manual [20] > 2 Reengineered (purely manual) [25] > 3 Reengineered (aware IT will be used, data centralised, etc) [30] > 4 Auto-assisted (sped up, more reliable, etc) [40]...

Poll 5

**How much better do you think
you've become over the last 45
minutes at understanding, identifying
and manifesting IT business value?**

Much better

Somewhat better

A little better

Same/No better

Worse

Other/specify in Chat

Don't Know

Parting Thought (for Q&A, etc)

**What is your (remaining/outstanding)
top challenge in respect of
maximising business value, success
and ROI from IT?**

**To gain optimum value, success and
ROI from digital transformation,
BAU, CI and all IT/software
supported org/bus activities**

Thank you for listening!

David P Jacobs
Business Value Maximisation Specialist (BVMS)
Email DavidJ@Maximum-Value.co.uk
Tel **07799 036652, 01932 248027**

Philippa (Pip) Randall-Nason
Executive Assistant/Client Support
Email PhilippaN@Maximum-Value.co.uk
Tel **07834 638373**

Web www.Maximum-Value.co.uk

The bonus slides that follow include more detail on today's models and techniques, some 'upfront' on models and techniques to be covered in Part II (January), Part III (spring 2024) and beyond, and a list of MaxVal's services...

Agenda for 'A Closer Look, Parts II & III' coming in January and spring 2024...

Name	Function
Business Value Equation (part II)	Helps you to see how the Value Ingredients (VIs) work with each and combine to produce value. Shows you the stark reality of how easy it is for your IT systems to bring your org/bus to its knees and how hard it is to have it all singing a fabulous song (you CAN do it as long as you underpin your work with some principles of IT bus val max
Conceptual Units of Benefit (CUB) Ladder™	If you're using MoSCoW, this will enhance the socks off your 'requirements'/functions prioritisation with its powerful component relationship segmentation and value tagging (VT)
Football Team Management (FTM)/Optimal Human-Computer Interaction/Interplay (OH-CI)	Helps you formulate the most powerful football team to play the game with an optimally blended set of players, some human, some computers (robots, i.e., computerised players)
Business Practice and Contingency (BP&C)	Makes sure, at Run time, all your hard work pays off. I.e., that IT systems do not, at run time, degrade your business processes rather than enhancing them; it's very easy to ruin your business with IT that doesn't work
Crossword Diagram	A model for decompositional analysis of manifest value/success that's supports you in divining where the IT systems are better than they were and where they are not so you can fix and/or improv them. A great way to structure and progress CI.
Various key concepts like Two Node Factors such as Push/Pull (P/P), Macro/Micro, On-point/Incremental value, etc. Plus approaches to effective value analysis like The Six Factor Cadence, The Croydon Facelift, etc.	There are plenty of two node concepts in BVMF [®] and here we look at the main ones. Macro->Micro, Design time->Run time, Functional->Technical, Estimated-> Actual, etc. Also, some techniques for effective analysis and communication.
Introduction to the systematic application and assessment of value using BVMF[®]	The IT Effectiveness Spectrum™ as a tool to assessing IT Business Value Capability (ITBVC)™ and planning to improve it

To optimise the value of each STEP in the Step Diagram

Decide for each STEP how high you will shoot for technical, functional and process improvement – and how long the STEP will be.

It's not about Waterfall, Agile or a hybrid approach; it's about continuous progress.

For example, are you in a business marketplace where first past the post applies, or, where a more proportional reward system applies?

What time scales are required?

Waterfall <-> Agile is a spectrum and each piece of work may be different in this respect

Use the Value Landscape Characteristics (LVCs) to help decide which approach will be best for a given piece of work

Types, Aspects & Dimensions Value Landscape Characteristics (LVCs 2)

Types, Dimensions and Characteristics (Measures) of Value

These measures/criteria can be used to assess the business value landscape i.e., the environment/backdrop in/against which a decision is to be made as to what blend of agile, waterfall, etc is most appropriate for a specific piece of work.

Measure title	Left side measure/s	Mid-range measure/s	Right side measure/s	Notes BVMF [®] Models
Macro/micro	Macro (big picture/high level)	Connecting factors	Micro (detail/low level)	Macro value (too) often disappears as micro design and implementation swings into action
Specificity	General/generic		Specific	
Predictability	Predictable	Less predictable	Unpredictable	
'Lifecycle' stage	Design time	Development & Test time	Run time	Design time value is a prediction, run time value is an actuality
Predictability	Predicted/expected/forecast	Estimated	Actual	
Tangibility	Tangible	Less tangible	Intangible	
Quantifiability	Quantifiable	Less quantifiable	Unquantifiable	You can invariably 'put a handle' on qualitative or so called unquantifiable. For example, <u>Crossword Model[™]</u> (uses 3 & 5 point scales from worse to better)
Quantity vs quality	Quantitative	'Handled' (qualitative 'quantified')	Qualitative	
Physicality	Conceptual/abstract/logical		Concrete/physical	
Conceptual Units of Benefit (CUB) Spectrum	Negative	Null/Zero -> Hygiene	Positive +, ++, +++ (low to high)	Conceptual Units of Benefit (CUB) <u>Ladder[™]</u>
Dependency	Dependent	Less dependent	Independent	
Objectivity	Objective		Subjective	
This, that or one to the other	Absolute		Comparative	
Now, then, change	Ongoing/at a point in time		Incremental/delta	Are you looking at value now, then or at the delta/magnitude of the change?
Achievement of objectives	<u>Objectives</u> part met	Objectives Met	Objectives exceeded	
First or proportional	First past the post ('waterfall'), winner takes all	Combination of winner takes all and proportional	Proportional ('agile')	Possibly the most important determining factor
Perception vs Actuality	Perceived		Real/actual	
Propensity	High propensity	Medium propensity	Low propensity	The degree of scope for value to be created
Representivity	High representivity	Medium representivity	Low representivity	<u>Representivity[™]</u>
Granularity	High level of granularity ('agile')	Medium granularity (Blend)	Low granularity ('waterfall')	1934 Model/Step <u>Diagram[™]</u>

Who is Business Value Maximisation Framework (BVMF[®]) for?

Who is
responsible
for
maximising
value?

**Business Analysts (BAs)?
Project Managers (PMs)?
Product Owners (POs)?
Product Managers (PMs)?**

Actually, anyone interested and involved in gaining *much* more value from IT, digital transformation, i.e., business analysts, project managers, product owners, portfolio managers, programme managers, IT managers, IT directors, senior developers/technicians, CIOs (misnomer?), CxOs, business SMEs/secondees, business change/organisational design managers, relationship managers, etc.

Business value maximisation specialists (BVMSs) working with BVMF[®] can help us all how to work together in this endeavour to engender MBV

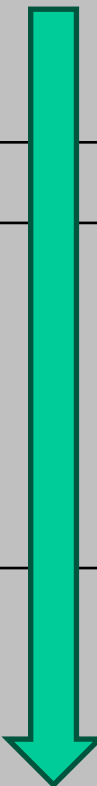
MaxVal's Services

Service	Status	Chargeable
Introduction to Business Value Maximisation Framework (BVMF[®])	Available	N
Value Clinic (60 minutes) with basic IT BV Capability Assessment	Available	N
Business Analysis primer (recap on basic BA skills)	Available	Y
Foundation training in BVMF[®] (15 hrs, certification as BVMS)	Available	Y
Intermediate training in BVMF[®]	Under development	N/a Ad hoc
Advanced training in BVMF[®]	Under development	N/a Ad hoc
Consultancy (supported by Do IT Better Consortium) with/out BVMF[®]	Available	Y
Value based career coaching and mentoring	Available	Y

Further analysis of ‘The challenge’

VISIBLE	LESS VISIBLE
Human Beings	IT/Computer Systems
Instantly flexible/changeable/updateable	Takes hours, days, weeks, months, years to change
Penetrable	Im/less penetrable
Complexly ‘layered’ with almost infinite dimensions to thinking and working	Multi layered
Can change t(r)ack in a microsecond; can change the question, paradigm, etc	Predefined to ask the questions based on X Y Z will never happen or X Y Z may happen under P Q R circumstances
Conscious – has sense of ‘sanity’, what’s likely and what’s not likely	Not conscious. Has no innate sense of sanity/common sense; only does what it’s programmed to do – to follow predefined paths/sequences. Can be made to simulate consciousness and sanity but it’s a repeatable procedure. This can have great positive value to save humans crunching billions of gigabytes of data – like AI for example...
Is reality. Has perceived reality and actual reality in contention. Has emotion and logic often in contention	Simulates reality (depending on Representivity (REPR) i.e., application area) - is artificial depending on REPR i.e., background and frontline REPR
Reasons (with the rational part of brain)	Can be programmed to ‘reason’ but it’s a simulation/emulation
Feels (with the emotional part of brain)	Doesn’t feel – if your bank debits you £1million instead of £1 the computer system <u>will only pick that up if it’s been programmed to do so</u> , to keep an eye on range of txns. If not, the £1billion will ‘happily’ go thru until a human being notices it. This is where BVMF [®] ’s FTM/OH-CI module comes in useful.
Can <u>tell</u> you what’s wrong (if you ask the right question)	Reverse engineering invariably required to work thru the less/invisibility, impenetrability factor/s and the hard-to-see complex layering
Processes thoughts simultaneously in a myriad of ways, directions, intensities, etc	Crunches (lots of) numbers very fast to simulate certain aspects of reasoning, artificially...

The Six Factor Cadence

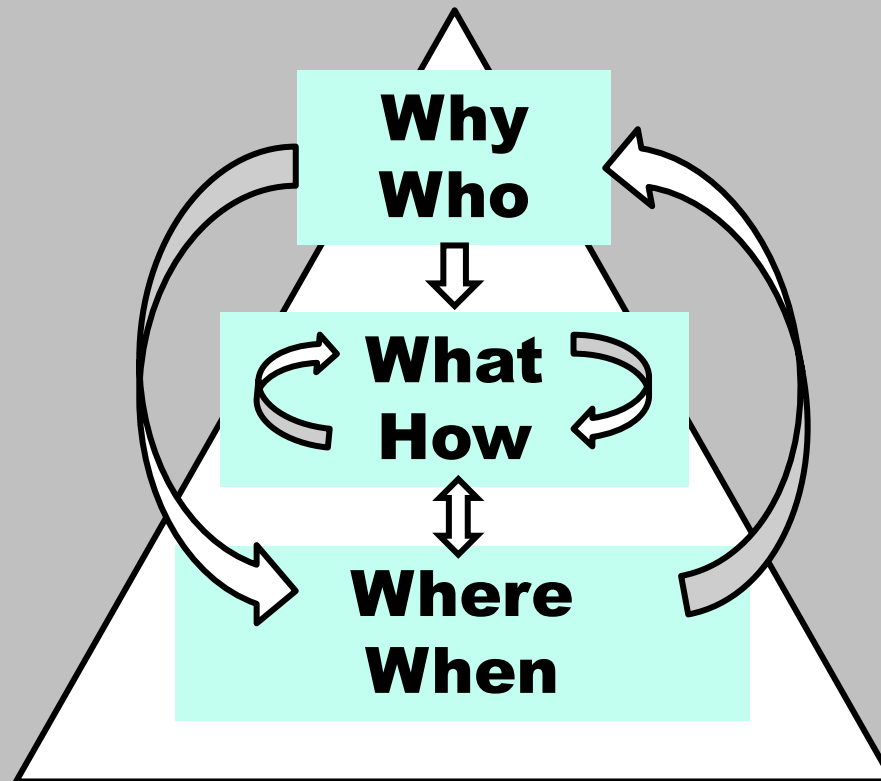
Why / Who		Along with the Why, one must consider the Who , especially on business IT projects because people involved have different perspectives and desires and you need to reconcile these two factors, or you can end up with more contention than you started with!
What		Next comes the What . What you need to do to bring about the vision, objectives of the project.
How		After the What, comes the How . Interestingly, when I have experimented with examples of what and how, I have seen that there is a recursive hierarchy present. I.e., every What has associated with it at least one How, sometimes more. And then, each of those component Hows forms a What to another set of Hows lower down the hierarchy. What and How are slightly similar but subtly different... i.e., from the above we could conclude that a How is (just) the detail of its prefatory What... maybe not always but extremely often it seems.
When / Where		These two may be important and can certainly make or break a project or exercise but are possibly not as critical as the why/who/what/how. However, never say never (as the Sean Connery film was entitled in 1983 in his James Bond comeback, admittedly with an Again on the end of the Never Say Never). So, anyway, don't underestimate the value of when and where!

Recently published in Brainz Digital Magazine as part of article
www.brainzmagazine.com/post/riding-the-storm-of-scepticism-and-apathy-for-innovators-entrepreneurs-and-pioneers-part-iii

To see more of my Brainz articles, click [Read more from David!](#) and scroll down. The first 'Riding The Storm' article (of 3) tells the story of my journey to develop BVMF[®] at [Riding The Storm of Scepticism and Apathy for Innovators, Entrepreneurs and Pioneers](#)

The Six Factor Cadence

Key points (good for BAs!) that often aren't aired...



**Context is
almost
always
everything**

Pros and Cons of Methods

Method	Pros	Cons	Notes
Waterfall	Predetermination is good. Leaf level process model plus data model plus glossary provide value	Slow to deploy value. Not the whole story	* Elephant missing BPR implicit
Agile	More business focused	** Promotes that working software is the objective veering away from real BV	It's not the software that produces the value! Golf clubs don't play themselves
*Elephant = the fundamental, underlying principles by which IT leads to business value **Explicit/deliberate/active obfuscation vs Implicit/incidental/passive inference/implication/effect	More collaborative	Knee jerk reaction to waterfall. Confusing terms: product, 'requirement', feature... user stories not clear on the ingredients of value	Confused team structure and roles: PO (no BA!), Prod Mgr, etc. Hypocritical on outcome vs output; 15k to 136k deployments at Amazon
	More granular	Not the whole story	* Elephant missing
	More responsive to changing requirements	Lost some of the con/sequential logic of waterfall	Threw the baby out with the bath water
	Handles emergence 'better'	Emergence is only valid in certain situations	BVMF's Value Landscapes help evaluate best methods
Wagile/hybrid/blended	Good compromise, more realistic	Not the whole story	* Elephant missing
Prince2, BRM, MSP, MoV, BABOK, etc...	They are trying to bring a logical approach	Not the whole story	* Elephant missing
UML/Use Cases	Better on interplay between human beings and IT func	Not the whole story	* Elephant missing Human/system interplay ok

A few more of BVMF[®] models, concepts and techniques...

Name	Function	Status
Representivity	Correspondence/alignment between real world process and data and how appropriately they are represented in an IT system	Foundation and Intermediate training
Predefinition, currency/changeability and control (P, C/C & C)	Degree of control a user has within a given time scale, including immediacy of mutual communication (IOMC)	Under development
Sole working vs team sizes	Optimisation of the balance between the single mind and larger teams	Under development
The IT Effectiveness Programme	Systematic way to improve value maximisation capability using the IT Effectiveness Spectrum assessment tool	Intermediate/Advanced
Assess, Boost, Check (ABC)	Way to boost value when it threatens to falter; works in conjunction with Crossword Diagram	Foundation
Croydon Facelift	Optimised way to work and communicate with users/SMEs and other involved parties	Drafted, under trial
Functional Creativity	To help the business community to envisage required IT functionality	Foundation
Taking the Rap	To help business managers avoid surreptitious inclusion of work practices into new systems	Foundation/Intermediate
Value focused 'requirements' definition	To develop atomic, value focused 'requirements' for each value ingredient	Foundation/Intermediate
Specific terminology definition	Yield more value from accurate terms definition with glossaries that equate business and IT terminology	Foundation

The Business Value Equation (3)

Example Based on Predicted and Actual Output, at Design and Run time

The existing business process (**BP/OAP/S-0**) is outputting **25** widgets a day; when reengineered (**BP/OAP/S-R**), it outputs 30 widgets a day

Now, when 're/automated' (to **BP/OAP/S-RA**), the business process's output will be equal to:

The output of the existing reengineered business process **BP/OAP/S-R** at **30** widgets

As boosted (or hindered) by the new IT functionality **IT FUNC-N** i.e., 30 * the IT functional boost factor (expressed as N.NNN), e.g., **30 * 1.333 = 40**

As supported/enabled (or degraded) by the new IT technicality **IT TECH-N** i.e., * 100% at full tilt (more likely to be 90% efficiency for 90% of the time i.e., 81%)

So, the equation we are looking at is: **30 * 1.333 = 40 * 81% = 32 ...**

The new level of 're/automated' output (**BP/OAP/S-RA**) = **BP/OAP/S-R** * (**IT FUNC-N** * **IT TECH-N**)

...we will ignore the other ingredients (**MAN**), **MISC** and **COST** for the time being...

Given that we are now outputting 30 widgets a week in our newly reengineered process, and we assume that **IT-TECH-N** will be 100% (is that realistic?) ... how much good will we do by introducing or upgrading the 'automation' of this process?

Upper and lower limits of the variables are important...

Transforming Output into Net Business Gain/Loss (BV EQ 4)

Process	Initial widgets output/volume	IT FUNC-N * N.NNN	IT TECH-N * NNN%	Resultant output	Net Business Gain/Loss over BP/OAP/S-R	% Gain/Loss over BP/OAP/S-R
BP/OAP/S-0 un-reengineered process	25			25		
BP/OAP/S-R reengineered process	30					
The transmission effect of (IT FUNC * IT TECH) on the BP/OAP/S will much depend on the degree and nature of the existing and incoming 'automation'...						
Output can be calculated into revenue or profit so ROI can be calculated, i.e., net business gain in monetary terms...						
Make these calculations at Design time, Test time, Run time, etc.						
IT FUNC should not be just another line on the 'project' plan... it's the project or sprint's major opportunity to create value by boosting the BP/OAP						
Use the Archimedes principle against the ingredients' Propensities to measure your finally manifested result to assess how your IT Functional boost turned out ... or was it your improved BP/OAP/S that did it, or even an improvement in IT TECH?!						
includes less predictable/exceed expectations output	30	1.5	81	36.5	6.5	+21.7%
NB these numbers do not take (MAN,) MISC and COST into account... you can add MISC, turn it into money, take away COST, get to profit...						

The Business Value Equation (5)

Considerations

Be aware whether you're measuring delta/change value or absolute/ongoing value... i.e. the incremental value of moving from T1 to T2, say from 30 to 40 widgets a week at a unit cost of £5 down to £4.50, or the ongoing value of 40 widgets a week at a unit cost of £4.50...

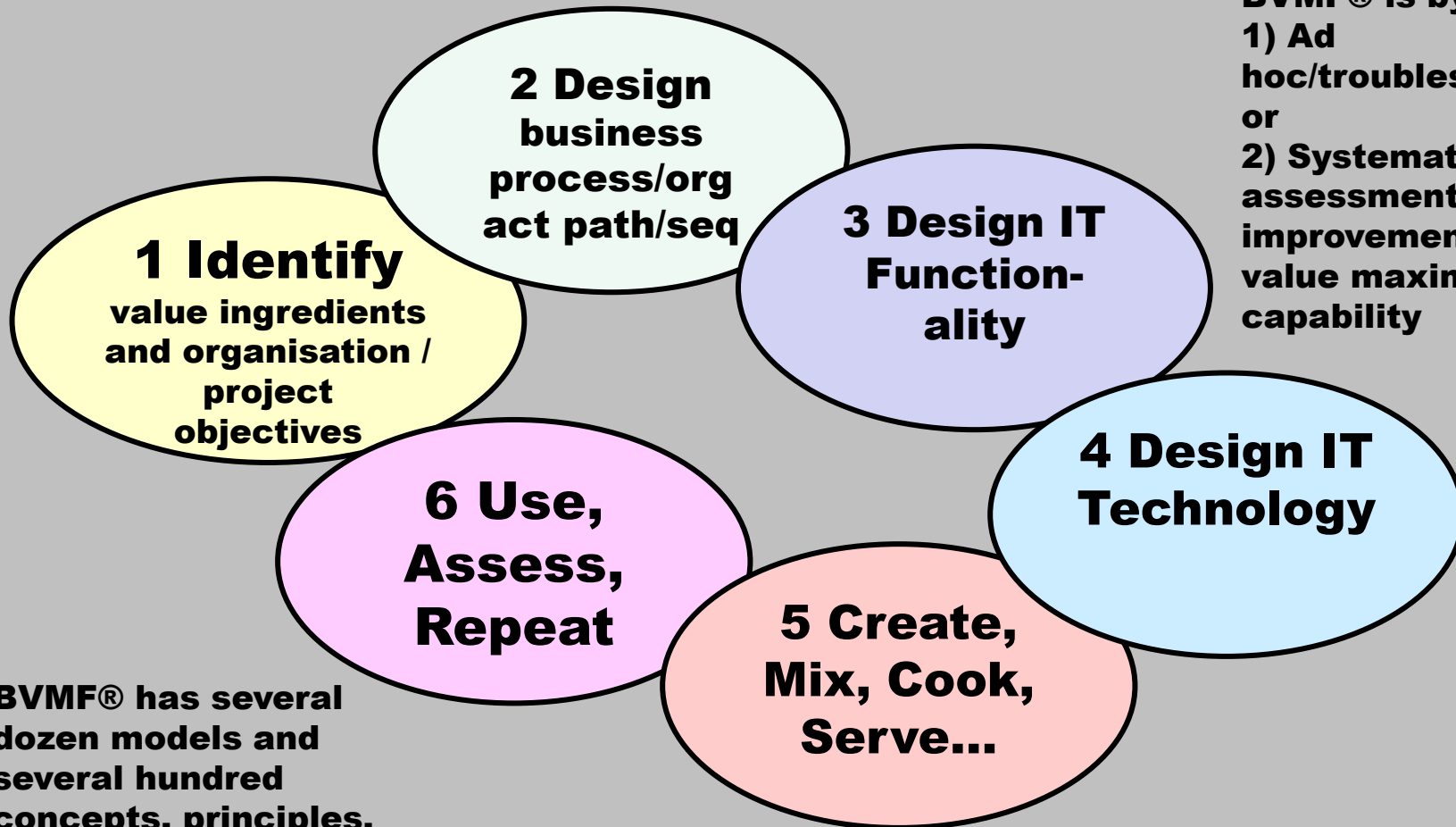
We assume here that the full effect of IT FUNC operates on BP/OAP boosting (or hindering) it. Depending on the degree and nature of any 'automation' the effect of IT FUNC will typically not be 100% but may be 85% for example...

Successive releases of business process and IT systems include changes to processes (BP/OAP/Ss) and IT systems and so some value gains will be due to pure process (BP/OAP/S) upgrade irrespective of any improvement in IT FUNC

What we want/expect from IT FUNC and what we get are two different things, usually! Design time expectations may not be realised at Run time

You will likely struggle to apply this equation at a fully granular level (you can work down from high level process all the way to function, screen and even field level, in theory) but doing it at a sensible level will invariably yield great dividends in Business Value

Systematic Application of BVMF®



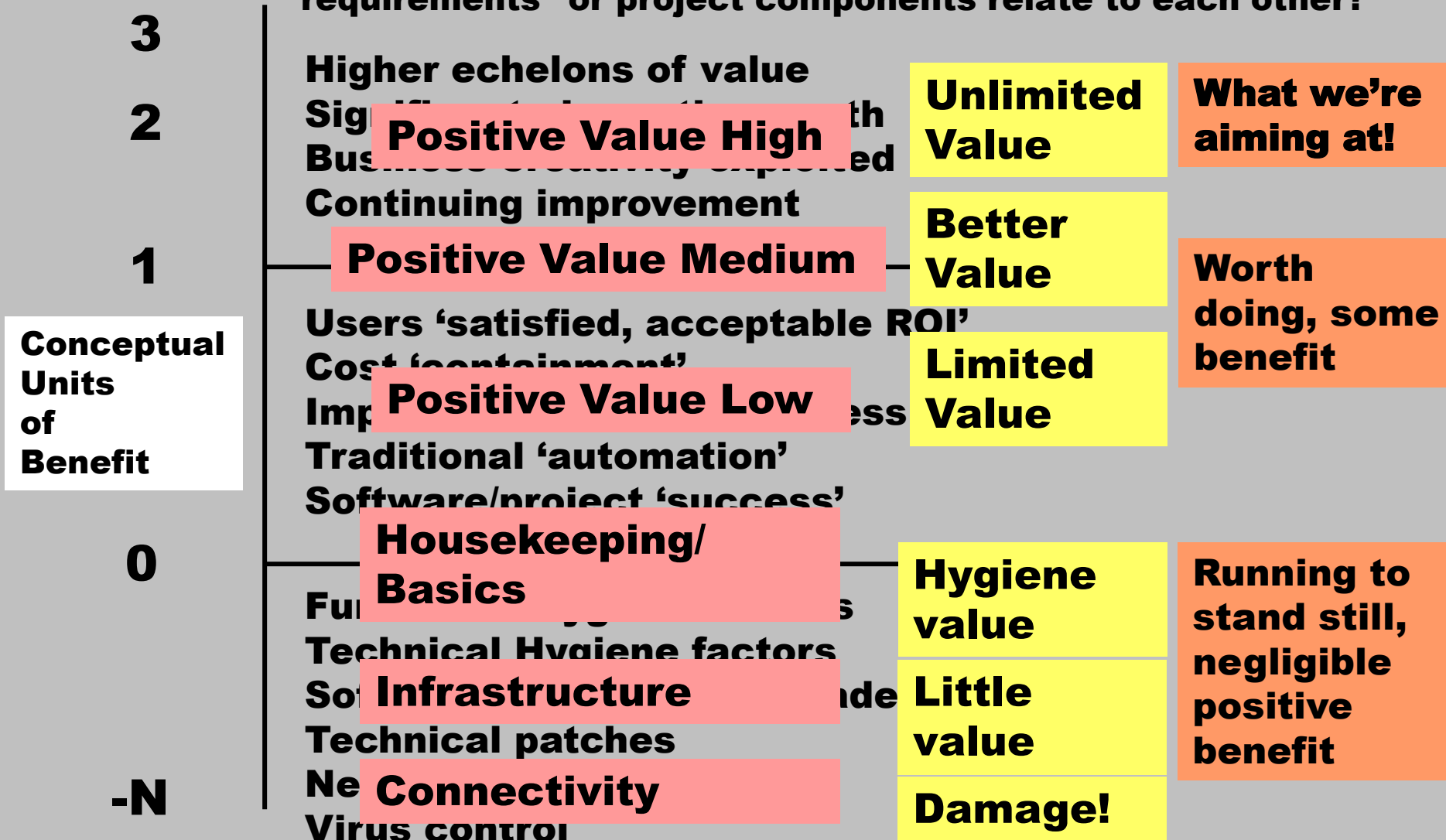
**Application of
BVMF® is by:**

- 1) Ad hoc/troubleshooting or**
- 2) Systematic assessment and improvement of value maximisation capability**

BVMF® has several dozen models and several hundred concepts, principles, guidelines and techniques (CPGTs) arranged into modules

The Conceptual Units of Benefit (CUB) Ladder (1)

What degree of value can we expect from each project, project element, sprint, etc; at best, and at worst? How do the functions, “requirements” or project components relate to each other?



The Conceptual Units of Benefit (CUB) Ladder (2)

Score 'requirements', functions and project elements at design and run time. Use as adjunct to MoSCoW coupled with who, why, what, etc.

3

Positive Value Factor: High
Satisfier++/Motivator++/Wow

BP/OAP/S, IT FUNC

Exceedingly Worthwhile (expectations exceeded)

2

Positive Value Factor: Medium
Satisfier+/Motivator+/Exciter/Delighter

BP/OAP, IT FUNC

More than Worthwhile (expectations met/exceeded)

Positive Value Factor: Low
Satisfier/Motivator/Normal/Want

BP/OAP, IT FUNC

Epics, features/themes, user stories

1

**Conceptual
Units
of
Benefit**

Worthwhile (expectations met)

Enabler/Dissatisfier/Hygiene/Basic

**BP/OAP, IT FUNC, IT
TECH**

Tech debt, vulnerabilities, live issues

0

No Value (Neutral)

**BP/OAP, IT FUNC, IT
TECH**

Negative Value (Waste)

**You can also consider MAN,
MISC and COST. And try for
granular application...**

TECH

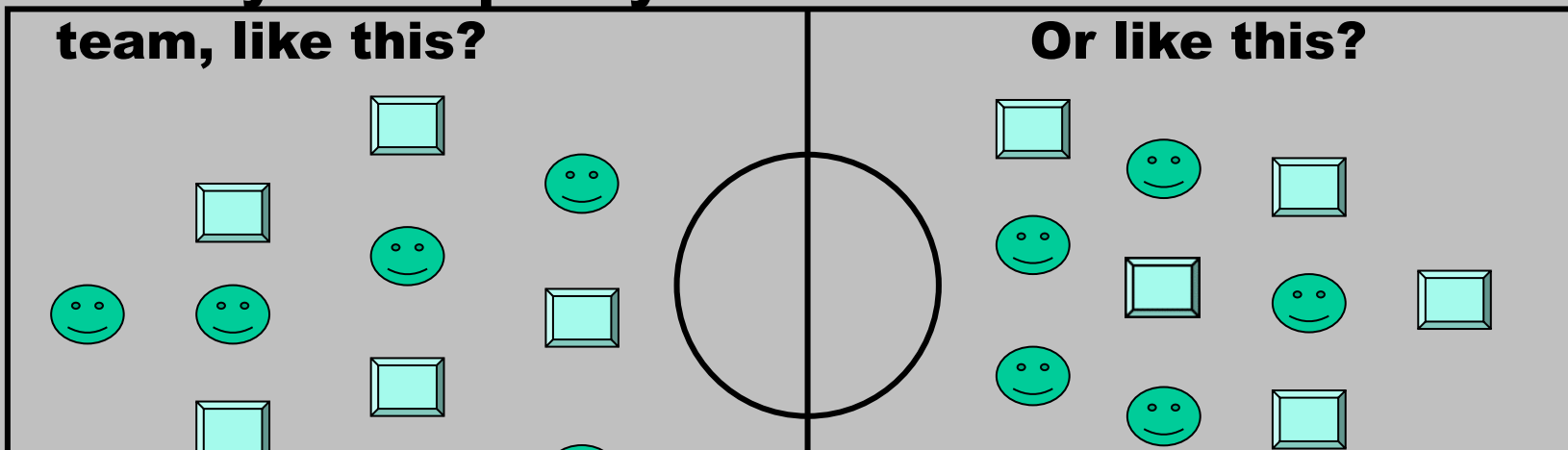
With grateful
thanks to
Hertzberg, Kano,
VSA&M and Lean.
Beware, these CUB
scores continually
move downwards –
sad fact of life!

Optimal Human-Computer Interaction using “Football Team Management” to balance our team for maximum performance

Value arises from the combined strength of the players...

Would you compose your

team, like this?



BVMF[®] has a variety of models and techniques to help address this challenge including Interfacial Sins Avoidance (ISA), macro to micro correspondence (MTMC), value focused functional design (VFFD), etc...

Boeing did this very badly with their 737 Max MCAS system. Pilots and system were NOT blended together in an effective fashion. Pilots were not properly trained, and the ball (of control) could not be passed from system to human effectively at the crucial (run) time when human override was required. Sadly, 346 people died.

Sins Avoidance (FTM 2)

To Avoid Value Loss at Micro Level

(micro value must play out macro value or (too much) value will be squandered)

- **Don't force the user to enter incorrect information** - e.g., displaying mandatory drop-down lists where no one value is the one the user requires! **Ask the right questions.**
- **Don't wipe the user's data** - the user has a whole screen of information and bits of it are flagged up (user may need to scroll through them) and most or all of their data has been wiped out or altered
- **Don't make the user guess; be *specific*** - e.g. tell them the required form of an entry *before* input, rather than highlighting an error *after* it has occurred (did Boeing make the 737 Max pilots guess?!) **Avoid conflation with imposed consequence/s**
- **On a brighter note, a great example of how to do it is the Royal Mail's post code finder – it's a joy!**

Be clear what info you ask for, what you will do with it and help the user to be confident you will use it constructively

IT is potentially highly dangerous... the more you 'automate' the more damage occurs when things go wrong, as they often do! Many organisations still don't get this.

In 2017, British Airways cancelled 726 flights when their check-in system failed – there was nothing wrong with the planes! Cost £80m.

In 2018, a report said, "TSB lacked common sense before its IT meltdown". Cost £100m.

From 1999 to 2020, the Post Office persecuted and jailed many of its sub-postmasters for fraud which turned out to be the fault of its Horizon IT system. Cost £100m.

Business Practice and Contingency (BP&C) helps deal with this...

Computer crash hits thousands of customers at the Post Office

THOUSANDS of people were kept waiting for their benefits and pensions yesterday after the Post Office's computer system crashed.

Customers were told staff could not deal with anything which required a computer, including posting parcels.

It was the 'fourth major service interruption' in the Post Office's electronic systems in nine months, according to Consumer Focus spokesman Andy Burrows. The system crashed yesterday morning and was not resolved for several hours.

'Customers need Post Office services, including the collection of benefits and pensions, to be reliable and resilient,' said Mr Burrows.

'The problems seem to be nationwide and have resulted in several hours of inconvenience for Post Office customers.

'We have heard some branches have decided to close early for the day – leaving customers without access to services. Most branches have only been able

by **SONIA ELKS**

to accept cash payments and do manual transactions such as selling stamps.

'We will be meeting with Post Office Limited to understand how the problem will be addressed.'

A Post Office spokesman apologised to customers for the problems.

He added: 'Post Office branches remained open and arrangements were put in place to ensure that special cash payments were made to pensioners and benefit claimants using the Post Office Card Account.

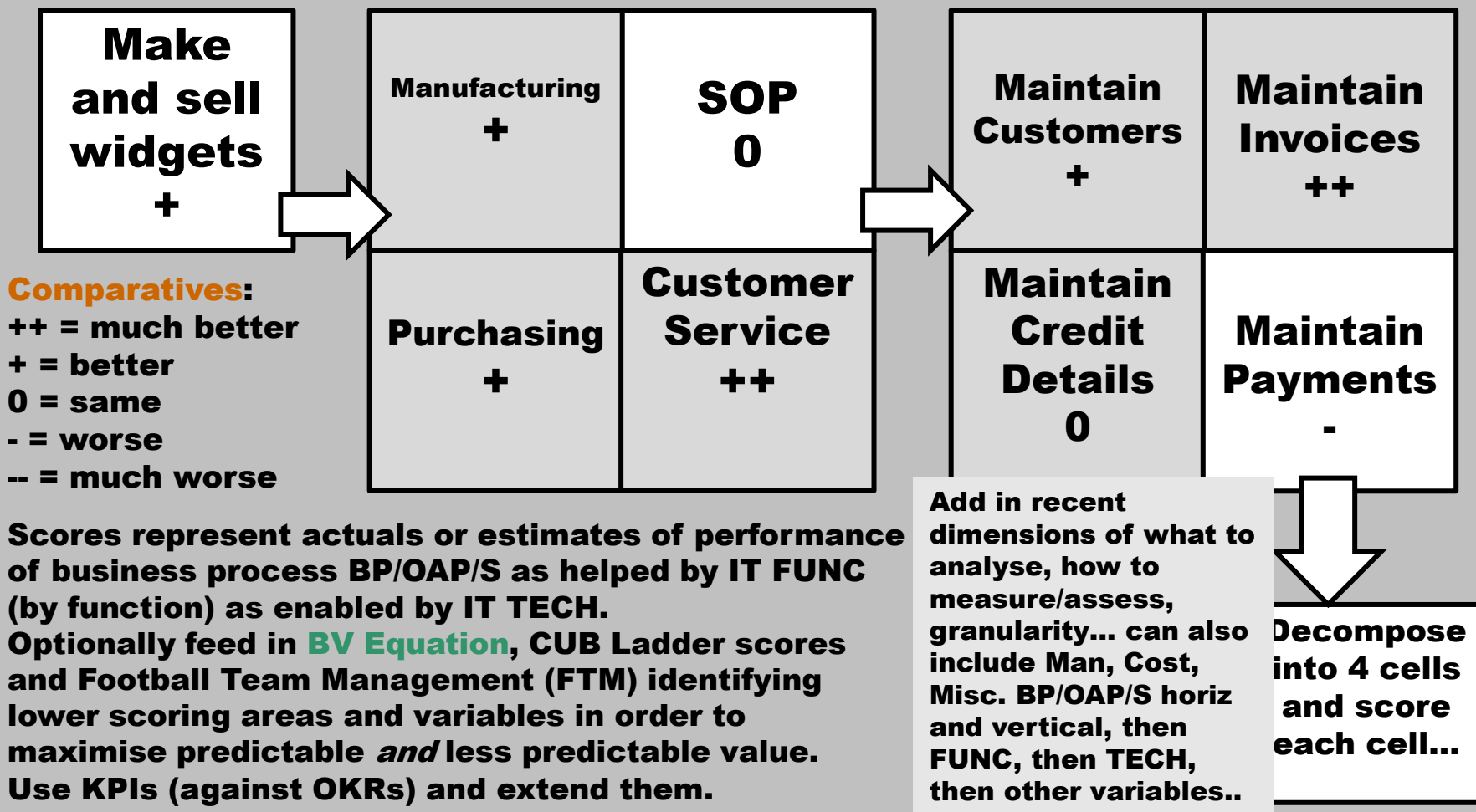
'Post Office ATMs, Post & Go services and Paystation bill payment and E-top up transactions were unaffected by this problem.

'Services have now fully been restored and customers are able to complete all transactions across the Post Office network. We are continuing to monitor the situation closely to make sure our services remain available as normal.'

**Although Peter Drucker
said “You can only
manage what you can
measure” which is broadly
true, you can maximise
each successive tranche
of value using
comparatives and sensible
‘handles’...**

Continual Improvement with the Crossword Diagram

For **'putting a handle'** on value, to identify and rectify low value scores, to make sure the new world is *much* better than the old



Crossword Diagram

Dimensions of Application

**Granular diagnosis and
rectification/optimisation
of value gain/loss**

**Manufacture
and sell
widgets**

**Manufacturing
+**

**SOP
0**

**Maintain
Customers
+**

**Maintain
Invoices
++**

1 by BP/OAP/S

**2 by elements:
MAN
IT FUNC
IT TECH
MISC
COST**

**3 by IT FUNC
levels: module,
function,
form/screen,
field,
validation/logic/
business
rules/coded
process**

**4 at design, test, run
time...**

**5 at/for each Step
(iteration/increment)**

Assessment Criteria:
Time to enter data and accuracy of MI
Effectiveness of process and IT
functionality
Presence of 'bugs'
Need for surrogates, workarounds...
Presence of sins (errors) at micro
level... etc...

Some Illustrations of the Power

A construction company, a retail merchandising brokerage, a telecoms organisation and a university have all had deep rooted business-IT problems resolved or ripe opportunities exploited by BVMF[®]

The European Purchasing Manager of a multinational manufacturer said, “Your business value approach has helped to get us more value than we thought possible.”

The MaxVal website has case studies and more client comments on it...

Eras of IT Business Value and the 20-year time lag

Era	Date	Characteristics & Events	Use	Methods & BVMF	Results
0	1960-1979	Mainframes, IBM, DEC PDP	Payroll, batch	Basic	Average. Pundits sceptical
1	1980-1999 1996	Minis, Micros, Desktops, Apple, Visicalc, Vax/Vms (DEC), Unix, MS DOS, email, dawn of internet/web Research shows business-IT hybridism is highly powerful Saying there's problem/telling the truth is too controversial (FT IT Review) IT doesn't serve business well	RDBMS, client server, 3GL, 4GL/GE	JAD/RAD SSADM Waterfall BPR Successful multi faceted business-IT 'hybridism' leads to birth of BVMF®	Poor success Takes too long Not business focused Many failures
1	1999	IBM survey on results of ERP BCS Business-IT Bridging Group starts Agile invented	ERP, BPR	Software implementation	Organisations are missing out on value by not reviewing their processes
2	2000 2003	David Taylor, President of IT Dirs Assoc, says "We need a whole new approach." BCS finally admits there is a problem	"We need something different"	I said 'Yes David, that's why I've developed BVMF!'	Agile authors think software is <i>the</i> problem
2	2000-2019	Agile, Microsoft prevalence Business becomes client of IT (you hope...) IT starts to serve business as a supplier to a client	SQL Server MS Dynamics	DevOps (hm...) BVMF® refined	IT gets more business for focused, continuous, granular (hooray) – but misses the main story; agile 'smudges' value
3	2020-2039	We are here! Business-IT collaborate, become partners which leads to <u>much</u> more value	Digitisation and 'digital' transformation	Increased interest arises in BVMF®	In Era 3 – we are finally getting there...

Aspects of Value

Ways of looking at value and understanding it

Two key Landscape Value Characteristics (LVCs)

Above or below the value (Conceptual Units of Benefit) line:

- **Hygiene value**
- **Positive value**
- **Negative value**
- **Arbitrary value (starts neutral, becomes potentially Negative)**

Proportionality:

- **First past the post; all or nothing**
- **Proportional**

Business Value Maximisation Framework (BVMF[®])'s Structure of Components

Analysis of problems, symptoms and causes

Macro level, outline solutions (models and modules) with pointers to micro level solutions

Micro level solutions: concepts and principles (understanding the problems and focus needed) and guidelines and techniques (things to *do* to resolve the problems), structured into modules

Concepts, Principles, Guidelines & Techniques (CPGTs)

**Value
Identification &
Maximisation**

**Functional
Concepts**

**Principles
of
Automation**

**'Bridging'
skills, the
value role**

**Decision
Strategy**

**Business
Practice &
Contingency**

**Culture
&
Assimilation**

**Models, modules and techniques are being continually
developed and refined...**

Business Value Maximisation Framework (BVMF®)

Is a comprehensive set of fundamental, underlying principles by which IT business value is maximised, practically and pragmatically

Underpins and transcends Waterfall, Agile, Wagile, Prince2 and other approaches and methods, significantly, even dramatically, increasing net business (organisational) gain

Consists of several dozen models (more than 100 when variations are included) and several hundred (approx. 450) techniques (concepts, principles, guidelines and techniques; abbreviated to CPGTs) – the models clarify the problem/challenge and point to a solution at a macro level; the techniques are things you focus on and do to solve the problem/s

Uses understandable, everyday analogies to illustrate its principles and yet has been developed from more than 35 years of first, second and third hand experience and research, all reconciled and verified using standard philosophical logic like Socratic questioning and Aristotelian syllogism coupled with techniques like hypothesis and observatory and inductive refinement. Case studies are also continually providing input and feedback

Is as much an ethos, attitude and approach (business value focused) as a set of models and techniques

Why Business Value Maximisation Framework (BVMF)[®] is different

It's the only fully dedicated, fundamental, understandable and usable set of principles for IT business value maximisation known to exist

It does not reinvent the wheel – you use it with Waterfall, Agile, Wagile, Prince2, everything... and it makes those approaches/methods significantly, even dramatically, more effective

It's been developed from first, second and third hand experience coupled with philosophical logic and reasoning (per Aristotle, Socrates and Plato) – practice leads to hypothesis/theory which leads on to improved practice and the cycle repeats – it never stops progressing

Key Points about BVMF[®]

BVMF[®] does NOT replace existing/traditional/conventional methods, practices and roles – it augments, completes, focuses and refines them. It sets out the principles of value maximisation providing a pragmatic framework to help implement “solutions”. It seeks to SIMPLIFY rather than complicate.

BVMF[®] fundamentally aims to address IT enabled *business* process but is also substantially appropriate to other software enabled technologies like aircraft operation, building management systems and IoT. It can also be useful on non-IT projects.

This slide pack has been a basic introduction. BVMF[®] has much more to offer as it contains:

- **Several dozen models (in PowerPoint) – these define the problems and offer a macro level ‘solution’ for the micro activities (CPGTs) to support**
- **Several hundred concepts, principles, guidelines and techniques (CPGTs) (in PowerPoint and Word) – these are the micro level points you think about, focus on and do to enact the macro level ‘solutions’ presented in the models**
- **A number of models and approaches to implementing BVMF[®] within a systematic programme to augment the default ad hoc, tailored approach where you choose to use any of the framework’s tools to help you raise your Information Systems Business Value (ISBV)[™]**