Engineering Serendipitous Innovation through Knowledge Brokering

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Victor Newman

Innovation Practitioner and Visiting Professor in Knowledge and Innovation Management, mentor to SILK, CIO Institute for Study of Zombie Organizations



Recent executive roles include Chief Innovation Officer @ Milamber Group, Co-Director of Innovoflow, Mind Fit Ltd, Shakesteer.com; Head of Innovation Strategy & Economics at The Technology Strategy Board, and Chief Learning Officer to Pfizer. Visiting Fellow to Cranfield University on the subject of Strategic Knowledge Management and Innovation. He works with several business schools.

Contributed to the Harvard Business Review, included in Harvard's "Fifty Lessons" interviews with 200 of the world's most respected business leaders, and featured in The Wall Street Journal. He is on the Advisory Boards of several organisations. He is the author of "Made to Measure Problem Solving" and his "Knowledge Activist's Handbook – Adventures in the Knowledge Trenches" from Capstone/ Wiley & Sons has been cited as the "best (secret) management book within the last ten years".

Inventor of Emergent Knowledge Management techniques, including: Baton=Passing, Smart Failing, **Predator**, Helicopter Process Leadership, MOT, Behavioural Literacy and the Innovation Leadership Diagnostic.

Most recent book: "Power House: Strategic Knowledge Management – Insights, Practical Tools and Techniques" on Blurb.com (http://www.blurb.com/bookstore/detail/2962123)

Favourite TV shows: The Wire & Dexter

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Context



- You don't know what you know until you see a problem and a solution, or until someone asks you a question.
- You won't know the value of something you currently use until someone removes it or tries to buy it!
- Joint C4I3 and GRE visits to SMEs noticed advanced secondary practices (virtual knowledge products or capabilities with high-potential within alternative contexts – for solving other people's problems)
 - RSI reduction through robotic cell assembly (from drain-pipes to valves, to biomedical devices)
 - Warehouse inventory reduction (amazon customer analytics and BM)
 - On-line gaming scratchcards (fashion promotion/ social media)
 - Crowd analytics (from TFL to airports)

The Innovation Deficit



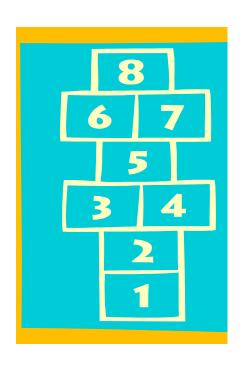
- The costs of <u>not</u> innovating
- Organizations are running a huge innovation deficit that has yet to be calculated.



The Hidden Cost

- The cost of not applying what is known and relevant to delivering new value is probably incalculable and includes
 - Bottleneck, prophylactic effect of legacy product development and business models,
 - Market-taking vs market-making focus,
 - Historically low levels of engagement in workforces,
 - Failure to engineer serendipitous innovation,
 - Limited utility of old methods in new context,
 - Permeability and receptivity to new ideas within existing organizations,
 - Lack of peripheral vision
 - And the use of partial, fragmented innovation techniques!

Exploring Serendipitous Innovation



Knowledge Product Relocation/ Connection to New Contexts

- Sildenafil Citrate (Viagra & Pharmamatrix alternative indications strategy)
- Ray Krock (multimix & McDonald's)
- Superglue (surgery)
- Radio wave reflection by birds (stealth aircraft)
- Error-reduction in cotton loom manufacturing (Toyota Production System)
- Philips MP3 (iTunes BM)
- Collaborative Value Architectures (young drivers' insurance)

Breakout Benchmarking (BoBM)



What are our *direct* competitors up to?

Horizontal & vertical process comparisons within our own industry can reveal critical gaps and potential opportunities for new value based on studying how our competitors do the same thing, helping us to identify sources of new knowledge and novel capabilities

H2 Unlock the hidden value in the Freelander 2 business?



Horizontal End-to-end process

Focus: Product Assembly

Vertical **Strategic sub-process**

Focus: Leasing & **Finance Package**



In-Sector BM **Comparator: Toyota** Landcruiser

Freelander 2 vs. Toyota Landcruiser Freelander 2 vs. Toyota Landcruiser

What are people outside our industry doing that's worth copying?

Horizontal & vertical process comparisons <u>outside</u> our own industry can help us develop new insights into alternative ways of performing analogous activities, helping us to see new problems we didn't know we had!



Out-of-Sector BM

Comparator: Airbus 340



Freelander 2 vs. Airbus 340



Innovation Knowledge Brokering

External Knowledge

(3) HUNTER-GATHERER: Innovation-spotting & scouting; Identifying potential & unusual practices.

(2) KNOWLEDGE-BROKER: Big picture context, building user social network of demonstrator sites.

Internal Knowledge

- (1) PRACTITIONER-HANDYMAN: Local problem-solving & solution-building by members.
 - (4) TRANSPORTER-REPLICATOR: practice identification & knowledge productisation.

Internal Market Application

External Market Application

- Roll back the ID through Knowledge Brokering employing systemic serendipitous innovation techniques (like BoBM)
- Establish the prototype network (1 & 2) with demonstrator sites of KPs
- Identify gaps (3)
- Select KP capabilities to develop for dissemination (4)
- Promote open innovations across networks

Questions



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