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The Impact of Creative Process on the Development of a New Assessment Tool for Innovation: A Case Study.

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The Impact of Creative Process on the Development of a New Assessment Tool for Innovation:
A Case Study

by

Anne Manning

An Abstract of a Project
In
Creative Studies

Submitted in Partial Fulfillment
Of the Requirements
For the Degree of

Masters of Science

December 2007

Buffalo State College
State University of New York
Department of Creative Studies

ABSTRACT OF PROJECT

The Impact of Creative Process on the Development of a New Assessment Tool for Innovation:
A Case Study

This case study explores the link between the development of a comprehensive organizational assessment tool, the *Innovation Aptitude™ Audit* and the creative thinking process, as defined by Paul Torrance. The case is designed to engage readers with the Audit while simultaneously exploring the multiple dimensions of the creative process. It shows the power of the creative process at its best (in that it enables us to develop output that is new and useful) and at its most challenging (in that it constantly tests our commitment to our original visions, requires us to take uncomfortable risk and manage self-doubt). By portraying the creative process as a powerful core competency that engages emotions, knowledge, intrinsic capabilities and cognitive capabilities in the pursuit of a creative product, the case raises questions about how individuals in organizations can produce better "product" by using the tools and techniques of creativity while simultaneously managing the challenges creativity presents.

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Dates of Approval:

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Section One: Project Background

Introduction

This project was about analyzing and reflecting on the development of an innovation assessment tool (*The Innovation Aptitude™ Audit* or *IA*^{2}). The objective was to understand what was in place to support the marketing of the tool and what new strategies had to be implemented to ensure its success. During the course of the project I:

1. wrote a case study demonstrating the link between creative process and creative product (developing and marketing the IA^2).
2. explored the challenges associated with creating something new – as well as the opportunities of using creative problem solving and leadership skills to overcome the challenges.
3. developed new ways to communicate the value and benefits associated with the tool.

Background

The *Innovation Aptitude™ Audit* is a comprehensive organizational assessment tool that was designed to stimulate change in organizations. It provides organizations with feedback on their innovation-related skills, capabilities, and climate as well as metrics to help executives measure progress moving forward. It is a fact base from which organizational leaders can develop innovation-related strategies, action plans and organizational commitment. The Innovation Audit delivers:

1. analytics that identify organizational skills, capabilities, gaps, internal attitudes and behaviors relative to innovation; and
2. a CPS-based (Miller, Vehar, Fierstien, 2001) workshop that aligns leadership and teams around what needs to be done to improve innovation output.

The program was built on the research and thought leadership of creativity/innovation experts like Rhodes (1961), Kouzes and Posner (2006), Amabile (1998, 1997, 1983) and Ekvall (1996). It has three components:

1. Executive Interviews. These in-depth qualitative interviews with leaders of the organization are analyzed and sorted to provide insights into an organization's experiences, strengths, and roadblocks relative to innovation.
2. A 360^{o} on-line survey given to all employees of the organization as well as external stakeholders, if relevant. The 20 – 30 minute survey provides an in-depth look at attitudes and behaviors of employees toward the organization as a whole, their work environment and their experience on innovation-related projects. The survey yields rich data that can be sorted from a variety of perspectives (e.g., department, function, personal style preference, and tenure with the company, as well as by how any question is answered and by any other coding desired by a client.)
3. A leadership workshop. The 1 – 2 day off-site for key decisions makers uses creative problem solving techniques to help executives process the data, diverge around the strengths and roadblocks within the organization

and converge around key areas of focus. Participants leave the workshop with an action plan to improve operations.

The *Innovation Aptitude Audit* benefits organizations by:

1. presenting a fact-base that is unique in the depth and breadth of information is provides, as well as its reporting flexibility;
2. provideing metrics that will help leaders evaluate their organization's progress and vitality over time (ultimately we will be able to link the metrics with revenue numbers as well, providing organizations with the ability to link their processes with their results); and
3. facilitating positive leadership interaction by asking leaders to process information, share knowledge and build relationships while creating a vision and/or action plan related to innovation;

The program has been piloted in two organizations with a total of 325 people. Activities completed to date suggest the program has content validity. Those activities include:

1. initial consultations with various academics and professionals in the field to help develop the tool;
2. focus groups among people involved with innovation initiatives at various companies to determine if the tool was collecting data on the right issues;
3. informal feedback from prospects and colleagues who have reviewed the instrument; and
4. informal feedback from clients who have used the instrument and experienced the workshop.

Rationale for Choice:

For this Master's project I chose to write a case study to share the story of the IA^2 with a broader audience of people who might be able to benefit from it. That audience includes researchers and practitioners in the field of innovation, creativity, organizational development, executive education and development.

What the Project adds creatively to me and others

This project helped me think more deeply about the nature of creative thinking and creative process on both a personal and professional basis. It gave me an opportunity to identify new ways to communicate the value of the Audit and new ways for that communication to reach interested parties.

The project will contribute to others in three ways:

1. It will contribute to the field of organizational development by providing thought leadership around what it takes for an organization to become strong innovators.
2. It will contribute to the field of creativity by building and implementing a research tool that will provide the field with more data about the impact of creativity-based principles and learnings.
3. It will help people in organizations, as well as the organizations themselves, become better creative thinkers and innovators by maximizing the people, process, products and climate that foster successful innovation.

Section Two: Pertinent Literature

Introduction

This project drew more on personal experience than literature. However, as I wrote the case, I found myself repeatedly referring to several texts on the nature of leading and facilitating complex situations. These three books, taken together, provided important insights into the nature of creativity and leadership and provided useful models and methods for helping groups of people solve complex challenges. The foundational principles of each book are briefly summarized below. The common theme running through the various texts is simple: In order to solve complex challenges, we, as leaders, facilitators and managers, need to be willing to think differently. And that simple task, in my mind, takes great courage.

Fullan (2001), in *Leading in a Culture of Change*, identified leadership as helping people "confront problems that have never yet been successfully addressed" (p. 3). He identified five components of leadership that drive positive change: (1) moral purpose; (2) understanding change; (3) relationship building; (4) knowledge creation and sharing; and (5) coherence making. He focused on the need for leaders to foster relationships and to share knowledge in order to make sense of complex challenges.

Charles Palus and David Horth (2002), in *The Leader's Edge*, have developed a six step methodology that demonstrates how a group of people can engage in a process of creating and sharing new knowledge in order to solve complex problems. Their process suggests: (1) using multiple modes of

perception to understand a complex situation; (2) tapping into personal experiences to gain insight and energy; (3) making sense of complex information by processing it using stories, pictures and metaphors; (4) generating knowledge and insight through exploration, improvisation, levity and play; (5) dialoguing within and across boundaries; and (6) synthesizing the learning into integrated and meaningful solutions.

Finally, Cynthia Barton Rabe (2006), in *The Innovation Killer*, talked about the need for outside thinking, basic questioning, and openness to new methods when trying to solve complex challenges. She described what she called “zero gravity thinkers” – people who can help teams reconsider the many filters that organizations have in place to kill new ideas, particularly as they move from the “creative idea” stage to the application development phase. She identified a basic set of principles that organizations must buy into if they want to think differently: (1) engage people who are not experts in the team; (2) encourage and address naïve questions; (3) be open to new methods, testing basic assumptions and looking at the challenge from different perspectives; (4) accept that some approaches and paths will lead to failure but that the cumulative effect of the process will lead to a higher level of innovation.

Selected Bibliography

Fullen, M. (2001). *Leading in a culture of change*. San Francisco, CA: Jossey Bass.

Palus, C. J., & Horth D. M. (2002). *The leader's edge: six creative competencies for navigating complex challenges,* San Francisco, CA: Jossey-Bass.

Rabe, C.B. (2006). *The innovation killer*. New York: American Management Association.

Section Three: Process plan

Introduction

Producing this project required me to:

(1) Define and articulate the project in a format that was concise and explicit.

(2) Develop an action plan that would help me organize the process.

(3) Solicit ideas and coaching from others, including my Project Advisor, my Cohort, my Business Partner and the Developers/Marketers of FourSight™.

(4) Engage in the creative process required for writing a case study.

(5) Reflect on the process to produce new insights to include in the final write-up.

(6) Produce the final document.

Project Timeline:

Activity	Begin	Complete	App. Hours
Step 1: Defined the challenge by developing, re-thinking, refining a concept paper, with the help of Project Advisor	Sept 5	Oct 15	30
Step 2: Identified an organizing principle for the case. Develop outline and first draft of the case.	Oct. 15	Oct. 30	20
Step 3: Solicited information and feedback from outside sources: Conducted interviews with the developers/marketers of FourSight. Set up series of feedback sessions with Project Advisor.	Oct. 15	Nov. 2	10
Step 4: Developed ideas for extending the reach of stakeholders in the tool. Created a written description of how a Board of Advisors could provide help and support. The description will be generated through a divergence/convergence process and identify how the Board and The Innovation Practice (our company name) could benefit	Oct. 15	Nov. 5	10
Step 5: Refined Case Study Drafted share, redraft case study. Used Morning Pages process to reflect on effectiveness of CPS process in re-engaging with and marketing the Audit.	Oct. 15	Dec. 5	20
Step 6: Packaged Case within the Final Write-up Guidelines. On line version of 15 min. presentation (ppt. or video) Final versions of project and presentation in CD form Bound and signed write up	Nov. 15	Nov. 20	20
Step 7: Developed PowerPoint summary of case to share	Nov.	Nov. 28	10

with others	20		
Step 8: Created final version of project and presentation in CD form		Dec. 10	5
Step 9: Delivered Final Bound Version of project		Jan. 10	5
Total Hours			130

Section Four: Outcomes

Narrative Overview

The output of my Master's project was a case study that documented the development and launch of a new innovation-related research tool and articulated the link between the tool and the creative problem solving process. The organizing principle around which the case is written is Torrance's definition of creative thinking which is described in the case itself.

The case begins with an overview of the challenge. It then describes how we sensed difficulties in the marketplace, created an idea, defined our "imagined future", then set about "making guesses" about how to create a tool that would address the marketplace challenges. It reviews the foundational principles on which we built the tool and discusses the process of writing the questionnaire and finding clients to help us begin to validate and refine the tool. At the end, I discuss the challenges inherent in commercializing the product, i.e., communicating it to its intended audiences in a compelling way. The case also contains process "notes" or comments in the form of italicized "reflections." These reflections detail how my experience has aligned with the creative process and some of the feelings and learnings that are associated with the process.

The full text, as well as corresponding figures, tables and Appendices, is included in this section.

The Case Study

The Challenge

In 2005, my colleague Carol Franczek and I had a desire to create a tool that would help organizations have more success with - and grow their business through - innovation. We defined innovation as creating something new and valuable that could be a product, a service, a process, a marketing campaign. Our experience told us there was a need, and our training in creative problem solving told us there was an opportunity to provide a new assessment tool and consulting product.

The project was ripe for Creative Problem Solving (CPS) techniques. It was important, immediate, something we owned that required imagination to solve. We defined our challenge with this question: “How can we support organizations who want to grow through innovation?”

On a personal level, the challenge also met the criteria for CPS. We framed our challenge with a more personal question: “How to develop a profitable research and consulting business that focuses on innovation, help client organizations become successful – while growing ourselves, and having fun?”

There were challenges that existed on a deeper level as well: “How to incorporate and live the principles of creativity successfully? How to engage with the creative process on a deep, almost cellular level in order to model it for others? How to live with the murkiness and tension the creative process

unleashes? How to become a more creative and responsive leader? How to live a more satisfying and rewarding life?"

This case study documents the challenges and opportunities we, as students of Creative Problem Solving (Miller, Vehar, Fierstien, 2001), faced as we sought to address these challenges and build a new business designed to help promote creative thinking – and produce successful innovation – in complex organizations. The case explores our product, our process and our results to date. We describe the variety of business and personal challenges and opportunities that continue to surface. Along the way, we hope to provide insights into the power of creative thinking and creative leadership – what it means, what it represents, and how it works in a "real world/real time" environment.

Guiding definition for this case

Because this case is about creative processes and products, the organizing principle for the paper is adapted from Torrance's definition of creative thinking. Torrance said:

> *"I have tried to describe creative thinking as taking place in the process of (1) sensing difficulties, problems, gaps in information or missing elements; (2) making guesses or formulating hypotheses about these deficiencies; (3) testing these guesses and possibly revising and retesting them; and, finally (4) communicating the results. I like this definition because it describes such a natural process". (1995, p. 72).*

Sensing Difficulties

As Torrance noted, our own process began when we sensed difficulties with how organizations approached innovation from a process level. Both of us had worked in and for complex organization for a long time and we sensed the difficulties facing organizations who want to be innovative.

We defined innovation as producing something new and useful and felt it was closely linked to creative thinking. We sensed that companies were not really set up for the innovation they were seeking. Innovation requires looking at problems from different perspectives, harnessing energy to solve problems in new ways, and bringing those products to life in a way that protects their uniqueness. Organizations do not always recruit and recognize the skills required for innovation. On the contrary, in a desire to protect their success, organizations, either implicitly or explicitly, are set up to maintain the status quo. In our experience, they frequently:

1. Discourage risk-taking.
2. Isolate creative, out of the box thinkers; depend heavily on group think
3. Establish processes that filter out good ideas.
4. Maintained working silos that mitigate teamwork.
5. Often prefer analytic thinking to divergent thinking.

The downside of an overly-analytic/protection-oriented environment is a lack of innovation in business output and a lack of creative thinking on the part of employees.

Making a guess to solve the problem

According to Torrance, guessing follows the sensing of difficulties. Guesses result from accumulating information and developing hypotheses about how to address the deficiency. In this case, our guesses took the form of “what if” questions. What if we could develop a research tool that would allow an organization to see its internal capabilities relative to innovation in a new light?

What if we could give them an in-depth view of what was supporting – and getting in the way of – innovation?

The questions led to a specific hypothesis: What if we could develop a tool, in the form of 360^{o} on line survey and in-depth executive interviews that would give organizations a fact-base assessment of "where they are"? Then, develop a follow-up workshop that would help them process the information in new ways and facilitate their working as a team to build an action plan for success. The end result would be that they would improve their leadership skills relative to creativity and innovation, potentially improve their organization's ability to think creatively, re-energize their team, and ultimately produce innovations that would power the company into the future.

The tool would reflect what we knew experientially and intuitively about innovation in organizations; it would also incorporate the learnings and thinking mentioned repeatedly in published studies, articles, books. Maybe we could even model internal capabilities with an organization's financial results (or other external metrics) to develop a predictive model and a way for organizations to benchmark their progress. These guesses led us to begin imagining what we wanted our future to look like.

The Imagined Future

Prior to developing the tool, we explored our "guess" further by spending time painting a picture of our "imagined future", a picture so vivid and compelling that it could withstand the "gravitational pull" of the past (Hurson, 129) . We had a vision of developing a "holy grail" for corporate innovators. We imagined

ourselves transforming client companies. Armed with facts, new sights, teamwork and action plans coming out of the workshop, clients could change their organizations and change the world. Our research would become as critical as customer satisfaction research – and we would become the new "J.D. Power" of the innovation world. And we diverged around the kind of company we wanted to be. We wanted to be "different". We wanted to promote creative problem solving. We wanted to live "it" and model "it".

Reflection

Great energy is produced at the cross section of vocation and avocation. And this imagined future was generated as much by personal interests as professional desires. We believed that creativity was a "core competency" for innovation. And we wanted others to understand and benefit from that dream. By putting personal interests at the center of professional goals, we put ourselves at risk for disappointment – but also at that place where great things can happen.

The "big idea" was also the result of incubation, a psychological process where thinking about a problem happens sub-consciously while an individual is engaged in other activities. Guilford (1979) suggests that incubation takes place in a pause in action. Incubation provides time and distance to let new ideas be born. Like any birth, the moment contains a great deal of excitement mixed with a little magic and some fear of what might come next. With that fear and excitement, we moved into the development process.

The Development process

Torrance says the development process consists of guessing and sensing, followed by testing, revising, making more guesses. In other words, it's hard, sweaty work. It's a labor of love. Motivated by passion, it requires trying, failing, trying again – with no guarantee of success in the end. Our developmental process consisted of four steps:

1. Building a conceptual framework;
2. Establishing a theoretical foundation;
3. Building the instrument; and
4. Putting the tool to work.

Building a conceptual framework

The first step in the development process was concept development. We spent about 6 months writing in this stage. We'd write a concept draft, show it to colleagues, and revise it. We'd collect more data, revise again. A review of our early drafts shows that we had a firm idea of the concept from the beginning, and then spent a lot of time "tweaking" the wording. An example of an early concept is included in Appendix A.

Reflection:

Concept development brought us face-to-face with the convergent/divergent thinking process that is intrinsic to creative problem solving. Looking back, this was the first place we discovered that our use of the normal divergent/convergent thinking did not follow the straight lines shown in all the

Creative Problem Solving models. The radiational diamond pattern – reaching for ideas, and the converging around ideas, does not capture the iterative nature of what we were doing….it's not a straight shape, more like converging S shapes:

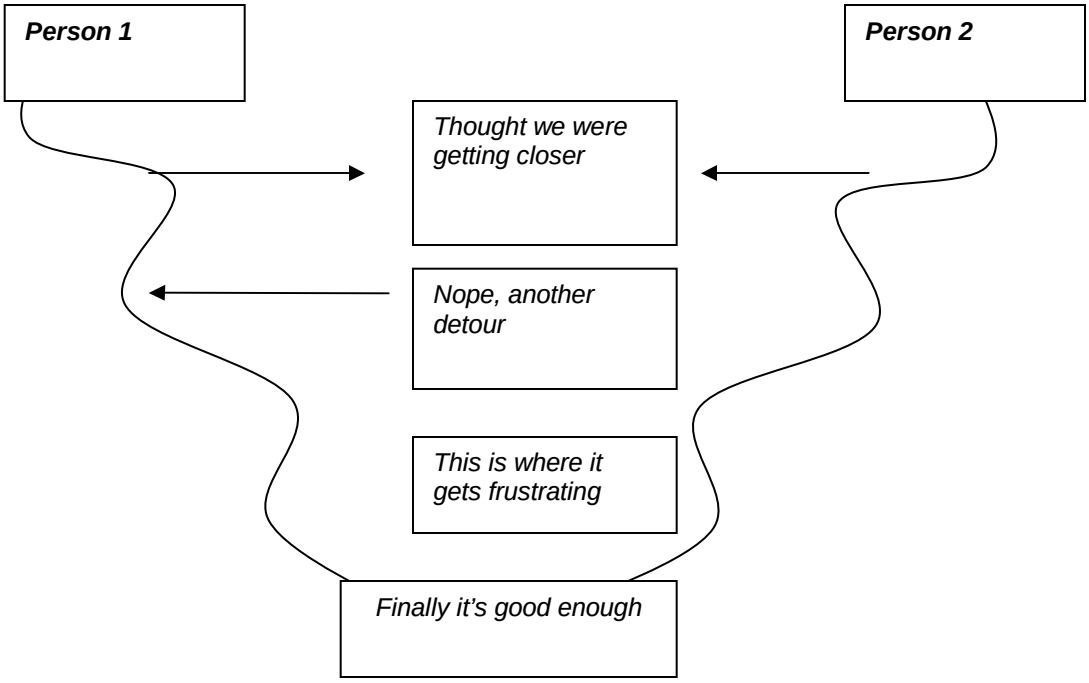


Figure 1: Defining how we experienced divergent thinking

Following this circuitous development process raised questions: "How perfect does this concept have to be? Is there a point of diminishing returns – where all the changes designed to create the "perfect" concept begin to undermine and weaken the concept itself? Where is that place where group think is a detractor, not an enhancer, to the process?

We could move forward after receiving universally positive feedback from colleagues, or we could rely on our "gut" to tell us to move on. We relied on gut, or what Goleman et al. (2002) refers to as "the smart guess".

After we had developed a “good enough” concept through testing and retesting our content hypotheses, we set about developing our product.

Establishing a theoretical foundation

Borrowing ideas – and putting them together in new ways - is common when trying to develop something new. Martha Graham, the dancer and choreographer, once said *“I am a thief…..and I glory in it…. I steal from the best where it happens to be – Plato, Picasso, Bertram Ross…I think I know the value of what I steal and I treasure it for all time – not as a possession but as a heritage and a legacy”. (http://www.time.com/time/magazine/article/0,9171,956241-1,00.html)* It is said that even Shakespeare’s Big Ideas apparently came from identifiable sources. Romeo and Juliet, for example, was sourced from *The Tragical History of Romeus and Juliet*, written by Arthur Brooke and translated into English in 1562. Macbeth was built on the Holinshed’s Chronicles, which was also a source of King Lear. The genius of Graham and Shakespeare was not in source of their ideas – but in the elaboration and development of the idea.

In our case, the challenge was to develop a theoretical foundation for our work. And like the greats who came before us, we chose to “build on the backs of the geniuses who came before” or, as Graham suggested, we wanted to “steal from the best”.

To build a theoretical foundation, we turned to ideas generated by Theresa Amabile (1983, 1997,1998) Clay Christianson (1997), Goran Ekvall (1996), white papers produced by major consulting firms (McKinsey). We gathered as much information as we could process to help us form our

underlying hypotheses. We combined our readings with an exploration of our own experiences to identify issues we felt were critical. We observed our clients and identified their skills, capabilities – and the gaps. We flowed between writing the questionnaire and gathering insights. Over time, with trial and error, we built a theoretical foundation based on the following insights and observations:

a. "***Creativity is a core leadership competence***". (Puccio, Murdock, Mance, p. xii) Leadership is critical and leaders are not trained to lead creatively. Corporate cultures and management education in business schools, are based on quick analysis, minimizing risk, and taking action fast. The "corporate rules", as established by leadership over the course of many years, produces filters that are designed to ward off problems but, in fact, ward off opportunity as well. We chose to focus on creative leadership practices articulated by Kouzes & Posner (1995), which are outlined in Appendix A.

b. ***Climate impacts performance***. High altitude affects what we can do with our bodies; it quickens our heart rate, increases our appetite and our need for more water. Heat slows down elite runners. Sailing ships run a-ground or, worse, capsize in storms. Climate has dramatic affects on what we can do and what we can produce. And if the race is to produce innovation, controlling the climate appropriately will have a dramatic impact on the outcome. We built on the climate factors established by Goran Ekval (1996): the need for: challenge, freedom,

idea support, trust, dynamism, playfulness, debate, conflict, risk-taking and idea time.

c. ***"Be Like Mike."*** Michael Jordan was famous for his desire to play "for the love of the game". He played hard and he played to win. Theresa Amabile has demonstrated that people with strong intrinsic motivation, in whatever field of endeavor, will produce. And those whose environments (or workplaces) support this type of intrinsic motivation will, in turn, be more creative. We have built factors about intrinsic motivation and workplace support into our tool

d. *"**Stop but-ing in**"***.*** We are trained in the principles of creative problem solving and believe that such fundamentals as separating divergent from convergent thinking, as well as allowing time for incubation, are at the heart of the creative development process….even if these rules are exceedingly hard to follow, as witnessed by our own tendancies to find a "but" to respond to any idea.

e. "***Play like a championship sports team."*** For all his deficiencies, Bill Belichick, the head coach of four time Super Bowl winners, the New England Patriots, is a leader who has created a culture of teamwork in a sport that can be defined by functional expertise (offense; defense) as well as by stars and grunts. The siloed nature of large companies, with rising stars and run-of-the-mill workers, often leads to misunderstanding and lack of cooperation between the various people and departments that need to be aligned in order to produce

innovation. We take a hard look at team experiences as well as how people in different functions view team members whose work goals are different than their own.

f. ***Kaizen vs. Tenkaien***. Kaizen is the Japanese principle of incremental change (http://en.wikipedia.org/wiki/Kaizen); it's based on the belief that a process can always be made a little better than it was before. Kaizen is represented in our society by initiatives like Six Sigma (Vitalo, n.d.) where we look closely at a process and methodically try to improve it. On the other side of the coin, Tenkaien is a term that suggests "good revolution". It is a process of turning things upside down to produce something new. It asks fundamental questions about how and why things are – and are not - done a certain way. Why, for example, don't we celebrate failure? What if we could…..? What can be done to change things around here? Kaizen and Tenkaien represent different processes, experiences and metrics. We explore how people have experienced these projects seeking incremental and breakthrough innovations and what the outcomes of these projects have been – to determine where strengths and challenges lie and how things could be done differently.

g. ***Numbers deceive***. Traditionally innovation metrics are measured, if at all, by profit/sales numbers. The ultimate "product", in a business, becomes profit resulting from innovation. We believe that innovation metrics need to measure internal processes as well – because it's the

behaviors that will ultimately produce the marketplace success. Poor metrics leads to poor process.

Reflection:

Yoga teaches us that the mind of the beginner is a powerful mind. The beginner's mind is open, eager and lacking in preconceptions. According to Shunrya Suzuki, the Zen teacher, "In the beginner's mind there are many possibilities, in the expert's mind there are few".

We evolved our principles with the mind of beginners. Being open and eager, we saw so many possibilities and opportunities – we were constantly revising our thinking – and continue to do that today. We also followed the path where it was leading. We made decisions based on a combination of best information available and our intuition. The process was messy and personal – as the creative process always is. We needed to constantly find the right balances – between rich detail and big picture concepts; between new ideas and accepted/researched practices. Trial and error and debates would endure.

Relative to the CPS/Thinking Skills Model (Puccio, Murdock et. al, , 2005), we moved in and out of various creative problem solving phases as we built the theory; we touched on exploring the vision, formulating the challenges, exploring ideas and formulating solutions repeatedly, as we gathered more data and made more decisions. Stages overlapped and there were lots of starts and stops.

The process is emotionally draining over time – and without our overarching "vision" I'm sure we would have stopped.

<u>Guessing, revising, testing, guessing some more: building the instrument</u>

Creating and programming the survey instrument took the better part of two years. We started building a questionnaire as we articulated our foundational beliefs. We changed our minds. We had new ideas. We had different organizing principles. We made charts. We created lengthy spreadsheets. We created lengthy questionnaires. We edited the questions again. We re-organized the instrument again. The instrument got longer. It got shorter. It got longer. And we continued to believe we had a great idea.

We consulted with research practitioners to get advice and feedback on survey design and modeling techniques. We approached a Columbia University professor who reviewed the content of the survey and told us we were on track. We worked with the Director of Innovation Research at Babson College who also reviewed the survey – multiple times – for organization and content. We held a focus group to see if “everyday people”, involved with innovation, related to our questions and found the content valid. After each conversation, we reviewed and refined our questionnaire. Finally, we reached the point of “good enough”; we decided the instrument was “good enough” to get up and running.

Putting the tool to work

Testing for validity has, too date, been an empirical process. We have run the Audit twice: once, for a non-paying client, amongst a group of 30 managers at a consumer packaged goods company and secondly, amongst a group of 299 employees at a division of another consumer packaged goods company.

Feedback from clients suggests the tool measures what we need it to measure. Because the data is presented and processed at a Workshop, clients

can tell us directly, at the point of presentation, the extent to which they feel it correctly describes their organization relative to leadership, climate, project experience and metrics. To date, clients have found the data useful and intuitively accurate. It gives them the data they need to think about what works and doesn't work. For example, executives at one company learned that the culture supported innovation but that there was no over-arching strategy; silos existed that impeded the optimization of innovative efforts and leadership effectiveness was strong at the project level but not at the strategic level. At another company, we learned there was a crying need for executive team support of innovation and a clear vision and a structure that supported that vision.

Further testing for validation and reliability has proven tricky for us, because it is linked to marketing: finding someone who will do this, even for free. The challenge: how to find more organizations who see value in what we are doing and who will respond positively to an offer to run it – at a good price?

Communication

Although we approached the development of our tool with the mind of beginners, we approached the communication phase with the mind of experts. Having come from a marketing background, we felt we knew what had to be done.

1. We designed a logo, a business card, and took a first crack at a website.
2. We created an on-line list, established an account with Constant Contact, and started to do periodic mailings.

3. We attended Innovation conferences where we could both learn, keep up to date on what others were doing, and meet potential clients. We approached the conferences creatively: We became conference podcasters, interviewing speakers and posting the interviews through itunes and on the Conference websites, then attending the conferences for free.
4. We wrote. I had an article published in *AdMap Magazine* on new approaches to qualitative research.
5. We hired a company to cold call for us and find us leads.

After a year, our efforts produced very few organizations willing to participate in our Audit process. We are now in a period of assessment and marketing strategy redesign. We are creating a modified PPCO, a CPS tool that calls for identifying positives, potentials, concerns and opportunities (see Illustration 1: a modified PPCO). We are assessing the impact of out-sourcing our sales process. We are also assessing the degree to which our size and resources are problematic, specifically when compared to large, well-known consulting firms like McKinsey that do a lot of global research and publish the results for free, in order to promote their capabilities and reinforce current relationships with senior executives.

A further area of exploration focuses on what we are doing vs. what others have done. In illustration 2, we compare what we have done to market our tool vs. steps taken to market to other innovation-related tools: KEYS™, a climate

tool developed by Theresa Amabile at Harvard and Foursight™, a tool developed by Gerard Puccio at Buffalo State College.

Illustration 1: A modified PPCO

	What worked/positives	Challenges to overcome
Logo and website	Yogi Berra quotes Folded business cards	How to better articulate what we do? How to create an elevator statement? How to demonstrate our tools? How to demonstrate our ideas? How to convince prospects to call us?
Conference participation	Learned at conferences Met new people Collected a lot of business cards Got new ideas	How to convert brief acquaintances into prospects? How to evolve from participant to speaker? How to make stronger connections with attendees?
Mailing list	Over 700 names	How to contact people? What motivates them? What to offer them? How to engage them? How to leave them feeling they've learned something?
Writing	Published one article	How to find time to write more? How to identify appropriate topics? How to find publishers?
Target Audience definition	Fairly well identified by different product lines	How to communicate effectively with target audience? How to determine timing of offering: when it might be meaningful? How to develop/refine offers? How to create meaningful experiences for them?
Sales and distribution		How to distribute through third parties/other consultants?
Brand		How to build more credibility? How to communicate more clearly and effectively? How to develop an elevator message?

Illustration 2: Comparing KEYs, FourSight and the Innovation Aptitude Audit:

Name/type of tool:	**KEYS:** measures climate for innovation	**FourSight:** measures thinking style relative to innovation	**Innovation Aptitude Audit**: comprehensive measure of organization's capabilities and skill
Developed by:	Academic	Academic	Practitioner
Based on:	One person's research and thinking	One person's research and thinking	Thought leadership scan; practical experience
Validation/reliability testing	extensive	extensive	reasonable
Manual availability	For price	For price	Not available yet
Easily used by third parties – supported by Powerpoints/workshop materials etc.	Yes	Yes	No
Training/credentials to third parties	Yes	Yes	No
Developer has outside partner for marketing	Yes: CCL	Yes	No
Priced for others to use	Priced by survey	Priced by survey	Priced as combination of survey and customized packages
Customized results	No	No	Yes

Conclusion

The *Innovation Aptitude Audit* is a new tool that shows promise as part of a larger program designed to inculcate organizations with a knowledge base and climate that fosters innovation. The tool's foundational theories are based in strong research. Initial response from those who have participated suggest that it will be a reliable and valid instrument that can provide organizations with

information that can then be turned into insight and action. It is well aligned with the principles of creativity and is designed to support those principles in the marketplace. With patience and appropriate communications, it can help complex organizations develop the processes and metrics needed to compete aggressively in a fast-changing world.

In order to thrive, the Innovation Audit, like any new product, requires tender care. It will require further content and validity testing. It will require support from client organizations as well as other innovation/creativity consultants who might find it useful. And it will require internal resources that will provide both fresh thinking about its development and marketing as well as content.

The process of developing the Innovation Audit has been informed by creative thinking principles. In turn, the Innovation Audit has helped us, as the developers, learn more about the challenges of innovation. We've learned that creating a new tool is an adventure. It requires living the very experiences we are advising clients about: risk-taking, dealing with uncertainty and the unknown, learning from failures, engaging in collaborative relationships. It has provided us with a more intimate glimpse of our clients needs while also giving us what is hopefully an overview of how to help them better – because we've lived the experience and had an opportunity to reflect and build upon it

Our story does not yet have an ending. We are wiser, but not richer. Moving forward our plans include:

- Redesigning website – in process;

- Reaching out to colleagues for support;
- Establishing partnerships with other consultants;
- Establishing a Board of Advisors (see Appendix B); and
- More closely defining our target audience and how to establish relationships with them.

As we continue to evolve both the content and process of the audit development, we hope to stimulate dialogue about and interest in our work. We welcome feedback to this case study and inquiries into the Innovation Audit and our process.

> *"Learning and innovation go hand in hand. The arrogance of success is to think that what you did yesterday will be sufficient for tomorrow."* William Pollard

Appendix 1: Early Concept

Introducing the XYZ Innovation Index….brought to you by the XYZ Group

Innovation has always been a critical function for any company; yet successfully commercializing new ideas is always a challenge. That's because few companies excel in every aspect of the innovation process. Typical barriers to success include: lack of strategic relevance, lack of great ideas, false selection criteria, commercialization weakness, lack of leadership or management experience, even politics. The goal of the Innovation Index is to provide a snapshot of your company's innovation skill set, its processes and its personnel.

The index is derived from responses to a straightforward, web-based survey that assesses your organization's current innovation capability—its perceptions, skills, behaviors and results to date. Then, it diagnoses gaps and proscribes ways to leverage your strengths and improve problem areas so that your innovation efforts deliver better results more efficiently.

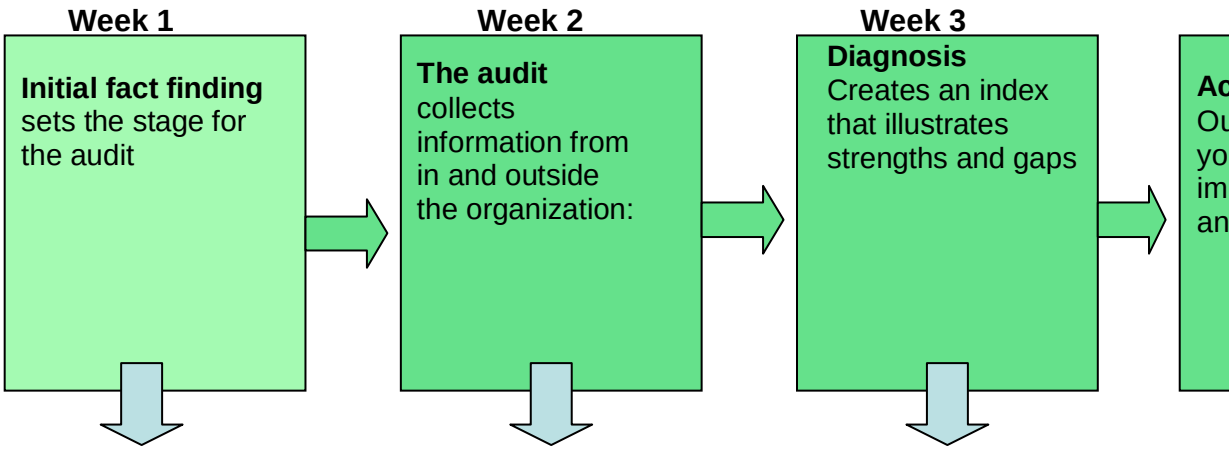
The audit was developed by the XYZ Group, a joint venture led by three professionals with extensive experience in innovation, creativity, problem solving, marketing, and market research. It is grounded in the most advanced thinking on innovation research and practice in organizations. .

Here's how it works:

The index is a result of an audit which includes a 360^{o} assessment of your organization's innovation capabilities – providing input from internal stakeholders, including executives, senior managers, and individual contributors across functions. It can also collect relevant external viewpoints from stakeholders like distributors, intermediaries, financial analysts, industry experts and consumers. It allows your organization to manage innovation more successfully by providing metrics that illustrate:

- How internal attitudes, beliefs and perceptions facilitate or constrain innovation
- The degree to which specific competency in skills (strategy development, ideation, and implementation/commercialization) facilitate or constrain innovation
- Why teams succeed or fail with innovation initiatives
- What leadership can do to foster an innovative, creative environment that produces results

An example of how the process works:



Internal interviews with senior executives and managers

- Straight-forward web survey with fast turn-around
- Collects information from executive team, middle managers, individual contributors as well as outsiders
- Audit produces an index that allows you to measure impact of changes over time
- Topline and deep dive capability

What you might learn:

- Significant gaps within and across organization
- Creative thinking isn't rewarded
- Teams not properly trained in creative process
- Information discontinuity
- New consumer segmentation strategy not understood by core team
- Strong new technology to build on
- Commercialization capacity

Appendix 2: Kouzes and Posner's Leadership Practices

- Challenge the process – look for innovative ways to improve the organizations
  - Search for Opportunities
  - Experiment and Take Risks

- Inspire a Shared Vision.
  - Envision the Future
  - Enlist Others

- Enable Others to Act
  - Foster Collaboration
  - Strengthen Others

- Model the Way
  - Set the Example
  - Achieve Small Wins

- Encourage the Heart
  - Recognize Contributions
  - Celebrate, celebrate, celebrate

Appendix 3: Advisory Board: Call for support

Who we Are:

We are an innovation consultancy who helps people and organizations do great work by unleashing their potential for creative thinking. We are looking to form an Advisory Board to help us position and market one of our core tools, the Innovation Aptitude™ Audit.

What is the Innovation Aptitude Audit?

The IA2 is an on-line survey that provides organizations with a comprehensive assessment of their innovation-related skills, capabilities, and climate. The survey results create a platform for building and sharing knowledge about what it takes to produce innovation in an organization.

The process gives leaders an opportunity to:

- Set priorities and get buy in from implementation teams.
- Engage their organization in a meaningful dialogue about what it will take to produce meaningful innovation
- Experience a process that demonstrates the type of information, dialogue, and connection needed to produce innovation in their organizations.
- Benchmark their organization for progress and, in the future, against other companies

Clients of the Audit receive:

- a fact-based set of analytics that identifies their skills, capabilities, gaps, internal attitudes and behaviors relative to innovation.

- a workshop and coaching that stimulates leadership to process the information and create an action plan, while building more open communication and commitment.

Why an advisory board?

We are looking to form an active Advisory Board who can help us by:

- Challenging our thinking and our plans
- Providing fresh perspectives around branding, marketing, sales and communications
- Conferring status on our product and process
- Sharing in our development and success

Specifically we would like our Advisory Board to:

1) Provide non-binding counsel on strategic direction….particularly how to:
- Develop a shared vision of what we could be
- Create an effective marketing/sales plan – for 2008, including how to identify and reach a core target market.
- Communicate what we do more effectively
- Identify meaningful partnerships
- Determine what other kinds of support we need, including potential investors

2) Keep us accountable to goals

3) Provide links to resources we don't have – potential clients, investors, etc.

Our responsibility to the Board:

In return, we promise our Board members that we will:

- Use their talents wisely
- Access their input monthly
- Openly share plans, disagreements, progress
- Share quarterly how they are making a difference to us and how we are making a difference to them – if there is no mutual benefit, disband.
- Look for opportunities to be mutually successful

Board member profiles:

We are looking for Board members who are deeply and personally engaged with the innovation process – from different perspectives. Ideally we would like to develop a Board whose members represent different backgrounds and perspectives, including:

- University professors
  - What we get: academic rigor; status
  - What you get: resume enhancement; case material

- Research/innovation/creativity executives – working or retired
  - What we get: experience and knowledge and objectivity
  - What you get: continued intellectual challenge and involvement; ability to impact and shape something new

- Potential users/customers
  - What we get: input from potential end users

    - What you get: intellectual challenge; exposure to new ideas; professional development

- Other consultants
    - What we get: experience and contacts in the marketplace
    - What you get: new product they can sell – as both a front-end assessment for their work and a commission from the work

- Potential investors

Commitment:

- 1 year commitment Jan – Dec. 2008
- 2 – 4 hours per month on the phone
- face-to-face meeting at six months
- celebration/analysis at year end

Compensation: tbd

Appendix 4: Worksheet for processing Audit results

As we present results, we ask workshop participants to record the following on yellow “stickies”. We asked them to produce as many stickies as possible as they listened – quantity counts! The questions are:

What did you hear that confirmed what you already know?

What did you hear that surprised you?

What questions did the information raise?

What information do you feel you are still missing?

Section Five: Key Learnings

Introduction

I embarked on this project with some specific learning goals (Manning, 2007). I wanted to learn how to:

1. articulate the link between creative process and our product (the IA2);
2. better communicate our story in a way that would engage our target audiences (researchers, potential collaborators, clients, colleagues);
3. re-energize myself around our product through reflection, clarification of purpose, and creating ideas and strategies for moving forward; and
4. become a more effective creative leader by engaging more deeply with a creative process (reflecting and writing).

I believe I made progress on all four of the goals. What I learned is detailed below.

Specific Learning Goals and Results

Goal #1: learning to articulate the link between creative process and our product (the IA2).

Aligning the development of the Audit with Torrance's definition provided a clear link between our process and a definition of creative thinking. I showed how the development process was consistent with his definition of sensing the problem, making guesses, refining and communicating. Writing the case also helped me articulate the link between the explicit actions we took and the more implicit processes that we were experiencing – such as how the development processes engaged a variety of creative thinking skills (conceptualization, development, clarification, implementation) as well as emotions (ranging from hopeful to discouraged). It also helped me develop the link between our work and the skills needed for building and leading a creative organization.

<u>Goal #2:</u> learning to better communicate our story in a way that would engage our target audiences.

This project helped me find a way to communicate what we've done in an informal, story-telling form that communicates a sense of the creative journey as well as the value of the product being written about. Writing gave me insight into that journey. We've come a long way, through processes of ideating, visioning, conceptualizing, developing, clarifying and communicating. Despite the length and difficulties already encountered, this project has helped me see how the journey has yet to reach a denouement.

Writing the story also helped me elaborate on the key benefits of the Audit in new ways – particularly in how we might link the audit experience to creative leadership skills, by working with clients to process the findings and explore behaviors and attitudes that will help the organization be more successful with innovation.

I also began to think through whether and how to create a Board of Advisors. I am beginning to understand how reaching out is a process that requires commitment, persistence and time. In asking for help, one puts oneself in the position of being turned down. Rejection can be psychologically unnerving. I believe there is an opportunity to further explore how the fear of rejection can destroy what might otherwise be a magnificent business opportunity.

<u>Goal #3:</u> learning to re-energize myself around our product through reflection, clarification of purpose, and creating ideas and strategies for moving forward.

Energy is associated with work and activity. According to the most basic law of science, energy can not be destroyed; it can only be transformed. This

project propelled me into periods where I used a lot of mental energy and then into periods where my mental energy was depleted. At that point, I would step away and use other forms of energy (physical energy for example) to help me reengage mentally. As I watched my own energy transform into different activities and outlets, I realized that positive energy moves, changes and evolves while negative energy literally sucks the life out of positive energy, much like what happens when a heated (positive) object touches a cool (negative) object, with the negative energy 'draining' the hot life energy from the object.

This project gave me a chance to experience the value of moving energy around. Instead of focusing on my doubts about what I was doing, I refocused my energy on exploring new ways for communicating our work. Re-channeling the energy has been liberating and has given me new perspective on how my energy ebbs and flows.

Goal #4: learning to become a more effective creative leader by engaging more deeply with a creative process (reflecting and writing).

The final goal was to engage more deeply with the creative process in order to become a more creative leader who can make change in the world. The process of completing the project took commitment and persistence; how the experience will impact me as a leader will emerge over time. By having the opportunity to reflect on creative leadership skills, I discovered how the Audit can facilitate creative leadership by helping leaders turn information into real knowledge that can guide actions and change on an individual and collective basis. It also provides leaders with an opportunity to build relationships

throughout the organization. These are experiences necessary to lead in a culture of change (Fullan, 2001). I believe there is an opportunity to further explore the dimensions of creative leadership and apply it to the development of processes that promote innovation in organizations.

Section Six: Conclusion

Creativity is about growth and change. To get an instant insight into the inherent nature of growth and change, look no further than the children in our lives. Every day, they face new challenges – whether it be learning how to walk or learning how to be part of a championship varsity football team – that require new solutions. That kind of creativity requires almost constant growth and change, which in turn can be simultaneously painful and rewarding.

In working on this project, I re-discovered, on a very personal level, the extent to which creativity is a process rooted in growth and change, pain and reward. Staring at that proverbial blank sheet of paper trying to come up with something new and useful to say is hard. It requires divergent thinking, to come up with new ideas and new words, and convergent thinking, in order to identify the “best” ideas and works with which to express them. It requires metaphorical thinking, to come up with new perspectives and solutions. It is a risk, as evidenced by the eternal and internal question that is always lurking in our heads: “is this good enough”? And, at its best, it is a community event. It engages others in a variety of roles: as sounding boards, as advisors, as encouragers, as challengers, as readers.

The tools and techniques we’ve developed and learned exist to serve and enhance our creative thinking, but, in the end, creative thinking itself is an internal process that engages our emotions, our knowledge, our inherent capabilities and cognitive styles to produce a creative product.

I continue to believe that creativity is one of our most important competencies. Our creativity speaks to the core of who we are and who we can be, individually and collectively. By instinct, I am a believer in the benefits of the creative process. And, as I learn its tools and techniques, I am also recognizing its challenges – and why people in organizations are so afraid of “it”. .

As I continue this journey of exploring my own creativity and encouraging organizations to apply creative thinking to their challenges, I want to:

1. collaborate more with individuals who work in the field.
2. learn more about the nature and application of creativity on an individual and organizational level.
3. more aggressively seek out opportunities to communicate my work, my ideas, my capabilities and enhance my credibility.
4. identify more opportunities to get meaningful and paid work helping organizations succeed by unleashing their creativity on complex challenges.
5. begin exploring how to write about “the creative organization”, much as Richard Florida has written about creative cities.

Working on this project has been a challenge, an irritation, a frustration, a gift and ultimately, a reward. Thank you for the opportunity of doing it.

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Project Appendix A:

Concept Paper

Bringing the Innovation Architect™ to market.

Anne Manning
Submitted: September 2007

Project Type: Developing and Using a Skill/Talent

What Is This Project About?

This project is about developing the leadership skills and resources to bring a complex product, The Innovation Architect (working name only) to market. It is about:

- using Creative Problem Solving (Miller, Vehar, Firestien: Common Language Version) techniques, as well as the CPS community, to address challenges in marketing this product.

- learning how to overcome isolation and frustration and reach out to natural communities for advice and support when stretching for a goal.

- developing a case study of how creative problem solving and leadership impacts the development, marketing and delivery of this product.

.

Background and Context:

The Innovation Architect is a proprietary research methodology that provides organizations with a comprehensive assessment of their innovation-related skills, capabilities, and climate. It helps organizations develop – and generate commitment around – an innovation strategy/action plan by providing them with:

- a fact-based set of analytics that identifies their skills, capabilities, gaps, internal attitudes and behaviors relative to innovation.

- a CPS-based workshop that aligns leadership/teams around what needs to be done to improve innovation output

The program was built on the research and thought leadership of creativity/innovation experts like Rhodes (1961), Kouzes and Posner (2006), Amabile (1998, 1997, 1983) and Ekvall (1996).

The Innovation Architect program has three components:

- Executive Interviews. These in-depth qualitative interviews with leaders of the organization are analyzed and sorted to provide insights into an organization's experiences, strengths, and roadblocks relative to innovation.

- A 360^{o} on-line survey given to all employees of the organization as well as external stakeholders, if relevant. The 20 – 30 minute survey provides an in-depth look at attitudes and behaviors of employees toward the organization as a whole, their work environment and their experience on innovation-related projects. The survey yields rich data that can be sorted from a variety of perspectives (e.g., department, function, personal style preference, and tenure with the company, as well as by how any question is answered and by any other coding desired by a client.)

- A leadership workshop. The 1 – 2 day off-site for key decisions makers uses the CPS process to help executives process the data, diverge around the strengths and roadblocks within the organization, and converge around key areas of focus. They leave the workshop with an action plan to improve operations.

The program has been piloted with two organizations - among a total of 325 people.

Activities completed to date suggest the program has content validity. Those activities include:

- initial consultations with various academics and professionals in the field to help develop the tool.
- focus groups among people involved with innovation initiatives at various companies to determine if the tool was collecting data on the right issues.
- informal feedback from prospects and colleagues who have reviewed the instrument.
- informal feedback from clients who have used the instrument and experienced the workshop.

Rationale for Choice:

Initial feedback suggests the Innovation Architect program is a meaningful tool.

- The experientially-based and detail-rich survey, combined with the executive interaction pre and post survey, helps leaders create – and gain commitment around – a vision and/or action plan.

- As far as we know, the Innovation Architect is unique in its ability to provide the depth and breadth of insight it offers.

- The program promotes the use of creative problem solving skills. We apply CPS techniques, as well as divergent and convergent thinking, to help participants process survey results, generate a vision and an action plan.

- The program has the potential to create metrics that will help leaders evaluate their organization's progress and vitality over time.

- Ultimately we will be able to link the metrics with revenue numbers as well, providing organizations with the ability to link their processes with their results.

My partner and I have worked hard on the program and early returns suggest it's great. Yet, we have stumbled in the sales process and have not found a successful way around barriers. I am looking for this project to help stimulate new thinking and new ways to generate interest, commitment and trial.

What Will be the Tangible Product(s) or Outcomes?

Ultimate "success" relative to this project is a) developing an effective marketing strategy for 2008; b) generating a meaningful group of Advisors and Partners to work with and b) creating a consortium of organizations who are participating in the program.

For the Master's Project, the deliverable is:

- A draft case study that examines how CPS (and the CPS community) has helped us develop, market and deliver a complex new product. Hopefully this case study will function not only for self-learning but for others who want to develop and market a process to improve innovation. The case will describe and reflect on how we used CPS thought processes, tools and techniques to:

    - guide and inform product development and marketing.

    - identify and resolve challenges.

    - create "circles of support" for leadership and marketing guidance.

    - reflect on internal and external barriers/resistors and how to transform barriers/resistors into opportunities/assisters.

What Criteria Will You Use To Measure The Effectiveness Of Your Achievement?

I will measure the effectiveness of my master's project achievement by:

- providing a self-assessment on the growth (or lack of growth) of my CPS and leadership skills. This assessment will be a part of the case study.
- my ability to identify and recruit appropriate help and support to bring this product to market.
- feedback from project advisor and others who engage with me on this project.
- the level of success (as measured in revenues, client satisfaction and our own satisfaction) with the Innovation Architect at the end of 2008.

Who Will Be Involved or Influenced; What Will Your Role Be?

- I will be the lead in this project. My role will be to gather information and insight from multiple people and other resources, put it together in a plan, be the principle writer and out reach person.
- My business partner will be involved. As an owner/user of the final product(s), I would like her to contribute ideas and then review and refine the work product.
- The Project Advisor who will provide on-going feedback and guidance
- Other people involved with the International Center for Studies in Creativity and the CPS community. I hope to tap into the collective wisdom, experience and resources available within the context of the program. I will look to these people to give me guidance for context, role models, referrals and other types of guidance and feedback.
- Specifically I would like to learn more about the development, validation and marketing of the ForeSight product because the lessons learned in that process, I'm sure, can provide guidance for us.

When Will This Project Take Place?

- The case study and initial development of "circles of support" (aka a Board of Advisors/Partners) will take place between now and the December 2007.
- The marketing plan will be developed and implemented in 2008.

Where Will This Project Occur?

The majority of this project will occur in Boston, MA, where I am located and which will be the base of all work. There might be a need to visit potential Advisory Board members.

Why Is It Important to Do This?

Professionally this project is important because, if successful, the Innovation Architect will:

- help individual organizations become better innovators by maximizing the people, process, products and climate that foster successful innovation.
- help individuals in the organizations become more effective innovators and more creative thinkers.
- contribute to the field of organizational development by providing thought leadership around what it takes for an organization to develop into a strong innovator.
- contribute to the field of creativity by building and implementing a research tool that will provide the field with more data about the impact of creativity-based principles and learnings.
- help me tap into, articulate and improve my leadership skills.

Personal Learning Goals:

My personal goals are to:

- integrate and solidify CPS skills on a personally high risk/high reward project.
- understand – and overcome – my own blocks and barriers to reaching out and recruiting support to reach a goal.
- demonstrate the clarity, leadership, and influencing skills necessary to bring a new product to market.
- demonstrate the commitment to overcome the difficulties of this project and the leadership to create some momentum behind it.

How Do You Plan to Achieve Your Goals and Outcomes?

This semester, I plan to do the following:

1.) solicit coaching from Project Advisor in terms of the ongoing and creative application of CPS skills in this project.

2.) conduct interviews with the developers/marketers of FourSight and (hopefully) 1 or 2 other tools, to understand the process that used and what lessons were learned in the process. This part of the process is aligned with “fact-finding” in the CPS model

3.) use interview findings to diverge around important next steps – including who might help us better position, market and “sell” this product

4.) make progress on developing circles of support to provide advise, council and connections.

   a. Creating a written description of how a Board of Advisors could provide help and support. The description will be generated through a divergence/convergence process and identify how the Board and The Innovation Practice (company name) could benefit from one another.

   b. Reaching out to various members of the CPS community and others to determine their interest in participating in the “Board”.

5.) write a case study that details how the Creative Problem Solving techniques and community has contributed to the development and marketing of the Innovation Architect.

Evaluation:

- Self-evaluation – how well do I think I have reached my personal learning goals

- Evaluation from advisor on the quality of the product (draft case study) and the quality of the process

- Progress on recruiting and working with a Board

Prepare Project Timeline:

Activity	Begin	Complete
Concept Paper • Draft • Final	 Sept. 5 Sept. 25	
Conduct interviews with the developers/marketers of ForeSight and (hopefully) 1 or 2 other tools, to understand the process that used and what lessons were learned in the process. This part of the process is aligned with “fact-finding” in the CPS model	Oct 1 - 15	Oct. 30
Use interview findings to diverge around important next steps – including who might help us better position, market and “sell” this product	w/o Oct. 15	Nov. 2
Create a written description of how a Board of Advisors could provide help and support. The description will be generated through a divergence/convergence process and identify how the Board and The Innovation Practice (company name) could benefit from one another. Create a list of potential Board members Reach out to Board candidates to determine their interest in participating	w/o Oct. 15 Nov. 2	Nov. 5 Nov. 16
Case Study Use Morning Pages process to reflect on effectiveness of CPS process in re-engaging with and marketing the Audit Create/vet Outline Write first draft Begin to draft ppt. presentation Finalize case/ppt.	Oct. 15 Oct. 15 Oct. 15 Nov. 2 Nov. 2 Nov. 28	Dec. 5 Nov. 28 Nov. 2 Nov. 28 Nov. 28 Dec. 5

Final Deliverables for Masters Project • Start draft of masters project • Draft of sections 1 – 3 • Draft of sections 4 – 6 (where case study belongs) • On line version of 15 min. presentation (ppt. or video) • Final versions of project and presentation in CD form • Bound and signed write up	Oct. 1 Nov. 5 Dec. 5 Nov. 28 Dec. 10 Jan. 10	

Appendix B

Presentation

Case Study:
Creative process at work

The Innovation Practice

Introduction

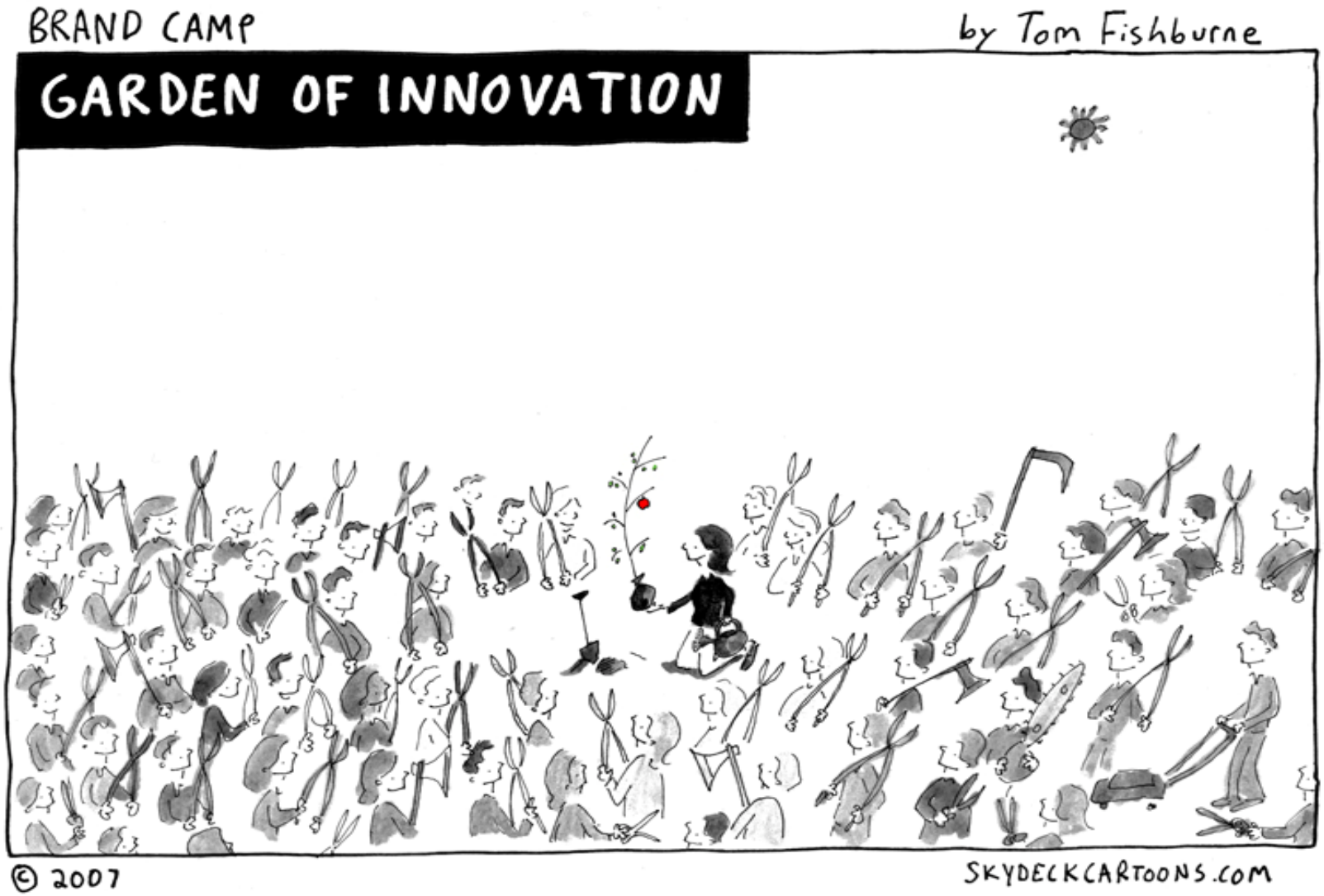
- This case study describes the creative process involved with creating a tool to help complex organizations improve their innovation-related skills and capabilities.

Tool Creators: Carol Franczek (on left) and Anne Manning (on right)

- The goal of the case is to
  - –Communicate our story
  - –Share our process
  - –Spark dialogue, debate
  - –Encourage others to participate in our tool – via furthering its development and validation, marketing partnerships or corporate sponsorship

The Innovation Practice

Our original challenge: ***How can we support organizations who want to grow organically by producing new and better stuff?***



A discovery: there are three levels of challenge

For our client's business:

- How can we support organizations who want to grow organically by producing new and better stuff?

For our business:

- How can we develop a profitable research and consulting business that focuses on innovation while growing ourselves and having fun?

For ourselves:

- How can we incorporate and live the principles of creativity?

The challenge fits the criteria for creative problem solving: it's important, immediate, ownable, and requires imagination to solve….

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Organizing Principle of the Case Study

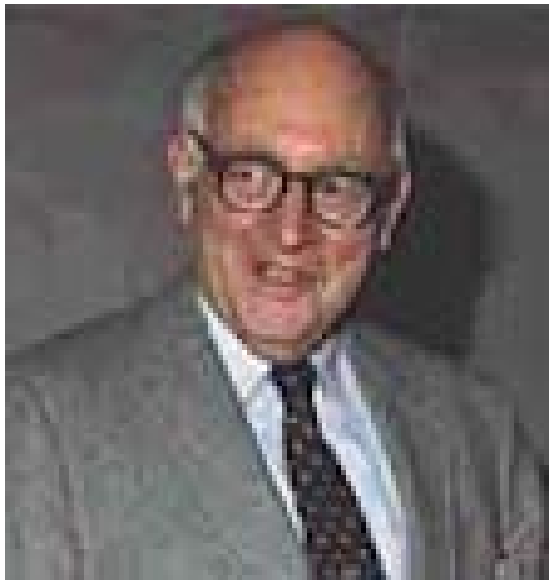
"I have ….described creative thinking as taking place in the process of:

(1) sensing difficulties, problems, gaps in information or missing elements

(2) Making guesses or formulating hypotheses about these deficiencies

(3) Testing these guesses and possibly revising and retesting them

(4) Communicating the results"



Paul Torrance: Definition of Creative thinking

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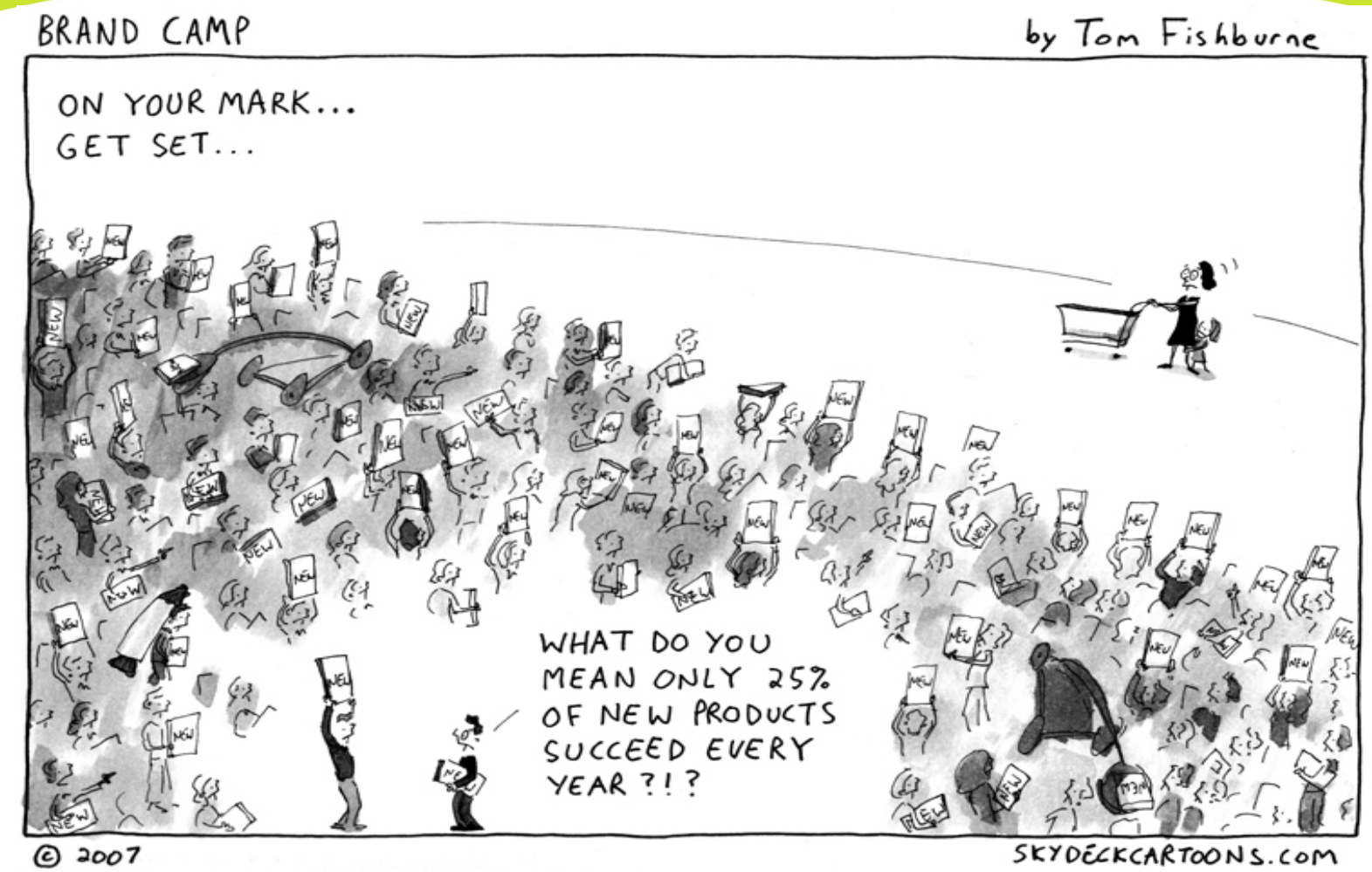
Sensing Difficulties #1. *Innovation is risky business…..*



Sensing Difficulties #2: Organizations aren't set up for success

The lawyers killed it….

That's Sue's ideas? Sue's ideas are way too out of the box…

What's the proof? Without proof it's too risky….

R&D doesn't have time…

I don't want ideas; I want answers…

If the focus groups didn't like it, then kill it…

This is the guy charged with doing something new in his organization….

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Some of our initial guesses….

The lawyers killed it….

That's Sue's ideas? Sue's ideas are way too out of the box…

What's the proof? Without proof it's too risky….

R&D doesn't have time…

I don't want ideas; I want answers…

If the focus groups didn't like it, then kill it…

What if we could develop a research tool that would allow organizations to understand these innovation killers?

What if we could develop a 360º on line survey that would provide a fact base about what's going on?

And a workshop where leaders process the information and begin to share the knowledge, build relationships and challenge their teams to do better?

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Our Big Idea: The Innovation Aptitude Audit

What is it?

- A comprehensive tool that assesses an organizations skills and capabilities relative to innovation

The Process:

- Executive level one on one interviews
- A 20 minute web-based survey; large number of respondents across level and function complete the audit anonymously
- Quick turnaround
- Workshop to process findings and create an action plan

The Deliverable:

- Leadership armed with important knowledge and a strategy to power growth through innovation

Reflection: our idea was the result of intuition, experience and incubation. Like the birth of anything new, the process was marked by a mix of excitement, magic and fear.

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Imagining Our Future….

"Create a picture of the imaged future that is so vivid and compelling it can withstand the gravitational pull of the past…."

Tim Hurson

Think Better

p. 29

Our imagined future:

•Develop a holy grail

•Transform client companies

•Provide leaders with facts, insights, experiences that will allow them to change the world.

•Make our tool critical to all companies

•Be different

•Promote creative problem solving

•Live and model the principles of creativity

Reflection: Our imagined future was generated by personal and professional interests. As a result, we had great energy for the task – and a lot at stake.

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Establishing a theoretical foundation

To build a theoretical basis for our tool, we borrowed ideas from others or, in the words of Martha Graham, we decided to steal from the best….

"I am a thief…and I glory in it…I steal from the best where it happens to be – Plato, Picasso, Bertram Ross…I think I know the value of what I steal and I treasure it for all time – not as a possession but as a heritage and legacy"….Martha Graham

In our case, we borrowed from the likes of Theresa Amabile, Goran Ekvall, Clay Christianson, Michael Jordan and The New England Patriots and others.

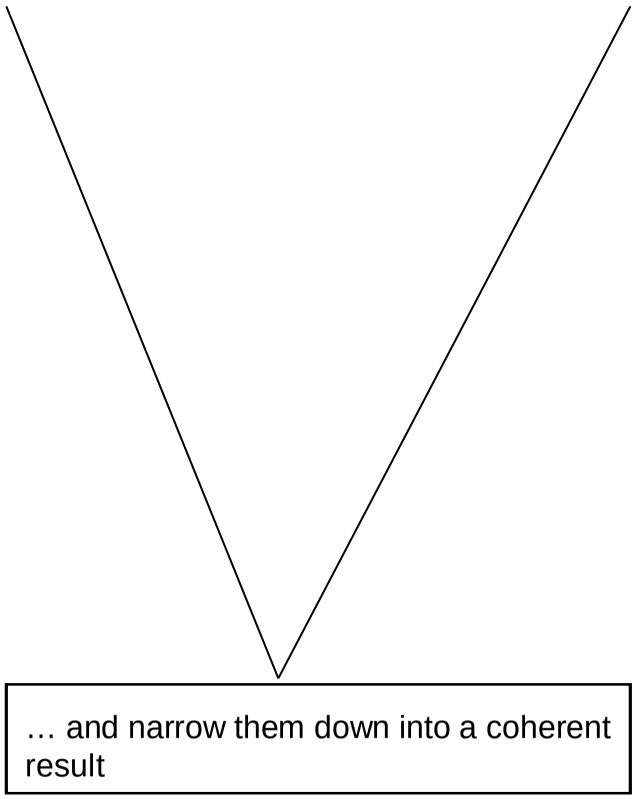
Reflections on building the theoretical foundation

"In the beginner's mind there are many possibilities; in the expert's mind there are few". Shunryu Suzuki

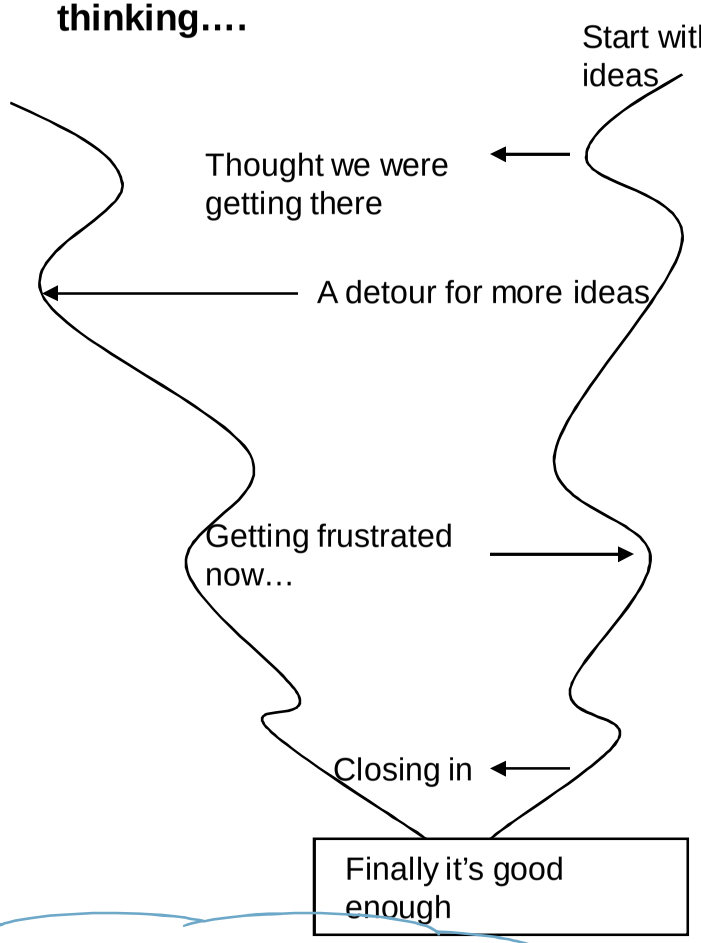
Open and eager, we saw a lot of possibilities and opportunities….we continued to constantly diverge and converge, add to our thinking and then wonder how to narrow down…we were struggling to find equilibrium between the desire for rich detail and focusing on big picture concepts. Trial and error. Debate an change….we moved in and out of various creative problem solving stages as we built our theory. In terms used by Puccio, Murdock and Mance, we touched on exploring vision, formulating challenges, exploring ideas and formulating solutions – repeatedly – as we gathered more data….

Our convergent thinking process was more dynamic than most diagrams suggest….

Classic diagram of convergent thinking….



Our experience of convergent thinking….



Reflection on learning: the desire for perfection is the enemy of good enough.....

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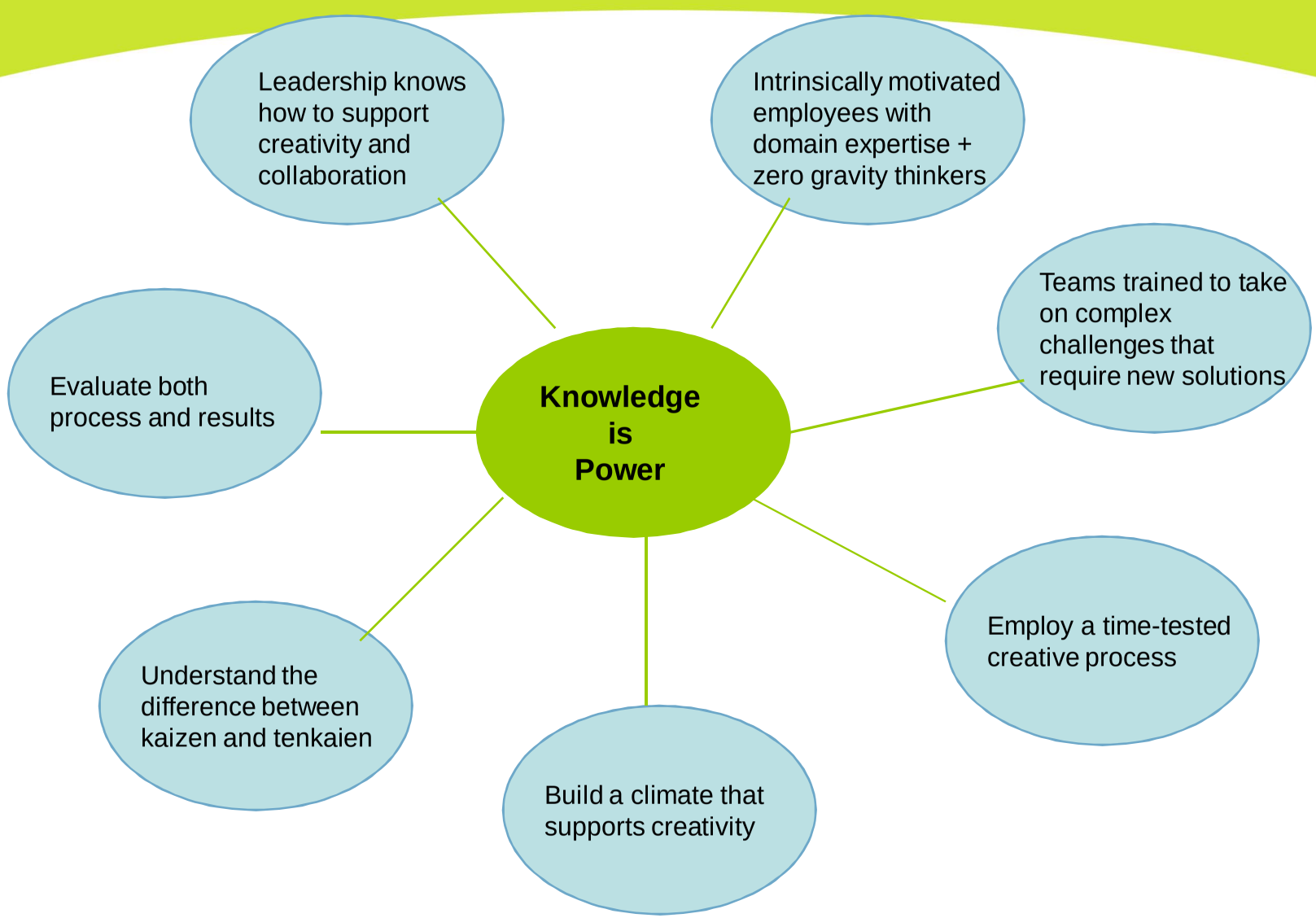
The Result: 7 key attributes of the innovative organization…



Were embedded in a survey…..

A quick and time-compressed snapshot of the survey construction process…..

Finished product: a 20 minute on-line survey….

Starting place: a lot of ideas; not a strong construction…

Reconstructed

Reviewed in focus groups

Added new ideas

Reviewed by professors at Columbia and Babson as well as pier

Refined

Small sampling of questions from finished survey….

To what extent do you agree that…	1 strongly disagree	2	3	4	5 strongly agree
Most people are open to change					
People put a lot of effort into their work					
There's always something new going on; this is a high energy place					
People typically raise objections and obstacles to new ideas					
Laughter and jokes are part of our normal behavior					
We reward curiosity – formally and informally					
Our workforce includes people from a variety of professional and personal backgrounds					
We value people with unusual ideas					
Failure is considered a part of the learning process					
We have the courage to pursue greatness					
People don't openly share information and ideas					
We regularly challenge current assumptions and how we do things					
We value and use input from outside sources					
Different departments typically cooperate to reach shared goals					
We have the courage to pursue greatness					

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Results snapshot: desired vs. actual leadership roles…

Role of leaders aspiring to innovate*…:	**What this leadership group said their role is:**
Inspiring a Shared Vision	Delivering cost, quality, service, people and environment Developing a track record of singles and doubles to build confidence
Challenging the process	Focus on continuous improvement (90% of effort; 10% for breakthrough)
Modeling the process:	Champion—Strong believer Monitoring technology trends Idea Generator- seeing ideas in different businesses and applying to LOL
Enabling others to act	Integrate into employees' objectives Setting expectations Generating commitment from Management for funding
Encouraging the heart	???

*Kouvez and Posner…

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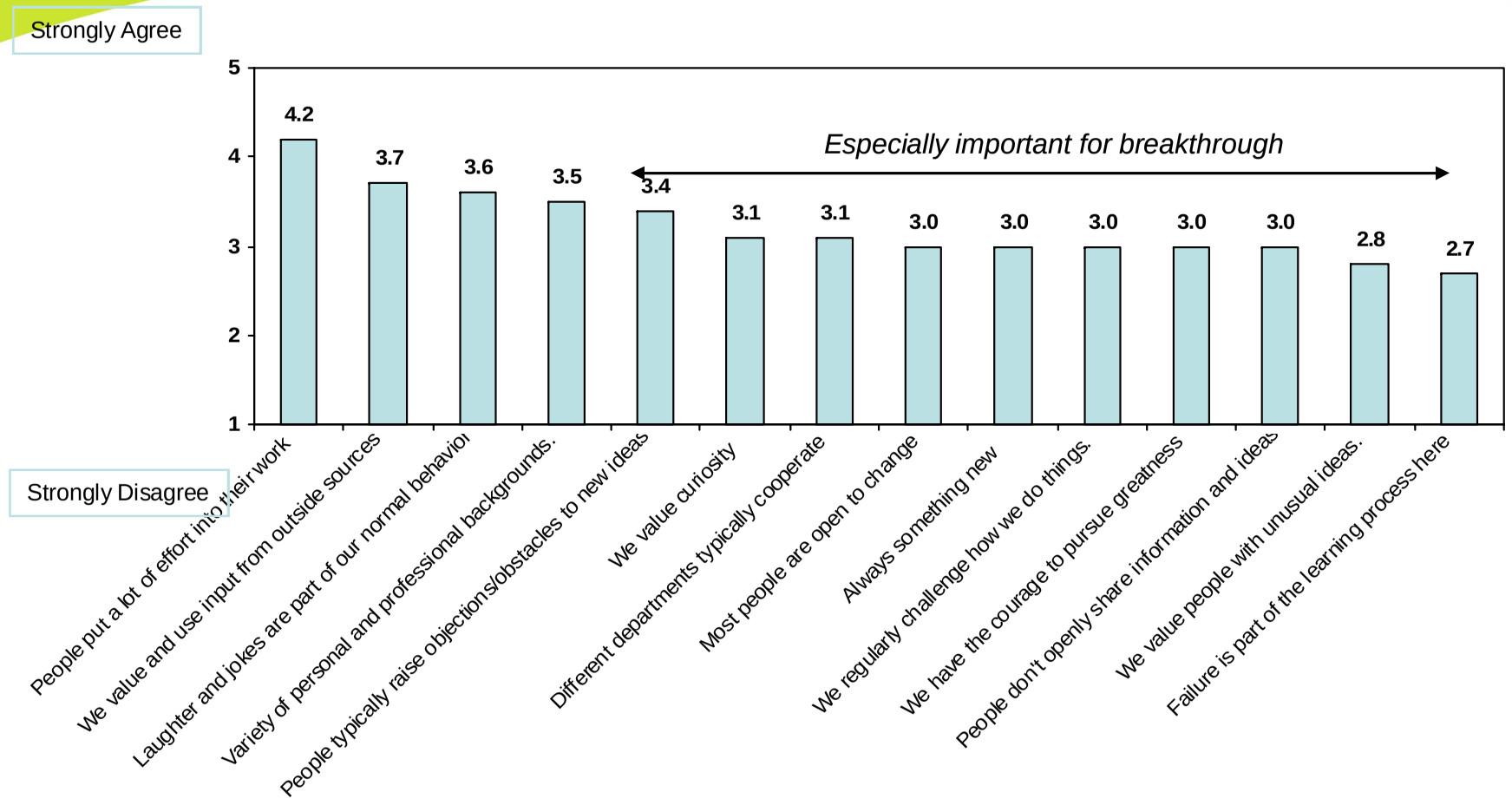
Results snapshot: organization whose climate does not support innovation…



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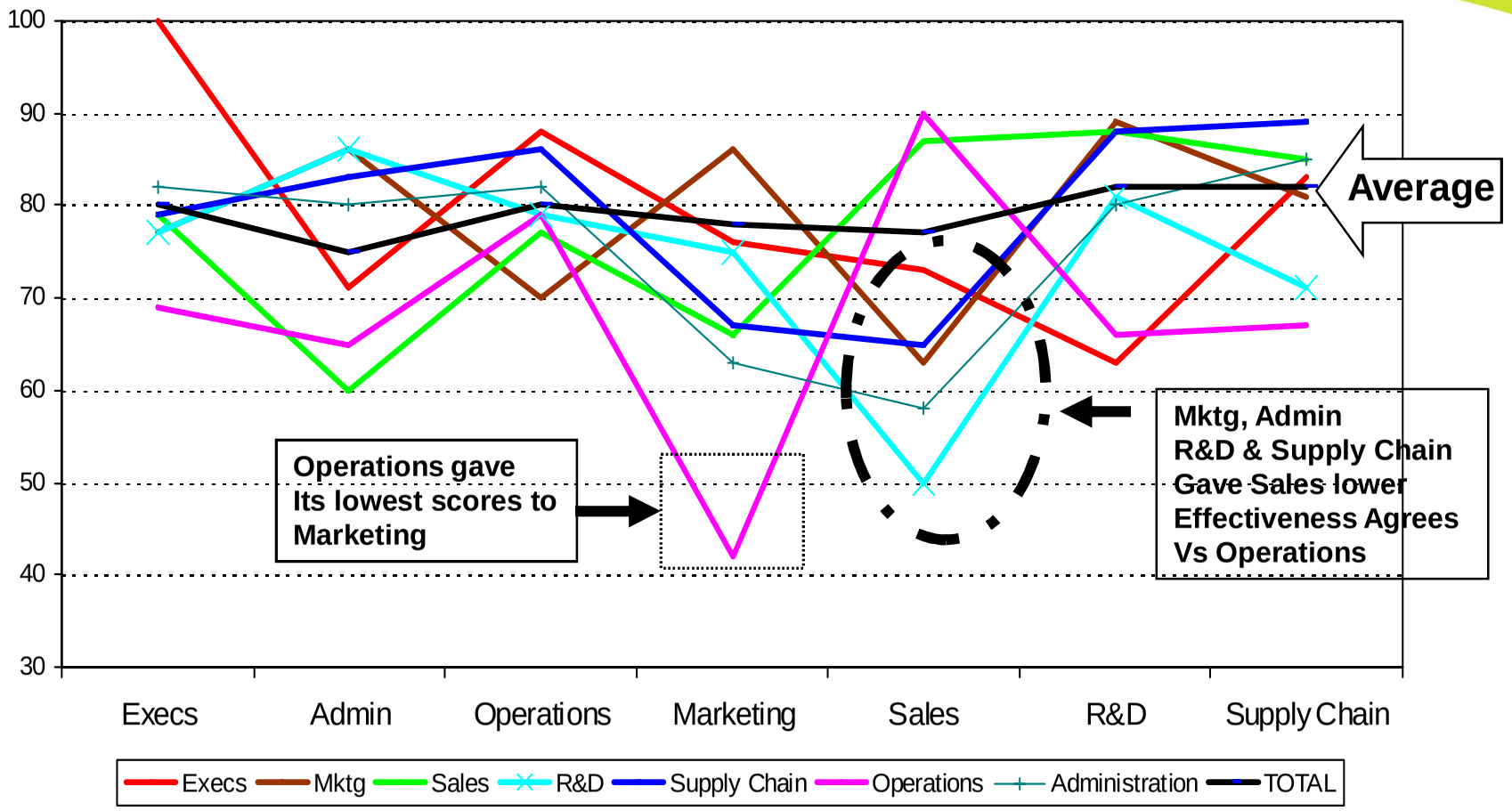
Results snapshot: functional groups don't support one another…



Based on breakthrough, incremental and no participation answers

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We learned the tool works….now the challenge is communication….

How do we communicate the power of the tool to others?

How do we motivate others to work with us?

How do we build trial and repeat?

Communications to date: a modified PPCO

Logo and website	Yogi Berra quotes Folded business cards	How to better articulate what we do? How to create an elevator statement? How to demonstrate our tools? How to demonstrate our ideas? How to convince prospects to call us?
Conference participation	Learned at conferences Met new people Collected a lot of business cards Got new ideas	How to convert brief acquaintances into prospects? How to evolve from participant to speaker? How to make stronger connections with attendees?
Mailing list	Over 150 names	How to contact people? What motivates them? What to offer them? How to engage them? How to leave them feeling they've learned something?
Writing	Published one article	How to find time to write more? How to identify appropriate topics? How to find publishers?
Target Audience definition	Fairly well identified by different product lines	How to communicate effectively with target audience? How to develop/refine offers? How to create meaningful experiences for them?
Other stuff		How to distribute through third parties/other consultants
		How to use analogy to inspire more creative communication statements? How to build more credibility? How to build more experience?

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A comparison of what we've done to what others have done

Name/type of tool:	**KEYS:** measures climate for innovation	**Foursight:** measures thinking style relative to innovation	**Innovation Aptitude Audit:** comprehensive measure of organization's capabilities and skill
Developed by:	Academic	Academic	Practionner
Based on:	One person's research and thinking	One person's research and thinking	Thought leadership from many people
Validation/reliability testing	extensive	extensive	reasonable
Manual availability	For price	For price	Not available yet
Easily used by third parties – supported by powerpoints/workshop materials etc.	Yes	Yes	No
Training/credentials to third parties	Yes	Yes	No
Developer has outside partner for marketing	Yes: CCL	Yes	No
Priced for others to use	Priced by survey	Priced by survey	Priced as package
Customized results	No	No	Yes

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Summary

- The *Innovation Aptitude Audit* shows promise as part of a larger program designed to inculcate organizations with a knowledge base and climate that fosters innovation.
- The tool's foundational theories are based in strong research.
- Initial response from those who have participated suggest that it will be a reliable and valid instrument that can provide organizations with information that can then be turned into insight and action.
- It is well aligned with the principles of creativity and is designed to support those principles in the marketplace.
- With patience and appropriate communications, it can help complex organizations develop the processes and metrics needed to compete aggressively in a fast-changing world.

Conclusion

- In order to thrive, the Innovation Audit, like any new product, requires tender care.
- It will require:
  - further content and validity testing.
  - support from client organizations as well as other innovation/creativity consultants who might find it useful.
  - internal resources that will provide both fresh thinking about its development and marketing as well as content
    - Formation of Board of Advisors (see Appendix for description)

Final Reflection

"The process of developing the Innovation Audit has been informed by creative thinking principles. In turn, the Innovation Audit has helped us, as the developers, learn more about the challenges of innovation. We've learned that creating a new tool is an adventure. It requires living the very experiences we are advising clients about: risk-taking, dealing with uncertainty and the unknown, learning from failures, engaging in collaborative relationships. It has provided us with a more intimate glimpse of our clients needs while also giving us what is hopefully an overview of how to help them better – because we've lived the experience and had an opportunity to reflect and build upon it."

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Appendix: Advisory Board roles and responsibilities

We are looking to form an active Advisory Board who can help us by:

- Challenging our thinking and our plans
- Providing fresh perspectives around branding, marketing, sales and communications
- Conferring status on our product and process
- Sharing in our development and success

Specifically we would like our Advisory Board to:

- Provide non-binding counsel on strategic direction….particularly how to:
  - Develop a shared vision of what we could be
  - Create an effective marketing/sales plan – for 2008, including how to identify and reach a core target market.
  - Communicate what we do more effectively
  - Identify meaningful partnerships
  - Determine what other kinds of support we need, including potential investors
- Keep us accountable to goals
- Provide links to resources we don't have – potential clients, investors, etc.

Appendix: Advisory Board roles and responsibilities

Our responsibility to the Board:

- Use talents wisely
- Access tinput monthly
- Openly share plans, disagreements, progress
- Share quarterly how they are making a difference to us and how we are making a difference to them – if there is no mutual benefit, disband.
- Look for opportunities to be mutually successful

Commitment:

- 1 year commitment Jan – Dec. 2008
- 2 – 4 hours per month on the phone
- face-to-face meeting at six months
- celebration/analysis at year end

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Appendix: Advisory Board Profile

We are looking for Board members who are deeply and personally engaged with the innovation process – from different perspectives. Ideally we would like to develop a Board whose members represent different backgrounds and perspectives, including:

- University professors
  - What we get: academic rigor; status
  - What you get: resume enhancement; case material
- Research/innovation/creativity executives – working or retired
  - What we get: experience and knowledge and objectivity
  - What you get: continued intellectual challenge and involvement; ability to impact and shape something new
- Potential users/customers
  - What we get: input from potential end users
  - What you get: intellectual challenge; exposure to new ideas; professional development
- Other established organizational consultants
  - What we get: experience and contacts in the marketplace
  - What you get: new product they can sell
- Potential investors