

QUINTESSENCE

AN ACME FOR SOFTWARE DEVELOPMENT
ORGANISATIONS



BOB MARSHALL



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I dedicate this book to all the people that struggle to envision and communicate what effective software development may look like and feel like. In the hope that, in some small part, the ideas herein may make a difference for at least one.

ALSO BY BOB MARSHALL

Rightshifting

The Marshall Model

Javelin

Product Aikido

The Antimatter Principle

Emotioneering

FlowChain

Prod•gnosis

Flow•gnosis

Hearts over Diamonds

Memeology

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FOREWORD



Most organisations don't understand this basic fact: our product is the result of our culture, not the other way around. We persist in hiring industry veterans, adopting common best practices, and managing by objectives, believing this is the path to create unique, innovative, and world-class products.

Nothing could be further from the truth.

This book outlines a different approach. Putting people at the center of our work not only improves today's performance but creates the foundation for ongoing innovation and renewal. It restores communication, respect, and enthusiasm between customers, suppliers, and employees. It eliminates waste and the need for firefighting.

As you read these pages, some ideas will seem impossible. "We could never do that here", you'll think to yourself -- and you'll be right! Using our current thinking and beliefs, we *would* be unable to adopt some of these ideas. Within our currently-structured way of doing business, attempts at wholesale change *would* be blocked.

However, refocusing the organisation from product to culture requires wholesale changes. Those changes begin in ourselves.

So don't dismiss the craziest ideas, as they may ultimately prove most valuable. Instead think deeply, searching through our current practices to identify how we compensate. Then consider all of the costs imposed on our people, suppliers, and customers as a result.

That is the real challenge to readers of this book -- to consider these ideas as a wholly different way of working, rather than an *à la carte* menu of possibilities. If you can do that, you may have what it takes to be a leader in your company's transformation.

And if you do, jump at the chance! It will likely be the most rewarding time of your career.

Kevin Weiss
Philip Crosby Associates
December 2021

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The late P Grant Rule for being one of the very few people that understood what I'm talking about. I miss him every day.

All the folks that have purchased early versions of this book, giving me the encouragement to continue it through to completion.

LeanPub, for providing a platform which allows authors like myself to approach the mammoth task of writing a whole book in small, bite-sized nibbles.

PREFACE



I've been in software development my whole career – more than forty years now. During that time I've seen, over and over, the egregious waste of human potential of those folks working in software development, in organisations large and small.

It's been my life's work to uncover the fundamental causes underlying these issues, in the hope of finding the key to liberating the potential of all those labouring so ineffectually for misguided organisations everywhere. A key even more difficult to find because those working in such software organisations do not see the issues themselves. My work with Rightshifting and the Marshall Model has served to raise these issues to the level of consciousness, for those willing to look.

Whilst writing this book, I had in mind one very specific audience I wished to inform. Namely, those folks who own the way the work works. Depending on the organisation, this often means the middle-management or the senior management. More rarely, in a few organisations, it can mean the software development groups and developers themselves.

A FUNDAMENTAL DEPARTURE

Quintessence is a fundamental departure from more than fifty years of thought and practice on how to effect capable software development organisations. Out goes process. Out goes technical skills. In comes people. In comes interpersonal relationships.

It's clear that prevailing thought and practise have little impact in manifesting highly effective organisations. A new perspective is required. The emerging discipline of Organisational Psychotherapy illuminates this new perspective.

INCREMENTAL WRITING

In the same way as Memeology grew from a small seed into a major work, Quintessence started out small and incomplete. It's progressed far more quickly and smoothly that I could have envisaged at the outset, particularly considering how long Memeology took to complete. As of today (early December 2021) Quintessence is more or less complete. I prefer writing in this way, not least because of the opportunity it presents to early readers to get engaged and influence the evolution of the book.

Please do let me know about other things you'd like to see appear in this book, questions as yet unanswered, and elaborations on one or more of the topics or memes appearing herein.

REQUEST

Please allow me to commend this book to you as a blueprint for the *quintessential software development organisation*, and for guiding your journey into increased organisational health, self-awareness, and increased openness to awesomely powerful new ideas.

Bob Marshall

@FlowchainSensei

November 2021. Hartley, Kent

PART I OVERVIEW



In their book, *Idealized Design: How to Solve Tomorrow's Crisis...Today* (Wharton School Publishing), authors Russell L. Ackoff, Jason Magidson and Herbert J. Addison build upon a simple notion. They argue that:

The way to get to the best outcome is to imagine what the ideal solution would be and then work backward to where you are today.

Idealized design is a way of thinking about change that is deceptively simple to state: In solving problems of virtually any kind, the way to get the best outcome is to imagine what the ideal solution would be and then work backward to where you are today. This ensures that you do not erect imaginary obstacles before you even know what the ideal is.

Quintessence presents an ideal “solution” or blueprint for the highly effective software development and collaborative knowledge work organisation. From this vantage, you might like to work backwards to where your organisation is today.

INTRODUCTION



ASSUMPTIONS, BELIEFS AND CHANGE

In my previous book, *Memeology* (Marshall 2021), I presented a list of some seventy-plus “memes”, intended to help folks inside an organisation surface and reflect on the wide range of assumptions and beliefs they might hold in common. Beliefs about work, business, organisations and how work should work.

In *Memeology*, each meme is presented neutrally, without judgment, and without attempting to influence discussions with any suggestions about which assumptions and beliefs might be “better” or more, or less, effective. With the kind of open questions that a therapist might ask of his or her clients.

“ I would rather have questions that can’t be answered than answers that can’t be questioned.

— RICHARD FEYNMAN

Quintessence starts from the same premise – that the collective assumptions and beliefs pervading an organisation’s psyche correlate *directly* with how effective that organisation is, or isn’t.

We might choose to state this correlation as a pseudo-equation, much like Lewin's Equation (Lewin, 1936):

$$\text{Organisational effectiveness} = f(\text{collective mindset})^1$$

Quintessence presents, for each of the memes listed in Memeology, the assumptions and beliefs that we find in the *quintessential* organisation. No neutrality here. The aim is to inform and guide organisations into appreciating the collective assumptions and beliefs of the quintessential collaborative knowledge work, and software development, organisation.

Armed with this appreciation, organisations may choose to move towards becoming more aligned with the collective assumptions and beliefs of the *quintessential* organisation.

ASPECTS OF THE WAY THE WORK WORKS

If we needed to have a highly effective software development or knowledge-work organisation, aside from the necessary mindset, what would the-way-the-work-works look like? What would our *quintessential* ideal be?

The quintessential ideal would include a number of essential aspects:

- A workplace, a working environment, in which great work is not only possible, but inevitable.
- Widespread, even ubiquitous, understanding throughout the organisation. that the collective mindset of the entire organisation constrains the options open to those who own the way the work works.
- A pervasive belief that the way the work works is the overriding determinant of the effectiveness of the organisation. Cf. W E Deming.

- Recognition that the collective assumptions and beliefs of the organisation dictate the way the work works.
- In-band change (seamless integration of day-to-day operations (BAU) and continuous improvement).
- Covalence (attending to the aggregate needs of all stakeholders, concurrently).
- Value-driven (deliveries systematically prioritised according to covalent value).
- Smooth, continuous flow of covalent value (single-piece flow, if this best meets the stakeholders' needs).
- Maintenance of adequate slack.
- Minimisation of delays and cycle (feedback delay) times.
- Having the *people* – the front-line workers – who are doing the work own the way the work works, and take all decisions about how the work works (guided by folks' needs, including covalent value and the organisation's purpose). Cf. Auftragstaktik, Drive
- An appreciation that product characteristics (look, feel, utility, evocativeness) derive from the way the work works. (Cf. Conway's Law).
- Explicit limits on work in progress (a.k.a. WIP) for work of all kinds.
- Key administrative information visible in real-time.
- A multi-skilled (generalising specialist, Cthulhu-shaped) workforce.
- Esprit de corps and a sense of fellowship exists *at the organisational level* (as opposed to having e.g. standing teams). Cf. The Regiment (British Army special forces).
- Individuals strive for personal fulfilment through e.g. mastery.
- Continuous innovation, not only on products and technology, but more importantly in the way the work works and its institutions and other sacred cows, such as management.

Ackoff calls this approach – imagining what the ideal future might look like, and working backwards from there to where we are today – “Interactive Planning” (Ackoff, 1999)

Aside: Unsurprisingly perhaps, the above attributes form the core blueprint for FlowChain.

IDEALISED DESIGN

“Ladies and gentlemen. Our organisation was destroyed last night. You don't believe our organisation was destroyed last night? Our organisation was destroyed last night and you had better believe it. If you don't believe it by noon, you'll be fired.”

— THE CEO

In his book “Idealized Design” (Ackoff, 2006), Russell L. Ackoff starts with a true story from an experience of his at Bell Laboratories circa 1951.

The core idea underpinning Ackoff's Idealized Design approach is to design something, (a product, an organisation, a network) with which we would replace the existing system right now if we were free to replace it with whatever system we wanted, subject to only two not-very-restrictive constraints.

“First, let me explain why we will focus on what we want right now, not out five or ten years. Why? Because we know that where we say today we would like to be five years from now is *not* where we will want to be when we get there. Things will happen between now and then that will affect our goals and objectives. By focusing on what we want right now, we can eliminate that potential source of error.

Second, why remove practically all constraints? Because if we don't know what we would do now if we could do whatever we wanted, how can we know what to do when we can't do everything we want? If we knew what we would do with virtually no constraints, we could modify it, if necessary, to become feasible and adapt it to changing internal and external conditions as time goes on.

Now, here are the two constraints.

First, technological feasibility. This means we cannot use any but currently available knowledge. No science fiction. We can't replace the phone with mental telepathy.

The second constraint is the system we design must be operationally viable. What does that mean? Because we are not changing the environment, it means that the system must be able to function and survive in the current environment. For example, it will have to obey current laws and regulations.

Ackoff posits that most effective way of creating the future is by closing or reducing the gap between the current state and the idealized design. Quintessence aids this approach by providing an idealized design for collaborative knowledge work organisations.

QUINTESSENTIAL

Let's take a brief look at what the word quintessential actually means:

“ Quintessential.
adjective

1. of the pure and essential essence of something:

the quintessential English tea room.

2. of or relating to the most perfect embodiment of something:

the quintessential performance of Gilbert & Sullivan's The Mikado.

TIE-IN TO ORGANISATIONAL PSYCHOTHERAPY

Memeology serves organisations seeking help with shifting their collective assumptions and beliefs through *bibliotherapy*. Quintessence paints a picture of an ideal, or acme, for that ultimately shifted set of collective assumptions and beliefs.

Organisations are free, of course, to choose the means for shifting their collective assumptions and beliefs. Organisational Psychotherapy (OP) is but one means available to them.

THE PSYCHOTHERAPISTS VIEW OF CHANGE

There are many views of the process of change. Common in our organisations today is the view that change is something to be managed, like other business initiatives. Many change programmes are run with project management techniques – defining the as-is and to-be states, formulating a plan to get from as-is to to-be, and then managing the implementation of the planned tasks – and assigned people – to arrive successfully at the desired destination. Success through this approach has proven elusive.

Therapists have a fundamentally different view of change. In the field of individual therapy, change is most often seen as a process of evolving or unfolding. As a series of small, unplanned, often unexpected and unlooked-for realisations. And so it is, too, with Organisational Psychotherapy.

FURTHER READING

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ABOUT THIS BOOK



YOUR ORGANISATION'S EFFECTIVENESS, TODAY AND TOMORROW

GUIDE TO EFFECTIVENESS

Quintessence is a *guide* book for anyone wishing a definitive text on what a highly effective software development organisation looks like, feels like and works like. We might call it a *map*, or blueprint, of an ideal future state for highly effective, collaborative knowledge work – including software development – organisations.

Instead of a map expressed in terms of processes, methods, or flows, it's a map expressed in terms of *memes*.

I've long been in two minds about writing this book. On the one hand, I remain keen to share my learnings and experiences – gained over more than forty years in software development. On the other hand, I don't expect such sharing to have much of an impact on either individuals, groups, organisations or the software industry at large.

Moreover, the format I've chosen – mapping the quintessential memeplex in terms of memes – may be very unfamiliar to the

preponderance of readers. Nevertheless, my experience tells me that memes are the way to go.

QUOTE IT TO YOUR BOSS

You might like to quote parts of this book to your boss. It might spark his or her curiosity about just what a highly effective software development *organisation* looks like, works like and above all, feels like.

“ Here’s a guy who’s spent forty years and more studying and running collaborative knowledge work and software development organisations, and here’s what *he* says...

Frankly, quoting from Quintessence is *unlikely* to do much more than just tickle their curiosity. Change in perspective comes hard, and rarely from a book or from the experience of others.

“ Is there anyone so wise as to learn by the experience of others?

— VOLTAIRE

FROM MY PERSONAL EXPERIENCE

Nevertheless, and in case you’re wondering, much of this book comes from my own personal experiences, and in particular my time owning and running Familiar (Cf. Marshall 2010). Familiar was, amongst other things, the first one hundred percent Agile software house and consultancy in Europe. So, as they say, “Works on my machine”.

THE NATURE OF THE CHALLENGE

Lest we disappear off down various rabbit holes in search of solutions to non-problems, let's start out by defining the nature of the challenge.

The challenge this book addresses is the manifesting of a highly effective software development, or “tech”, organisation. That's to say, any organisation for which the ability to create and maintain technology-enabled solutions to customers' problems is core to their business.

Such manifesting depends not on structure or process, but on the governing collective assumptions and beliefs – the set of memes or *memeplex* – of the organisation. Folks often call this the organisation's *culture*.

We use the term *organisational mindset* or collective mindset to refer to the set of assumptions and beliefs about the world and the world of work held in common across the organisation – *assumptions and beliefs which act to reinforce each other*.

These interlocking beliefs tightly bind organisations into a straight-jacket of thought patterns which many organisations find inescapable. Simply tackling any one of these interlocking beliefs causes the other memes of the memeplex to tighten their grip to compensate – and so preserve the memeplex. Without coordinated interventions at multiple points in the memeplex *simultaneously*, these interlocking beliefs will prevail, as will the status quo.

So, in these terms, replacing the current memeplex, wholesale, with another more effective memeplex is the challenge we face in manifesting the quintessential organisation.

RECAP

To recap and summarise: For the quintessential development organisation, I offer the following values:

1. Attend to folks' needs.
2. Nurture an environment wherein quality interpersonal relationships and interactions can manifest.
3. Institutionalise nonviolence.

EVERYBODY DOES THINGS DIFFERENTLY

The quintessential organisation invites everyone involved to surface and reflect on their individual and collective assumptions and beliefs about work and how work should work. Progress towards the quintessential depends on progress with respect to changing these assumptions and beliefs.

This is the *foundational reason* why we see so few quintessential organisations, and why making the transition to a quintessential organisation is so difficult, and so rarely achieved successfully.

Here's a brief outline of roles that look very different from the quintessential perspective:

- The **Manager's** role looks very different. So different, in fact, that the term "manage" ceases to be relevant. Managers in a quintessential organisation have relinquished ideas of control, and embraced a role of enablement, resourcing and support.
- The **Developer's** role looks very different. So different, in fact, that "software" and "technology" cease to be relevant. Developers in a quintessential organisation have downplayed a focus on "hard" technical skills, such as coding, and embraced and learned social skills, including skilful dialogue, empathy, self-organisation and compassion.
- The **Tester's** role looks very different. So different, in fact, that "testing" a.k.a. "inspection" ceases to be relevant. Testers in a quintessential organisation have relinquished a focus on inspection skills, and embraced means of *preventing* defects, and ensuring that attending to

the need of the Folks That Matter™ is “baked in” to how the work works.

- The **Customer’s** role looks very different. Customers of a quintessential organisation get to have conversations about their needs, and have those needs attended to, more often and with more clarity than customers of more traditional organisations.

Even though a rational explanation of these differences serves little purpose, and will convince no one, we’ll take a more detailed look into the rationale later in this book.

Quintessence presents my experiences from over forty years of leading, working in, and advising software development shops and companies. I invite you to find inspiration, motivation and connection from my journey. Quintessence presents an ideal approach to making money (and other things) via attending to folks’ needs¹. Note: I say *an* ideal, not *the* ideal. There may well be other ways of achieving the same ends².

THE FOUR ABSOLUTES OF QUINTESSENCE

There are four absolutes for quintessential effectiveness of software development and collaborative knowledge work organisations:

1. The definition of quintessence is meeting all the needs of all the Folks That Matter™.
2. The system for moving towards quintessence is people choosing to change their individual and collective assumptions and beliefs.
3. The performance standard for quintessential organisations is zero needs of all the Folks That Matter™ going unmet, every time.
4. The measurement of quintessence is the consequences of not meeting folks’ needs, sometime referred to as the cost of ineffectiveness.

THE LESS SOFTWARE THE BETTER

“ The way you get programmer productivity is not by increasing the lines of code per programmer per day. That doesn't work. The way you get programmer productivity is by eliminating lines of code you have to write. The line of code that's the fastest to write, that never breaks, that doesn't need maintenance, is the line you never had to write.

— STEVE JOBS

CONTEXT

In my (long) career in the software business, I've come to one key conclusion. And that conclusion is: If you want a quintessential organisation, the surrounding context is the thing that demands the most attention.

So this book is for the folks that hold the reins for that surrounding context. In smaller organisations this group may include the founders, owners, or senior executives. In larger organisations, this group may be headed up by the CTO or COO.

HOW TO USE THIS BOOK

This book is less intended to be simply *read* than to be *used*.

Pick a meme more or less at random from Part II, and reflect on your own and your organisation's assumptions and beliefs in comparison to the assumptions and beliefs described for the quintessential organisation, in the context of the selected meme. The wider the divergence between the two – between the current and the quintessential – the more effort you and your peers and colleagues have ahead of y'all, should you need to become more effective *as an organisation*.

Alternatively, pick a meme from Memeology (Marshall 2021), take a look at the questions listed there for your chosen meme, and then consider how a quintessential organisation would answer those questions. Then go look at the same meme here in Quintessence (this book) to check your answers.

NO HOW

You may be surprised to find this book a simple listing of the assumptions and beliefs of quintessential organisations, with no advice on *how* to change an organisation's assumptions and beliefs. You may have your own ideas on the how, or you might like to look into my earlier books, *Hearts over Diamonds* (Marshall 2018) and *Memeology* (Marshall 2021) for information on Organisational Psychotherapy as a means to support changes in an organisation's collective assumptions and beliefs.

NO WHY

You may also be surprised to find no attempt herein to provide rationale for, or arguments in favour of, the assumptions and beliefs held by quintessential organisations. I doubt any rationale or arguments will convince those with different assumptions and beliefs that those of the quintessential organisation make any sense at all. I share John Seddon's view (Seddon, 2019) that books are a poor medium for influencing folks' mental models. Better to try these things out, normative-learning stylee, to begin to understand why.

REFERENCES AND FURTHER READING

You will find numerous books, papers and articles referenced in the **Further Reading** section of most chapters. Please note that there are also many further references in *Memeology*. Please also note, in case you were wondering, that I have personally read some ninety five percent of the books, papers and articles cited.

And that most of the references explain in depth the rationale behind the quintessential organisation's assumptions and beliefs.

FURTHER READING

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PARTS



LISTING THE PARTS OF THIS BOOK

This book is structured in three parts:

Part 1: Overview

Sets the scene for the book.

Part 2: The Quintessential Mindset

Maps out the collective mindset of quintessential organisations, in terms of some seventy memes.

Part 3: Appendices

Examples drawn from Javelin™ – Falling Blossom’s highly effective approach to software development, based on quintessential principles.

THE BIG PICTURE



WHY QUINTESSENCE?

“The most effective way of creating the future is by closing or reducing the gap between the current state and the idealized design.”

— RUSSELL L. ACKOFF

FIVE TIMES NORMAL PRODUCTIVITY

Highly effective organisations¹ exhibit productivity levels some *five times* higher than the norm. Cf. ISBSG².

Consequently, people often ask:

“Where does the factor of five uplift in productivity come from, when software development is done right?”

It does not arise from just one thing, but from a synergistic combination of a number of things that together cause the uplift.

These things include:

- **Motivated people.** As we now know, forget extrinsic motivators – these only serve to reduce productivity in collaborative knowledge work. Intrinsic motivation's the thing.
- **The social dynamic.** This delivers the environment for employee wellbeing and organisational health – the environment in which joy emerges and intrinsic motivation can flex its considerable muscle.
- **Teaming.** Collaboration in groups trumps the efforts of the heroic individual.
- **Defect prevention.** It's more beneficial to prevent defects before they happen, than to find and fix them after they have.
- **Change.** Making experiments and finding new, better ways of doing things, on a regular basis.
- **Skilled dialogue.** Understanding emergent problems and collaborating to quickly find neat solutions requires people to talk with each other. Skilled dialogue has a part to play here.
- **Courage.** Courage to attempt novel approaches. Courage to buck trends. Courage to speak up and tackle thorny issues.
- **Attending to folks' needs.** Key impact: improved social dynamic.
- **Identifying all the Folks That Matter™ and their critical needs.** And then attending to those needs (and no others). "Maximising the amount of work NOT done."
- **#NoSoftware.** Writing as little software as possible. Designing products and services such that software is a minimal part of the solution. And minimising the cost of each element of a solution by intelligently selecting the appropriate solution tech (often, not software).
- **Quantification.** Bringing clarity to all aspects of work by eliminating confusion of qualitative terms by using quantification.

- **Structure.** Uplift morale, engagement, relationship-building, discretionary effort and overall effectiveness through organisational structures – such as self-organising, self-managing teams and flat organisations – suited to collaborative knowledge work.
- **Physical environment.** Having available a range of workspaces suited to the modalities of collaborative knowledge work (e.g. mobbing, pairing, thinking, discussing, focussing, socialising, etc.).
- **Tooling.** Acquire and deploy tooling best suited to the work style and preferences of each individual and team.
- **Hiring for what matters.** You know what matters, don't you?
- **Relationships.** Interpersonal relationships and interactions over processes and tools. See also: Social dynamic.
- **Remuneration.** Pay people enough that their living expenses are no issue for them. Don't pay so much that you attract mercenaries. Ensure people have agency to each decide their own personal rates or salaries, hours, places of work, terms and conditions, etc.
- **Treating people like trusted adults.** See also: Social dynamic.
- **Flow (of Value).** Focus on economies of flow, rather than e.g. economies of scale.
- **Failure demand.** Reduce and then eliminate failure demand.
- **Shared purpose.** Allow folks a real say in the purpose of the organisation, to invite buy-in and a sense of personal ownership in the organisation's shared common purpose.
- **Whole-systems thinking.** Steer the organisation as a whole, not as compartmentalised subunits.
- **Measuring.** By all means measure. But never measure either individuals or collaborative groups. Invite individuals and collaborative groups to identify what

matters to the Folks That Matter™, and invite them to come up with measures for those things.

- **Monitor variation.** And invite folks to uncover the causes of variation and reduce or eliminate same.
- **Learning.** Invite people to develop themselves (and others). Provide support of all kinds for learning.
- **Replace “work” with “play”.** Cf. Serious Play (Schrage 2008).
- **Build eustress.** Reducing or eliminating *distress*.
- **Identify and manage risks and opportunities.** Proactively, actively and continuously.
- **Reduce and eliminate misunderstandings and conflicts.** And the inevitable waste and misalignments caused by differing assumptions and beliefs about how work should work.
- **Technical skills and competencies.** Yes, there is a place for having folks that know what they’re doing.
- **Working fewer hours.** Hours worked correlate *negatively* with effectiveness. The Rule of Four: Four day working weeks or 4 hour days. Or both.
- **Obliquity.** Don’t chase productivity. 5x productivity comes from chasing the things that *result* in productivity. In fact, better to forget the notion of productivity entirely.

What’s missing? Quite a bit, actually. Part II attempts a more exhaustive list, in the form of memes.

The above is a long list, to be sure. But then, software development always has been a Mess. If you want a simpler, shorter list, try this one:

- Attend to folks’ needs.

Put another way, and mentioning the role of the collective mindset:

“ Reality is created by the mind, we can change our reality by changing our mind.

— PLATO

AGILE MANIFESTO

Many folks look to the Agile Manifesto for guidance in manifesting effective software development. Which is ironic, not least because following the Agile Manifesto is likely to lead to software development *organisations* as equally ineffective as those that conform to more traditional approaches.

At the risk of accusations of revisionism, I'd revisit the values stated in the Manifesto thusly:

The Agile Manifesto's first value states:

“ Individuals and interactions over processes and tools.

Here, the Snowbird folks got it half-right. In my experience, the role of the individual is largely irrelevant, although no individual likes to hear this. Deming himself tells us that some ninety five per cent of the contribution of any one person is down to the system in which they work, and only five percent to their personal abilities and talents. Systems Thinking is a constant thread running through this book, and through highly effective software development, both. Accordingly, I suggest replacing the above value with:

“ Interpersonal relationships and interactions over individuals, processes and tools.

The Agile Manifesto's second value states:

“ Working software over comprehensive documentation.

Here, the Snowbird folks got it totally wrong – although understandable, given its billing as the “Manifesto for Agile *Software* Development”. In the light of the question software or not, I suggest replacing this second value with:

“ Attending to folks’ needs over assuming any given means – i.e. software – to achieving that.

Note: Quintessentially, this is **the number one value**, as all of the other value listed here *follow* from this one. In other words, just this one value is necessary for a highly effective development organisation to manifest – the three other values listed here will arise largely unbidden, to the extent that this primary value manifests.

The Agile Manifesto’s third value states:

“ Customer collaboration over contract negotiation.

Seems like the Snowbird folks were’ running out of ideas at this point. Here’s a different third value I can get behind:

“ Nonviolence over violence e.g. collaborative and voluntary agreements over transactional contracts.

With nonviolence predominating, voluntary collaboration becomes the inevitable – and highly effective – norm.

The Agile Manifesto’s fourth value states:

“ Responding to change over following a plan.

As von Moltke observed:

“ No plan of operations extends with any certainty beyond the first encounter with the main enemy forces.

— HELMUTH KARL BERNHARD GRAF VON MOLTKE

Or, more simply, and apparently favoured by Rommel:

“ No plan survives contact with the enemy.

— JOHANNES ERWIN EUGEN ROMMEL

Therefore this fourth manifesto value seems largely redundant and at best, a statement of the obvious. I guess the Snowbird folks had suffered from repeated instances of others (project managers, maybe) slavishly following a plan to the detriment of responding to folks' changing needs, and to changing circumstances.

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DEFINITIONS



DEFINING SOME KEY TERMS

In this book, I use a few terms which may not feature in your own organisation's vocabulary, presently. Please feel free to rename these terms if you find the names I have assigned to be unhelpful, confusing or unappealing.

QUINTESSENTIAL

“ Quintessential.

adjective

1. of the pure and essential essence of something:

the quintessential English tea room.

2. of or relating to the most perfect embodiment of something:

the quintessential performance of Gilbert & Sullivan's The Mikado.

THE QUINTESSENTIAL ORGANISATION

Any organisation that is the acme of its peers. More specifically, any organisation where its collective assumptions and beliefs, and its strategies for getting everyone's needs met – including its own – are *optimal* in terms of being aligned to its purpose and to the needs of all the Folks That Matter™.

THE NON-QUINTESSENTIAL ORGANISATION

Any organisation that falls short of quintessentiality.

THE WAY THE WORK WORKS

Many organisations use the word “process” or “system” to describe the way employees are expected - or even required - to approach specific tasks. Often, however, the way specific tasks actually get done diverges a little or a lot from the process definitions.

Some organisations use the term “the way the work works” to refer to the actual way specific tasks get done in reality.

You can find more about the idea that maybe the system – “the way the work works” – governs the behaviour of people in the organisation, in the later chapter on The Way the Work Works.

FAILURE DEMAND

Demand caused by a failure to do something or do something right for one or more of the Folks That Matter™.

ADMINISTRATION

The systematic pursuit of desired conditions or outcomes through coordinating and directing organisational capabilities, assets and resources in a concerted way.

ADMINISTRATIVE INFORMATION

Any information used in the activities of administration.

EXTRINSIC MOTIVATION

The incentive to undertake an activity based on the expected receipt of external rewards. These rewards may include money, fame, praise, and similar considerations. To be extrinsically motivated means that one becomes more inclined to do something when external rewards are offered.

INTRINSIC MOTIVATION

The incentive to undertake an activity based on the expected enjoyment of the activity itself, rather than external benefits that might result.

LOCAL OPTIMISATION

For the purposes of this book, we may define “local optimisation” as:

“ Making the “best” decision from the viewpoint of a single person or department, rather than from the viewpoint of the organisation as a whole – or even more broadly, from the viewpoint of the “whole system”, when “the system” extends beyond the organisation.

LOCAL OPTIMA

A local optimum (plural: local optima) is whatever is best for the performance of an individual part (of a system). Compare and contrast with *global optimum* – what is best for the performance of the system as a whole.

BAU

Business as usual (BAU) is a term that refers to the standard day-to-day business operations in an organisation. These operations can include:

- Staff members carrying out their daily tasks as suggested by their job descriptions.
- Outcomes or deliverables resulting from one-off (out-of-band) collaborative efforts – efforts whose outputs have been integrated into the daily operations of the business.
- Tasks deemed necessary to running the daily operations of the business.
- Tasks carried out to fulfil ongoing contracts or agreements.

IN-BAND

In-band activities are those activities that occur inside, or as a normal part of e.g. BAU (business as usual). An example: continuous improvement activities.

OUT-OF-BAND

Out-of-band activities are those activities that occur outside, or extraordinary to e.g. BAU (business as usual). Out-of-band activities include special or one-off activities, for example, change programmes.

FLOW

Flow (n): The movement of a product or service through the process which creates it.

In the context of product *development*, we might choose to modify this definition slightly:

Flow (n): The movement of the designs for a product or service through the design processes which create them.

And continuous flow:

Continuous Flow (n): The progressive movement of units of design through value-adding steps with a design process such that a product design or service design proceeds from conception into production without stoppages, delays, or back flows.

BATCH

A batch is a collection of work items regarded as a single unit.

TALENT

“Talent – when I use the word, I mean it as the rate at which you get better with effort. The rate at which you get better at soccer is your soccer talent. The rate at which you get better at math is your math talent. You know, given that you are putting forth a certain amount of effort. And I absolutely believe – and not everyone does, but I think most people do – that there are differences in talent among us: that we are not all equally talented.

— DUCKWORTH, 2016

ENGINEERING

The creative application of scientific principles to the design or development of structures, machines, apparatus, processes, or works.

SYNERGY

Synergy means behaviour of integral, aggregate, whole systems *unpredicted* by behaviours of any of their components, parts or subassemblies of their components taken separately from the whole.

SYSTEM

An integrated or interdependent set of elements forming a complete whole.

SYSTEMS THINKING

- An epistemology which, when applied to human activity, is based on four basic ideas: emergence, hierarchy, communication, and control as characteristics of systems. (Checkland 1999)
- A process of discovery and diagnosis – an inquiry into the governing processes underlying various problems and opportunities. (Senge 1990)
- A discipline for examining wholes, interrelationships, and patterns utilising a specific set of tools and techniques. (Senge 1990)
- A way of thinking about, and a language for describing and understanding the forces and interrelationships that shape the behaviour of systems. This discipline helps us to see how to change systems more effectively. (Senge et al., 1994)

MESS

Ackoff defines a mess as: “Complex systems of changing problems that interact with each other.”

ORGANISATIONAL PSYCHOTHERAPY

“ Psychology is more of the ‘let’s figure out what is going on’ (the perspective of the scientist) and psychiatry, psychotherapy are more ‘let’s treat whatever is going on’ (the perspective of the physician).

Organisational Psychotherapy (OP) aims to support an organisation’s “becoming” – increasing its sense of self-worth, reducing the level of incongruence between its ideal and actual self, and supporting the organisation to become more fully-functioning. This can translate to positive changes in the organisation’s well-being and, as a consequence, its effectiveness – amongst other things. Organisational psychotherapists employ a range of techniques – based on experiential relationship building, dialogue, communication, reflection and introspection.

Put another way, OP involves inviting the organisation “onto the therapist’s couch” and working through issues using e.g. conversation and open questions, in the Socratic style.

ORGANISATIONAL PSYCHE

In psychology, the psyche is the totality of the individual human mind – both the conscious and unconscious. Psychology is the scientific or objective study of the psyche. Therapy is the treatment of the psyche.

The word psyche is based in the Greek word ψυχή (psyche), meaning "life" – in the sense of “breath”. Derived meanings included "spirit", "soul", "ghost", and ultimately "self" in the sense of "conscious personality". In psychoanalysis and other forms of psychology, “psyche” refers to the forces in an individual that influence thought, behaviour and personality.

Nowadays, cognitive scientists seem to prefer to use the word "mind" rather than "psyche" – mind holds the power of imagina-

tion, recognition, and appreciation, and is responsible for processing feelings and emotions, resulting in attitudes and behaviours.

OP regards the *organisational* psyche as analogous to the individual psyche, or mind. I prefer to remain with the term psyche, rather than mind, not least because the phrase “organisational mind” seems to be somewhat obscure, even risible.

The concept - and existence - of the Organisational Psyche is foundational to OP. It is *the* thing with which every OP therapist interacts.

TRANSITION

For the purpose of organisational psychotherapy, we define a *transition* as a change involving the *wholesale* replacement of one collective memeplex for another. In other words, the *organisation-wide* adoption of a host of new and *counter-intuitive* “truths”, and the unlearning of a host of existing truths.

“ It’s hard to teach counter-intuitive truths by explanation.

— TAIICHI OHNO

MEME

The term “meme” (rhymes with “cream”, “dream”) refers to an idea, concept, belief, behaviour, or style that spreads from person to person. A meme acts as a unit for carrying cultural ideas, symbols, or practices, that can be transmitted from one mind to another through writing, speech, gestures, or rituals. We might regard memes as analogous to genes in that they self-replicate, mutate, and respond to selective pressures. The term originated with Richard Dawkins' 1976 book *The Selfish Gene*.

MEMEPLEX

We may choose to name groups of memes “meme complexes”, or “memeplexes”. Like the gene complexes found in biology, memeplexes are groups of memes that are often found present in the same individual – and also in organisations. Memes that interact favourably will form strong memeplexes, while memeplexes will resist incompatible memes.

“ A memeplex is a set of memes which, while not necessarily being good survivors on their own, are good survivors in the presence of other members of the memeplex.

— RICHARD DAWKINS

In OP, we use the term “collective mindset” and “memeplex” more or less interchangeably. And for OP, memeplexes have a special significance, in that we regard the organisational memeplex as a “strong” memeplex, where every meme has an interlocking, or reinforcing connection that binds it together with the other memes in such a way as to resist its removal from the memeplex, and similarly resists the introduction of new, incompatible memes.

In practice, this characteristic suggests that an organisational memeplex *must* be replaced wholesale, rather than by e.g. swapping out individual memes one by one.

Memeplexes have a special significance in OP, in that we regard each meme in an organisational memeplex as having an interlocking, or reinforcing connection.

ORGANISATIONAL MINDSET

In OP we use the term *mindset* interchangeable with *memeplex* – i.e. a *set* of ideas, assumptions, beliefs, heuristics, etc. (e.g. memes) which *interact* to *reinforce* each other.

We use the term *organisational mindset* to refer to the set of assumptions and beliefs about the world and the world of work held in common across the organisation – *assumptions and beliefs which act to reinforce each other*.

These interlocking beliefs tightly bind organisations into a straight-jacket of thought patterns which many find inescapable. Simply tackling any one of these interlocking beliefs causes the other memes of the memeplex to tighten their grip to compensate – and so preserve the memeplex. Without coordinated interventions at multiple points in the memeplex simultaneously, these interlocking beliefs will prevail, as will the status quo.

“ But if we consider culture as its own self-organizing system,—a system with its own agenda and pressure to survive – then the history of humanity gets even more interesting. As Richard Dawkins has shown, systems of self-replicating ideas – or memes – can quickly accumulate their own agenda and behaviours.

— KEVIN KELLY, OUT OF CONTROL 1994, P.360

We can identify many memes in the world of work – management, hierarchy, power, relationships, remuneration, direction, outcomes, stakeholders, customers, value; to name but a few (see: Part II – The Quintessential Mindset). And when certain of these memes combine, the pernicious homeostatic effects of the whole collective memeplex becomes significant.

We can label many, many distinct memeplexes, or mindsets. The Marshall Model isolates and contrasts just four (i.e. Ad-hoc, Analytic, Synergistic and Chaordic).

SOCIAL DYNAMIC

Social dynamics (or sociodynamics) is the study of the behaviour of groups that results from the interactions of individual group members as well to the study of the relationship between individual interactions and group level behaviours.

The field of social dynamics brings together ideas from economics, sociology, social psychology, and other disciplines, and is a sub-field of complex adaptive systems or complexity science. The fundamental assumption of the field is that individuals are influenced by one another's behaviour.

In Organisational Psychotherapy we use the term “The Social Dynamic” (of an organisation) to refer to the way in which individuals and groups typically interact with one another in that organisation.

MERCENARIES

Folks who work for solely for money, not for the shared purpose or success of the organisation.

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AMBITION



THE WILL TO EXCEL

Does your organisation, group, team, have the will to excel? A longing for the quintessential? Or does it settle for what it believe is “good enough”?

What drives learning in organisations? Where does the will come from to improve things, such as the way the work works?

Is growth important to your organisation, and how does ambition contribute to growth, and rate of growth?

We might choose to define *ambition* as a striving for some kind of achievement or distinction. It involves, first, the desire for achievement, and, second, the willingness to work towards it even in the face of adversity or failure.

To be ambitious is to achieve first and foremost not for the sake of achievement itself (which is to be *high-reaching*) but for the sake of determinedly seeing one’s – and others’ – needs met, combined with the willingness to work towards that.

EMERSON'S THESIS

“We must aim above, if we are to hit the mark.”

— RALPH WALDO EMERSON

PAYING THE PRICE

Ambition has its price.

“We can achieve whatever we want, as long as we are willing to pay the price.

— ELVIN SEMRAD

What price are we willing to pay? What needs must we forego to obtain our more significant needs?

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THE ORGANISATIONAL DIMENSION



WHOLE-ORGANISATION THINKING

The book is about the quintessential *organisation*. It makes little sense to talk about the quintessential software development function, marketing silo, or finance department. Breaking things down into parts and managing the parts separately in the expectation that will optimise the whole organisation is a fool's errand.

“ The systems approach to problems focuses on systems taken as a whole, not on their parts taken separately. Such an approach is concerned with total-system performance even when a change in only one or a few of its parts is contemplated, because there are some properties of systems that can only be treated adequately from a holistic point of view. These properties derive from the relationship between parts of systems: how the parts interact and fit together.

— RUSSELL L. ACKOFF

“ The performance of the whole is never the sum of the performance of the parts taken separately, but it's the product of their interactions.

— RUSSELL L. ACKOFF

The second most significant problem with Agile development approaches is their focus on one silo or organisational function – the IT or software development function. The quintessential organisation has instead a whole-system (whole organisation) perspective, focussing on the *interactions* between aspects of the organisation. I use the term *aspects* as these organisations eschew a structure comprised of *parts*.

In case you're now wondering, the most significant problem with the Agile approach to development is the focus on software as the only, and primary solution to folks' needs.

ENROLLING THE FOLKS



GETTING EVERYONE ONTO THE SAME PAGE

The challenge in manifesting a highly effective collaborative knowledge work organisation is not, as we might expect, defining a way or ways of working that *work*. Methods cannot help us.

The challenge is one of having everyone choose to move *voluntarily* onto the same page – from senior management to the most junior coder, intern or other staffer.

Which begs the question: “Whose page?”.

Conventionally, alignment (getting everyone onto the same page) means getting everyone outside the Core Group to come over to the Core Group’s page. And typically, this is approached by means of violence (i.e. using fear, obligation, guilt, shame – and punishment for non-conformance). I say *approached* rather than accomplished, for this typical approach rarely accomplishes the alignment – the “true consensus”, as Goldratt calls it – sought by the Core Group.

And then there’s the question of *coercing* people to move at all. It’s very tempting to embrace the idea that the organisation’s collec-

tive assumptions and beliefs drive effectiveness, and thus success. From there, it's a short jump to the idea that folks *have to* get with the programme and work on changing their individual assumptions and beliefs to align with the emerging collective. After all, if folks remain wedded to their preexisting assumptions and beliefs, success will remain elusive for the organisation. This kind of thinking, relying as it does on certain *other* assumptions and beliefs, undermines the whole endeavour of changing the assumptions and beliefs prevailing across the organisation.

Better to signal the organisation's belief that collective assumptions and beliefs matter, and leave it to the free will and good intentions of all involved to choose what to do about it, and their individual roles in it.

PIPE DREAMS



FROM UNATTAINABLE TO ATTAINABLE

Readers may consider the organisation described in these pages – the quintessential organisation – as an unattainable dream. And for many leaders, managers, owners and staff, unattainable it is.

At least, unless and until the merits of a set of collective assumptions and beliefs entirely different from the conventional are explored and embraced.

What induces people to begin reflecting on their assumptions and beliefs – individual and collective alike?

Reading books – like this one – doesn't cut it. Listening to other folks' experiences doesn't cut it. Evidence doesn't cut it. Challenging folks and their beliefs often only results in the Backfire Effect.

(Chin & Benne 1969) suggest there are three basic approaches to effecting changes in folks' assumptions and beliefs: rational, normative and coercive.

RATIONAL APPROACHES

People, being y'know, people, will most likely map anything they see or hear onto their current frame, their current mental model, rather than change that frame / model. Some very few people might react to a rational approach by becoming curious. Perhaps because of some previous experiences, these few curious folks' minds are at least partly open to rethinking some of their fundamental assumptions and beliefs. This book, by its nature, employs a rational approach.

NORMATIVE APPROACHES

The normative approach refers to the taking of actions that deliberately aim to change norms, beliefs, assumptions or attitudes. On the path to the quintessential, this means getting out into the organisation, and studying how assumptions and beliefs govern the way the work works, at first hand. In the Lean canon, this is often referred to as *going to the gemba*. Each time this studying reveals a counterintuitive truth, denial or dismissal is no longer an option. The student is directly challenged to surface and reflect on their mental model.

COERCIVE APPROACHES

Coercive approaches rely on the use of violence, such as fear, obligation, guilt and shame. As a means for transformation of assumptions and beliefs they are doomed to fail. Quintessential organisations know full well the futility of violence.

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PART II

THE QUINTESSENTIAL MINDSET



In my previous book “Memeology”, there appears a long list of memes – memes pertinent to organisations of every stripe, and in particular to technology organisations a.k.a. Digital organisations.

In this book we take a look at the broad sweep of collective assumptions and beliefs held by the most highly effective technology organisations.

In this part of Quintessence, we take each meme in turn, and see what collective assumptions and beliefs related to that meme are held by quintessential organisations.

Note: The memes and chapters in this part are listed in the same order, and with the same numbering, as they appear in Memeology.

CHANGE



POSITIVE DISRUPTION

QUINTESSENTIALLY

Quintessential organisations regard change as their friend and companion through life. Indeed, change allows for the exercise of “positive opportunism” – the hallmark and exclusive prerogative of the Chaordic-minded organisation.

“Someone once told me that change is a predator that stalks us all our lives. I rather believe that change is a companion who goes with us on the journey, and reminds us to cherish every moment, because it will never come again.

— CAPTAIN JEAN-LUC PICARD (PARAPHRASED)

The quintessential organisation exhibits the following collective attitudes and feelings towards change:

- Change is our friend and constant companion. We’re

continually excited and energised by the prospect of change.

- We believe that there is advantage to the organisation to have everyone embrace change, and organise, structure and administer the way the works works to best accommodate change. We have a policy of inviting folks to train in change management, administration, and structuring the way the work works for best anticipation of change.
- We seek from change innovative ways of working, along with innovations in the products and services we offer. Change serves us by affording daily opportunities to both keep ahead of the competition and remain aligned to the “sweet spots” of our markets.
- Love of change is not something that comes naturally to most people, so hiring must seek new hires that understand the upside of constant change, and become comfortable with it.
- We seek change wherever we can, provoking it into happening at every turn. Role models champion change. People throughout the organisation empower themselves to embrace and provoke change.
- We approach change on a daily basis, embedding it into BAU across the organisation.

“ Everything changes and nothing remains still.

— PLATO

CREATION NOT IMPOSITION

“ In practice, all systems insist on exercising their own creativity. They never accept imposed solutions, predetermined designs, or well-articulated plans *that have been generated somewhere else*. Too often, we interpret their refusal as resistance. We say that people

innately resist change. But the resistance we experience from others is not to change itself. It is to the particular process of change that believes in imposition rather than creation. It is the resistance of a living system to being treated as a non-living thing. It is an assertion of the system's right to create. It is life insisting on its primary responsibility to create itself.

— MARGARET WHEATLEY AND MYRON KELLNER-ROGERS IN *A SIMPLER WAY*.

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DISCUSSION



EFFECTIVE DIALOGUE

QUINTESSENTIALLY

Quintessential organisations regard discussion – and its kissing cousins, dialogue and conversation – as an essential element in both becoming and remaining highly effective. Moreover, discussions of collective assumption and beliefs, particularly *therapeutic* discussions, in the service of culture change, are seen as paramount to effectiveness.

“ If we want to solve a problem that we have never solved before, we must leave the door to the unknown ajar...doubt is not to be feared, but welcomed and discussed.

— RICHARD P. FEYNMAN

The quintessential organisation exhibits the following collective attitudes and feelings towards discussion:

- Discussion is the lifeblood of our organisation. We

constantly seek discussion, dialogue, and the open, candid exchange of ideas, knowledge and information. We recognise the challenges in speaking our minds, and strive to help each other overcome these natural challenges.

- We have a policy of constantly growing our collective and individual capabilities for skilful dialogue and discussion.
- We encourage people to drive discussions through to closure. Nonviolent Communication aids us greatly in discussing difficult topics and dealing with inevitable conflicts.
- We accept that attempting to surface our collective assumptions and beliefs during our daily business-as-usual discussions can disrupt and divert those discussions, but such disruptions and diversions can serve to strengthen and support our social dynamic.
- We recognise the positive impact of skilful dialogue, and dedicate significant resources – through trainings and the like – to improving our ability to engage in such dialogue.

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UNDISCUSSABLES



THE TABOO TOPICS THAT CHALLENGE OUR ABILITY TO SURFACE AND REFLECT TOGETHER

QUINTESSENTIALLY

Quintessential organisations regard open and free discussion as an essential element in both becoming and remaining highly effective. No topics are taboo or undiscussable. We can't converge on a most likely hypothesis if there are some hypotheses that are undiscussable. It's only in the crucible of ideas and debate that we can converge on a common understanding.

In the quintessential organisation, even though discussion of some topics may contribute to people feeling nervous, uncomfortable, or threatened, everyone realises the necessity to work through such feelings, support each other, and discuss these difficult topics, nevertheless. In fact, it's the most difficult topics that are often those most worthy of discussion.

Folks look out for topics that might be on the cusp of becoming undiscussable, and make a special effort to bring these particular topics up for discussion. Everyone is aware of the impact of taboo topics, and strives to keep the count of such topics at zero.

Quintessential organisations have zero tolerance of undiscussability.

“ What distinguishes exemplary boards is that they are robust, effective social systems ... The highest performing companies have extremely contentious boards that regard dissent as an obligation and that treat no subject as undiscussable.

— JEFFREY SONNENFELD

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COURAGE



PSYCHOLOGICAL LIMITS

QUINTESENTIALLY

Quintessential organisations value courage. Courage to speak out. Courage to take risks. Courage to go against convention. Courage to act, especially when much is at stake. Courage to challenge one another's assumptions and beliefs, along with the collective assumptions and beliefs of the whole organisation.

“ When Greg first met Butch Johnson, he was deeply impressed by Butch's insight into the way organizations and leaders behave.

Butch taught him that the psychological limit of the leader inevitably becomes the psychological limit of the organization.

Very few top managers understand their own psychological limit, how it pervades the organization, and how they should change their profile.

— RAY IMMELMAN, (IMMELMAN 2003)

Courage does not mean recklessness. See: Risk.

“ Courage doesn’t happen when you have all the answers. It happens when you are ready to face the questions you have been avoiding your whole life.

— SHANNON L. ALDER

How does the quintessential organisation, and folks therein, show courage? Here are some of the ways:

- Saying no to building stuff that nobody needs.
- Admitting things will never be perfect.
- Considering change as a source of inspiration and innovation.
- Showing transparency and radical candour in discussions and in sharing information.
- Accepting human beings are human and fallible, not infallible machines.
- Putting the mission before individual advantage.

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NEEDS



CONNECTING WITH WHAT'S ALIVE IN PEOPLE

QUINTESSENTIALLY

Quintessential organisations recognise and embrace the fact that people have needs. Being *needy* is regarded as an essential aspect of being human, and celebrated. Further, these organisations understand the power of attending to folks' needs, and invite their folks to build this understanding into all policies, tools and aspects of the way the work works.

To illustrate, here's some typical needs of different kinds of folks we find in organisations (remembering that everyone has different needs, even though, as humans, they may have some or many needs in common).

- **Employees:** Possible needs include: autonomy, mastery, purpose, belonging, relationships, trust, consideration, safety, integrity, joy, ease, freedom, challenge, clarity, play, honest, being heard, ...
- **Managers:** Possible needs include: stability, security, consistency, respect, appreciation, ...
- **Executives:** Possible needs include: challenge,

cooperation, respect, self-respect, safety, order, independence, accomplishment, ...

- **Customers:** Possible needs include: clarity, discovery, hope, joy, to matter, being heard, ...
- **Ourselves:** Possible needs (beyond the basics) include: acceptance, appreciation, community, empathy, inclusion, safety, warmth, integrity, joy, self-esteem, harmony, autonomy, challenge, effectiveness, ...
- **Others:** Possible needs include: acceptance, appreciation, community, empathy, inclusion, safety, warmth, integrity, joy, self-esteem, harmony, autonomy, challenge, effectiveness, ...

Quintessential organisations are well aware of the wide range of needs that folks might have, and regularly use e.g. Needs Inventories (Cnvc.org. 2005) to help guide and focus their effort in attending to folks' needs.

CONNECTING TO THE BOTTOM LINE

Attending to folks' needs encourages desirable things like employee engagement, improved morale, increased discretionary effort, improved interpersonal relationships, and joy. These things, in turn, promote more effectiveness in the organisation. Which in turn translates to increasing success. And thence to commercial success and the bottom line.

WHAT'S ALIVE IN US AND WHAT WOULD MAKE OUR LIVES MORE WONDERFUL?

Quintessential organisations know the power of love, healthy relationships, friends and family, and the role of these things in nurturing effectiveness. Psychology, in particular Positive Psychology, informs the quintessential organisation's approach. Nonviolent Communication (Rosenberg 2004) also emphasises the spiritual aspects of interpersonal communication.

“ Nonviolent Communication came out of my attempt to understand the concept of love and how to manifest it, how to do it.

— MARSHALL B. ROSENBERG (ROSENBERG 2004)

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WHO MATTERS?



WHO INFLUENCES OUR DECISIONS AND PRIORITIES?

QUINTESSENTIALLY

Quintessential organisations regard the needs of their customers, staff, managers, investors, etc. as central to the way the work works. Collectively, these folks are sometimes called The Folks That Matter™. These organisations invest much effort in:

- Identifying the various constituencies and the people who belongs to these constituencies.
- Tracking the set of constituencies, and the changing membership of these constituencies, over time.

“ Understand stakeholder symmetry: Find the appropriate balance of competing claims by various groups of stakeholders.

— WARREN G. BENNIS

The quintessential organisation exhibits the following (collective) attitudes and feelings towards the Folks That Matter™:

- A keen urge to understand and track the needs of all the Folks That Matter™.
- Inviting folks to come up with explicit policies for defining and tracking membership of the set of all Folks That Matter™.
- Practices to both discover and attend to these needs.
- Defining organisational success in terms of needs met.

Quintessential organisations recognise the major costs and other risks arising from missing out key members from the set of all Folks That Matter™. These risks receive their continuous scrutiny – both in terms of accurately identifying members and in terms of ensuring these members’ needs are attended to, and ultimately, met. All work of the organisation is geared towards meeting the needs of the Folks That Matter™. Maximising the amount of work NOT done is achieved by cautious (risk-aware) exclusion of *insignificant* groups and individuals from the set of the Folks that Matter™, whilst striving to drive towards zero the instances of omission of *significant* groups and individuals from the set of the Folks that Matter™.

STAKEHOLDERS

Quintessential organisations recognise the distinction between *stakeholders* and The Folks That Matter™. The needs of some stakeholders sometimes don’t much matter, and some of The Folks That Matter™ aren’t actually seen as stakeholders (employees, for example). Given these distinctions, choosing different terms helps communication and, more significantly perhaps, improves Cost of Focus.

FURTHER READING

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COLLECTIVE MINDSETS



THE COLLECTIVE PSYCHE OF THE ORGANISATION

QUINTESSENTIALLY

Quintessential organisations embrace the idea that groups, communities and organisations have a *collective mindset* a.k.a. *collective psyche*. Further, they recognise the influence that their collective mindset has over their ability to succeed in their collective purpose.

Such organisations act intentionally on their collective mindset so as to improve their ability to succeed in their collective purpose.

Put another way, they believe that their organisational effectiveness is a function of their prevailing collective assumptions and beliefs:

$$\text{Organisational effectiveness} = f(\text{collective mindset})^1$$

Quintessential organisations note that a key aspect of a collective mindset, a.k.a. memeplex, is the way in which the individual memes *interact* to *reinforce* each other.

“ A memplex is a set of memes which, while not necessarily being good survivors on their own, are good survivors in the presence of other members of the memplex.

— RICHARD DAWKINS (DAWKINS 2016)

SHIFT

The implications of the above quotation being that any organisation wishing to shift its collective mindset, and thus its culture, must approach the challenge on a broad front. Not only shifting all individuals in the organisation more or less simultaneously (else risking the perils of organisational cognitive dissonance), but also shifting all the interlocking memes in a wholesale, simultaneous replacement of one memplex for another, too. Organisational Psychotherapy refers to this as a *transition* (Bridges 2009). Not for the faint-hearted. NB. Quintessential organisations see transitions as a series of punctuated equilibria.

HOMEOSTASIS

Quintessential organisations appreciate the homeostatic effects of the phenomenon of interlocking memes, and approach transitions with full knowledge of the nature of the challenge.

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SUCCESS



OUR DEFINITION OF ORGANISATIONAL SUCCESS

QUINTESSENTIALLY

Quintessential organisations define success in terms of achieving their purpose, whilst meeting the needs of all the Folks That Matter™. Not that success is a binary condition. Much more often it's a sliding scale. Quite successful one week, a little less successful the next. And, over time, an upward sloping line or curve of increasing success, enabled by increasing effectiveness.

So who matters, as far as *success* goes? Often, in non-quintessential organisations, it's limited to just the Core Group (Kleiner 2003) – for example, investors, owners, or senior executives of the organisation, or some mix of these folks.

In the quintessential organisation however, we find a wider net being cast. The Folks That Matter™ comprise not only the Core Group, but many other constituencies too. Just which constituencies varies from organisation to organisation, as does the approach to selecting members for this group.

In any case, quintessential organisations see their success in terms of success for *everyone* who matters. In other words, if there are some Folks That Matter™ (possibly including suppliers and external customers, investors, and society at large) whose needs are not met, nor even attended to, then success has not happened.

Personal success – of individuals within the quintessential organisation – has a place, to be sure, but individual success is always *secondary* to the success of the group, or the organisation – including some or all of its extended value stream – as a whole.

Quintessential organisations also have a clearly specified, quantified operational definition for success. This definition may change with circumstances, but is *always* defined operationally.

“ There is no true value of any characteristic, state, or condition that is defined in terms of measurement or observation. Change of procedure for measurement (change of **operational definition**) or observation produces a new number.

— W. EDWARDS DEMING

SUCCESS AND TIME HORIZONS

Quintessential organisations recognise their need to balance success in the short, medium and long term, and plan accordingly. The Three Horizons model (or similar) informs this perspective.

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CULTURE



ORGANISATIONAL CULTURE

QUINTESSENTIALLY

Quintessential organisations regard their organisational culture as *the* lever by which to manifest extreme effectiveness. Hang on though, that’s not the *entire* story...

These organisations recognise *culture* as a *read-only* manifestation of the *collective* assumptions and beliefs of all the folks comprising the organisation. So, it’s these *collective assumptions and beliefs* that are the real lever. Effectiveness stems from shifting these collective assumptions and beliefs to better align with and support the organisation’s purpose.

“ Culture is the collective programming of the mind which distinguishes the members of one group from another.

— GEERT HOFSTEDE

Schein (Schein 2016) provides us with a definition for “the culture of an organisation”:

“ Culture is the deeper level of basic assumptions and beliefs that are shared by members of an organisation, that operate unconsciously and define in a basic 'taken for granted' fashion an organisation's view of its self and its environment...

It's a pattern of shared basic assumptions invented, discovered, or developed by a given group.

— EDGAR SCHEIN

When collective assumptions and beliefs are out of kilter with ambitions and purpose, success becomes ever more difficult to achieve. In the quintessential organisation, everyone recognises the relevance of culture (read: collective assumptions and beliefs) and strives to align culture to purpose via adjustments to the organisation's collective assumptions and beliefs. And maybe sometimes, too, via adjustments to the organisation's shared purpose.

CULTURE CHARACTERISED

How might we go about characterising the *culture* of a quintessential organisation – or of any organisation really? Organisational Psychotherapy (Marshall 2021) proposes we can characterise the *culture* of an organisation by characterising the individual memes of that organisation's collective mindset. This allows us to characterise its culture as a whole. This book serves to define the quintessential mindset, via its seventy-plus chapters on memes.

“ In the 1970s I worked on 'culture change' programmes. What a fool I was. I learned how behaviour is a product of the system. Change the system and behaviour changes. Culture change is free. If you work on the people in a command and control system it gets ugly.

— JOHN SEDDON

Behaviour is a product of the system (the way the work works). And what moulds and shapes the system? The collective assumptions and beliefs of the organisation.

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PART III
APPENDICES



APPENDIX A – JAVELIN™



A RISK-AWARE APPROACH TO SOFTWARE DEVELOPMENT

In the forepart of this book I stated that Quintessence is neither a method nor proprietary approach. And indeed this is so. Yet I'm guessing that some folks might appreciate an example of a method or approach founded on the values and principles of Quintessence. To this end I have included here in this appendix the description of Javelin™ – an approach created by the author in 1994, and in use for more than twenty five years since, in the context of collaborative knowledge work endeavours, including software development.

Note: Javelin™ was conceived and developed expressly for *software development*, which accounts for its shortfalls in systems-thinking and whole-organisation concerns.

* * *

THE FALLING BLOSSOMS JAVELIN™ APPROACH



THE AUTHOR’S COMPANY, “FALLING BLOSSOMS”, has devoted more than fifty man-years over the past two and a half decades to creating and evolving the Javelin™ approach for guiding and administering collaborative knowledge work.

Note: the action verb here used to be “control”, but I’ve been weaning myself off that in favour of less violent concepts and terminology i.e. now “guiding and administering”. Also, I find myself somewhat uncomfortable these days about the lingering Agile influences found in Javelin™. I continue to winnow these out where necessary.

PROVEN WORTH

Initially born out of a pressing need to improve the success rate of software development efforts, nowadays Javelin™ and its related variants have proven their worth across a broad spectrum of work types, from CMMI level 5 software development work, through consulting engagements, Business Prices Reengineering and Enterprise Engineering efforts, Digital Transformations, to weddings(!) and more.

INTENTIONALLY DESIGNED

Javelin™ extends and transcends the Agile family of approaches, sharing concepts and philosophies with other Agile approaches such as Extreme Programming (XP), Scrum

and Crystal. In particular, Javelin™ is *intentionally* designed to be:

- **Responsive** – Easily admitting of both minor and radical change - at controlled points.
- **Risk-based** – Explicitly manages a wide gamut of common risks to ensure guaranteed success.
- **People-centric** – Places folks’ needs front and centre. Values interpersonal relationships and interactions over processes and tools.
- **Lightweight** – Emphasises useful results over make-work or paperwork.
- **Comprehensive** – Covers most if not all areas of e.g. CMMI Level 5.
- **Cohesive** – Addresses *all* common software development risks (the “all holes in the boat” principle - cf. Gilb). Javelin’s practices snugly interlock, providing value much greater than the sum of its parts.
- **Improvement-oriented** – Integral and explicit continual process improvement based on the Shewhart cycle (Kaizen), FlowChain™ ready.
- **Proven and polished** – Continually used and improved in active service since 1994.

INFLUENCES

We distinguish Javelin™ from its cousins, however, by believing that it incorporates much best practice from various fields both present and past, rather than trying to re-invent development management from scratch. Key influences include:

- Explicit and deliberate risk management (Capers Jones, DeMarco & Lister).
- Explicit and deliberate stakeholder requirements management (Weinberg, Gilb).
- Socio-cultural aspects (DeMarco & Lister, Yourdon).

- Process Engineering (Shewhart, Deming, Shingo, Juran, Goldratt, Jacobson).
- Quality (Deming, Crosby).
- Quantitativeness (Gilb)
- Measurement (Fenton, Gilb & Graham)
- Agile (XP - Beck; Scrum - Schwaber; Crystal - Cockburn; DSDM; RUP).
- Programme Management and Theory of Constraints (Goldratt).
- Systems Thinking (Ackoff, Deming, Seddon).
- General Semantics (Korzybski).

ORIGIN OF THE NAME

We originally chose the name “Javelin” to signify that it is one of Falling Blossom’s SPEAR (Software Process Engineering And Re-engineering) range of processes. And to jive with the (then) fashion of naming everything with a “Jav” prefix to ride the coattails of the popularity of Java. We also like to think it evokes an impression of a potent instrument, light in weight, low in cost, easy to learn to use, and with a highly effective point. “Everyone in Falling Blossoms carries their own Javelin™”.

YOUR OWN SPEAR

Javelin™ works for us. But in our experience – helping organisations transition to more effective development practices – we find that each organisation improves more quickly and achieves better results when the organisation and its development teams take the key concepts from Javelin™ and focus on building a approach tailored to their *own* needs, culture and environment. Plus, a mature customised approach can become a valuable intellectual property asset for the organisation, affording significant competitive advantage over competitors' capabilities in bringing new technology (software) based products and services to market.

SUMMARY

To sum up, Javelin™ regards delivering successfully as much like riding a moto-crosser in the mud: To go really fast you have to relax your grip: provide gentle nudges in the general direction and you'll do fine, hold on too tight and you'll surely fall flat on your face into the mire.

* * *

JAVELIN™ KEY CONCEPTS

RISK MANAGEMENT

Most software development approaches offer ‘canned’ – i.e. *implicit* – mitigations to common software development risks. This rarely alerts developers and others to the presence of a multitude of risks in their day-to-day work. Javelin™ incorporates many industry best-practice, lightweight, mitigations to common software development risks – things that are often going wrong – including:

- Building the wrong thing.
- Building the thing wrong.
- Failing to respond to changing circumstances and needs.
- Interpersonal communications failures.
- Etc..

A Javelin™ team will also *explicitly* manage the risks facing them, to raise the odds of a successful outcome for the long-suffering Folks That Matter™. Not only does a Javelin™ team continually readjust itself to keep in the “sweet-spot” of best attending to folks’ needs, it also continually inspects, morphs and adapts to ensure it’s always using the best approaches (e.g. practices, methods and tools) to meet those needs.

Note: See also the Risk meme in Part II, including the idea of Opportunity Management – not an explicit aspect of Javelin™.

THE SHEWHART CYCLE

The Shewhart Cycle, also named the Deming Cycle, the Deming Wheel, PDSA, or PDCA, represents a continuous feedback loop divided into four stages:

- **Plan** – Orient and decide what to do; consider strategy and risks; decide what to deliver this loop; allocate available resources; etc..
- **Do** – Execute against the plan.
- **Check** – Review how well we did (monitor team-specified indicators) and decide if and how to do better in the next loop.
- **Act** – Make changes to improve the way the Javelin™ team's work works.

Javelin™ places the Shewhart Cycle at the heart of its cyclic approach to **in-band** improvement. (See also: FlowChain™).

At the start of each and every PDCA cycle (typically, this might be of two week's duration) the Javelin™ team get together with their customer and other Folks That Matter™, to choose the key things of most immediate value, plan how to deliver these things, allocate resources, and consider the risks facing the team.

Once agreed on proceeding, the team executes against the plan, producing artefacts and other interim work products, and delivering against the plan. At the end of the cycle, the team come together once more to review how well things went, identify and record causes for concern, highlight aspects of their approach that failed to work well, and suggest improvements to the way the work works for e.g. the next cycle¹.

Note: Under Javelin™, the team will only admit changes (to the needs of the Folks That Matter™, to the way the work works, etc.)

at the boundary between cycles, never during a cycle. In Javelin™, actually planning and implementing any improvements gets folded into the candidate list of things to do for the next cycle.

DELIVERABLES

Javelin™ eschews the idea of *tasks* as the unit of planning in favour of *deliverables*. The rationale? Well, ideally we would like every cycle, every project, to meet all the needs of all the Folks That Matter™, with zero effort. Not that zero effort is a practical option, of course.

But we have found that placing an emphasis on *deliverables* encourages and continually reminds Javelin™ teams to focus on needs (e.g. outcomes, business value) rather than inputs (e.g. hours worked). An emphasis on deliverables also serves as a continual reminder to try to leverage existing components, sub-systems and solutions rather than continually re-invent the wheel.

FEATURE SCHEDULE AND BACKLOG

At the outset of a Javelin™ endeavour the team will explore with all the Folks That Matter™ what they need from the endeavour, and will construct a Feature Schedule showing, in outline, the various features requested and the timeline for delivery of these features. This timeline serves to inform people outside the Javelin™ team when they can expect to see various features become available to them - to help them plan, in turn.

The list of features from the Feature Schedule also feeds the Backlog - a rolling list of the features demanded by the customer, prioritised by e.g. business value or need. As the endeavour moves forward, the team and Folks That Matter™ regularly get together to select priority features (from the Backlog) for delivery in the upcoming cycle, as well as identifying additions to and deletions from the Backlog.

Note: Over the years, the role of the backlog has become increasingly irrelevant to the success of Javelin™ teams.

THE NEEDSSCAPE

Javelin places deliberate emphasis on the continual and frequent management of the needs of all the Folks That Matter™. (a.k.a. the Needsscape™).

A Javelin™ team will attempt to identify as many Folks That Matter™ as possible from the outset of an endeavour, and monitor their needsscape™ throughout the project. Each person or group that “matters”, by definition, will have some needs they’re looking to have met. The Javelin™ team tracks these (evolving) needs, from their informal beginnings, into more formal statements of requirements - both functional and non- functional, on behalf of all the Folks That Matter™.

Borrowing from the Lean canon – just-in-time inventory management – a Javelin™ team will keep the Needsscape™ to a bare minimum at all times, to ensure that formal requirements become available exactly when the project team needs them - but no sooner.

PEOPLE

Javelin™ takes to its heart the principle of “Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done”. Javelin™ explicitly includes aspects to address the needs of the Javelin™ team members, and help them do the best possible job (often under often “challenging” circumstances). Nothing in Javelin™ is prescriptive - we encourage Javelin™ teams to question everything about the way their work works, and apply only those practices in which they find real value, whilst standing prepared to defend such decisions when challenged (or audited).

POLICIES

Javelin™ promotes a very few key policies:

- Absolutely no work gets done off-plan. That's to say, unless a work product appears on the plan for the current cycle, no-one should spend any time working on it. Of course, if anyone has some spare time (which can and indeed should be the case in well-managed projects²) it might make sense to try and get ahead of the Backlog to some extent. That's what we mean by 'under-promising and over-delivering', after all.
- Although capable of meeting CMMI level 5 assessment criteria, Javelin™ has little in the way of documentation. Next to nothing about the process is – or needs to be – written down. Its authors and guardians believe this to be a key strength – the less that is written down, the easier it is to evolve and adapt Javelin™ to new circumstances, applications and domains.
- Each Javelin™ team has carte blanche to use some, all or none of the practices described as part of Javelin™. The only caveat is that to the extent that the team (not an individual) chooses to eschew a particular practice or artefact, the team must be prepared to justify that decision (to e.g. auditors, QA, management, or whoever) and describe their alternative arrangements for mitigating all the relevant risks addressed by the 'standard' Javelin™ practice or artefact.
- Each and every deliverable must meet all the relevant *quality criteria*, within the defined tolerances ("conformance to specification" Cf. Crosby). This means that Javelin™ can cater for iterative development of demonstrators, prototypes and proof-of-concepts – and equally for production of industrial-quality software, systems and other deliverables.
- Few teams ever have enough communication, whether

internal or external. We encourage Javelin™ team members to get together frequently (sometimes briefly, sometimes at length) to exchange information and build a sense of common purpose and camaraderie – a “team spirit”. Each Javelin™ team invites some or all of the Folks That Matter™ to attend cycle planning and review sessions, as well as contributing – in person or via e.g. teleconferencing – to each impromptu “huddle”.

THE ARTEFACTS

In every Javelin™ development group’s output you will find the following “administrative” artefacts. The Javelin™ development group evolves these as necessary to facilitate the evolution and progress of the *deliverables*.

ADMINISTRATIVE INFORMATION

Typically, I choose to lump all the following into one, continually-evolving, monolith of a document. Some Javelin™ development groups separate each item out into its own document. Yet again, some other Javelin™ development groups use a web-based approach to sharing this information.

In any case, this collection of administrative information serves to provide the Javelin™ development group and the other Folks That Matter™ with the context essential to enabling effective decisions, in particular helping the Javelin™ development group manage the many risks typically found in every endeavour:

- **Endeavour Name and Icon** – Increases the Javelin™ development group’s sense of ownership, common purpose, social cohesion, and camaraderie.

*Helps mitigate: Lack of buy-in from development group;
building the wrong thing.*

- **Article of Understanding** – Helps to foster understanding between the Javelin™ development group and the Folks That Matter™.

Helps mitigate: Misunderstandings between the development group and the Folks That Matter™; delays arising from the need to clarify aspects of the Needscape™.

- **Glossary** – Helps everyone to form a common frame of reference, improving communication between the development group and all the other Folks That Matter™.

Helps mitigate: Misunderstandings between the team and the stakeholders.

- **Statement of Purpose** – A statement of 25 words or less, created by the members of the development group, summarising and scoping the endeavour. Increases the development group's sense of ownership, focus, autonomy and camaraderie. Increases everyone's focus on the real goal.

Helps mitigate: Lack of buy-in from the development group; building the wrong thing.

- **Folks That Matter™ and their Needs** – Increases the the development group's awareness of the specific needs of each key constituency.

Helps mitigate: Building the wrong thing.

- **Case For Action** – Tracks the justification for the endeavour; motivates and informs; increases awareness of the justification for the endeavour; improves the basis

information for disambiguating folks' needs of the endeavour.

Helps mitigate: Lack of buy-in from development team; building the wrong thing; delays and loss of focus from changes in personnel.

- **Vision** – Provides everyone with a positive focus on the intended outcome; increases motivation; records the justification for the endeavour.

Helps mitigate: Lack of buy-in from all the Folks That Matter™; delays and loss of focus from changes in personnel; building the wrong thing.

- **Risk Parade** – Contributes to minimisation of waste and rework; allows decision-makers to balance risk vs. reward; reduces likelihood of 'show-stoppers'; anticipates obstructions.

Helps mitigate: Endeavour canned; schedule and budget overruns.

- **Top Risks** – Typically from six to ten in number; lists the risks the development group commit to actively managing (on behalf of all the Folks That Matter™).

Helps mitigate: Administration overheads impact delivery or quality.

- **Functional Requirements** – Derived *directly* from the needs of all the Folks That Matter™; typically represented as Use Cases or User Stories; provides the detailed engineering context for the 'oily rags'; provides the detail necessary to manage quality effectively.

Helps mitigate: Building the wrong thing.

- **Non-functional Requirements** – Derived directly from the needs of all the Folks That Matter™; typically represented as Quantified Quality Objectives (cf. Gilb); provides the detailed engineering context for the ‘oily rags’; provides the detail necessary to manage quality effectively.

Helps mitigate: Building the wrong thing.

- **Critical Success Factors** – Typically from three to seven in number; the most important functional and non-functional requirements; a.k.a. ‘Top Needs’ - across all the Folks That Matter™; the needs the development team commit to actively attending to.

Helps mitigate: Administration overheads impact delivery or quality.

- **Feature Schedule and Milestones** – Key synchronisation and communication tool.

Helps mitigate: Administration overheads impact delivery or quality.

- **Backlog** – Key estimating and monitoring/tracking tool; allows decision-makers to continually adjust priorities, ROI; minimises inventory and work-in-progress.

Helps mitigate: High levels of waste and rework.

- **Best Practices** – Defines or refers to pertinent best practice for building things right: Quality Plan; Risk Management Plan; Test Plan; Change Control Plan.

Helps mitigate: Building the thing wrong.

CYCLE PLAN (MULTIPLE)

Each cycle plan (one per PDCA iteration) describes the upcoming cycle: the objectives, risks, deliverables and commitment of resources.

- **Cycle Plan Details** – The plan for the specific upcoming cycle; sets out exactly what’s due to be delivered this cycle; sets out improvement initiatives and deliverables; focuses the development group on working on only what’s wanted – as defined by the most important needs of all the Folks That Matter™; defines resource allocation and confidence ratings pertaining to the delivery of each artefact; highlights external deadlines.

Helps mitigate: Building the wrong thing; building the thing wrong; high levels of waste and rework; over-promising; under-delivering; overlooking external dependencies.

- **Cycle Goal** – A statement of 25 words or less; summarises and scopes the cycle; increases a sense of ownership, focus, autonomy and camaraderie; increases everyone’s focus on the cycle’s real goal.

Helps mitigate: Lack of buy-in from development group; building the wrong thing.

- **Cycle Principal Deliverables** – Around 3 in number; generally references features from e.g. the Backlog and/or Feature Schedule.

Helps mitigate: Building the wrong thing.

- **Upcoming Events** – Anticipates potential obstacles and e.g. synchronisation needs of other groups.

Helps mitigate: Unforeseen obstacles derail progress; external demands overlooked.

- **Cycle Risks** – Focuses the Javelin™ team on key risks from the risk register that will need active mitigation this cycle.

Helps mitigate: Key risks remain unmitigated.

- **Cycle Key Needs** – Focuses the development team on those key needs that must be present (met) in the deliverables of this cycle.

Helps mitigate: Cost of Focus; poor quality.

- **Cycle Critical Success Factors** – Focuses the development team on the key Critical Success Factors that must be present in the deliverables of this cycle.

Helps mitigate: Poor quality; building the wrong thing.

- **Cycle Resource Plan** – Details the allocation of resources to the production of specific work products during the cycle.

Helps mitigate: Lack of resources; poor allocation of resources; overconfidence in the team's abilities (to deliver).

- **Cycle Work Products** – The micro-deliverables and interim artefacts of the cycle; includes reviews, walkthroughs, testing, presentations, meetings, etc.; typically between 10 and 50 in number; each product is

described by a set of Quality Gates, confidence ratings, and resources allocated to its completion; work products #1 and #2 of each cycle are always Cycle Plan and Cycle Review, respectively.

Helps mitigate: Building the wrong thing.

- **Sign-Off** – Authorisation(s) for commencing this cycle, as described and detailed by this cycle plan.

Helps mitigate: Unclear acceptance criteria; building the wrong thing.

CYCLE REVIEW (MULTIPLE)

Each cycle review (one per PDCA iteration) provides the essential ‘closure’ for a cycle. More pragmatically, it lists both the achievements and lessons learned.

- **Cycle Review Details** – To close each and every cycle; does not include reviews of e.g. work products from the cycle. Collates every learning experience when it’s still fresh in peoples’ minds. Provides a cadence and sense of rhythm, achievement, acclaim and ‘closure’; visible results, control of risk exposure, status reported in the terms needed by all the Folks That Matter™.

Helps mitigate: Failing to learn key lessons; loss of key-man expertise; limited buy-in from development group; premature termination of endeavour; unnecessary overrun of endeavour.

- **Cycle Goal** – (Restated)
- **Cycle Principal Deliverables** – (Restated) Around 3 in number; generally references features from e.g. the Backlog and/or Feature Schedule. Declaration of

outcome for each planned deliverable (delivered/not delivered).

- **Cycle Key Needs** – (Restated) Focuses the Javelin™ team and all the Folks That Matter™ on what has been achieved this cycle.

Helps mitigate: Lack of buy-in from development group and other Folks That Matter™.

- **Cycle Critical Success Factors** – (Restated) Focuses the Javelin™ team and all the Folks That Matter™ on what has been achieved this cycle.

Helps mitigate: Lack of buy-in from development group and other Folks That Matter™.

- **Cycle Resource Plan** – (Restated) and augmented by “actuals”.

Helps mitigate: Failure to learn lessons.

- **Cycle Work Products** – Actuals; status (done/ not done).

Helps mitigate: Failure to learn lessons.

- **Notes** – Information re: e.g. status of specific cycle work products.

Helps mitigate: Lack of collective memory.

- **Sign-Off** – Authorisation(s) for concluding this cycle; acceptance and trigger for billing.

Helps mitigate: Unclear acceptance criteria.

- **Reservations** – To enable sign-off (and billing) even when some of the Folks That Matter™ are not one hundred percent satisfied.

Helps mitigate: Lack of collective memory; failure to complete key deliverables going unnoticed.

FUNCTIONAL REQUIREMENTS MODEL

The functional requirements model presents a more formal, detailed specification of the informal functional needs of all the Folks That Matter™.

- **Introduction to the Notation** – Explains the modelling notations and conventions used in the requirements model.

Helps mitigate: Non-technical people having difficulty understanding the notation and modelling conventions.

- **List of Actors** – Clarifies roles and responsibilities of people engaging with the *deliverables* of the project.

Helps mitigate: Users may not understand how the deliverables of the endeavour will affect them.

- **Functional Requirements** – Specifies the things the product must do; typically expressed as a Use Case Model; evolves throughout the project; populated just ahead of the construction effort (e.g. Just-in-time).

Helps mitigate: Over-extensive ‘inventory’ of needs; over-resourcing of needs analysis; stale Needscape.

NON-FUNCTIONAL REQUIREMENTS MODEL

The non-functional requirements model presents a more formal, details specification of the informal qualitative needs of the stakeholders of the project.

- **Introduction to the Notation** – Explains the modelling notations and conventions used in the requirements model.

Helps mitigate: Non-technical people having difficulty understanding the notation and modelling conventions.

- **Non-functional Requirements** – Specifies how well the product must do the things it does; typically expressed as a matrix of Quantified Quality Objectives (cf. Gilb); lists all the ‘-ilities’ of the project; examples: Cost, Timescales, Performance, Reliability, etc.; can grow to several hundred in number (eventually); evolves throughout the endeavour; populated just ahead of the development effort (e.g. Just-in-time). Every QOO described by:

- Metric (scale, etc.).
- Date-related targets:
- Current (if known)
- Best (ideal case)
- Worst (worst acceptable level)
- Planned (Planned or target level)
- Actual (for those few actively measured)

Helps mitigate: Over-extensive ‘inventory’ of needs; over-resourcing of needs analysis; stale Needscape.

* * *

APPENDIX B – JAVELIN™ ARTICLES OF UNDERSTANDING



EXAMPLE ARTICLES OF UNDERSTANDING

One element of the Javelin collection of “administrative artefacts” is the “Articles of Understanding”. This element addresses the risk of different parties (different people and groups among the Folks That Matter™) having conflicting expectations of each other.

“ Articles of Understanding help foster understanding between the Javelin™ development group and all the other Folks That Matter™ served by that team. Better understanding leads to reduced miscommunication, angst and frustration, and thereto reduced schedule delays.

Here’s an example:

* * *

INTRODUCTION TO THE ARTICLES

In line with meeting the needs of all the Folks That Matter™ as quickly as possible, the Javelin™ development group wishes to keep the amount of detail in the requirements for this endeavour to a prudent minimum. The following Articles of Understanding attempts to set a certain level of expectation amongst all concerned regarding the likely consequences of that wish:

ARTICLES OF UNDERSTANDING

“ The development team will try to capture every important need of all the Folks That Matter™ in its needs-, functional- and non-functional- requirements models, but gaps and ambiguities will inevitably occur. To resolve these gaps the development group will need to invent details on their own. On a typical day, hundreds of such gaps can exist, which makes it impractical for the Folks That Matter™ and the development group to confer about each one. The development group typically resolves the vast majority of these gaps without other members of the Folks That Matter™ ever becoming aware that an ambiguity existed.

In some cases, a member of the Folks That Matter™ will have a strong feeling about how the development group has resolved a particular ambiguity and will invite a different resolution. This happens to a greater or lesser extent in virtually every endeavour. To the extent that a member of the Folks That Matter™ clarifies such ambiguities, later in the endeavour, to mean something different from the development group's earlier assumption, there will probably be negative impacts on costs or schedules, or both. development group will try from the outset

to structure the deliverables to minimise these negative impacts, but we all know from long experience the inevitability of this unfortunate feature of development. We will all try to remember this.

The development group undertakes to be attentive as possible to the needs of all the Folks That Matter™ and create solutions that satisfy those *evolving* needs with minimum disruption to costs and schedules.

The Folks That Matter™ undertake to remember that the development group consistently tries its best when interpreting gaps in their stated needs.

ENDNOTES

1. INTRODUCTION

1. For more information on this equation and its origins, see: Rightshifting

2. ABOUT THIS BOOK

1. See: the Antimatter Principle, elaborated in a later chapter.
2. I elaborate on the particular ends I have in mind, in a later chapter.

4. THE BIG PICTURE

1. In this book we focus on collaborative knowledge work organisations, cf. Peter Drucker, and in particular, that subset of collaborative knowledge work organisations known as “software development organisations”.
2. ISBSG The International Software Benchmarking Standards Group
<https://www.isbsg.org>

16. COLLECTIVE MINDSETS

1. For more information on this equation and its origins, see: Rightshifting

19. APPENDIX A – JAVELIN™

1. In larger organisations, each Javelin™ team may be invited to share their process improvements with other Javelin™ teams and/or QA/process improvement teams and/or process asset library team(s).
2. See e.g. Theory of Constraints (cf. Goldratt) , Queueing Theory (cf. Reinertsen) or “Slack” (cf. De Marco) for an understanding of the benefits of consistently maintaining some percentage of capacity in. Reserve, or “Slack”.

ABOUT THE AUTHOR

Bob Marshall is the creator and founder of Organisational Psychotherapy. Based in London, England, he works with forward-thinking organisations worldwide to help them open themselves up to awesomely powerful new ideas and thereby liberate their amazing hidden potential.



With forty-something years in software engineering and the tech industry, Bob has spent the past fifteen years and more studying and writing about group dynamics, and the psychology and sociology of organisations, including the creation of *Rightshifting* and *the Marshall Model* (The Marshall Model of Organisational Evolution, subtitled “Dreyfus for the Organisation”). He has previously written “Hearts Over Diamonds” – the foundational book in the emerging field of Organisational Psychotherapy, and “Memeology” – a self-help Organisational Psychotherapy book.

Most recently – since 2010 – he has dedicated his career to studying, building, evolving and applying the emerging discipline (field) of Organisational Psychotherapy.



COLOPHON



QUINTESSENCE

The name “Quintessence” refers to

- a) the pure and essential essence of something.
- b) of or relating to the most perfect embodiment of something.

In the case of this book, “Quintessence” refers to the pure and essential essence of *collaborative knowledge work* (of which software development, a.k.a. software engineering, is a subset).

SUBTITLE

“ An acme for software development organisations.

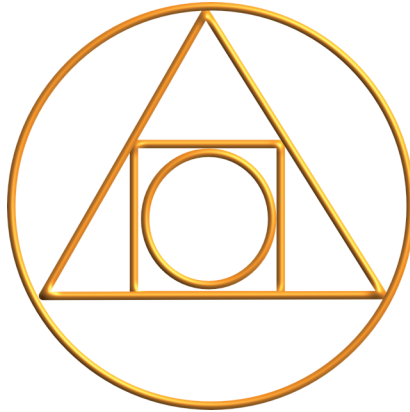
NB. Acme: *n*

The culminating point, as of achievement or excellence;
summit; peak.

Although primality targeted at software development organisations both large and small – and at organisations with software development or software engineering at their core – this book applies equally to all kinds of collaborative knowledge work organisations (of which software development organisations are but a small subset).

COVER IMAGE

The cover image for this book is inspired by the ancient alchemical symbol for Quintessence – the fifth and highest element (after Earth, Water, Air and Fire), often named “Aether”. In ancient and medieval philosophy, Quintessence permeates all nature and was believed to be the substance composing the celestial bodies, and the substance that filled invisible space.



Cover image

BOOK EDITING AND OUTPUT GENERATION

This book was created, edited, and output formats (PDF and ePub) produced via the wonderful Vellum app (NB. Mac OS X only).