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Mapping Innovation Practice among Practitioners

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Abstract

This paper outlines a serendipitous journey of enquiry whereby a Practice Special Interest Group (PSIG) of innovation professionals' exploration of thought-leadership led to a practical form of knowledge management documenting high-value lessons from their experience within a visual tool based upon an innovation maturity model. Insights are captured, described and implications for innovation practice discussed.

Analysis and interpretation of workshop outputs demonstrated the value of conceptual models for helping practitioners locate themselves within a thought-leader: subject-matter continuum, which in turn led to an exploration of the nature of emergent knowledge around innovation practice which demonstrated the low survival-rate of innovation improvement projects to full maturity and some insights into political resistance to innovation.

Key lessons from this exercise include the importance of innovation practitioners negotiating a balanced portfolio of short and long-term projects upon appointment, learning from projects that survive to become business-as-usual, and the power of knowledge maps as a means of integrating and distilling diverse practitioners' emergent and sometimes fractured knowledge about their practice in the form of usable, aggregated practices that change performance and lead to the introduction of new value in organizations.

1. Introduction

Whilst innovation practitioners are influenced by academic models around their practice, it is rare that innovation practitioners find themselves in a situation where they can work together to develop a meta-view of their combined practice and use it to modify their own approach. This rarity can lead to a dichotomies or dissonances between innovation theory as prescribed by academics, innovation practice as a product taught to new practitioners and applied commercially, and emergent practice of experienced and adaptive practitioners.

The last two dissonances are probably due to the cloistered political context within which innovation practitioners operate where intellectualism about innovation method is treated with suspicion, the ability to generalize tending to come towards the end of a career, where experience of different economic cycles and different tools grants a longer perspective; and where practitioners are often inexperienced and themselves, the product of a practitioner induction that has led to the

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acquisition of an often branded, inflexible template methodology for all situations, where the means of the method become an end in themselves.

The researcher was invited to work with a Practice Special Interest Group (PSIG) of 32 innovation practitioners representing 28 companies within the FT100 listing who jointly funded the PSIG as a commercial practitioner inter-organizational Community of Practice. The Practice Special Interest Group represented internal innovation practitioners within long-lived businesses with shrinking margins in services or manufacturing focused on adding value, and not on introducing new value to the market. PSIG members were senior managers, responsible for strategic direction of an innovation function or directly reporting to strategic leadership.

The engagement began as a practitioner insight session for the researcher to share recent consulting experiences within multi-national corporate organizations that had led to the development of a prototype Thought-Leader: Subject-Matter Expert Conceptual Model (TLSME-CM). A condition of the exercise was that the official name of the PSIG and of its members should remain anonymous. A feature of the PSIG was that whilst it had some elements of Wenger's [1] "relationships to official organization", it was stuck between "legitimized" (as officially-sanctioned but yet subject to scrutiny) and "strategic" levels (being recognized as officially strategic, yet subject to the contradictions of short-term pressures, official blindness to success, a sense of exclusivity yet still vulnerable) and largely unable to make it to "transformational". PSIG membership fees were commercial, conducted at prestigious venues or members' HQ locations and meetings were still well-attended in spite of economic pressures to cut non-core activity back (in fact economic pressure was a keen motivator for most members to attend).

At the time of the invitation to participate and contribute, the PSIG manager (whose brief was to meet members' requirements and anticipate their needs) was becoming concerned that the group was becoming "stuck" in its level of development. To paraphrase Tuckman's forming, storming, norming and performing model [2] the PSIG manager felt that the PSIG was stuck at the norming stage and in danger of regressing back into storming or even withdrawal. The symptoms for this decay (which threatened its financial viability) or state of being "stuck" included:

- Stereotypical presentations by members of whole-business or functional departmental implementations of lean thinking projects which were essentially about marginal cost-reduction and process simplification through the deployment of template Six sigma methodologies as typified by Motorola/ GE practice [3]. These were stereotypical in that they followed the same method, achieved similar results, showed little evidence of reflective thinking, rarely referenced other practitioners and crucially never considered any strategic triage at the front-end of the innovation process as to leverage, in other words: which part of the business should be focused upon first, in order to gain the maximum return?

- Functional fixedness, a characteristic defined by Bruner [4] involving the "use of corrective information exclusively for the evaluation of one single hypothesis that happens to be wrong", in the sense that while the PSIG membership accepted the idea that lean thinking as a methodology was merely a component within a larger potential repertoire, they were nervous of discussions around alternative innovation methodologies as typified by Blue Ocean Strategy. To paraphrase Kim and Mauborgne [5], the PSIG was stuck in a methodology that was very much "red" ocean, and reluctant to move into exploring the space and texture of an unknown "blue" ocean. Fundamentally the PSIG's practical focus was upon building added-value and not about creating new value. Curiously, a common feature of presentations was the absence of front-end Quality Function Deployment or House of Quality matrices [6] connecting customer needs with innovation improvement projects. This issue will be discussed later.

- Some key members were becoming less active (sometimes sending junior representatives below the level of VP or Senior Director) which was leading to the perception that the discussions and exercises were becoming lower-status and less strategic, that expert inputs were of a traditional nature and insufficiently challenging, and that membership renewals in the challenging economic conditions might become more problematic in the near future which would affect the survival or growth of the PSIG in a difficult economic climate.

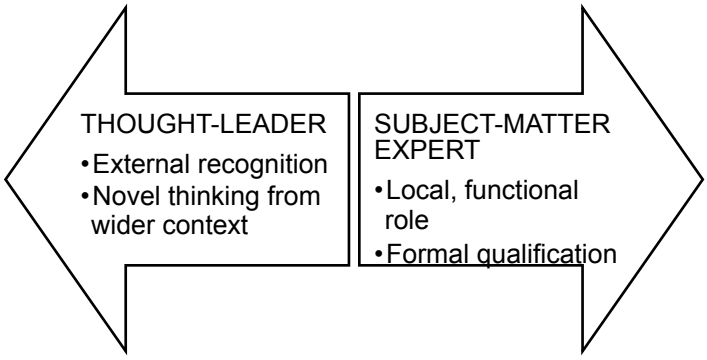
2. Methodology

As part of an exploratory approach to influencing this "stuckness" within the group, the researcher was invited to introduce some innovative knowledge practice insights and techniques with the potential to move thinking within the PSIG so that it would begin to consider out-of-the-box thinking as described by Adams [7] and Weisberg [8] that connected with their current context and would both meet their interests, intrigue and potentially provoke them into thinking new thoughts. Two knowledge products were used, firstly the prototype Thought-Leader: Subject-Matter Expert Conceptual Model (TLSME-CM) as a means of putting their own role into perspective and explore their ability to construct and wield influence at a strategic level, and elements of the Baton-Passing technique as originally described by Newman and Castledine [9].

2.1 The Thought-Leader: Subject-Matter Expert Conceptual Model (TLSME-CM)

The primary interest of the PSIG members had been to learn more about the researcher's TLSME-CM prototype developed through brainstorming and reflective workshops with 5 Chief Innovation/ Information/ Technology Officers (one of whom was an PSIG member), and to locate themselves within the 4 dimensions (recognition, innovation, visibility and perspective) of the model that connected a conceptual continuum between Subject-Matter Expert and Thought-Leader (figure 1) and consciously explore their own development toward the higher-status end of the continuum represented by the position of Thought-Leader. This was seen as a

key exercise in developing corporate survival skills in a competitive and highly



political corporate environment.

Figure 1: Thought-Leader: Subject-Matter Expert Continuum

These 2 polar practitioner perspectives within the TLSME-CM prototype can be simply described as follows:

- Thought-Leaders have both a local and a global perspective on practice, they are aware of gaps or contradictions in methodology, have built local solutions with wider potential and network with their peers in other organizations [10].

- Subject-Matter Experts have a local organizational perspective, are aware of the form that current practice takes in the organization, what works, what is being learnt and the form it takes.

In more detail:

Thought Leaders (TL) are externally-recognized as such by someone outside the employing organization, or another external organization. They cannot anoint themselves. They need to be innovative in being able to generate a strong viewpoint on what really works; and also be seen as the source of novel models or named and innovative approaches. They need to be confident to craft and share independent thinking, quoted in publications, on the web and at selected conferences (not necessarily academic). Their bigger-picture perspective means they describe emerging opportunities and trends, they are invited to comment on policies by external organizations, and individual specialists. They know fellow practitioners by name, they may even be a member of specialist Editorial Boards for publications and advise conference designers on new topics of interest.

Subject-Matter Experts (SME) know something practical about a topic through it being part of their title or part of everyday work in their function or their in-house role. They have a sense of strategic trends based on tactical experience within their current organization. They may even have formal technical qualifications in the subject.

They are recognized internally as someone with either:
a) An unique role – the only person in a function, sitting at the bottleneck of decision-making and resource allocation, or
b) Relatively unique experience – they may have been recruited specially to add new functionality or capability to existing products and services through previous roles outside the organization, or a senior person within a function who defines the role that function takes, identifying which problems are best solved using internal capabilities and which require external capabilities.
In both cases, sufficient Relational Social Capital as described by Ian and Anouche [11] has been established by the SME with competing functions so that they are invited to contribute, or comment on cross-functional issues (having done so in the past without alienating colleagues or those functions which have strategic primacy in decision-making).

2.1.1 Outcomes of TLSME-CM Mapping by Members

To the chagrin of the PSIG members, it became clear that whilst most were located toward the SME end of the continuum, and that only 2 members had significant, developed elements of TL capability. An exercise exploring the 4 dimensions of the TLSME-CM and unpacking obstacles and developing tactics for overcoming these, was visually modelled and opened up a discussion about the nature of their current innovation practice, the knowledge involved and what the PSIG could do about building new knowledge and capability.

This then led to a discussion about the Baton-Passing technique which participants had heard about and which had gained some visibility within Lockheed-Martin, Solvay, UEFA, The British Council and HMRC. The family of Baton-Passing (BP) techniques was introduced and described and it was proposed to take the core process-based BP technique and use it to capture, integrate and make accessible knowledge across the PSIG to improve capability and Process Capital [12] within the group and thus enhance its value and attractiveness.

2.2 The Baton-Passing Technique

The Baton-Passing family of techniques had originally been developed within the context of improving the learning of New Product Development (NPD) teams within the pharmaceutical industry which has a tradition of high and costly attrition or product failure. The inventor, as Pfizer's Chief Learning Officer (2000-2005) had noted the failure of traditional Lessons Learnt databases operated by project management functions whereby the volume of lessons documented was recorded whilst the absence of evidence of lesson re-use was ignored, noting in contrast the willingness of team members to share anecdotes or stories informally and their cynicism toward traditional structured, post-project stage-gate debriefing based on After-Action Reviews [13] which could last up to 3 days.

An informal review of documented lessons-learnt within Pfizer demonstrated a significant number of high-frequency lessons that a conventional search-engine would locate retrospectively within a lessons-learnt database but for which NPD

team members were not psychologically-prepared to recognize their significance proactively when approaching their decision stage-gate of the New Product Development process as described by Cooper [14]. Replicating the cost of failing to implement a few of these high-frequency lessons rapidly generated an invisible cost to the business involving hundreds of millions of dollars.

The issue was not one of managing the transition of tacit to explicit knowledge as suggested by Nonaka and Takeuchi [15] but of something more subtle, of how to manage emergent knowledge (in other words, Emergent Knowledge Management) by capturing, expressing and positioning Emergent Knowledge [16] for re-use in a rapid, attractive and dynamic way. Emergent Knowledge being knowledge which only has meaning within a specific context, which tends to be elicited when the donor is in contact with the potential recipient, through the use of Creative Silence Brainstorming [17] and visually mapping such Emergent Knowledge within a specific, defined NPD process stage. Creative Silence Brainstorming involves responding to innovation challenges or questions by individual brainstorming of ideas in silence, drafting these on post-its with black felt-tip pens, and then sharing these ideas in clusters of 3, grouping into emergent themes or families (defined in real time) and using ideas to trigger new waves of ideas through further Creative Silence Brainstorming in groups.

Emergent Knowledge Management (EKM) techniques are designed to overcome organizational groupthink, to "expose what people believe but never say aloud and to help them change direction by acknowledging their reality. Instead of traditional 'push' approaches that trigger resistance, EKM principles try to overcome NIH [not-invented-here] by using 'pull' strategies to elicit the truth in an emergent situation…EKM is designed to make it OK to say when the current version of reality is no longer working, to identify the issues that need resolving, and guide the construction of solutions that people are prepared to commit to – because they [themselves] have constructed them" [18].

All of the above elements are integrated into the Baton-Passing knowledge transfer technique. Baton-Passing originally being used for just-in-time transfer of learnings from one team to another, the identification of valuable learnings for use by future projects and the basis of generic learnings that can usefully be integrated into education programmes. Baton-Passing is about giving the right people the knowledge they need, in the form that they can use at the most appropriate time.
Fahey's dichotomous know/ don't know matrix [19] is a powerful model for realizing the power of knowledge. A variant on Fahey's model, the "Knowledge Engagement Matrix" (figure 2) by Newman and Castledine [20] introduces the key stereotypes that need to be engaged and integrated to build a continuous, virtuous, learning cycle (it is interesting to observe note that Nonaka and Takeuchi's SECI model resembles a mirror-image of Fahey's matrix).

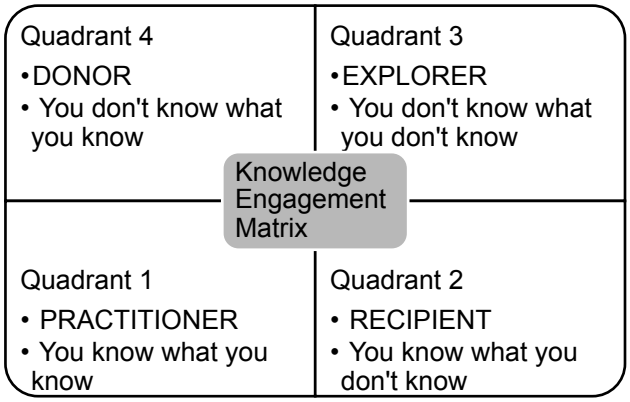


Figure 2: The Knowledge Engagement Matrix

Each quadrant in the Knowledge Engagement Matrix (figure 2) is unpacked separately. A key activity that involves three out of the four stereotypes is the "Baton Passing" technique that enables both an expert knowledge "push" and apprentice knowledge "pull" to be managed both naturally and quickly.

Q1: The Practitioner/ Expert Faculty quadrant is the "You know what you know" space, because expert faculty are visible, and engaged in orienting new project teams for the decision space they are about to enter (usually that part of the NPD process that ends with a specific decision stage-gate). They work from accepted basic educational materials that can be backed up by foundation education portal content, physical manuals and diagnostics as to NPD readiness. This is where NPD stage-gate decision-making simulations are designed to support principle-based skills through case studies based on legacy product data portfolios.

Q2: The Recipient/ Participant quadrant is the "You know what you don't know" space. Knowledge recipients know enough about the context through having gone through a foundation orientation in Q1 to see the potential gaps in their existing knowledge. Similarly, when the Recipient is exposed to recent learnings from a Donor/ Practitioner within a Baton-Pass exercise, they find themselves moving into the next, Q3 box to become exposed to unexpected learnings.

Q3: The Explorer quadrant is the "You don't know what you don't know" Box, the place that technical specialists don't like to enter because it challenges their functional knowledge by suggesting that other forms of knowledge may have primacy over their own specialism. The Explorer/ Out-of-the-box Thinker is a space where the participant deliberately suspends judgement and immerses themselves, for a limited period within the new engagement context. This box can also involve the use of arousal diagnostics, out-of-sector benchmarking to create hunger for new knowledge, and storytelling from Q4 veterans who have made the journey the Recipient is about to make.

Q4: The Donor/ Participant quadrant is the "You don't know what you know" box. Typically individuals are not aware of much of the potentially valuable tacit

knowledge they are laden with until someone asks them a good/ contextual question (you don't know what you know because you've never had to explain it to anyone or to replicate it).

Successful Baton Passing involves ensuring that the potential Recipient of learnings or lessons gains a foundation orientation from experienced faculty (Q1), and then managing the synchronous timing for an intensive, structured discussion involving Q4 and Q2, to catch the Donor soon after an experience when they are still laden with tacit and potentially emergent knowledge and before it has begun to decay or mutate into constructive fantasy under groupthink due to failure [21]. This involves bringing Donors face to face with a Recipient who is close enough to a decision stage-gate within a New Product Development (NPD) process to be interested and hungry enough to ask direct questions that draw out Donors' experience, and occasionally move into Q3 by consciously reviewing the Donor's high-value learnings.

The success of the original fast (within 3 hours) NPD, stage-gate process-based, visual mapping technique for identifying emergent knowledge, contextualizing it and connecting it with specific users and tracking its use, had led to its adoption by several organizations where rapid learning was key to survival and continued market credibility. Stories of successful Baton-Pass implementations led to the researcher being invited to apply Baton-Passing to the collective PSIG to fill the some of the knowledge gaps identified in the TLSME-CM. To paraphrase Fahey, the PSIG had moved from not knowing what it didn't know, into knowing a lot more about what it didn't know and wanting to do something practical about it.

2.2.1 Applying Baton-Passing to an Innovation PSIG

A slightly modified version of the process-based BP technique was used to meet the needs of an audience of participants who were both donors and recipients of lessons, who had limited time and whose membership included some who whilst they were ideologically-positive about knowledge sharing as a concept, preferred to retain their high-value knowledge (even if they couldn't describe it) and keep it personal and hidden.

The first key step was to identify a shared innovation context process within which practitioner lessons could be located. Several were proposed for comparison and a prototype Deployment Maturity Model (DMM) with 4 generic stages from a financial services member of the PSIG was adopted as broadly meeting the needs of the group, defined in the following 4 stages:

1. Deployment or doing improvements for the business (engaging stakeholders, establishing quick-wins, rolling out resource and training).
2. Growth or doing improvements with the business (building infrastructure, adjusting approach as needed, aligning to local requirements).
3. Maturity or building capability and capacity (beginning the transition into line management, establishing a steady-state programme of activities).

4. Business as usual (revolving programme of quality activities, regular calibration to ensure that the programme is on course).

These four stages represented both a generic process of integration of an innovation improvement approach or technique within an organisation, as an infection-based model whereby an idea was introduced to the host organization, develops and expands into functions and becomes a standard measureable method for gaining results (thus attaining maturity) and then becomes an embedded element of the business culture, such that no-one remarks upon it and it is taken for granted by literally becoming part of "the way we do things around here" [22].

The next step was to introduce a customised Baton Passing approach to the PSIG. Using Creative Silence Brainstorming and Smart Failure techniques [23], participants were facilitated to identify the characteristics of failing traditional lessons learnt approaches and then reverse these to construct success principles with results as featured in table I (over).

Lesson Failure Characteristics	Lesson Success Characteristics
• Slow: documenting all lessons in full detail, over 2-3 days. • Publication: as an end in itself. Write long, boring documents so no-one will want to read them. Pretend that publishing means the job is done and something has been "learnt" (and will change), obviously merely posting a "lessons learnt" document on a shared drive doesn't mean it has been learnt or is likely to happen. • Language: use ineffective language, make it obscure, apply specialist jargon, make recommendations instead of defined actions, and always have more than 3 key points. • Disconnect: Make it ineffective through delay and decay: use a slow political sign-off process for management buy-in to ensure that it lacks "bite", and topicality. • Impersonal: make it impersonal, so that there's no drive to identify who needs to do what, differently.	• Fast (design meetings for less than 3 hours together for teams with relevant knowledge and good questions, sometimes split these into 45 minute sessions for defined topics). • Visual, colourful and intuitive (exploit the way the mind organises information best). • Social and dramatic (bringing together people who have answers and the people who have questions). • Personal (ensure that you document individual commitments In real-time to specific outcomes that can be tracked, and track them!)

Table 1: Facilitated Characteristics of Failing and Successful Approaches to Lessons Learnt

Subsequently, within a limited 3-hour window, and using Creative Silence Brainstorming, participants were invited individually to

- Indicate the current relative position of business innovation initiatives within the DMM.
- Outline 3 high-value shareable and usable lessons and insights from their experiences and locate them appropriately within the DMM stages.
- Group these high-value shareable and usable lessons and insights into provisionally-titled Lesson Themes within each DMM stage, integrating these and removing duplicates.
- Identify (by voting) the most valuable lesson theme and construct prototype sharable and usable lessons using a Baton Passing lesson template involving the following features: name of the lesson, issue resolved by lesson, key steps involved – using 'so that' phrase at the end of each defined action to define outcomes, and special requirements/ risk management issues that need to be considered in order to apply the lesson.

2.3 Workshop Process (First and Second)

The facilitator anticipated that the competitive nature of participants would mean a tendency to exaggerate the maturity of their innovation initiative implementations within their organization by putting their location (A) post-its at an optimistically high level of maturity. A pre-briefed compliant PSIG member modelled this tendency by moving forward to correct his innovation initiative locations by moving them backwards within the DMM when I suggested that this might have occurred. This was followed generally and with some rueful good humour by participants and a more realistic picture emerged.

In the next phase (B), high-value individual lessons generated individually through Creative Silence Brainstorming were offered on post-its against each DMM prototype stage, these were then aggregated or grouped into titled themes spontaneously named by participants (C). Participants voted for their highest-value lessons, these were then prioritised and groups formed to work concurrently to populate up to six key, thematic lessons from each DMM prototype stage (D). These were briefly presented back to the room in plenary, then rapidly customised to reflect feedback given by participants.

2.3.1 First Workshop Outcomes

Reviewing the material in table 2, having transfered it from flipcharts to spreadsheets and powerpoint as part of the online feedback promised to participants made several things evident:

1. The DMM prototype was incomplete.

It became clear that it required a prequel or pre-deployment stage, and that the original Deployment Stage needed refocusing to identify and populate a Pre-Deployment Stage 0.

2. Could it be the case that participants had very little experience of getting projects to higher maturity levels?

If 69% of projects were within the DMM prototype stages 1 and 2, and 31% of projects were at stages 3 and 4, did this suggest a level of attrition or merely reflect participating organisations' response to the economic situation (by having lots of early-stage innovation projects)?

DMM Stage	Organizations at this Stage	Number of projects at this stage	Individual Lesson Offers	Lesson Themes Identified	Drafted most-important, populated thematic Lesson in each DMM stage
Deployment	22	39 (40%)	30 (47%)	People capability, organisational buy-in, planning for deployment, way of working, quick-wins, engagement (6; 37%)	1 – "Senior Leader & Organizational Buy-In".
Growth	21	28 (29%)	14 (22%)	People development & capability, project selection, linkage to quality, engagement (4; 25%)	3 - "Grow your Own", "Establish & Protect", "Cultural Engagement".
Maturity	12	17 (18%)	12 (19%)	Line management accountability, performance management, keeping things running (3; 19%)	1 – "Keep the Ball in Play"
Business as Usual	8	13 (13%)	8 (12%)	Build into the organisational fabric, keep it relevant to business goals, visible metrics (3; 19%)	1 – "Everybody's Job to Improve Process"
Totals	Min 8, Max 22	97 projects	64	16 themes	6 x fully-populated, useable lessons

Table 2: Outcomes of First Wave Workshop

3. Did the language of the emerging lesson themes and of the prioritised, named lessons themselves suggest a more authentic, context-based reality of what needed to be paid attention to, or worked upon at each stage by practitioners than the rather bland language of the DMM prototype stages (deployment, growth, maturity, business as usual)?

4. It would be necessary to meet again and rework the DMM prototype to reflect the outcomes (1-3, above), and construct a layered, practice map for participants.

2.3.2 Second Wave Outcomes

The original first stage of the DMM prototype was reformulated and lessons and themes were recalibrated, leading to a new Stage 0: Pre-Deployment, and a modified Stage 1: Deployment, retaining the emergent lesson themes, maintaining a few "fully-populated, high-value lessons"but largely simplifying many of these into simple statements of principle (principles) within the DMM-2, resulting in table 3, below.

DMM-2 Stage	New Lesson Themes	Principles	Fully-Populated High-Value Lessons
0: Pre-Deployment	0.1 Align the vision	6	0.1.5 "Parliamo Business"
	0.2 Identifying demand	2	
	0.3 Sustainability strategy	2	
	0.4 Deployment plan	5	
1: Deployment	1.1 People capability		
	1.2 Organizational buy-in		1.2.1 "Senior Leader Buy-In"
	1.3 Planning for deployment		1.3.1 "Project Selection"
	1.4 Way of working	2	
	1.5 Quick-wins	3	
2: Growth	2.1 Continued buy-in		2.1.1 "Continued Buy-In" 2.1.2 "Establish and Protect"
	2.2 People development and capability		2.2.1 "Grow Your Own"
	2.3 Link to quality		2.3.1 "Focus on Customers" 2.3.2 "Create Improvement Culture"
	2.4 Project selection		2.4.1 "Align Project to Business Goals"
3: Maturity	3.1 Maintaining momentum		3.1.1 "Keeping the Ball In Play"
	3.2 Performance management	3	
	3.3 Line management accountability		
4: Business as Usual	4.1 Build into organizational fabric	2	
	4.2 Everybody's job to improve process		4.2.1 "Everyone's Job"
	4.3 Keep it relevant to business goals		4.3.1 "Keep It Real"
	4.4 Visible metrics	2	
Totals	20 Lesson Themes	27 Principles	12 High-Value Lessons

Table 3: Repopulated Content of DMM-2

This second, informal workshop had assumed that only an elite, self-selecting group would continue with the exercise. To the researcher's surprise 24 participants joined in testing and reworking the documented high-value lessons learnt, in some cases reducing potential lessons to simple statements of principle that were simply expressed (as in figure 3, 0.1.5 "Use the language of the business, not CI" [ie. Continuous Improvement]). This material was then posted on

the closed PSIG website for access and re-use through a drill-down structure that answered the following sequence of questions:

- Where am I (which DMM-2 stage am I in)?
- Which themes apply to me, or do I need to consider?
- Which principles or lessons apply in this theme?
- If I can't find what I need: who do I talk to?

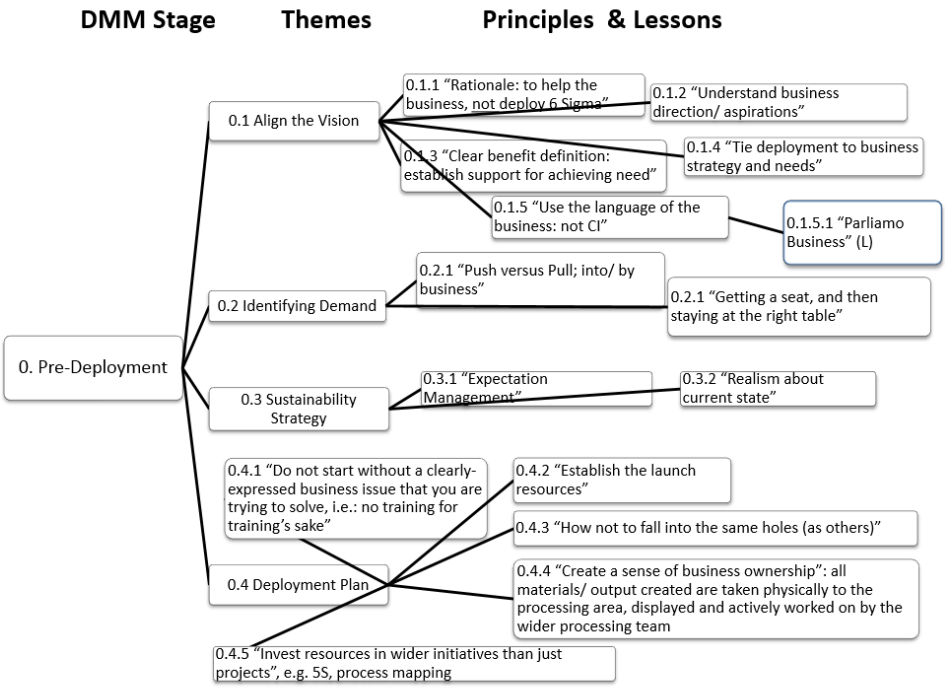


Figure 3: Repopulated Stage 0. Pre-deployment from DMM-2

3. Discussion

Participants noted the emerging architecture of 20 lesson themes across the 5 DMM-2 stages and the way these formed a practical aide-memoir of issues for focusing attention at different stages in the process. Similarly, that whilst the number of documented, high-value lessons committed to the BP template system had doubled, the decision to convert 27 lessons into principles that applied at different stages, had simplified the architecture of the emerging PSIG practice map. The sessions demonstrated that you cannot make a journey without a map, and you won't know what you don't know (which could kill you) if you can't learn from other people's journeys. Similarly, it is interesting to connect Wittgenstein's [24] observation that the conceptual limits of worlds are the product of the limited languages (and presumably tools to represent worlds), and Pacific islanders' construction of delicate A4-sized bundles of twigs on displayed in the National Maritime Museum at Greenwich [25] that represent personal maps for successful

journeys by canoes from atol to island, across vast areas of ocean, but using idiosyncratic coded embellishments that limited shared use.

The researcher noticed the continued dominance of early-stage emergent knowledge capture of principles and high-value populated lessons learnt in the first 3 stages of the DMM-2. This seemed to reinforce the idea that practitioners had to live with a more robust internal customer than had previously been discussed, and the low survival of innovation projects beyond DMM-2 stage 3 into stage 4 (maturity) or even stage 5 (business as usual) required adaption to respond.
A new discussion (facilitated by the researcher) opened up the issue of low project-maturity, and the political nature of potential innovation projects began to emerge and the nature of resistance by functions in businesses in maintaining political and functional boundaries. In open conversation, it became clear that practitioners were trapped within an innovation conundrum between their innovation role and politically-influenced reality that increasingly reflected their personal vulnerability in terms of being permitted to practice innovation (in the form of improvement projects) and also their distance from the real strategic conversation. The author was surprised to learn how marginal the PSIG practitioners were, and how the inflation of corporate titles failed to reflect political reality.

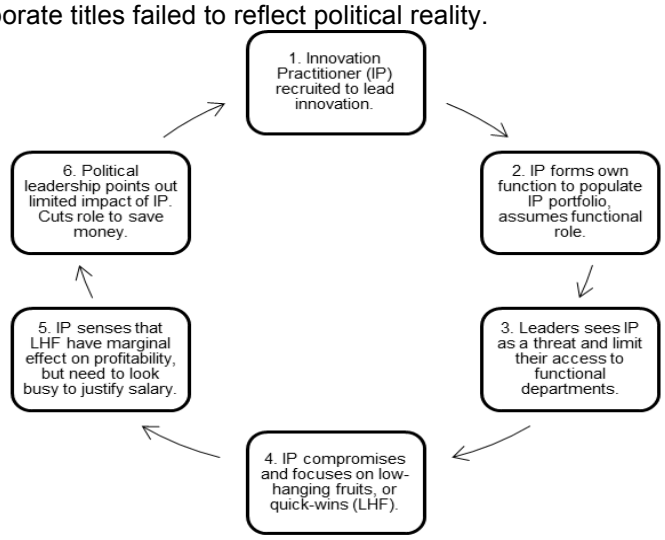


Figure 4: Innovation Practitioner Role and Political Influence Conundrum

In the plenary review following the reconstruction and population of DMM-2, the researcher captured and facilitated the discussion of personal insights to formulate the Innovation Practitioner Role and Political Influence Conundrum (figure 4). The general “good” political sense expressed by participants supported the practice of rapidly identifying a portfolio of quick-win projects (since these were generally already politically-visible and had a history that made them common knowledge), aggregating resources on the basis of the perceived relatively low investment: predicted return ratio to attack these projects; then edging themselves into the

corporate reporting dashboard (to build political visibility) and ultimately "bigging themselves up" to become a new business function with titles and staffing.

For some participants, the insight that they were being "funnelled" into low-hanging-fruit or political quick-wins at the expense of the opportunity for systemic innovation that would involve the introduction of genuinely new value rather than the construction of added value, came as a shock. Participants took great professional pride in being practitioners of branded systemic "lean" improvement methodologies with all the brash associations of manufacturing and engineering culture and had taken it for granted that the sheer difficulty of grinding out improvement projects was a given part of the nature of corporate life, where innovation improvement projects always had to compete for attention with "feeding the corporate beast" (customer-facing processes that generate income and profit) so that it could keep moving. The emergence of a systemic behavioural insight into the nature of their problem in the form of the Innovation Practitioner Role and Political Influence Conundrum (figure 4) suggested that their athletic approach was itself a generator of waste.

The nature of the few projects that participants recognised as having survived and progressed to the DMM-2 stage 5 was explored. A key insight generated a potential stage 7 to figure 4, in the form of several complementary anecdotes to the effect that sometimes, after stage 6 (the closure of the IP activity) after an interval of time, an Internal Business Visionary rooted in the real world of the Business functions starts the innovation technique or method up again but at a lower level (ie., without attempting strategic visibility) and within their own function where they have political power to influence adoption. This internal business visionary has learnt from the failure of the IP function that change has to be business-focused and business-initiated and should not try to ape the clothing and behaviour of the Business functions.

The researcher then invited participants to apply Predator (an EKM thinking technique for anticipating environmental change and constructing antidotes through visualising a "smarter" predatory business or practitioner) to figure 4, to craft an alternative strategy or reinforcing principles for overcoming those issues identified, within figure 5, reminiscent of Sun-Tzu [26] and Boyd in Coram's biography [27] in providing the type of thinking that anticipates political reactions to innovation in the form of a new adaptive algorithum or alternative tactic in 3 steps listed below in figure 5:

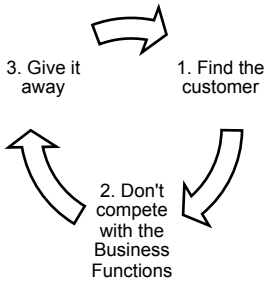


Figure 5: Alternative Knowledge Product Introduction Principles for Innovation Practitioners

i. Find the customer.
Work with someone (internally) who really wants to do it. If it's going to survive to stage 5. It is not about doing it TO the business, but for the Business to want to do it TO and FOR ITSELF if it's going to work.
ii. Don't compete with the business functions.
If you build a change-machine to compete with the business functions, they will have to destroy you at some point. You don't have enough Relational (social) Capital to be party to the real political discussions that determine what happens in the business.
iii. Give it away.
The Practitioner who succeeds in the long-term will literally give their practice away to willing users and focus on maintaining a Centre of Excellence and upon the development of thought-leadership; will learn to act as a guide, and not as a change-machine driver competing with existing functions.

4. Conclusions

Since change is a constant, understanding the social life of knowledge in organizations as examined by Berger and Luckman [28] is probably the key to successful innovation practice, and whilst Communities of Practice provide insights into willing participants within a single organisation, the role of isolated knowledge practitioners introducing knowledge products that focus attention on innovation across industries, is essential to economic growth and should be encouraged.

The social and political realities facing innovation practice, the introduction and the application of knowledge products needs to be acknowledged and integrated into practice and the design of the new stage 0 (Pre-Deployment) intuitively reflected this reality. It is clear that the practice of innovation knowledge is a social and political act and needs careful stage setting and management of stakeholders. The DMM-2 is a step forward in this respect in actively integrating this consideration as key.

In retrospect, a key characteristic of the PSIG membership was the dependence of their employing organizations upon long-lived products or assets in either the service or manufacturing sectors (sometimes both) plus regulatory sectors. This was probably the basis of the functions' successful resistance to improvement projects' maturity in spite of the presence of high levels of process waste in legacy activities as well as (ironically) their ability to fund PSIG membership.

The prototype TLSME-CM itself needs to be modified to include the issue of populated practice maps, in other words a key component that connects thought leadership and subject-matter expertise is the matter of having an accessible practice-map to refer to, which can be easily repopulated as learning develops in the form of contextual insights that would guide practice at both a tactical and strategic level with the potential to use insights generated to influence double-loop

learning to encourage systemic adaption to emerging environmental change [29] by reconfiguring the model itself.

The issue of low survival-rates of innovation improvement projects beyond stage 3 needs to inform innovation practitioners' practice by negotiating a different role to the traditional "push" innovation improvement lean/ six sigma strategy, to include a facilitative instead of purely functional approach by focusing more on the importance of "pull" social engagement tactics throughout the DMM-2, acknowledging the issue of weak Relational Capital of practitioners upon employment with the need to balance going where the business functions will allow projects to survive. This needs to be supplemented by developing project portfolios that include projects involving systemic thinking about the nature of businesses and operations to include understanding the need to replace current value products and services by considering their life-cycles. As far as the PSIG was concerned, this kind of thinking was "terra incognita" and off their current map. Alternatively, the low survival/ high attrition rate of innovation improvement projects beyond stage 3 could be seen as a reflexive emergent systemic approach within organizations to ration the impact of change on core added-value processes in order to maintain current political, social and process integrity; plus an acknowledgement of initiative-fatigue that was the product of too many innovation improvement projects being attempted at one time.

Innovation practitioners need to negotiate early and often as circumstances change, and also to consciously craft a project portfolio that whilst accepting some high-value quick-wins or low-hanging fruit that build added value, balances these with high-hanging fruit that change the nature of the competitive game itself and move the organisation into less bloody, but more interesting oceans.

At a general level, it became clear the the PSIG workshops had important features of Gloor's COINs or Collaborative Innovation Networks [30] in being largely self-organizing, unified by a shared vision and goals, with a shared value system, communicating in a practitioner "small world" networking structure involving a "delicate balance of reciprocity" and an unwritten code of ethics to which members comply. It became evident that the workshops were reinforcing COIN-like levels of commitment through the process of investment (sacrifice, renunciation of competition, and mortification – temporarily abandoning former identity) and communion (investment – building knowledge products that they will lose if they depart, communion – a new sense of identity, and transcendence – basing future choices and decisions on co-produced knowledge products).

It was never the researcher's intention to use Baton Passing practice mapping as a diagnostic for a population's ability to apply their knowledge, however this technique of visual, social and dramatic mapping whilst being robust and engaging does have the potential for identifying important gaps for thought-leadership development and subject-matter expertise. A future exercise should involve a similar group of innovation professionals involved in organizations focused on blue ocean strategies, dedicated to both adding value and creating genuinely new value.

5. Implications and Opportunities

As innovation practices develop, and the need to innovate with collaborating partners through forms of Open Innovation [31] become mainstream strategic options, it is likely that inward Communities of Practice will be augmented by extra-organizational communities or PSIGs based on COIN principles, working across the internet through collaborative environment technologies. The application of the Open Innovation paradigm assuming that firms can use external and internal ideas as well as internal and external paths to market, will probably require a different innovation maturity model, probably through combining elements of Müller-Prothmann and Stein's Integrated Innovation Maturity Model for Lean Assessment of Innovation Capability [32] and Habicht and Möslein's Open Innovation Maturity model [33].

Developing research around the potential architecture for facilitating distant practitioners' practice development into the development of timely, functional knowledge products that reflect emerging practice and their availability in the digital environment, is the next opportunity.

A key implication for innovation practitioners' roles in large organizations is the importance of improving effectiveness by negotiating (on appointment) a project portfolio that balances short and long-term projects with systemic benefits, deliberately adopting a longer view to introducing knowledge products that improve or change performance by adopting a role of strategic facilitator and, by examining the characteristics of the few projects that make it to maturity and learning to apply these criteria to do less (in the form of fewer projects), but more effectively.

The exercise demonstrated that reality is socially constructed, and that by introducing knowledge maps to individuals who facilitate innovation but come from different organizations, it is possible to enable the focused proliferation of knowledge in the form of usable, aggregated practices that change performance and the introduction of new value.

Finally, even incomplete conceptual models can be powerful tools for mapping practice by identifying current and optimal practices, and can lead to the development of personal and systemic insight into the nature of innovation. In fact, leaving provovative gaps in conceptual models could be a powerful technique to encourage modification and build ownership among users.

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