IT Value Maximisation
for
Business Analysts

A Closer Look At The Elephant
Part II
More of the Basic Principles

for
IIBA UK North & Scotland

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25th January 2024

Whistle Stop History Tour

1970 until 1985 I work in marketing information, analysis and research

1981 I write my first professional computer program - it gets a good result

1983 until 1992 I realise we need better ways to mediate between business and IT

1993 I start documenting Business Value Maximisation Framework (BVMF)®

1995 my first article is published in Corporate IT Strategy

1996 my article for the FT IT Review 'A New Breed of Friendship (between Business and IT' is deemed "good, but too controversial" to print!
my letter 'Not Ignoring Is Not Enough' is published in Computing magazine

1999 I join the new Business IT Bridging Group at the BCS

2000 agile is invented, D Taylor calls for 'a whole new approach' & I agree!
IBM publishes watershed ERP survey...
I give my first BVMF® presentation at BCS Bridging Conference

2001 I present BVMF® to BCS PROMSG members (2015 reprise declined)

2003 the BCS project management group FINALLY admits there is a problem!

2021 I experience a significant upswing in interest in BVMF® (18 years on!)
I start mentoring BAs under the IIBA UK mentoring scheme

2022 two attendees at GovNet 2022's conference kindly say "David, you were too early with BVMF® in the 1990s" – 'phew' I think
I train and accredit the first Business Analyst in Foundation Level BVMF®
the BA is now (also) a Business Value Maximisation Specialist (BVMS)

2023 my 3-article Riding The Storm series is published by Brainz online magazine
I run a Bus Val Max clinic at GovNet 2023

2024 the second part of my article on The Golden Value Circle™ appears at OAG
we're running a free Bus Val Max clinic at GovNet 2024's conference in May
we're participating in the Commonwealth 75th Anniversary celebrations
advising on Bus Val Max for digital transformation in November

Poll 1

Which of my previous events/webinars on IT Business Value Maximisation (BVM) have you attended/watched, articles seen/read, podcasts listened to, etc?

The First Question

If I want maximum business value (MBV)

from IT enabled process/es, '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?!

Note: it's not 'What flavour of agile shall we use?'!

Specifically

- What *is* value?

- How does value arise?

- Where will the value come from
(how much value 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

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

Will we be better off?
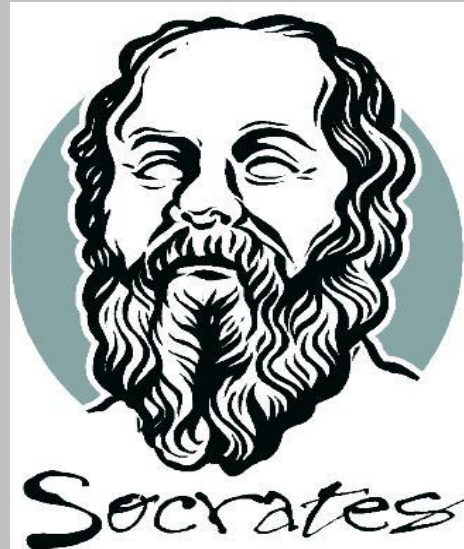
By how much will we be better off?
What's the likely net gain?
Latterly, did we get it?

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

How will we stay the best off possible?

Right, so, with thinking caps on…

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

The Mighty Cruel Ratio

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

David P Jacobs, 2022

Bridging the Gap
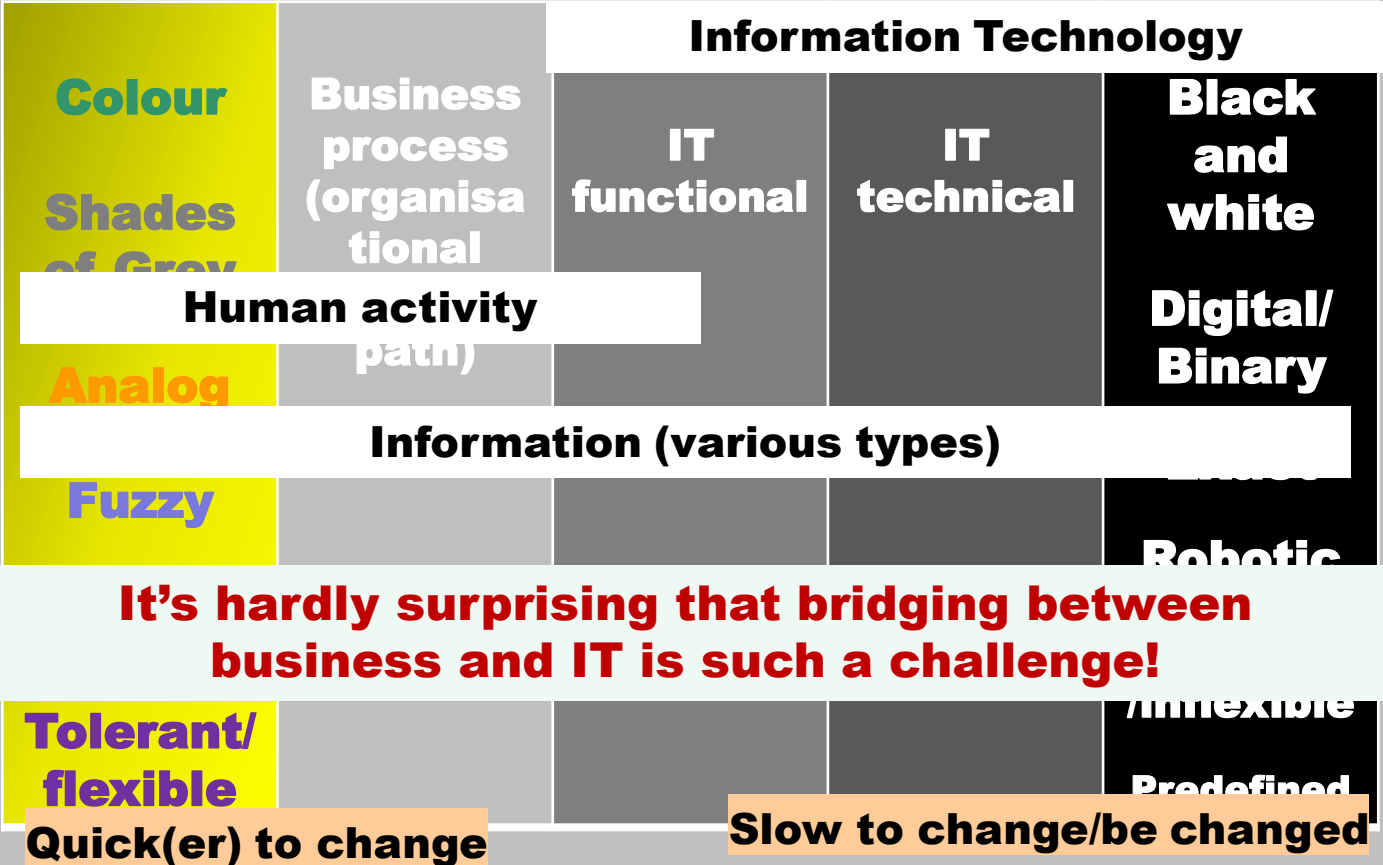
The Activity/Role Spectrum (simplified)

Busin... real w... people

<-- Antithetic! -->

IT/ computers

	Business process (organisa tional path)	IT functional	IT technical	Information Technology
Colour				**Black and white**
Shades of Grey				
	Human activity			**Digital/ Binary**
Analog				
	Information (various types)			
Fuzzy				
				Robotic
Tolerant/ flexible				**/inflexible**
				Predefined

Markets

Computer hardware

It's hardly surprising that bridging between business and IT is such a challenge!

Quick(er) to change

Slow to change/be changed

9

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	Impenetrable (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 level of 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 will only pick that up if it's been programmed to do so, 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 tell 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…

Elephant Maxims

The IT value jig-saw has pieces missing or not fitting properly…
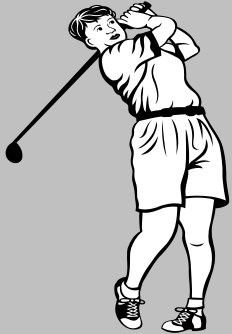
A set of golf clubs is not the primary determinant for the golfer winning or losing the match/tournament

You would not drive your car all the way to work in reverse (although occasionally reverse gear *is* valid), and the car is <u>not</u> the journey!

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

What <u>is</u> Value?

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

<u>plus</u>

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 <u>predict</u> <u>all</u> value and it accrues (or gets wasted) at <u>micro</u> level – 'business cases' have tended to be "macro-assumptive" and bounded/limited ...

Value is <u>net</u> benefit – <u>all</u> 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'

Value Delivery Model (simplified)
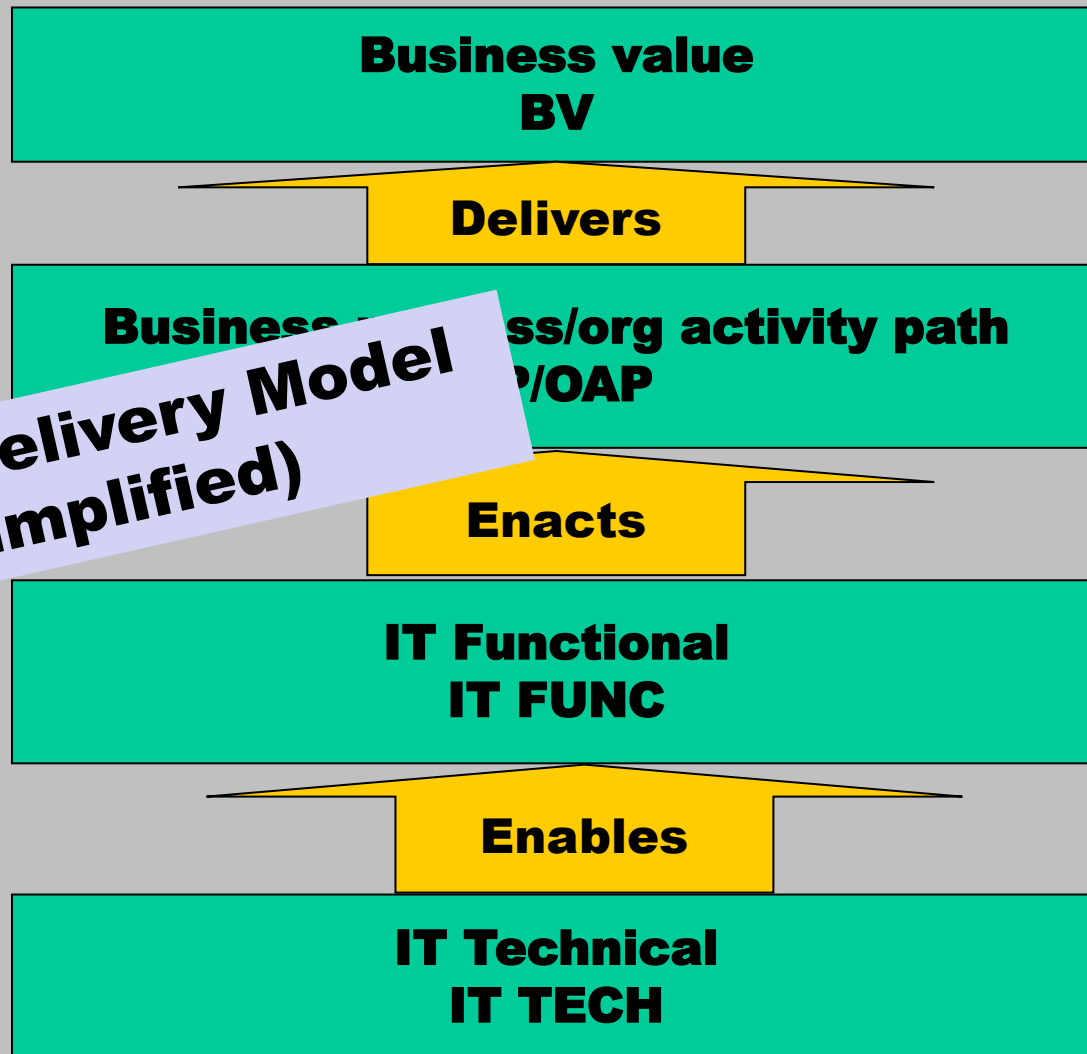
Business value BV	Improved revenue/margin, productivity, information quality, cost reduction, etc.
⬆ **Delivers**	
Business process/org activity path BP/OAP	Produces the value
⬆ **Enacts**	
IT Functional IT FUNC	What IT <u>does</u>
⬆ **Enables**	
IT Technical IT TECH	What IT <u>is</u>/how IT <u>works</u>

How value arises
at run-time, auto-assisted

Business value BV
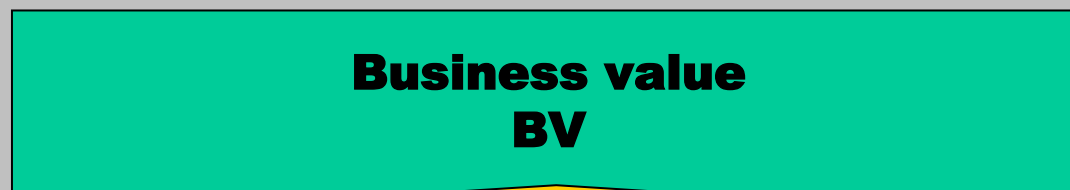
↓ **Delivers**

Bus process/activity path

↓ **Enacts**

Value Delivery Model (VDM)

Manual MAN	⟷	IT Functional IT FUNC	⟷	Equipment function (electronic, mechanical)

↑ **Enables**

IT Technical IT TECH

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

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

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

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

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

IT Technical IT TECH

Will be enabled by

Manual MAN

IT Functional IT FUNC

Equipment function (electronic, mechanical)

Value Conception & Design Model (VC&DM)

Will be enacted by

Business process/org activity path BP/OAP

Will be delivered by

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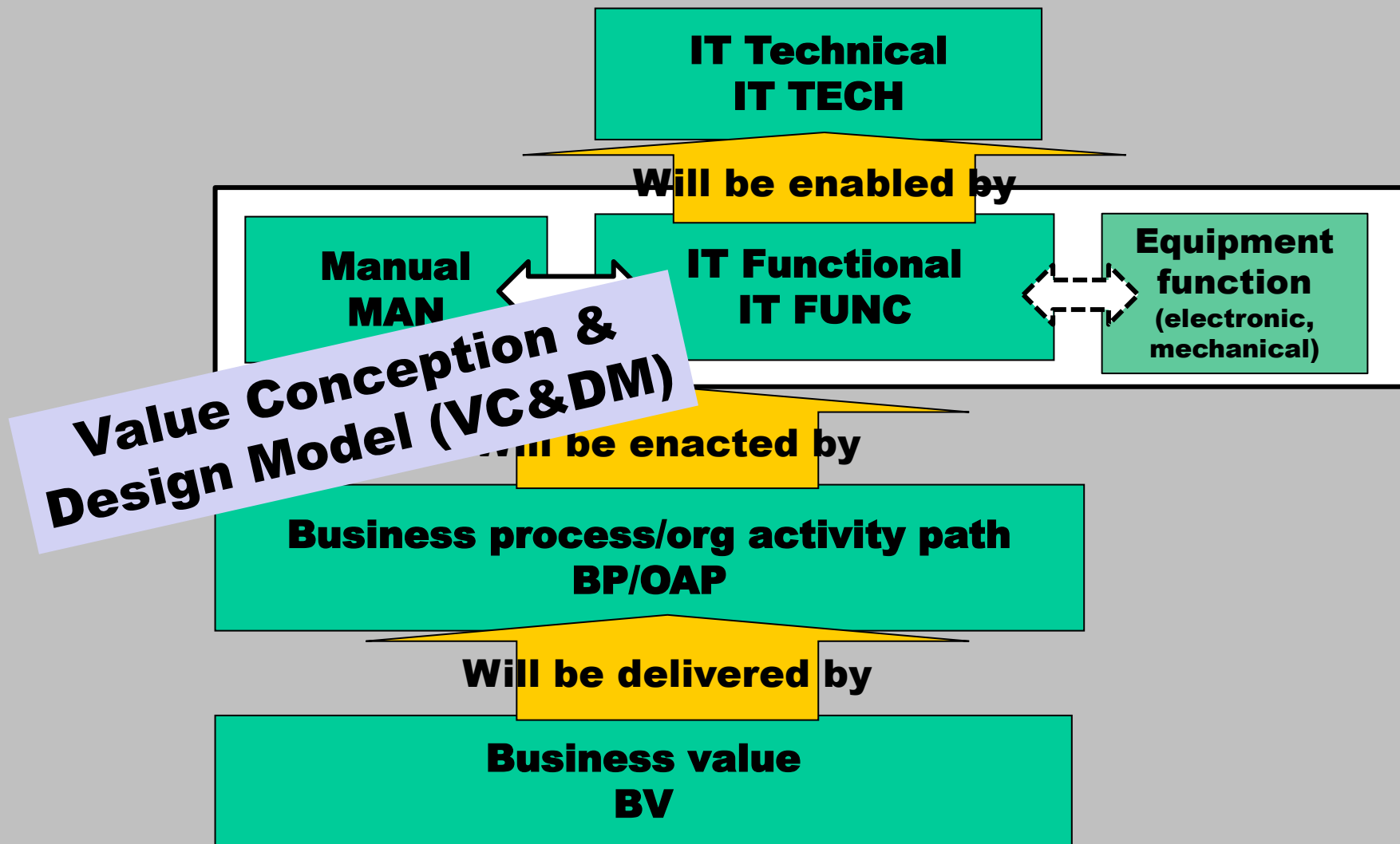
Where will our value come from?
What will the ingredients be?
How much value can we get from each ingredient, i.e., what's the Propensity?*

Ingredient Description	Ingredient Name	% of Total Value to be Realised*
Business process/org activity path (incl. creation and use of information INFO)	BP/OAP	25?
Human ~~activity~~ ... 're' and		10?
		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 ...

Part II

We got to about here in Part I ...

Poll 2

Key Question:
How much better off will we be?

What do we expect the power of our new IT functionality to be?
(the value of IT FUNC-N)
How much value and uplift in bus process/org act path performance,
do we expect to get?

In an averagely worthwhile, acceptably successful project/piece of work, 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, currently and wrt the near future...

| What is the <u>general</u> number?

What do we want *our* number to be – on our specific project/s?

How will we get there? | +10%
+25%
+50%
+75%
+100%
+125%
+???% | *1.1
*1.25
*1.5
*1.75
*2.0
*2.125
*?.??? | Will we be faster, more accurate, better quality, more available/accessible/centralised? Are we prepared for the negatives as one <u>tiny</u> fault can cause huge damage? And wrt visibility, computerised functionality (and errors) can be harder to see for the humans involved... |

Please type your answer into the Chat ...

Introduction to the Business Value Equation (BV Eq)

How much better off do we expect to be? Running the equation to optimise its output (outcome!)

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

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

Textually:
Net **Business Gain/Loss (NBG/L)** is proportional to the power of the **reengineered business process/org activity path (BP/OAP-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:
$$\text{NBG/L} \propto \text{BP/OAP (R/A)} * (\text{IT FUNC} * \text{IT TECH}) +\!\!- \text{MISC} - \text{COST}$$

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]...

The Business Value Equation (3)

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

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

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

The output of the existing reengineered business process BP/OAP-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-RA) = BP/OAP-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…

Process	Initial widgets output/ volume	IT FUNC-N * N.NNN	IT TECH-N * NNN%	Resultant output	Net Business Gain/Loss over BP/OAP-R	% Gain/ Loss over BP/OAP-R
BP/OAP-0 un-reengineered process	25			25		N/a
		1.333	50	20	-10	-33.3 (worse than ever was!)
BP/OAP-RA includes less predictable/exceed expectations output	30	1.5	81	36.5	6.5	+21.7%

The transmission effect of (IT FUNC * IT TECH) on the BP/OAP 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 that did it, or even an improvement in IT TECH?!

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…

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 <u>full</u> 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/OAPs) <u>and</u> IT systems and so **some value gains will be due to pure process (BP/OAP) upgrade** irrespective of any improvement in IT FUNC (IT FUNC = current power, IT FUNC-N = future power)

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 <u>fully granular</u> 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...**

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?

N

3

2

Higher echelons of value
Sig... **Positive Value High** ...th
Bus... **Positive Value High** ...ed
Continuing improvement

| **Unlimited Value** | **What we're aiming at!** |

1

Positive Value Medium

| **Better Value** | **Worth doing, some benefit** |

Users 'satisfied, acceptable ROI'
Cost 'containment'
Imp... **Positive Value Low** ...ess
Traditional 'automation'
Software/project 'success'

| **Limited Value** |

Conceptual Units of Benefit

Housekeeping/ Basics

0

Fur... ...s
Technical Hygiene factors
Sof... **Infrastructure** ...de
Technical patches
Ne... **Connectivity**
Virus control

Hygiene value	**Running to stand still, negligible positive benefit**
Little value	
Damage!	

-N

BVMF
BUSINESS VALUE MAXIMISATION FRAMEWORK

MAXVAL CONSULTANCY LIMITED

3

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

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

BP/OAP, 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)

BP/OAP, IT FUNC

1

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

Epics, features/themes, user stories

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

Not worth it (expectations not met)

Negative Value (Waste)

BP/O... TEC...

You can also consider MAN, MISC and COST. And try for granular or big picture application...

With thanks to F. Hertzberg, Kano, VSA&M, Lean, R. Wallsgrove & C. Ashton.
Beware, these CUB scores continually move downwards – sad fact of life!

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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	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
**Explicit/deliberate/ active obfuscation vs Implicit/incidental/passive inference/implication/effect	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/blend	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

Macro/big picture/high	Mid-level	Micro/detail/low
General/generic		Specific
Predictable	Less predictable	Unpredictable
Design time	Dvt & Test time	Run time
Predicted/expected/forecast		
Tangible		
Quantifiable		ble
Quantitative		
Conceptual/abs		ysical
Negative		+, +++
Dependent		
Objective		
Absolute		
Ongoing/at a po		lelta
Objectives part		ceeded
First past the po		(possibly agile)
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…
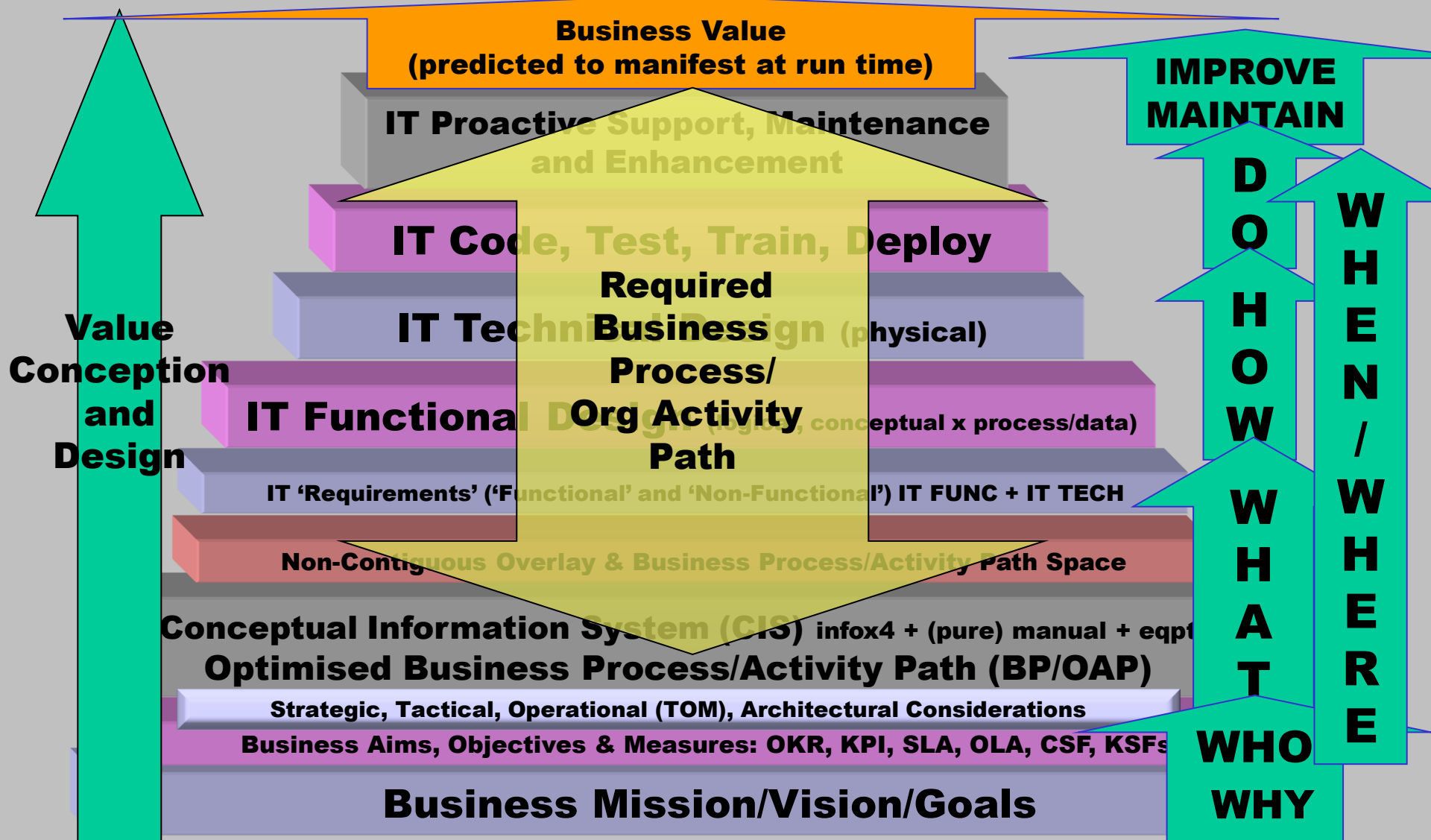
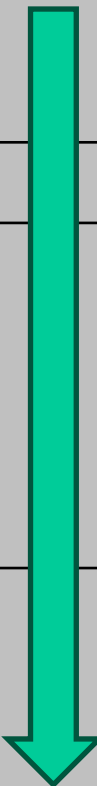## Types, Dimensions and Characteristics (Measures) of Value

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, Crossword Model™ (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) Ladder™
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	Objectives 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	Representivity™
Granularity	High level of granularity ('agile')	Medium granularity (Blend)	Low granularity ('waterfall')	1934 Model/Step Diagram™

Value Conception and Design Layers of Focus (LoF)

BVMF® BUSINESS VALUE MAXIMISATION FRAMEWORK

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Business Value (predicted to manifest at run time)

IT Proactive Support, Maintenance and Enhancement

IT Code, Test, Train, Deploy

IT Technical Design (physical)

IT Functional Design (logical, conceptual x process/data)

IT 'Requirements' ('Functional' and 'Non-Functional') IT FUNC + IT TECH

Non-Contiguous Overlay & Business Process/Activity Path Space

Conceptual Information System (CIS) infox4 + (pure) manual + eqpt

Optimised Business Process/Activity Path (BP/OAP)

Strategic, Tactical, Operational (TOM), Architectural Considerations

Business Aims, Objectives & Measures: OKR, KPI, SLA, OLA, CSF, KSFs

Business Mission/Vision/Goals

Value Conception and Design

Required Business Process/ Org Activity Path

IMPROVE MAINTAIN

DO HOW WHAT WHO WHY

WHEN/WHERE

The Six Factor Cadence

Why / Who	⬇	<mark>Along with the Why, one must consider the Who</mark>, 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		<mark>Next comes the What</mark>. What you need to do to bring about the vison, objectives of the project.
How		<mark>After the What, comes the How</mark>. Interestingly, when I have experimented with examples of what and how, I have seen that there is <mark>a recursive hierarchy</mark> 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		<mark>These two may be important</mark> 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, <mark>don't underestimate the value of when and where!</mark> <u>Context is almost always everything!</u>

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
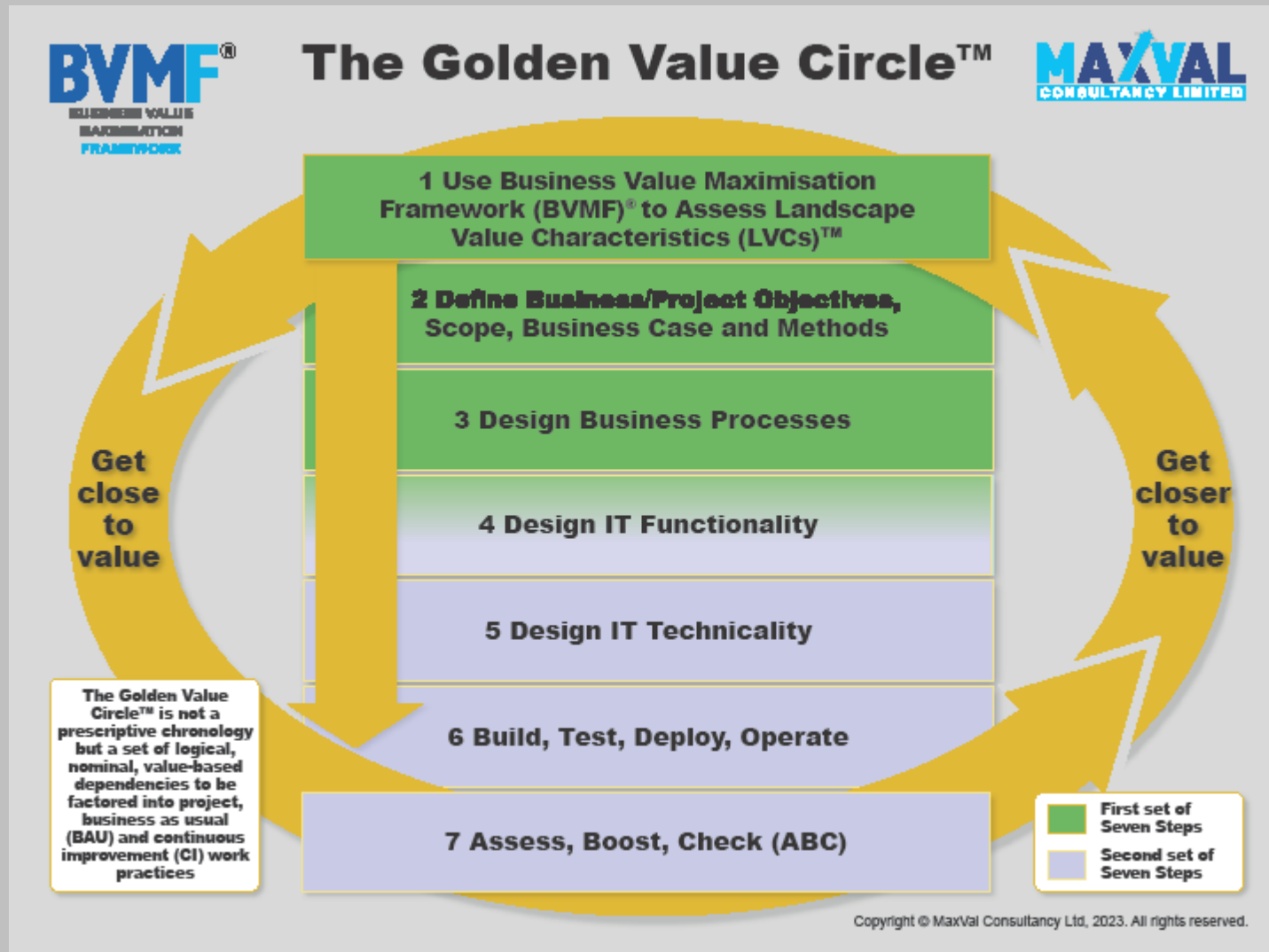Riding The Storm of Scepticism and Apathy for Innovators, Entrepreneurs and Pioneers

Systematic Application of BVMF®
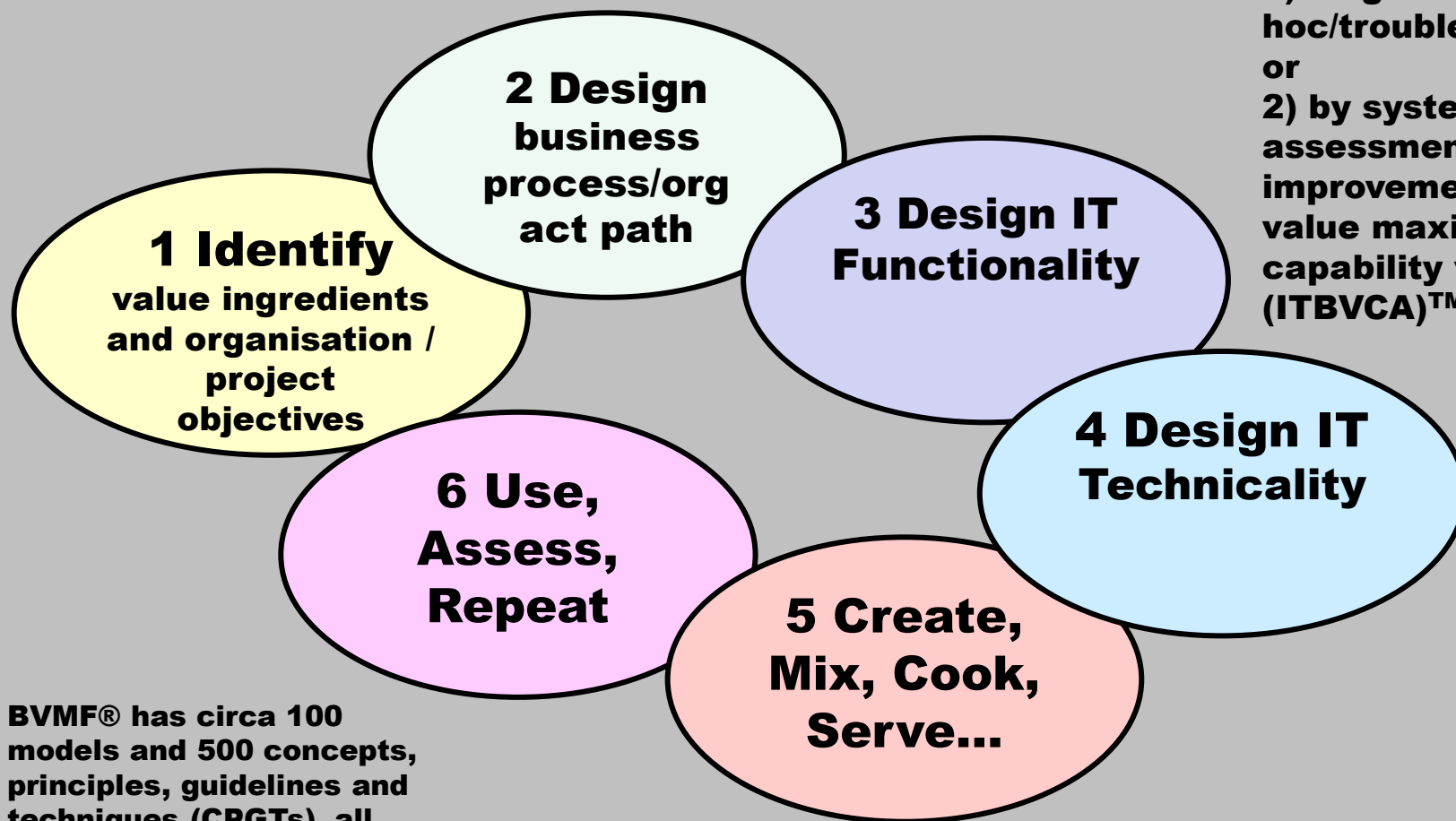
Application of BVMF® is either:
1) targeted ad hoc/troubleshooted or
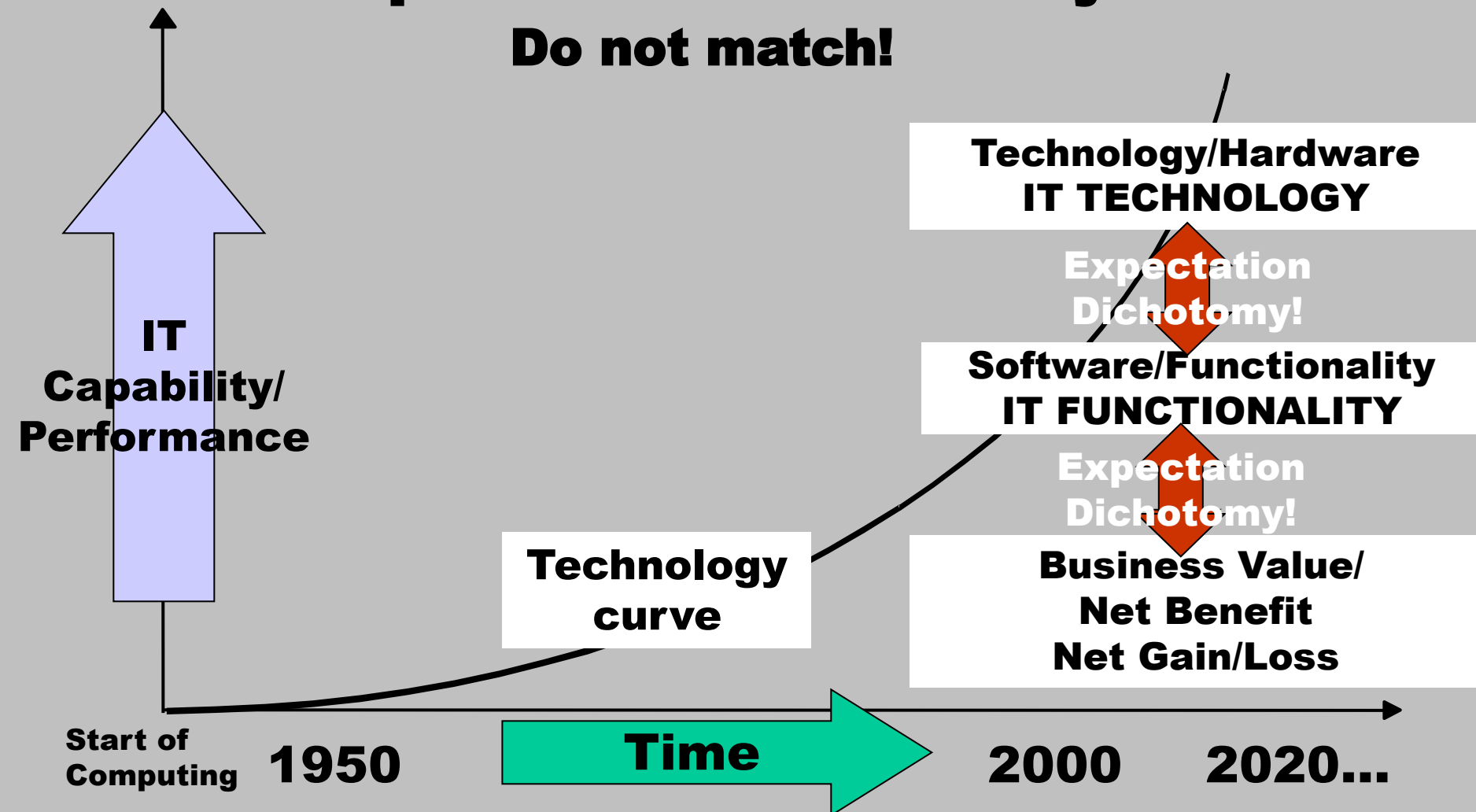2) by systematic assessment and improvement of value maximisation capability via (ITBVCA)™

1 Identify value ingredients and organisation / project objectives

2 Design business process/org act path

3 Design IT Functionality

4 Design IT Technicality

5 Create, Mix, Cook, Serve…

6 Use, Assess, Repeat

BVMF® has circa 100 models and 500 concepts, principles, guidelines and techniques (CPGTs), all arranged into modules

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The Golden Value Circle™

1 Use Business Value Maximisation Framework (BVMF)® to Assess Landscape Value Characteristics (LVCs)™

2 Define Business/Project Objectives, Scope, Business Case and Methods

3 Design Business Processes

4 Design IT Functionality

5 Design IT Technicality

6 Build, Test, Deploy, Operate

7 Assess, Boost, Check (ABC)

Get close to value

Get closer to value

The Golden Value Circle™ is not a prescriptive chronology but a set of logical, nominal, value-based dependencies to be factored into project, business as usual (BAU) and continuous improvement (CI) work practices

First set of Seven Steps
Second set of Seven Steps

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Expectations and Reality
Do not match!

IT
Capability/
Performance

**Technology/Hardware
IT TECHNOLOGY**

Expectation
Dichotomy!

**Software/Functionality
IT FUNCTIONALITY**

Expectation
Dichotomy!

**Technology
curve**

**Business Value/
Net Benefit
Net Gain/Loss**

Start of
Computing   1950

Time

2000   2020...

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/optimise, 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

Value

Value

Value

Value

Time
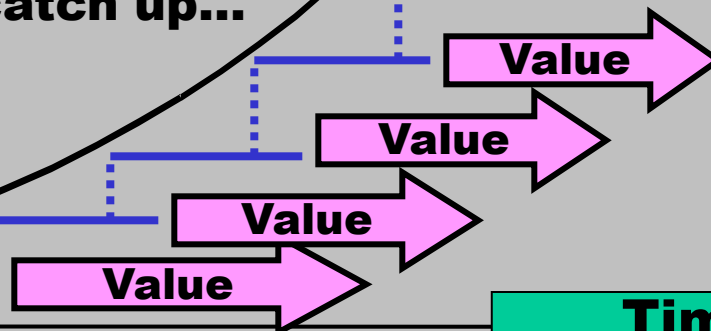
The Step Diagram

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

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

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

Optimal Human-Computer Interaction using Football Team Management (FTM) to balance our team for maximum performance

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

Would you compose your team, like this?   Or like this?
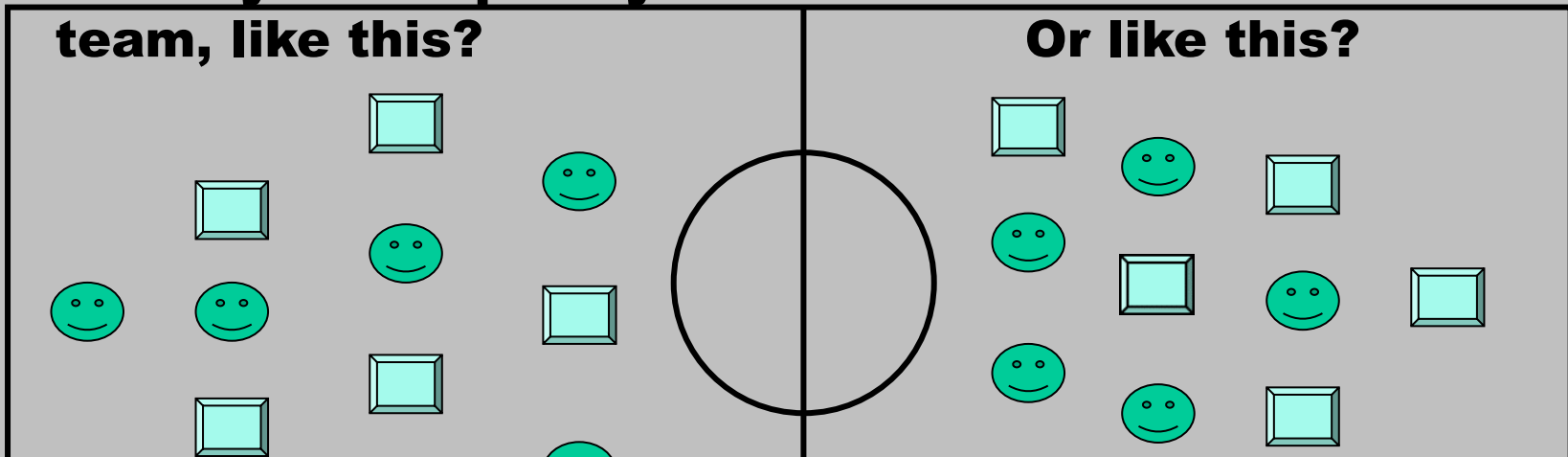
BVMF® has a variety of models and techniques to address this challenge including Interfacial Sins Avoidance (ISA), macro to micro correspondence (MTMC), value focused functional design (VFFD), Modes, etc.

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
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 enters a whole screen of information and hits *enter*, error/s are flagged up (user may need to scroll to find them) and most or all of their data has been wiped out or altered

THINK IT THROUGH!

- **Never 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 have to 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! And Aviva's find your login details**

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

Poll 3

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

A Parting Thought

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

i.e., to gain optimum value, success and ROI from digital transformation, BAU, CI and all IT/software supported org/bus activities...

If you come to GovNet 2024 in May to our free business value maximisation clinic and tell us your challenges, we will help you...!

MaxVal Services

Service	Status	Chargeable
Introductory presentation on Business Value Maximisation Framework (BVMF®)	Available	N
Value Clinic (45/60 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®	Training under development	(Y)
Advanced training in BVMF®	Training under development	(Y)
Consultancy (supported by Do IT Better Consortium) with/out BVMF®	Available	Y
Value based career coaching and mentoring	Available	Y

* Individual or small group cost economic, organisation buys the licence...

More BVMF® models, concepts and techniques...

Name	Function
Representivity	Correspondence/alignment between real world process and data and how appropriately they are represented in an IT system
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)
Sole working vs team sizes	Optimisation of the balance between the single mind and larger teams
The IT Effectiveness Programme™	Systematic way to improve value maximisation capability using the IT Effectiveness Spectrum assessment tool – used by IT Business Value Capability Assessment (ITBVCA)™
Assess, Boost, Check (ABC)	Way to boost value when it threatens to falter; works in conjunction with Crossword Diagram
Croydon Facelift	Optimised way to work and communicate with users/SMEs and other involved parties
Functional Creativity	To help the business community to envisage required IT functionality
Taking the Rap	To help business managers avoid surreptitious inclusion of work practices into new systems
Value focused 'requirements' definition	To develop atomic, value focused 'requirements' for each value ingredient
Specific terminology definitions	Yield more value from accurate terms definition with glossaries that equate business and IT terminology
Archery Target	Visual career progression model and tool, good for business analysts, IT professionals and all career roles

Agenda for 'A Closer Look, Part III' due in spring 2024, date tbc

Name	Function
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 decomposition style 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.
More on the Two Node Factors such as Push/Pull (P/P), Macro/Micro, On-point/Incremental value, 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®	Using The IT Effectiveness Spectrum™ as a tool to assess IT Business Value Capability (ITBVC)™ in order to improve it
More on Layers of Focus™ sub-layers	More detail on key sub layers that have not previously been delineated by other methods
More on approaches to effective value analysis like The Six Factor Cadence	Good for BAs and BVMSs, shows logical linkages and common misconceptions between the factors
The Croydon Facelift	Powerful set of techniques for working in an optimally focused way with one or more others, to get to a result quickly and valuably

MaxVal / BVMF® Free Resources

Item	Type of Item	Resources
CURRENT		
MaxVal web site	MaxVal Consultancy's website for BVMF®	The story of BVMF® and MaxVal Consultancy with lots of background, etc. ==www.Maximum-Value.co.uk's home page Latest News feed has almost all the links to the resources listed below==
IIBA UK web site	Webinars – promotional narrative, slides and recordings	Webinars listed on the Events tab: Past: July 2020, Sep 2022, Aug 2023 Today: Jan 2024
GovNet 2023 conference	Events/conferences/exhibitions especially for Digital Transformation	GovNet 2023 was in May 2023 in Westminster at QEII Centre Free business value maximisation clinic was held at MaxVal stand – see MaxVal website for photos
Spotify podcast	Podcast under The Independent Minds (Michael Millward's)	David's podcast for business leaders on IT business value maximisation (a 20+ mins listen)
Brainz online magazine	Articles, online, with a coaching and mentoring orientation including personal and professional performance including David's journey with the development of BVMF®	A series of 3 articles entitled 'Riding the Storm of Scepticism and Apathy for Entrepreneurs, Inventors and Pioneers' An interview with DPJ
Open Access Government (OAG) online	Online publications for civil service, public and governmental organisations	Stakeholder article on MaxVal and a profile of CEO D Jacobs Articles on the Holy Grail of business IT and The Golden Value Circle (part 1)
Do IT Better Consortium (DIBC) web site	Subsidiary web site of MaxVal, DIBC was founded by David in 2014	Description of the type of consultancy services client orgs need; all member consultants are BVMF® trained
FUTURE		
IIBA UK web site	Webinar – A Closer Look at The Elephant – Part II	Slides and recording for today will be up soon on the IIBA UK web site – slide pack includes bonus slides
Open Access Gov't	Online in April 2024	Article The Golden Value Circle™ - Part 2
IIBA UK	Webinar – A Closer Look at The Elephant – Part III	Date is tbc
GovNet 2024 conference	May 8th and 9th at Excel Centre, MaxVal will run its IT Business Value Maximisation Clinic for attendees	David will also be presenting on the Holy Grail of business IT, i.e., how possible and feasible it is to get much higher levels of value, success and ROI
Commonwealth 75	Events in November 2024 along with publishing of a promotional book featuring MaxVal with David's comments wrt digital transformation	Celebrating Commonwealth 75 anniversary MaxVal appears in a new book out in Nov 2024 and will be attending an event in Westminster with commonwealth leaders talking digital transformation best practice

Thank you for listening!

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The bonus slides that follow include more on today's Closer Look, Part II models and techniques and some upfront on the models and techniques that <u>will</u> be covered in Closer Look, Part III (spring 2024). There is also material from previous webinars in this Value Maximisation for Business Analysts series, such as The Journey and The Elephant (Sep 2022) and Closer Look, Part I (Aug 2023).

Agenda (Part I)

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...

Poll 1
(from Closer Look Part I)

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

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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, <u>anyone interested and involved in gaining *much* more value from IT, digital transformation, i.e.,</u> 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

Poll 2
(from Closer Look Part I)

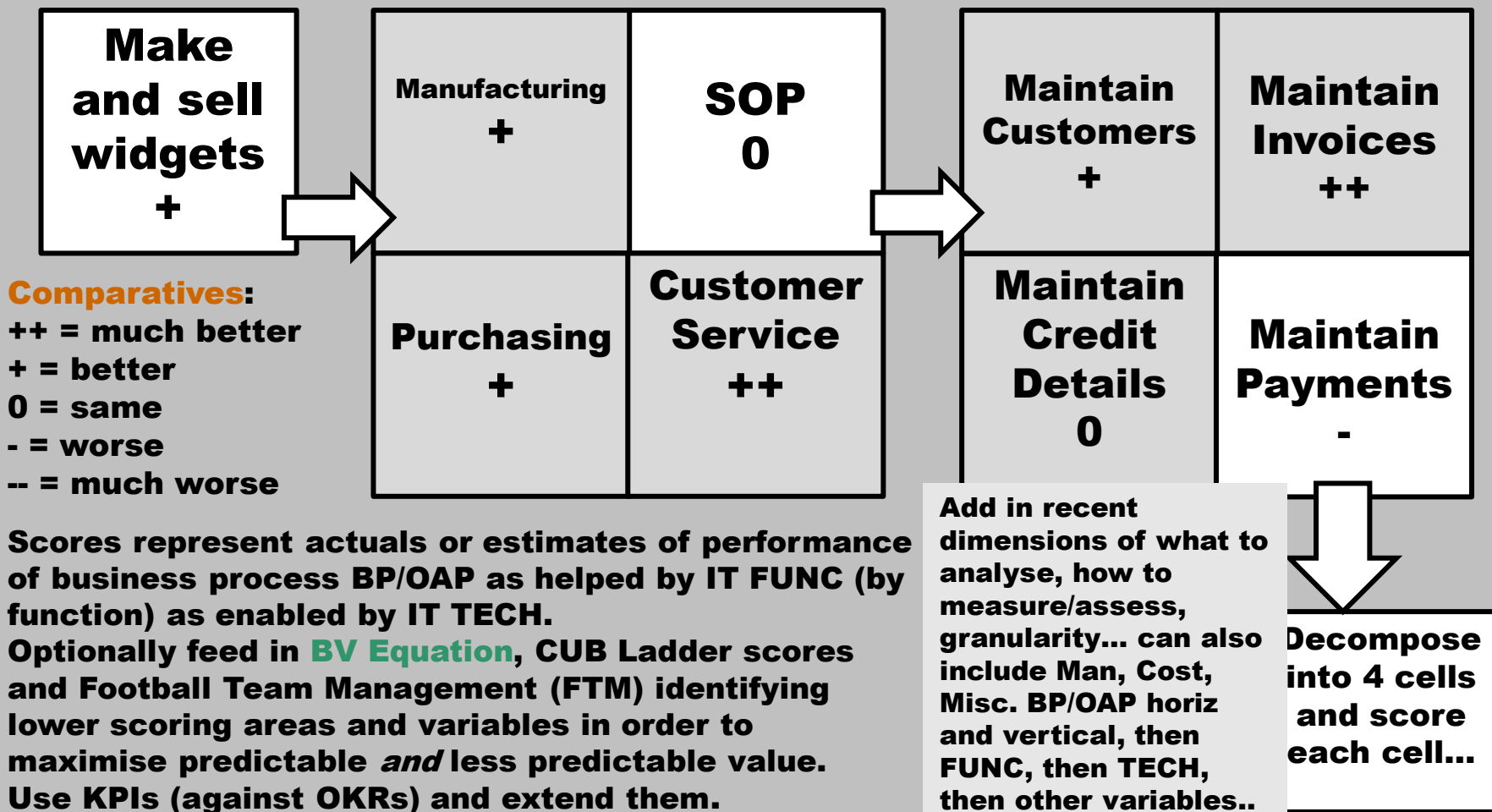## What type of result are we aiming at?

Poll 3
(from Closer Look Part I)

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

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

Make and sell widgets +	**Manufacturing +**	**SOP 0**	**Maintain Customers +**	**Maintain Invoices ++**
	Purchasing +	**Customer Service ++**	**Maintain Credit Details 0**	**Maintain Payments -**

Comparatives:
++ = much better
+ = better
0 = same
- = worse
-- = much worse

Scores represent actuals or estimates of performance of business process BP/OAP as helped by IT FUNC (by function) as enabled by IT TECH.
Optionally feed in BV Equation, CUB Ladder scores and Football Team Management (FTM) identifying lower scoring areas and variables in order to maximise predictable *and* less predictable value.
Use KPIs (against OKRs) and extend them.

Add in recent dimensions of what to analyse, how to measure/assess, granularity... can also include Man, Cost, Misc. BP/OAP horiz and vertical, then FUNC, then TECH, then other variables..

Decompose into 4 cells and score each cell...

Crossword Diagram

Dimensions of Application

Granular diagnosis and rectification/optimisation of value gain/loss

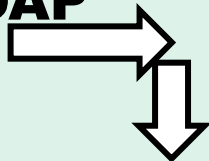| Manufacturing +	SOP 0	Maintain Customers +	Maintain Invoices ++

sell widgets

1 by BP/OAP

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…

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 rife 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
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 *the* 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 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 much 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)

<u>Above or below the value</u> (Conceptual Units of Benefit<u>) line</u>:

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

<u>Proportionality:</u>

- **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…

Is a comprehensive set of <u>fundamental, underlying principles</u> 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 <u>NOT replace</u> existing/traditional/conventional methods, practices and roles – it augments, completes, focuses and refines them. It sets out the <u>principles</u> 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 <u>basic</u> 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)™**

Method Selection
to determine the best methods for maximising BV (Question 0)

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 – <u>standardisation is rarely beneficial in net terms when deployed for its own sake</u>

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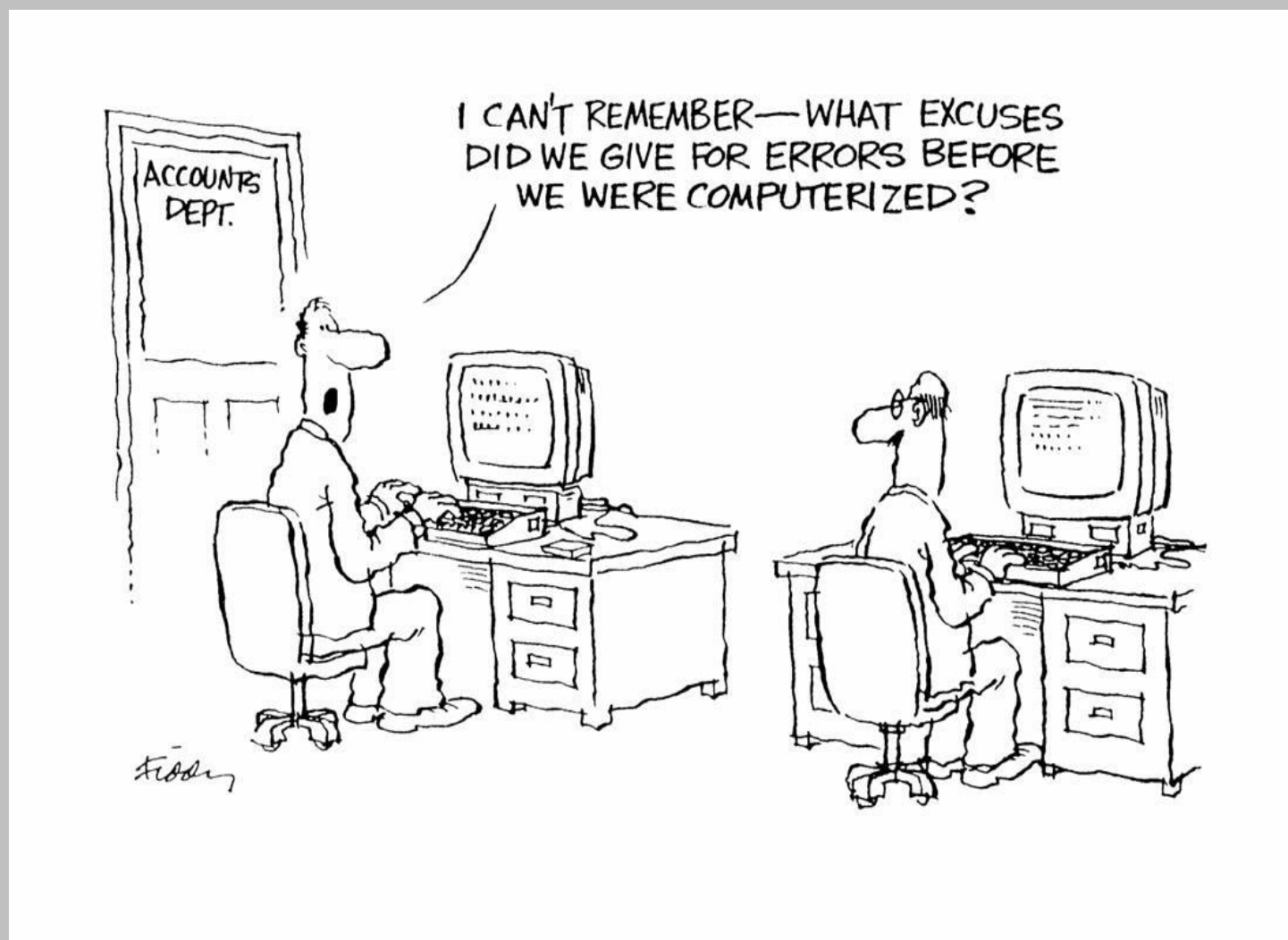
IT is potentially highly dangerous... the more you 'automate' the more damage occurs when things go wrong, as they often do! Many organisations still don't get this.

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...

2/3/12

Computer crash hits thousands of customers at the Post Office

by SONIA ELKS

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 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.'
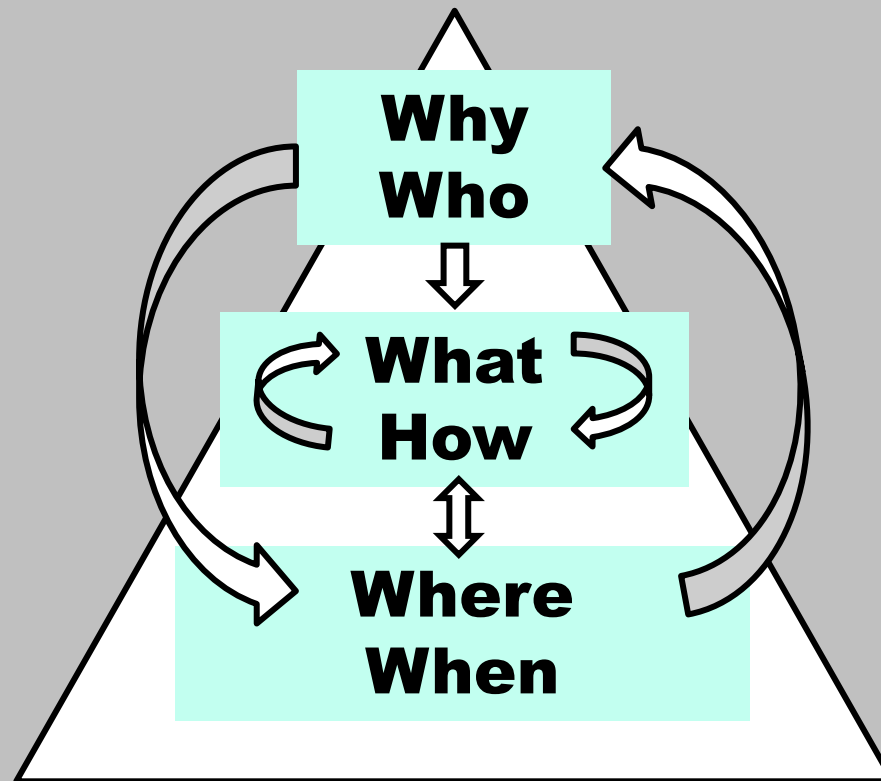
Oh dear, oh deary me...

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

The Six Factor Cadence

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

Context is almost always everything