Systematic Innovation

e-zine

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In this month's issue:

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Five Levels Of Open Innovation

The wave of interest in Open Innovation (OI) appears to still be on an upward trajectory. Despite the fact that, when measured in a true innovation sense of 'how much profit did this generate?' the statistics reveal very high levels of failure. According to our latest studies with clients, OI projects are failing to deliver the desired outcomes in over 98% of all cases. To put that figure in context, an OI project is about 4 times more likely to end in failure than a project in which an organization decided to not look outside their four walls for solutions.

In attempting to answer the question of why this is the case, it has become clear that some organizations do considerably better than others in terms of success rate. Which in turn begged the question, 'what, if anything, are the successful OI practitioners doing that the unsuccessful ones are not?'

The simple answer turned out to be 'quite a lot'. This article is about those differences. Thus far, we have uncovered what appears to be five distinct stages of evolution of OI capability within an organization. By distinct, we believe each represents a discontinuously different S-curve. Which in turn means that jumping from one stage to the next sees the emergence of and then demands the resolution of a contradiction.

Figure 1 illustrates what we believe the five currently visible stages look like:

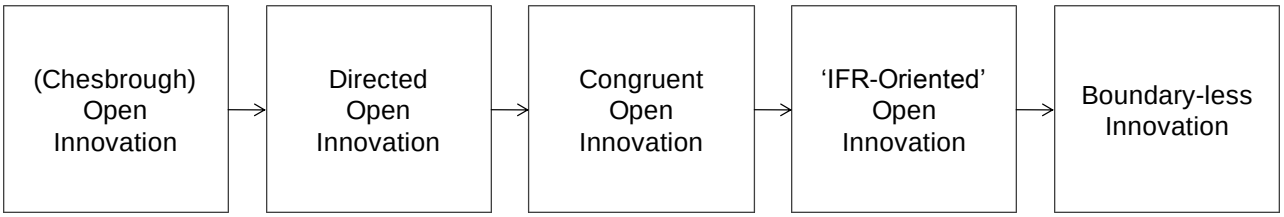

Figure 1: Five Stages Of Open Innovation Evolution

Let's have a look at each of these stages and the journeys that enable the jump from one stage to the next in a little more detail:

Level 1 - (Chesbrough) OI

The whole Open innovation phenomenon started as a slow-burn idea back in the late 1960s, and turned into the 'next-big-thing' in 2003 following the publication of Henry Chesbrough's book of the same title. The theory was in many ways brilliant: 'someone, somewhere can help you solve your problem'. For solution-hungry managers frustrated by the apparent lack of progress by their technical and R&D teams, it sounded like manna from heaven. And instinctively sensible: why restrict yourself to a small number of people working on your problems when you can make use of everyone on the planet. As is often the case with instinctively good ideas, they resonate with a lot of people. The rise in interest in the subject soon prompted the emergence of a multitude of intermediary organizations offering to help the big multi-nationals manage their portfolio of unsolved problems. Organisations like yet2.com and Nine Sigma rapidly emerged as well-known names in the industrial world. They seemed to have made an initial flurry of money too – in retrospect, they saw a neat money-making trick and decided to run with it. They couldn't hide for long though, and the trickle of apparent success stories never seemed to grow into anything bigger. Worse, a large proportion of the 'success' wasn't really success at all

when measured in a truly end to end fashion: did the end customer receive an improved value proposition? Did everyone make money? Almost always, no. The intermediaries took their no-risk fees, wrote some beautiful problem dossiers, but the MNCs didn't win and neither did the problem-solvers. Well, not quite. Quite often the 'problem-solvers' were university academics. On one level they also 'won' since the MNC occasionally threw a pile of money in their direction to build and verify their solutions. In university terms, when money comes in that is counted as success. This is okay in the artificial world of academia, so long as we remember it has little if anything to do with the real issue, which is customer value.

The Chesbrough Contradiction

The core of the problem with this Chesbrough-ian slant on the Open Innovation story is two-fold. From the perspective of the problem owner came the burden of having to plough through potentially hundreds of candidate solutions as they arrived from the outside world. Having been one of these people for a period, the real problem quickly becomes the realization that 99% of the incoming solutions are the addled doodlings of idiots. Idiots, however, that frequently had plenty of time on their hands to first of all take up your precious time explaining how they've really re-invented the Laws of Physics, and then secondly, accusing you of stealing their ideas. The problem owner is now in a real double-bind – lots of wasted time making sure idiots don't have a valid claim that you stole their idea; and knowing that if you somehow miss the 1% of incoming solutions that is a potential winner, you'll be in trouble with your bosses. In this regard, the Hoover/Dyson vacuum cleaner story has become legend. No-on wants to be the engineer, like the one at Hoover, that missed the invention that eventually killed their current business.

Then, from the perspective of the problem solver, and particularly the 1% who actually knew what they were talking about, comes the other root problem with Chesbrough's model: how do you trust the 'big-bad' problem owner organization? You reveal your idea to them – usually in excruciating detail – with no confidence that they aren't just going to walk away with your idea and leave you with nothing but a bunch of wasted hours jumping through their bureaucratic hoops.

In theory, the intermediary companies were supposed to act as a bridge to resolve these owner and solver issues. In practice, they usually didn't understand the problem or the incoming solution candidates well enough to make a sensible set of connections. So they began employing PhDs. And, of course, putting their fees up.

Level 2 - Directed Open Innovation (DOI)

By our estimate still around 75% of all OI activities are stuck at that first stage and either haven't grasped the contradictions or don't know how to resolve them. Either that or the whole OI experiment has been given up as a dud concept. From a Hype Cycle perspective, a large proportion of Level 1 OI programmes failed to make it through the 'trough of despondency'. The few that did make up the majority of the 25% of OI programmes that successfully solved the Chesbrough Contradiction and made it to this second Level, 'Directed Open Innovation'. Although the name is new (invented and owned by us, by the way), the concept is becoming familiar to many: Make Open Innovation work better by *not* making it Open. Yes, we still look outside for solutions, but rather than opening the problem to the world, we do some smart (semantic or TRIZ-based) pre-searching in order to find a small cadre of likely solution owners. This way the problem owner (or another intermediary – they get everywhere there's money to be made!) spends a little more time up front in order to save a potentially massive amount of time evaluating bogus solutions downstream.

At this second OI Level, we're very definitely in TRIZ, 'someone, somewhere solved a problem like yours' territory. As those of us occupied for much of their time in the TRIZ world know, too that great theory has rarely turned into true value-adding practice. If 99% of Level 1 OI initiatives end in failure, from what we can see so far, 98% of Level 2 initiatives are also ending in failure. The good news here is that by Directing the Open search, you double your chances of success. The bad news is that you're still around four times more likely to fail than the global average innovation statistics – i.e. if you'd never used any kind of OI at all.

The DOI Contradiction

Why is the DOI failure rate worse than plain old 'do-it-ourselves' innovation? Again two main answers, both operating at the interfaces between inside and outside worlds:

1) The first big issue relates to the tangible interface issues. Almost inherently, the 'someone, somewhere' that has solved a problem like yours has indeed solved a problem like yours. The key word being 'like'. But crucially, 'like' is never the same as 'precisely your'. As problem owner, your context is inherently different to the problem-solvers context. The problem, in other words, is now in that strange limbo-land between 'generic'ally relevant and 'specific'ally 'not quite there'. It is a land full of 'yes, but' moments as far as the problem owner is concerned: 'it's a great solution, but too expensive', or 'we like the solution, but it won't work at our temperatures', or a thousand other generic-to-specific transition problems. Too often, potentially great solutions die prematurely at this stage. As in the rest of life, nothing kills good ideas faster than a well-aimed 'yes, but'.
2) The second big issue concerns the intangible interface issues. Usually to do with the attitudes of the problem owner R&D team. R&D teams love solving problems – it's what made them become R&D people – and so there are strong 'not invented here' perceptions with any outside solution. Or, subconsciously, 'you smart-arse you just made me look like an idiot in the eyes of my boss'. Firstly, the R&D team were 'robbed' of the opportunity to work on 'their' problem, and then secondly, they got their nose rubbed in it by their bosses – 'it's such a simple solution, how come you couldn't have done that?' Net consequence? All too often, the R&D team has a vested interest in killing the incoming cuckoo.

Level 3 - Congruent Open Innovation (COI)

At Level 3 – a stage occupied by no more than a handful of OI players around the planet - we're inevitably getting into territory where there is not a lot of statistical evidence, but what is clear is that these organizations have evolved solutions to the Level 2, DOI, contradictions described above. P&G's re-imagined OI 'Connect + Develop' initiative is probably one of the better examples, largely because the problems that are opened up to the world are now almost always problems selected by the R&D teams themselves as opposed to their bosses. Hence they get to keep the exciting, golden-nugget challenges for themselves and farm out the less exciting, drudgery type problems.

We've labeled this third Level, 'Congruent' because all the 'yes, but' interface problems between inside and outside worlds have now been understood and people inside the problem-owner organization have put in place strategies – both tangible and intangible – that give an incoming solution the very best chance of making it all the way through to the customer-value adding prize at the end of the innovation journey.

Although perhaps it's a little too early to tell for sure, by the time organizations make it to this third OI Level, their chances of innovation success appears to have reached the global average levels for innovation projects that didn't go Open. Overall, in other words, OI hasn't helped, but neither has it hindered.

The COI Contradiction

The key contradictions at this stage in the OI evolution story begin to converge with the global reasons why so many innovation attempts end in failure. In particular this means what we tend to think of as the 'wrong problem, dummy' issue. Take a look at the vast majority of the problems posed in OI forums or on the more credible of the intermediary agencies and they very much focus on the need for a solution to a very specific question – 'an indicator that tells me my barbeque sausages are properly cooked', or (to take a random example from one of this week's bulletins) 'non-aerosol technologies for foam generation'. On one level these aren't such bad questions, but, from the perspective of 'will my innovation attempt be successful?' the real problem that needs solving is the higher level question of *why* do you need to solve this problem? Why does the consumer want a 'ready' indicator on their sausage? Why can't aerosols be used? In both these and just about every other case, the real problem is either a contradiction associated with the current problem that the problem owner has wrongly diagnosed needs to be solved in a certain way ('non aerosol'), or it was a situation where the real customer problem was a higher level problem ('confidence that I haven't just poisoned my kids with raw sausage meat').

In the same way that the fourth stage of our global Innovation Capability Maturity Model (ICMM) shows a Level 4 organisation to be one that is consistently able to escape from these domain-specialist written problem statements to ones that grasp the real customer need and are thus prepared to be technology agnostic, solving the Level 3 COI contradiction is all about freeing the problem owner from their technology domain to permit solutions to the real customer functional needs…

Level 4 – 'IFR-Oriented' Open Innovation (IFROI)

Having escaped from the shackles of domain expertise, Level 4 organisations free themselves up to the possibility that they can now work on the most appropriate customer problem as opposed to one that is merely within their current realm of expertise. As may be expected, the number of large organizations that have achieved this level of capability across wide stretches of the business are almost non-existent. There are, however, enlightened pockets within a number of MNCs and there are a number of corporation-sized businesses that have found ways to dynamically harness the required technical expertise for the correct problem rather than trying to make current technical knowledge fit the problem. Level-4-bound OI organizations have, to put it another way, found ways of incorporating many different types of tools in their toolbox as opposed to making every problem look like a nail just because they're good at wielding hammers. These organizations are the ones, like Apple, that have understood and are able to live by the 'customer wants the function' philosophy. Few people think of Apple as an exemplar of Open Innovation, but we only have to open up the back of one of their products to see that they are 'merely' a bolter-together of other people's smart bits of technology, and that their real value – take a look at their IP portfolio to see ample proof – comes from marrying other people's bits into a seamless and coherent consumer experience. In all likelihood, a Level 4 OI organization probably won't even be using the expression 'Open Innovation' anymore – the basic idea now being a part of the DNA of the pool of employees. And external collaboration partners.

The IFROI Contradiction

As anyone familiar with TRIZ knows, there is always the next contradiction. And so, no matter how good we think Apple is, they don't set the benchmark when it comes to Open Innovation capability. Their next contradiction – one they're already beginning to

experience – is that the customer-function-oriented world in which they live is a very convergent world. One only has to look at the speed with which Samsung, for example, have been able to mimic the iPhone, and at which iPad clones have emerged to see that no matter how in-tune an organization is with the (tangible and intangible) functional needs of their customers, there aren't enough different needs around, nor do those needs change fast enough to allow all the players that decide to enter a market to thrive within it. The problem that Apple have yet to solve – but which a small number of usually under-the-radar organizations (if WL Gore can be called 'under-the-radar'!) have – is developing the confidence, skills and abilities to venture out of one functional domain and into others. So that, one day I'm dominating the waterproof, breathable fabrics market, and the next I'm disrupting the world of guitar strings.

Level 5 – Boundary-Less Innovation

Once this comfortable-in-multiple-function-domains contradiction becomes solved, the idea of 'open' innovation never mind the OI banner has in effect becomes meaningless. An organization that attains Level 5 capability has effectively been able to build an innovation-radar that allows them to identify unmet needs in any market domain, and identify in any other domain (or 'domains' – their solutions are likely to bridge a multitude) the right combination of solutions to satisfy those needs. Whilst it is difficult to suggest that any single organization has yet achieved such a high level of innovation capability, what is already clear from trawling through the patent databases of the world is that several have understood that this is where they need to get to. There are two halves to the Level 5 story – the first is understanding and spotting needs across different functional domains ('true Voice of Customer'); the second is being able to connect to solutions in other, potentially quite different domains ('Voice of System'). The aforementioned WL Gore are pretty good at the first of these two, but not so good at the second; Apple are pretty good at the second, but not so good at the first. A true Level 5 OI organizations would achieve the best of both these two organizations and in so doing effectively become 'boundary-less'.

And there we have it. Five different stages of evolution, each separated by a contradiction that must be solved. Figure 2 summarises the stages and those contradictions:

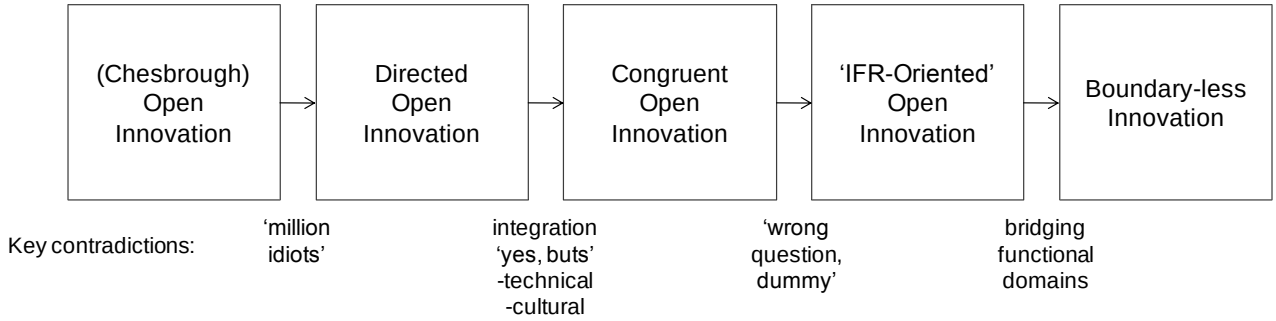

Figure 2: Open Innovation Evolution Journey Contradictions

As we have seen, only a relatively small number of organizations have made it beyond the first two Levels at this point in the evolution of the OI subject. Our work with organizations working at each of the different Levels has revealed a number of frequently-asked questions. For those organizations at the beginning of the journey, the most frequent question tends to relate to the issue of leap-frogging to the more advanced stages. For those already at the fourth and heading towards five, the question tends to be along the

lines, ‘is this the end of the road?’ Before we close the article, we offer a few thoughts on both topics:

Can Organisations Leap-Frog Levels?
Because there is a strong correlation between the five OI Levels and our Innovation Capability Maturity Model, all of the work that we have done in developing and testing that model with client organizations tells us that the answer to the leap-frogging question is a resounding ‘no’. Sure, teams within organizations seem to be able to intellectualise the different stages, and the contradictions that exist between them, but ’getting’ something intellectually and being able to live it turn out to be two quite different things. To take one of the more common examples we have seen, a number of people come to understand that any and all outside solutions will come bearing ‘yes, buts’, and a slightly smaller number of (TRIZ-familiar) people get the idea that once we’ve found such contradictions, someone, somewhere will have found solutions to them, the number of management teams that believe it enough to supply the resources to make it happen is still very small. Solving contradictions, in other words, sounds great in theory – ‘win-win’ has not become a cliché without good reason – but few organizations have seen it happen consistently enough to believe it to be repeatable. Given, then, that at ICMM Level 4, where there is, like in our OI story, a developed ability to shift outside existing technical domains, and thus a larger raft of ‘yes, buts’ are going to appear, if the Level 3 contradiction hasn’t been solved, there is no way the fourth Level has a realistic chance of working.

We tend to think this macro-view of the innovation world inability to jump over Levels also applies to a considerable extent to our Open Innovation story. Indeed the only exception seems to be the ability of some organizations to enter the story at Level 2, DOI rather than thinking they have to begin at the beginning. Even here, without the visceral frustrations of having to plough through the addled inputs of the moronic masses, it is still tempting for organizations to think the idea of ‘none of us is as smart as all of us’ is certain ‘common sense’ and therefore worth a try. Especially if they started from the Chesbrough font of knowledge. Here, as in many other walks of life (TRIZ to name one), the originators appear to have a vested interest selling their original idea rather than wishing to admit they got a few things wrong and to then move with the times.

In short, at Level 2 and beyond, expect the OI journey to demand the sequential emergence and resolution of each of the Figure 2 contradictions. There are no short-cuts to be had here other than learning from those organizations that have been through the journey stages before you.

Beyond Level Five?
If we examine the five OI evolution Levels in the context of the TRIZ/SI trends of evolution we can quickly see that Level 5 still contains a considerable amount of untapped potential. This in turn should tell us that those organizations heading towards this Level can discard the idea that it might be some kind of holy grail end point. It won’t be. The moment your competitors achieve the same Level 5 status your organization has worked hard to attain, you ought to already have defined and be building your Level 6 story.

Looking at the various aspects of untapped potential, it is difficult to establish for sure which of the currently un-made jumps will be the one – or ones – that will solve the emerging contradictions at the end of the Level 5 journey.

If we had to pick the most likely scenario based on projections for the evolution of the global economy in the coming decades, the strongest business contradiction drivers look

set to be those that relate to a parallel need for increasing levels of organizational agility, coupled with the need for stability in a 'crisis' period of multiple stuttering and failing national economies.

And if agility-stability is the key contradiction that needs to be resolved, we believe the jump that best solves the conflict will be the ability to add 'feed-forward' predictive capability to the idea of the boundary-less organization. In Figure 3, we call this Sixth Level, 'Prescient Innovation':

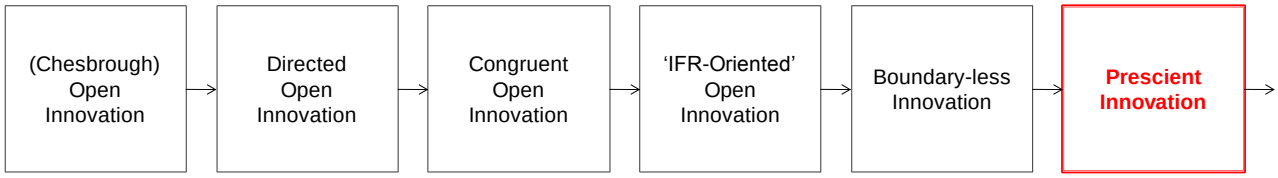

Figure 3: Six Stages Of Open Innovation Evolution?

Prescient in this sense meaning the ability to build predictive 'feed-forward' organizational control systems… a subject we imagine talking more about in the coming months.

The Gurdjieff Paradox

Never in the fields of philosophy, psychology or spiritual teaching has one person created so much polarization of opinion as Caucasus-born, George Ivanovich Gurdjieff. No-one seems completely sure when he was born (and Gurdjieff seemed more than happy to exacerbate the confusion), but probably somewhere around 1873. He died in 1950, leaving behind him a wake of ardent acolytes, arch-enemies and lengthy, convoluted texts describing his 'method'. Have a go at reading the first couple of pages in the 1200-page long main text, 'Beelzebub's Tales To His Grandson' (Reference 1), and you'll pretty quickly be able to decide which side of the genius/charlatan fence you sit.

Rather than enter that debate, this article centers around the main thrust of Gurdjieff's life work, the so-called 'war against sleep' that formed the sub-title of one of the more coherent accounts about the man and his output (Reference 2). The 'sleep' in Gurdjieff's war wasn't so much about bad cases of insomnia, but rather man's struggle to escape from what those of us in the TRIZ/SI world will know as 'psychological inertia'. Gurdjieff himself talked about humans as spending the majority of their lives as 'unthinking robots', seemingly unwilling and increasingly as we get older, incapable of true creative thought. Which in turn justifies why we think it makes a suitable topic for the SI e-zine.

Compared to the early parts of the 20th Century when Gurdjieff first observed and began working on solutions to the problem, we now have a much clearer understanding of the role of paradoxes, conflicts and contradictions preventing us from getting to where we want to be. Gurdjieff didn't have a way to present what he was trying to achieve (or perhaps rather his view – wrongly in our opinion – was that merely making something easy to understand wouldn't solve the problem; waking people from their robot 'sleep' in his eyes meant forcing them to do a lot of hard, physical work. A lot.). Today we can do a far better job. The big contradiction he was trying to solve is thus shown – simply – in Figure 1:

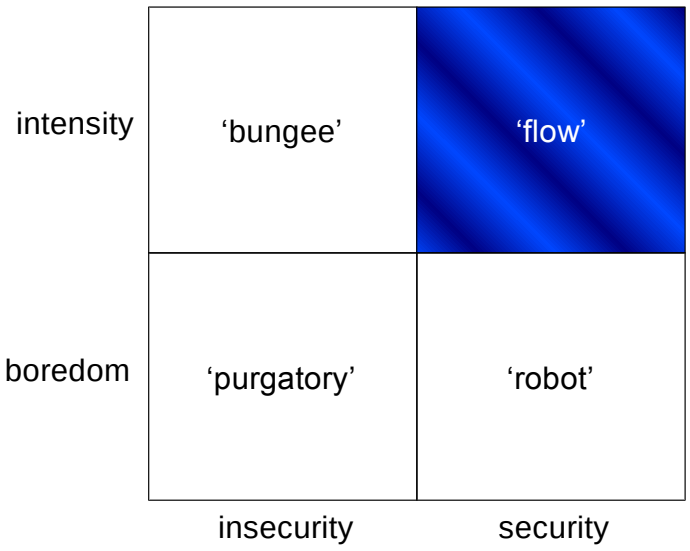

Figure 1: The Gurdjieff Paradox As 2x2 Matrix

As with any good 2x2 matrix, the two axes define two opposing sides of a conflict. In Gurdjieff's case that conflict centred around parallel desires that people use the creative parts of their brain (the vertical boredom/intensity axis) and their feeling of security (the security/insecurity horizontal axis). Gurdjieff never described his problem in this way and

so never had an opportunity to label each of the four segments. Let's though examine each of the four to see how they do relate to his thinking:

Robot
The most directly connected to Gurdjieff's thinking is the bottom-right, 'robot' quadrant. It was Gurdjieff's belief that all of us spend nearly all of our time in this box, and that the older we become the more difficult we find it to escape from our 'robot' thinking. We all desire security, Gurdjieff hypothesized, and therefore over time gradually surrounded ourselves with routines and patterns that we know work. The Gurdjieff 'method' was all about getting people out of this box into the top-right 'flow' quadrant.

Bungee
The founding idea for the Gurdjieff 'method' was the recognition that, under extraordinary circumstances, people are able to do things that under normal situations they cannot. So, for example, someone caught in a car wreck finds the strength to lift the car off a trapped family member. Or, under hypnotic trance (Gurdjieff earned some of his income for a time as a stage hypnotist!) it was possible to lay a person between two chairs, with their head on one and their ankles on the other and have someone stand on them as they lay there rigidly horizontal, whereas once out of the trance it turns into a feat of muscle control that no-one can manage. We've labeled the state of mind found in these kinds of situation as 'bungee' – like bungee jumping and other dangerous sports, people do them because of the feeling of intense exhilaration the elicit. At the same time, of course, the experience of plummeting to earth at several hundred miles an hour represents a state of extreme insecurity.

Flow
Gurdjieff's big idea was that if we could experience that kind of thrill while simultaneously being secure, that would represent a much more ideal situation. We would be both 'awake' and living life to the maximum. In modern parlance, the term 'flow', coined by psychologist, Mihaly Csikszentmihalyi (Reference 3), is the closest model to the mind state Gurdjieff was trying to enable his students to attain. Athlete's often use the expression 'in the zone' to mean exactly the same thing – a mind-state of complete focus at the task at hand. It also forms the basis of Edward Matchett's 5M equation (Reference 4). Perhaps not surprisingly, both Csikszentmihalyi and Matchett were strongly influenced by Gurdjieff's work.

Purgatory
Gurjieff didn't really talk very much about the fourth and final quadrant of our matrix. This is the place where we are both insecure and 'bored'. The closest concept we could think of to describe scenarios where this strange pairing is present was either the experience of sitting in a dentist's waiting room, or the Catholic idea of 'purgatory' – in either case, a state of uncertain limbo, where nothing's actually happening, but when it does, it probably won't be good.

Gurdjieff's 'Method'
We keep writing 'method' in inverted commas, because having ploughed through a substantial chunk of Reference 1 (an act of, in retrospect, extreme masochism – we suffer so you don't have to!), Gurdjieff's big idea was to force people into the flow state by making them do incredible, ultimately un-endurable amounts of physical labour. Again, his big idea centres around how we're able to change our behavior only when we're in

extreme positions. After Gurdjieff, it was another acolyte, William James that perhaps best summed up the idea, and set it into a more consumer-friendly (something Gurdjieff would have abhorred I think) - 'most people never run far enough on their first wind to find out they've got a second.' The 'Method' in other words was all about pushing people past their point of exhaustion until such times as a magical 'second wind' kicked in. When we're running on second wind, we're in flow state.

If Gurdjieffian warning bells weren't sounding earlier in the article, they probably – rightly – are now. How does post-exhaustion 'second wind' count as a 'secure' mode of operation? Answer; it doesn't. The idea though was that once people were able to experience the second-wind state they had the opportunity to mimic it even when they weren't in a post-exhaustion state.

All in all, today the hard work extolled by Gurdjieff appears to be closer to a form of torture rather than any kind of 'method' that would be adopted by anyone other than the extreme masochist. We think he had found a really good problem to solve – how to get people out of their psychological inertia, 'robot' state?

Physically tiring people is 'a' way of achieving a solution, but probably not the most effective. The second half of the 20th Century saw the emergence of other psychologists and teachers – like Matchett – who developed less drastic solutions. It's what the newly reprinted Matchett book, 'The Road To True Professionalism' (Reference 4) is all about. It's also the theme of the so-called 'creativity cap' – an Australian invention that in effect enables the wearer of the cap to 'turn off' the analytical left-side of their brain and thus become 'more creative' by only having their right-side operational. It's also a part of David Snowden's 'Cynefin' thinking model – his view being that taking individuals and groups into what is in effect the 'bungee' quadrant of our Figure 1 model temporarily and consciously (he calls it the 'chaos' quadrant) is a very good way to get people out of the box and thinking differently, knowing that they can always retreat to their 'robot' safety as and when things get too uncomfortable.

For us, finally, it is not about judging the 'right' or 'wrong'ness of any of these solutions. Ultimately, when we're talking about Gurdjieff's Paradox, we're very definitely in the territory of complex systems, and as such, it is very unlikely that any kind of silver-bullet solution is going to work for everyone in every situation. Gurdjieff's big contribution, ultimately, is making us aware of the key thinking state problem. Beyond that, others that have followed in his wake have given us a host of clues and insights into possible solutions. Now its our job to turn those insights and clues into something that will consistently work for us. Which ultimately comes back to doing some hard work again. Albeit, not the kind of hard work Gurdjieff had in mind.

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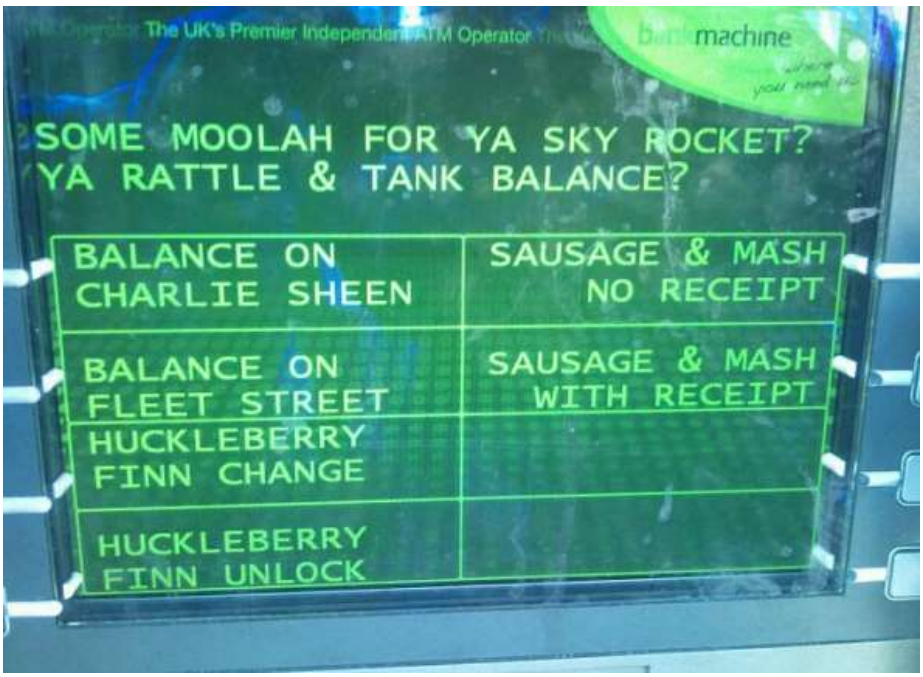
2) Wilson, C., 'G.I.Gurdjieff: The War Against Sleep', The Aquarian Press, 1986.
3) Csikszentmihalyi, M., **'**Flow: The Psychology of Optimal Experience', HarperPerennial; Reprint edition (31 Mar 1991)
4) Matchett, E., 'The Road To True Professionalism', IFR Press reprint, 2011.

Having A Bubble - Sausages

One of the lesser known of British hobbies is finding new ways to confuse tourists with colloquial language and behaviours. As if to prove the point, the phenomenon recently attained ‘corporate’ status when one of the nation’s banks introduced a Cockney rhyming slang option on their ATMs:



For the un-educated, Cockney rhyming slang is a dialect traditionally used by some in the East End of London, where certain words or phrases are replaced by other, rhyming words. For example, if you wanted to go upstairs you would climb the "apples and pears". Or, if you’ve reached a high level of proficiency, you’d lose the rhyming part of the expression altogether, as in, ‘climb the apples’.

And so if you’d like to withdraw some cash from one of these new ATMs, you should press the "sausage and mash" button (no doubt to be truncated to ‘sausage’ in the future). As for the other options, we’ll leave you to work it out for yourselves. Or, ‘on your Jack Jones.’

Or how about: 'Allo me old china - wot say we pop round the Jack. I'll stand you a pig and you can rabbit on about your teapots. We can 'ave some loop and tommy and be off before the dickory hits twelve.’

My new favourite trick pastes these kinds of sentences into a translation engine and then translates them back into English:

French:

'Allo moi la Chine ancienne - wot dire que nous le tour de la pop de Jack. Je vais vous arrêtez-vous un cochon et vous pouvez lapin sur votre théières. Nous pouvons "ave une boucle et Tommy et être éteint avant l'dickory frappe douze

To German :

SYSTEM ATIC INNOVAT ION

'Allo mich alten China - wot sagen, dass wir rund um die Jack Pop. Ich werde für ein Schwein zu stoppen, und Sie können Kaninchen auf Ihrem Teekannen. Wir können 'ave eine Schleife und Tommy und abgeschaltet werden, bevor die Dickory hits zwölf

To Spanish:

'Allo me antigua China - WOT decir que alrededor del pop Jack. Yo voy a dejar para un cerdo, y se puede conejo en su teteras. Podemos 'ave de un bucle y Tommy son dentro y fuera, antes de la Dickory doce golpes

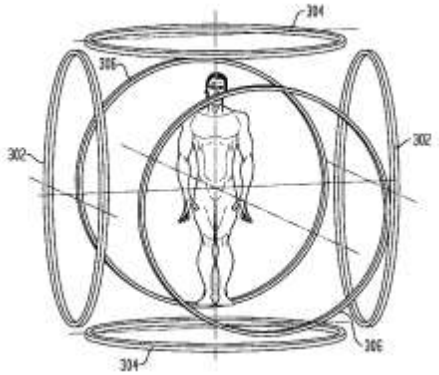
And now back to English:

'Allo me old China - WOT pop say that about Jack. I will leave for a pig, and rabbit can be in teapots. We 'ave a loop and Tommy are in and out before the twelve strokes Dickory

Which I think takes the story to a whole new dimension of genius-ness. Rhyming slang for the digital age. You saw it hear first.

Patent of the Month – Therapeutic Electric Fields

Patent of the month this month takes us very clearly into the world of 'fields'. Fields, as we keep saying, ultimately win in *any and all* domains. Sometimes they permit the delivery of functions that weren't possible in other ways. Some of these more ethereal than others. This month we head to the 'very' end of that scale – the use of magnetic and electric fields in therapeutic applications. Rather than make any unwarranted claims about the efficacy or otherwise about such treatments, what we particularly liked about our chosen example is the way the 'field' has been evolved along other of the TRIZ/SI trends of evolution.



Okay, if you've not been put off yet, the drawing above is the main image from US8,014,846, granted to inventor Ted Litovitz at the Catholic University of America in Washington DC, on 6 September. Here's the background to the invention:

Exposure to electromagnetic fields (EMFs) has become an increasingly useful tool in the treatment of many medical conditions. For example, exposure to time-varying magnetic fields is an accepted method of accelerating bone and wound healing. For example, EMFs may be used to limit damage to a heart during a heart attack and to protect bone marrow during chemotherapy and x-ray therapy for destruction of tumors.

When an EMF is applied to a cell, the electric field acting on the cell is the main mechanism by which the EMF affects the cell. For most purposes, the use of a low frequency time-varying magnetic field is the most convenient and controllable method of causing an electric field to appear across the tissue to be treated. A time-varying magnetic field may be created external to the body (for example with a pair of coils and a time-varying current source). When this field enters a body, it induces (by Faraday's Law) a time-varying electric field. It is fairly straightforward to create a uniform magnetic field in a body because the body's magnetic properties are quite uniform. However, the induced electric field is very non-uniform because the body's electrical conductivity may vary enormously from organ to organ (e.g., lung to heart) and within an organ (e.g., heart muscle to heart blood).

This lack of uniformity represents a serious limitation in the therapeutic application of time-varying magnetic fields. A good example of this limitation is in the use of magnetic fields to limit damage to the heart after an ischemic event (e.g., heart attack). Application of the magnetic field for a period of 30 minutes or more induces activation of heat shock proteins (hsps) in the cells of the heart muscle. These hsps act to protect the heart from cell death (necrosis) during the period in which the stoppage of blood flow (ischemia) causes cell stress. The problem that exists with this technique is that the induced electric fields vary so greatly that in many regions of the heart the induced electric field is not great enough to cause the cells to produce hsps. For example, the lung is a high resistance region adjacent to the heart. As a result, if the induced electric field passes through both the lung and heart, most of the field will appear across the lung and very little in the heart. Even if the induced electric field is applied in a direction that does not cross the lung, there

will be regions in the heart that do not experience a significant electric field because the blood has such a low conductivity relative to the heart muscle.

Which regions of an organ do not experience a significant electric field depends critically upon the direction of the applied magnetic field, and thus the direction of the induced EMF. One proposed solution may be to simply apply fields in the x, y and z directions simultaneously. This however does not work since the vector sum of these fields would be simply a new magnetic field in a single direction.

Which translates to the following basic conflict: we want all regions to experience the electric fields, but we cannot apply directional fields due to their propensity to 'merge' and we need directional fields because different parts of the body absorb/shield fields at different levels. Not the easiest of problems to map onto the Contradiction Matrix, but here's how we decided to map it when we were adding this data-point to the database:

IMPROVING PARAMETERS YOU HAVE SELECTED:

Function Efficiency (24) and Manufacturing Precision/Consistency (42)

WORSENING PARAMETERS YOU HAVE SELECTED:

Other Harmful Effects Generated by System (31) and Adaptability/Versatility (32)

SUGGESTED INVENTIVE PRINCIPLES:

4, 19, 15, 35, 17, 3, 33, 30, 10, 7, 28, 13, 1, 23, 37, 34, 39, 16, 26, 12

And here's how the inventors solved the problem:

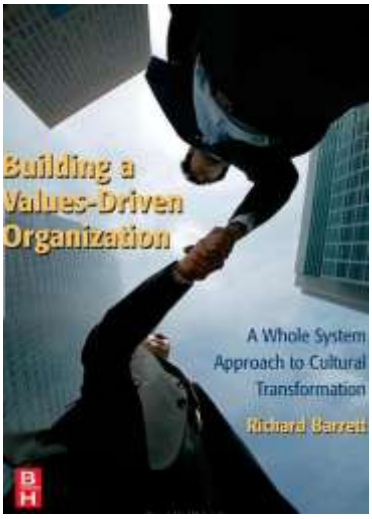
A method of delivering an electric field to a body, comprising: delivering a first magnetic field from a first coil in a first orientation to a body and directed at a desired target within the body; and delivering a second magnetic field from a second coil in a second orientation directed at said desired target within the body to induce an electric field across said desired target, wherein only one magnetic field is delivered to the body at any one time.

A rather nice example of a Principle 19, Periodic Action – apply the field from one direction *then* apply it from another. Also, a nice reminder of the importance of the Rhythm Coordination trend – anything that is continuous should evolve to pulsing.

Amazing that something so simple forms the basis of an invention. Even more amazing it the solution delivers improved efficacy for the patient. And all done with barely any change to the existing system – just some clever switching on and off of what was already there.

Now we just need to get the inventors thinking about the next evolution stage and start exploring the use of a resonant frequency with their pulsations. Or somebody should do it for them? Over to you.

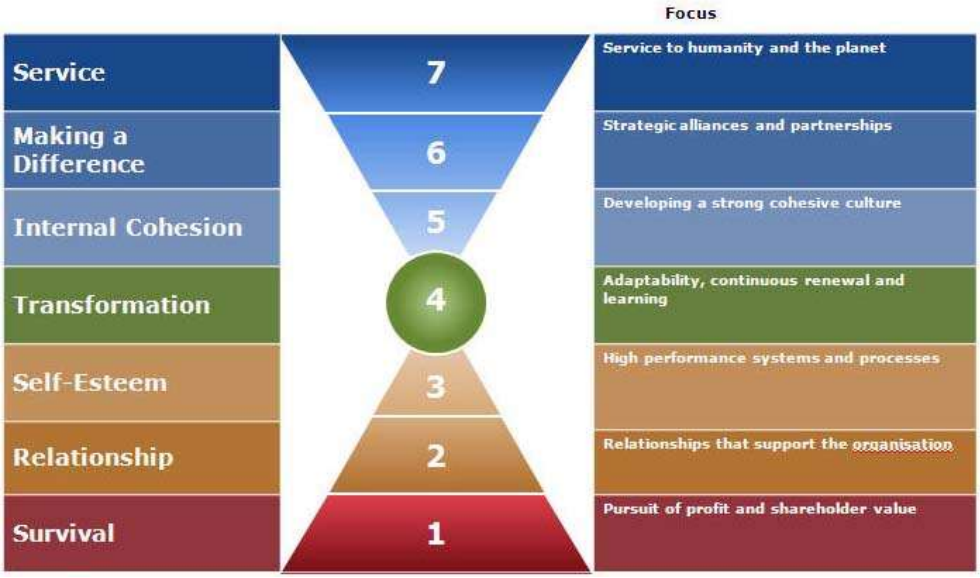
Best of the Month - Building A Values-Driven Organization



Well, yet another month in which the new releases haven't inspired us enough to merit their consideration as candidates for mention in this section of the e-zine (although in fairness, neither the newly published Clay Christensen nor the new Hugh MacLeod had arrived before we went to press – maybe next month!). And so we find ourselves heading back in time in the search for something (anything!) of sufficient merit.

Which brings us to one of the few genuine British business gurus, Richard Barrett. 'Building a Values-Driven Organization is his 2006 book. Essentially a bringing together of three elements, two of which – Spiral Dynamics and Ken Wilber's Integral Theory – will most likely already be known to readers of any of our work. The third element is Barrett's own work on levels of consciousness, crudely speaking a halfway house between Maslow's Hierarchy of Needs and Spiral Dynamics. Frankly, anything readable relating to Spiral Dynamics is to be recommended, and so for this reason alone, it is a fairly safe bet that Barrett's insights will be worth the price of entry for a majority of our readers.

A few words about Barrett's own Levels of Consciousness model might help convey the theme and focus of what these insights might be. Here is the basic model as drawn for what Barrett describes as an organization-level view of the world:



The egg-timer shape of the centre of the picture is indicative of three distinctly different business foci:

- Levels 1-3 focus on the basic (tangible) needs of business (pursuit of profit, satisfying customers and high performance systems and processes)
- Levels 5-7 focus on the higher level intangible needs – group cohesion, beneficial alliances and the role of the organization in a bigger societal context
- Level 4 is all about transformation, and the shift from (tangible) fear-based, rigid hierarchies to (intangible) more open, inclusive, adaptive systems, and importantly according to Barrett's hypothesis, organizations have to pass through this stage before they can really 'live' the higher level needs and balance them with the essential tangible needs.

Interestingly, Barrett goes on to use this same basic seven-level pattern in each of the four quadrants of the Wilber (me-we/internal-external) 2x2 matrix. All in all quite elegant, especially when combined with the case study examples of organizations that have been through a questionnaire analysis formulated to help understand where individuals and leaders are along the hierarchy.

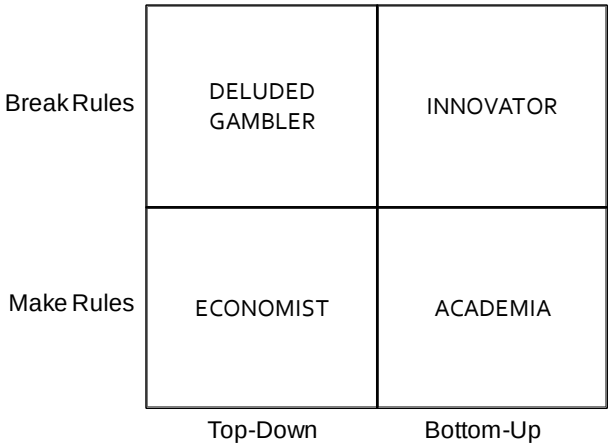
A big part of the book, then, after having explained the basic models and shown a few case study examples, is to focus much of the discussion on the role of leaders. The large majority of Barrett's analyses with companies over the eight year period leading up to the publication of the book firmly showed that – perhaps not so surprisingly – the values of an organization are strongly dependent on the values of the person at the top of the company. Or, in short, if a management team is trying to instill an 'innovation culture' within an organization, if the person at the top doesn't get it, or such an objective is inconsistent with his/her personal values, it won't happen. Period.

Where the book is weakest is describing the required journeys that an organization needs to follow in order to shift their value systems from their current state to whatever the desired state might be. Sure, in general, the instruction is (per Spiral Dynamics) 'you need a balance of each of the different Levels', and 'the leader needs to be working at the higher Level', but there's not enough meat for any reader to really go away and put into action anything tangible. Or even intangible. In this regard, the book can come across as a not-so subtle attempt to sell consulting support. At least, I think, that would be the case for anyone that didn't already know something about Spiral Dynamics or Wilber. For those of us that do, while we still shouldn't expect to get a clear what-to-do roadmap either, the myriad connections and nuggets of insight alone make this worthy of a serious look.

Conference Report – BSA – Planning For The Future

I made a number of important discoveries at this small but perfectly formed event held by the UK Building Society Association in London on September 13. The two most important things I learned were: 1) innovators are the polar opposite of economists, and 2) economists have a horrible and worrying knack of being able to present very confidently about things they have absolutely no way on earth of knowing is true. Which is not to say that economists are dumb, rather that they know confidence is critical in the financial markets and that we're all relying on them to make sensible predictions about the future.

My biggest dawning came when I tried to explain (to myself) what I meant when I had said (aloud) 'polar opposite' and found myself drawing this 2x2 matrix:



To no doubt over-simplify horribly, economists are in the business of building top-down models of the world that they can then extrapolate from to make predictions of the future. Their emphasis is on looking at macro-level data (interest rates, the price of oil, average domestic debt, etc), inferring relationships from it in order to obtain an algorithm that can use to calculate what will happen in the coming months and years. I learned today that they manage to get away with doing this and still retain their jobs when their naïve predictions invariably go wrong, by declaring the reason said predictions went wrong was due to 'unforeseen circumstances'. I also learned that 'unforeseen circumstances' is what the innovators of the world do: economists build models of the world; innovators change the rules.

The other thing economists do, according to the picture, is they work top-down from the end result data. I come from the aerospace industry originally. My equivalent of the economists problem was to design a jet engine that I could prove to my industry regulators would still be operating predictably in five or ten years time even though, at the beginning of a project I'd never built an engine of this type before. If I got my job wrong, people died. Ask an economist to make predictions about the future where people die if they get the predictions wrong and not many will take up the challenge (well, according to the survey I did during the session at least). Jet engine designers have the relative advantage here that a typical engine will have just a few thousand components, whereas something like a national economy has two or three orders of magnitude more. The jet engine designer has a small enough set of variables that they can work bottom-up to determine the behaviour of an engine over time: basically you look at the design of each component, the interactions between each pair of components and make sure you understand each aspect of those elements. Crudely speaking.

What jet engine designers understand is that working bottom-up is the only way to sensibly predict the future. Economists, while some of them get the concept of 'bottom-up' effectively hold their arms aloft and say 'there is no way you can do that when you're looking at systems as complex as ours'.

The theme of my presentation at the event was that, yes, to some extent, that is true. No one can sensibly predict growth of the UK economy in the next five years (the participants at this event were doubting their ability to predict to the end of 2011) because there are simply too many unknowns and unknowables.

But at the same time there are some things that are very predictable indeed. Like deomographic profiles and the chain of events they inevitably set in place. And, theme of our talk, generational characteristics. So that even if we're not able to build the complete big picture, we can at least start to bolt together some important pieces in order to build some more realistic scenarios. And certainly well enough to do what turns out to be the key innovator's task: finding the conflicts and contradictions.

Whether any of the room-full of economists got the concept – it's difficult listening to polar-opposite perspectives! (I know, I had to listen to them pontificating naively about things even the crudest bottom-up model tells you are ridiculous) – at least hopefully they left the session with the thought that bottom-up was heading towards the realms of possibility.

Looking back, the agenda definitely pitched us as the 'light-hearted pre-lunch entertainment'. The overall theme was enabling participants to 'navigate the current economic uncertainty and assess the challenges and opportunities ahead.' Aimed primarily at those charged with planning and budgeting for next year, or marketing and product development, it was supposed to deliver increased understanding of the future operating environment for mutual lenders and deposit takers, and risks and opportunities within it. Here's what the agenda looked like:

10.00 Welcome and Introduction
Andrew Gall, Business Economist, BSA

10.05 The UK Economic Outlook The UK Economic Outlook
Robert Gardner, Chief Economist, Nationwide Building Society
Robert sets out what the main macroeconomic trends affecting the general business environment mean for mutual lenders and deposit takers, and puts forward potential scenarios for the next couple of years.

10.45 The Housing Market The Housing Market
Simon Rubinsohn, Chief Economist,
Royal Institute for Chartered Surveyors
Simon examines the outlook for transactions and lending, house prices and arrears, and flags the potential risks for mutual lenders.

11.40 The Savings Market The Savings Market
Andrew Gall, Business Economist, BSA
This session examines future developments in the funding markets, including expectations for retail savings flows, and what this means in practice.

12.20 Consumer Trends And Innovation
Darrell Mann
Darrell analyses key customer trends and challenges and shows how to innovate and achieve a breakthrough business strategy taking advantage of these.

13.00 Close

Boy, did we all get a shock. For different reasons, but a shock nevertheless.

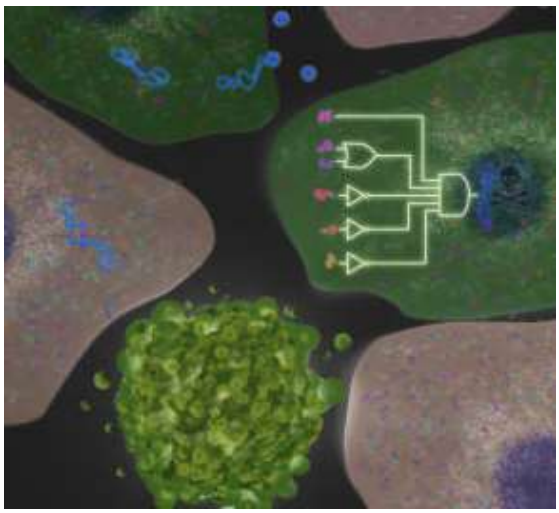
My big shock was that these twenty-or-so high-powered financiers had absolutely no idea what they were doing. Cautiously predicting ‘modest recovery next year’ on the basis of nothing more than top-down rose-tinted spectacles.

We’ve always said with things like the generational cycles and the Fourth Turning findings of Strauss & Howe that there is nothing about the patterns that are set in stone. In theory, the end of this current cycle is the first time we’re aware the cycle exists so knowing it we *ought* to be able to shift it. Alas, unless the economists start to embrace it, all the evidence of the speakers on show today was that their naivety and reliance on the wrong data will inherently cause the pattern to repeat. Which basically means, if I had to make a bottom-up bet, buckle-up and brace yourself for some rough times ahead.

I have never been more glad that I no longer have a mortgage. Because I now see my money was not in safe hands.

Their big shock (I hope) was that someone in the room had seen through their castles-in-the-air prediction charade. The coming weeks will see if any of them are brave enough to do anything about it.

Investments – Cancer Destroying Biological Computer



Researchers led by ETH professor Yaakov Benenson and MIT professor Ron Weiss have successfully incorporated a diagnostic biological "computer" network in human cells it was reported in Science this month. This network recognizes certain cancer cells using logic combinations of five cancer-specific molecular factors, triggering cancer cells destruction.

Yaakov (Kobi) Benenson, Professor of Synthetic Biology at ETH Zurich, has spent a large part of his career developing biological computers that operate in living cells. His goal is to construct bio-computers that detect molecules carrying important information about cell well-being and process this information to direct appropriate therapeutic response if the cell is found to be abnormal. Now, together with MIT professor Ron Weiss and a team of scientists including post-doctoral scholars Zhen Xie and Liliana Wroblewska, and a doctoral student Laura Prochazka, they made a major step towards reaching this goal. In the study, they describe a multi-gene synthetic "circuit" whose task is to distinguish between cancer and healthy cells and subsequently target cancer cells for destruction. This circuit works by sampling and integrating five intracellular cancer-specific molecular factors and their concentration. The circuit makes a positive identification only when all factors are present in the cell, resulting in a highly precise cancer detection. Researchers hope that it can serve a basis for very specific anti-cancer treatments.

Selective destruction of cancer cells

The scientists tested the gene network in two types of cultured human cells: cervical cancer cells, called HeLa cells, and normal cells. When the genetic bio-computer was introduced into the different cell types, only HeLa cells, but not the healthy ones, were destroyed.

Extensive groundwork was required to achieve this result. Benenson and his team had to first find out which combinations of molecules are unique to HeLa cells. They looked among the molecules that belong to the class of compounds known as microRNA (miRNA) and identified one miRNA combination, or profile, that was typical of a HeLa cell but not any other healthy cell type. Finding the profile was a challenging task. In the human body there are about 250 different healthy cell types. In addition, there are numerous variants of cancer cells, of which hundreds can be grown in the laboratory. Still greater is the diversity of miRNA: between 500 to 1000 different species have been

described in human cells. "Each cell type, healthy or diseased, has different miRNA molecules switched on or off," says Benenson.

Five factors for cancer profile
Creating a miRNA "profile" is not unlike finding a set of symptoms to reliably diagnose a disease: "One symptom alone, such as fever, can never characterize a disease. The more information is available to a doctor, the more reliable becomes his diagnosis," explained the professor. The researchers have therefore sought after several factors that reliably distinguish HeLa cancer cells from all other healthy cells. It turned out that a combination of only five specific miRNAs, some present at high levels and some present at very low levels, is enough to identify a HeLa cell among all healthy cells.

A network operates similar to a computer
"The miRNA factors are subjected to Boolean calculations in the very cell in which they are detected. The bio-computer combines the factors using logic operations such as AND and NOT, and only generates the required outcome, namely cell death, when the entire calculation with all the factors results in a logical TRUE value," says Benenson. Indeed, the researchers were able to demonstrate that the network works very reliably in living cells, correctly combining all the intracellular factors and giving the right diagnosis. This, according to Benenson, represents a significant achievement in the field.

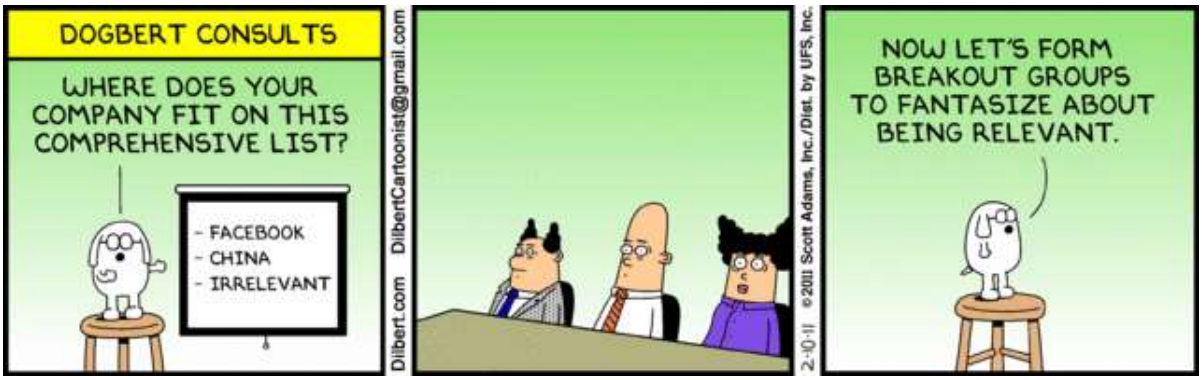
Animal Model and Gene Therapy
In a next step, the team wants to test this cellular computation in an appropriate animal model, with the aim to build diagnostic and therapeutic tools in the future. This may sound like science fiction, but Benenson believes that this is feasible. However, there are still difficult problems to solve, for example the delivery of foreign genes into a cell efficiently and safely. Such DNA delivery is currently quite challenging. In particular this approach requires temporary rather than permanent introduction of foreign genes into the cells, but the currently available methods, both viral and chemical, are not fully developed and need to be improved.

"We are still very far from a fully functional treatment method for humans. This work, however, is an important first step that demonstrates feasibility of such a selective diagnostic method at a single cell level," said Benenson.

We tend to agree, albeit the directions followed by the research team are precisely the ones that TRIZ/SI would indicate being the most fruitful directions. Unlike so much of the rest of the cancer treatment world. Read more about the work at:

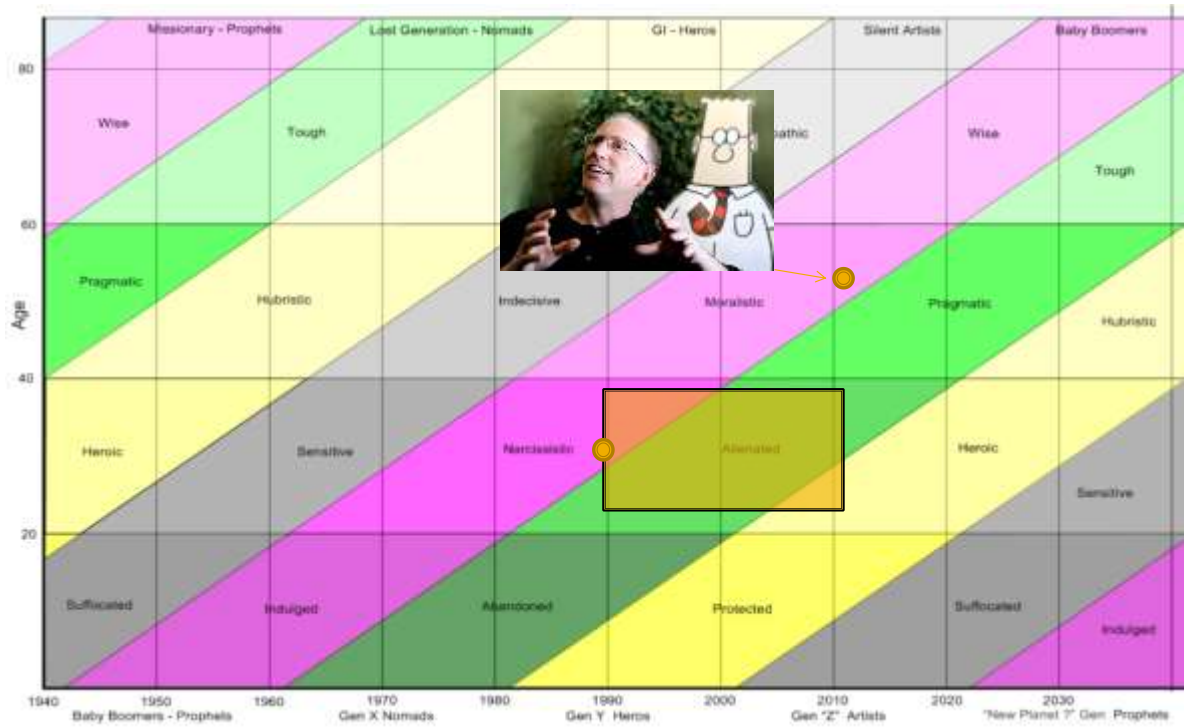
Z. Xie, L. Wroblewska, L. Prochazka, R. Weiss, Y. Benenson. Multi-Input RNAi-Based Logic Circuit for Identification of Specific Cancer Cells**.** Science**, 2011; 333 (6047): 1307**
DOI: 10.1126/science.1205527

Generational Cycles – The Rise and Fall Of The Dilbert Empire



In 2005, Dilbert cartoonist, Scott Adams placed at a somewhat astonishing 12th in the EFMD rankings of the most influential management thinkers in the world. In 2007 he had slipped to 21st. In 2009 he didn't feature in the list at all, and hasn't done since. Despite being syndicated in close to 2000 publications around the world, Adams recognition for his work, in terms of awards ended with the Newspaper Comic Strip Award for 1997. For a time he was ranked number one in the world in terms of readers. But that time, despite the continuing high syndication, seems well and truly over. Ever noticed how the cartoons don't seem quite so funny anymore? Quite so in tune with the times?

Here's the nub of the problem:



Boomer, Adams was born in 1957 and so was in his early 30s when Dilbert first appeared in 1989. The cartoon strip was one of the first to focus on the strange world of work and so it found an audience in primarily the 20-40 age-group – people who were most likely operating at a Dilbert-cubicle level in their respective organization, and were consequently working for the pointy-haired (Boomer) boss. The strip had a relatively slow rise to fame, taking until 1995 before Adams was able to leave his cubicle and draw Dilbert as a full-

SYSTEM·ATIC INNOVAT·ION

time occupation. From 1995 to 2000, Dilbert took a rocket ride to the stars, seemingly taking over the walls of every Western company on the planet. Then came the books and even cartoon TV series. The latter first hit our screens in the year 2000. Consensus is that it wasn't very good. Consensus saw it withdrawn from our screen in 2002, a point in time when all the awards had started to fade into the ether and the edge had started to disappear.

Spot the generational connection?

Dilbert is (was!) the ultimate work companion for the alienated Generation X Nomad.

But what we can see happening now is that, firstly those Nomads are getting older – becoming less alienated and more pragmatic – and secondly there is a huge surge of Generation Y heroes filling in the gap at the young end of the office spectrum. Generation Y tends not to get Dilbert. Why would anyone have such a cynical attitude? Instead of making fun of the system, why aren't you out there trying to change it? Adams is thus caught between a rock and a hard place, and, according to the generation map, looks destined to ultimately find himself with no audience at all. No more merchandise purchasers for this kind of thing:

Which frankly is not only not funny and more, it feels like exactly the wrong sentiment to be expressing in the Crisis period of history we now find ourselves in.

Poor Dilbert.

The King is dead. Long live the new king… just as soon as a sharp Nomad or (more likely) Hero works out who Dilbert's successor character might be.

Biology – Hatchetfish

Have you ever noticed how easy it is to spot a bird flying overhead? In comparison to their bright background, the bird will always tend to look much darker. Fortunately for birds, predators that attack from below are relatively rare, and so there has been no real evolutionary advantage in being camouflaged when viewed from below. Even those that might consider such an action, the bird has the advantage of height and therefore the ability to convert potential energy into energy that will facilitate a rapid escape.

Alas, the same ease-of-escape situation does not exist for many fish living in our oceans. For those feeding near the surface comes the inevitable problem of being attacked from below, with little hope of a potential-energy advantage to facilitate escape. So how does such a fish manage to camouflage itself so that it doesn't stand out as a dark thing relative to the bright sky above?

The simplest answer seems to be to have a coloration that matches that of the sky above on the underside of the body. Many species use such a technique – often in combination with a top-half coloration that camouflages them against predators that might be looking down at them from above. The problem with just using coloration, however, is that it's very difficult to make yourself as light and bright as your background (think of how easy even a high altitude bright white seagull is to spot from the ground). Also, of course, then comes the fact that the light above you is continuously changing according to both weather and time of day.

Here's how we might map this pair of problems onto the Contradiction Matrix:

IMPROVING PARAMETERS YOU HAVE SELECTED:

Ability to Detect/Measure (49)

WORSENING PARAMETERS YOU HAVE SELECTED:

Illumination Intensity (23) and Adaptability/Versatility (32)

SUGGESTED INVENTIVE PRINCIPLES:

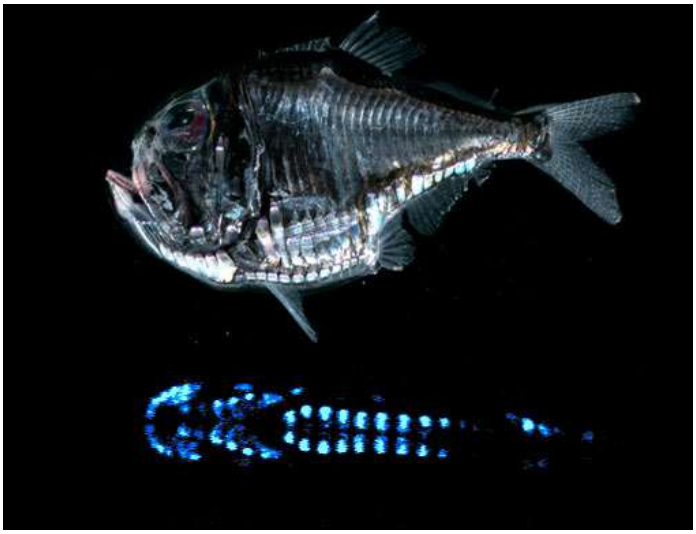
26, 13, 28, 1, 24, 23, 3, 35, 2, 15, 5, 19

And so how has the hatchetfish solved the problem? Answer 1) Bioluminescence. A difficult one to map against the 40 Inventive Principles, but if we had to chose one, most likely Principle 28, Mechanics Substitution ('adding a field') is as close as we will get.

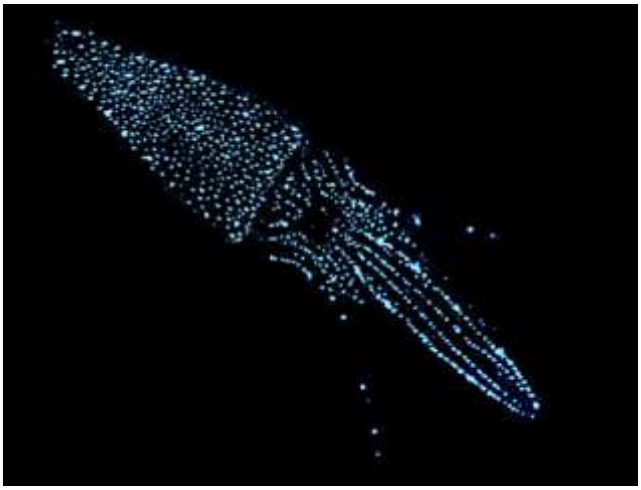
SYSTEM ·ATIC INNOVAT· ION

Answer 2) – upturned eyes and mouths. An easier one to map onto the Principles – Principle 13, Other Way Around.

But the story doesn't end there. The hatchetfish itself is prey to bigger fish swimming below it. It's narrow silhouette and silver sides make it harder to see, but it also emits light from its belly that is a perfect match in color and intensity to sunlight filtering down. If a cloud dims the sunlight, the fish dims its bioluminescence—a trick called counter-illumination. (This time an interesting combination of Principles, 23 – Feedback, 15 – Dynamics and 13 again.)



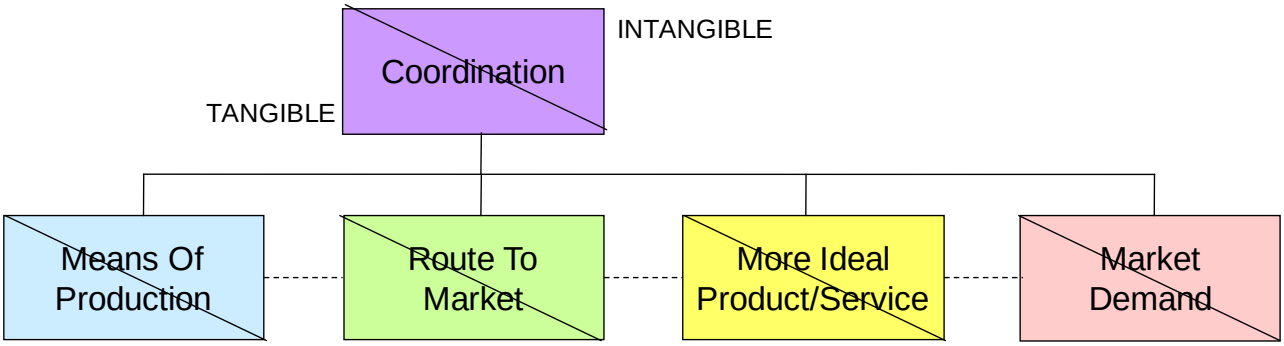
Counter-illumination is something you need to see to believe. One testament to its effectiveness is the enormous numbers of animals that have evolved to use it. They include the benttooth bristlemouth (which, notably, is the most common vertebrate on the planet), lantern fish, viperfish, scaly dragonfish, krill, and squid. The squid in this image, *Abralia veranyi*, is such a master of disguise that it can change the color of its belly lights depending on whether it is counter-illuminating against sunlight or moonlight:



It's also a trick that various air-forces of the world have applied to similar effect in disguising aircraft. Like our aforementioned bird visibility problem, aircraft are very easy to spot from the ground. But apparently not when they are fitted with downward facing lights that, like the hatchetfish and squid, possess a similar level of brightness to the sky above them.

Short Thort

10 Essential Elements Of Any (Human) System
Law Of System Completeness:



Each of the five usual elements has both a tangible and an intangible dimension.
(people do things for GOOD reasons and REAL reasons)

News

CAMOT2011
We will be presenting a workshop at the China Association Of Management Of Technology annual conference, this year being held in HongKong between 15 and 17 December. The title of the workshop will be 'Understanding East/West Customers Better Than They Understand Themselves'. Conference details at www.camot.org/2011conference.

Taiwan
It looks like we will also be keynoting at the next Society of Systematic Innovation conference, being held in Taiwan between 5-7 January 2012. With a following wind, we should also be conducting three one-day workshops either side of the conference: one each on ICMM, TrenDNA(B2B) and Edward Matchett's 'Fundamental Design Method'.

TrenDNA
While work on the new software version of the TrenDNA process is progressing well, we've been grappling with the issue of how best to keep users of the book/card version updated with new trends as they appear and begin to grow. Keeping a software database

up to date is easy: circulating new bits of card isn't. The latest thinking is that we will issue a 'new trend supplement pack'. Probably at the beginning of 2012. We already have about 30 new trends in our collection compared to the 2009 original edition. We mention the topic now in case any of our readers have any suggestions for trends they would like to see in the new deck? Send thoughts and ideas direct to Darrell if you have any candidates.

Matrix2003

With a following wind, by the time you read this the new SI website will have been launched. One of the features of which is we're allowing people to download the old 2003 version of the Contradiction Matrix for free. Time to get rid of the redundant 1970s original and replace it with something that might actually point users in the right direction. The idea is that it will be free in perpetuity. Tell your friends!

New Projects

This month's new projects from around the Network:

FMCG – Whispered Voices Study
Mining – Innovation Culture Assessment and Intervention Strategy Design Study
Semi-conductor – Problem-solving workshops
Legal – Disruptive Innovation study
Government – Innovation Policy Definition Project
Automotive – Problem Solving Study Phase 3 project
Pharma – Innovation Project Coaching