Ript™: Innovation and Collective Product Ownership

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Abstract

In 2006, Oxygen Media CEO Geraldine (Gerry) Laybourne, the woman largely responsible for Nickelodeon's early success, partnered with her XP/Scrum development team to create a new mission and new revenue stream for her company. This experience report covers product conception through initial release of a single product. It describes how Gerry's leadership qualities paired with agile practices to engender deep mutual trust and collective ownership over technical execution and business outcome. This unbounded collaboration provides a template for future projects at Oxygen and other organizations with innovation as part of their agile product development strategy.

1. Introduction

Scrum and XP describe a separation of roles. The customer is accountable for achieving business objectives and the team for technical execution. However, a customer with the right leadership style can **share** ownership over a product's vision and priorities while remaining highly accountable to the product's success.

When a self-directed agile team shares authority and responsibility for more than technical execution, they are allowed to think more broadly and deeply about a problem. The company is setup to surprise itself with opportunities and inventive solutions. Oxygen Media achieved this spirit of whole team product ownership while developing the software product, *Ript*™.

This report describes an environment of shared risk and unbounded collaboration in a context of agile values and practices. The authors share what worked for them and where they seek improvement. Readers should review the benefits and challenges of collective product ownership to determine whether it is achievable and desirable within their organization.

2. Collective product ownership as unbounded collaboration

Bounded collaboration rarely reaches deep down to the grounds, the principles or the ethics of practice. It can get stuck with the more comfortable business of advice giving, trick trading and material sharing of a more immediate, specific and technical nature. Such collaboration does not extend beyond particular units of work or subjects of study to the wider purpose and value of what is taught and how. It is collaboration, which focuses on the immediate, the short-term and the practical to the exclusion of longer term planning concern. [1]

Bounded collaboration exists in software when developers do not invest themselves in the business outcome of a project. This can occur through no fault of their own if the plan is vague, not shared with them, or if their input is not invited and listened to.

Scrum and XP allow for success on these terms by assigning responsibility for the business outcome to the product owner and for technical execution to the team. If the product owner has deep insight into their end users well-executed software stands a chance.

Still, consumer product companies with sustained innovation programs don't work that way. Company's like Sony, Toyota and Canon engage the imaginations, tacit understanding and problem solving capabilities of front-line staff, middle-management, and leadership in a way that flows knowledge up, down and across the organization. As described by Nonaka, Takeuchi and others, this lean manufacturing approach bases success on responsiveness, customer focus, high quality, and repeated innovation.

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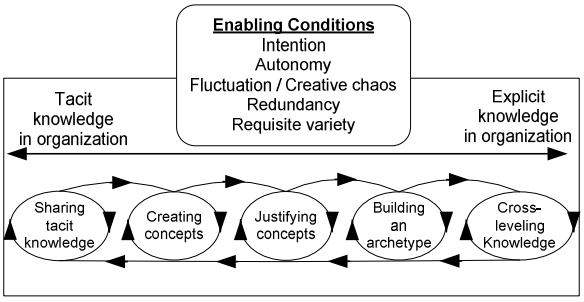

Figure 1. Five-phase model for the organizational knowledge creation process [2]

We now apply Lean thinking principles (not the practices, but the principles) from manufacturing and logistics into Product Development. When you apply Lean into Product Development you get a different way of looking at it. And I believe that software development is a subset of… Product Development. [3]

In its origins, manifesto[4] and in the words of Agile thought leaders, like Mary Poppendieck (quoted above) or Kent Beck in his 2001 "One Team" paper, Agile Software Development aspires to unbounded collaboration - where workers are engaged with management in the "longer term planning concern"; success of the product, health of the business and contribution to the society.

3. Collective ownership feels like…

Most of the time in a creative project, I might be involved at the beginning and the very end, but never in this kind of on-going role...I am on the team with you. I love it. I own it. I worry about it. Just like you guys do. That's why it works.

Honestly, if I were as know nothing as I am about software development and I was a command-and-control person who thought I knew best about everything, this would be a disaster. I have seen this happen with TV executives who have never made anything. I think that is why, especially with your group, I'm interested in having everybody's necks in the noose with me. – G. Laybourne [5]

Collective product ownership feels different than command and control. The product owner does not dominate the development team nor is there a Maginot Line between product owner and development team. The foundation is high-performance, mutual respect and deep trust. The product owner walks a tight rope, engaging the team in an evolving product and business plan while guiding the project toward her vision and high-level goals. The team is passionate about the product they are building and feel personally accountable to the product's success.

Gerry Laybourne is highly collaborative and "emotionally intelligent." She values the contributions of her team, is sensitive to intrinsic motivation, and believes knowledge workers must buy into the vision, opportunity and features of the software they are building.

Peter Senge writes, "The first step in mastering the discipline of building shared visions is to give up traditional notions that visions are always announced from "on high" or come from the organizational institutional planning processes." [6]

Great product owners lead their teams rather than manage or control them. Mary and Tom Poppendieck observe that 3M and Toyota inspire technical teams through *respected leaders* who "fully understand that leveraging the talents of a large pool of experts is far more effective than trying to control the work." [7]

Gerry consistently works to invest her employees in a shared sense of purpose.

It would have been the easiest thing in the world for me to sit down and write a mission statement. But that isn't what I did. I put the general counsel in charge of drawing up the mission statement. He's the fairest person I know – and he has patience. He involved everyone in the process. Everyone here was able to make a contribution, everyone was listened to and everyone became part of the process. – G. Laybourne [8]

Sustained innovation involves an embrace of seeming contradictions. [9] An environment of collective product ownership requires a highly accountable product owner. The team must trust they are not out there alone ahead of the business. The product owner must stand in front with authority and responsibility for the ultimate outcome.

In this sense, collective product ownership is not the same as collective ownership of code as described in XP. In ideal collective code ownership, any developer can re-factor any area of code in an application as long as it continues to meet the contract defined by interfaces and unit tests. The idea a single accountable authority on such decisions is anathema. [10]

Gerry delegates a great deal of authority. She values differing perspectives and makes decisions in the face of strong competing arguments. However, there is no question that she is the ultimate authority on questions of customer value and ultimately accountable to the outcome. She has overruled the team on several instances. An example is provided in section nine of this paper.

[I]n terms of my management of all creative projects, it is exactly the same, I try to avoid micromanaging. On television it is the same thing. I like an idea or I hate an idea. It is a yes or no with me. It is not a bunch of manhandling or woman handling. It is not a bunch of second guessing. You see how I am "No, I don't like that. I don't want that. It is not right." And then there is a conversation, but I feel like everybody's voice is heard. – G. Laybourne [11]

In collective product ownership the development team is passionate about the product they are building,

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connected to business goals and empathetic to their end users. They feel on the hook if the product does not succeed.

The team is a united cohesive, performing unit. They challenge each other's assumptions but rallies around decisions. They share recognition for ideas and do not compete to impress. They trust that everyone carries their own weight. Ideas coming out of the group are both more novel and rigorously debated than those of any single individual.

4. Women's Watch: Girls Gone Wired

Oxygen Media is the only cable network owned and operated by women. The company launched on February 2, 2000 as a converged television and internet company. As the internet bubble burst, the company focused on its cable network where it achieved profitability in 2005 and has outperformed its business plan for several years running. Oxygen is carried in over 70 million homes.

In 2005-2006, Oxygen entered into a research project with Teen Research Unlimited (TRU), *Women's Watch: Girls Gone Wired.* Among the conclusions:

4.1 Women and men are digital peers

Similar number of devices owned: women (6.6) and men (6.9)

Similar number of devices used weekly: women (4.4) and men (4.9)

4.2 Both women and men spend most of their waking hours interfacing with tech

Women (15 hrs/ day) and men (17 hrs/ day)

4.3 Both own and use similar numbers of devices

% who use their computers weekly: women (73%) and men (71%)

% who use their cell phones weekly: women (62%) and men (61%)

4.4 Women are making important purchase decisions about technology

73% of women make tech purchasing decisions on their own (only 27% of women defer to others when choosing what tech to buy - vs. 24% of men)

The difference between women and men lies in the way they utilize technology. Women see technology as a "means to an end" and are "incorporating technology into their lives as a practical tool to stay connected, up-to-date, and in control of their busy lives." [12]

5. A woman's company creates software

Gerry Laybourne is an innovator in the television industry largely responsible for the overwhelming success Nickelodeon achieved in the 1980s and 1990s [13].

In January 2006, Gerry initiated a part-time, one month brainstorm around interactive opportunities involving thirty employees across departments and levels of the organization. Gerry entrusted the format to her CTO, Steve Morgan. He asked his project management office – all certified scrum masters – to facilitate.

Gerry's intention was to tap the tacit knowledge of employees, assess the marketplace, and identify areas where women are underserved. Participants presented their conclusions directly to Gerry. The result was a number of product ideas but more importantly, the conversation fueled Gerry's aspirations and a sense of opportunity.

In February 2006, Gerry arranged to halt internal software development work for one week. She called a meeting with her six-person, development team. Gerry began by explaining that while women were equal users and significant purchasers of technology, software was not crafted around women's needs or strengths.

Gerry spoke candidly about her frustrations with the state of software. How applications are bloated, over-constrained by assumptions and counter-intuitive. Incorporating ideas out of the company brainstorming, Gerry made a white board drawing of how she would prefer to interact with a computer.

That line drawing suggested a grand vision for a suite of related applications. She challenged the team to take four days to devise product ideas relevant to women and addressing unmet needs or "ten times better" than existing products. The ideas need to be plausible if not achievable with current staff.

Sensing the mood of the room, Gerry told a story of Theodore Roosevelt pushing his staff through their doubt and uncertainty by taking them on forced treks through harsh terrain. Gerry asked the team to set aside their fears and join her.

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6. Personas and prototypes

The developers were both inspired and horrified by Gerry's challenge. It took a day for them to move past their initial hesitation and rally as a team.

To a person they bought into Gerry's goal. They wanted to learn from an underserved consumer base and apply that learning to the benefit of all users. They also wanted to avoid "thinking pink" [14], i.e. focusing on a superficial appeal to women consumers. The team, being all men, appreciated this required humility on their part.

They translated the lofty and ambiguous goal of making software "ten times better" into specific principles: address real-world needs (as observed in the lives of women), be accessible on whatever device or platform is most useful to the user, enable easy collaboration between friends and family, and think beyond the user interface conventions of current software.

Drawing from friends and family, the team created three female "assumptions personas" [15] of differing ages, interests, and geographic location. Each persona was championed by one or more members of the team. They broke into pairs to role-play a day in each of these persona's lives and imagine how Gerry's concept might improve their experience of computing.

The team needed consensus on how to organize and present product ideas as they evolved. Having learned from the company-wide brainstorming exercise, they decided to communicate concepts to Gerry visually using lightweight prototypes that evoked basic user interaction.

Besides time constraints the biggest concern with this approach was running the gauntlet between banal wireframe drawings and over-worked but under-conceived graphic designs.

Riffing off the sketch Gerry herself had drawn, the team decided to present hand drawn white board sketches digitally photographed into PowerPoint with key interactions crudely animated using PowerPoint's custom animation feature. Drawings were combined with screen captures to illustrate interactions between product concepts and the existing windows environment.

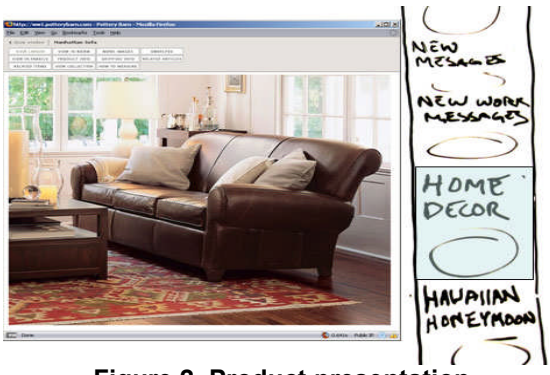

Figure 2. Product presentation

The team reconvened at intervals to share ideas, get feedback and change partners. Concepts created for one persona were worked into others until the presentation felt coherent. Finally, the three narratives were interlaced to give the presentation a chronological progression.

On February 24, 2006, the team presented. Three staff presented the narrative with the other team members interjecting thoughts and opinions. The presentation itself lasted twenty minutes. Serendipitously, part of the presentation hit on an idea Gerry had not mentioned to the team. Gerry was thrilled by what she saw. She said, "You can think like women!"

This was a pivotal moment in the relationship between Gerry and the developers. The team had really listened, approached the challenge with humility and ingenuity. They had devised relevant product ideas. They proved they were in sync with Gerry's vision and understood how to communicate back to her.

Likewise, the team had come to respect the reach of Gerry's vision. They proved to themselves they could rise to the challenge. Just as the presentation had built trust in Gerry, her response built trust in the team.

The overall presentation was wildly ambitious. The team suggested building an independently marketable subset of the larger concept.

Development management proposed a budget for which they received partial approval. This relates to two lessons learned in this project. Oxygen was slow to evolve a business justification for this project which made it difficult to rally the larger organization. The related decision to under-resource the project would have ramifications both to time to market and the team's ability to balance this work with its other work for the company.

Given those constraints, the development team was given autonomy to organize itself. By the end of May, the team grew from five to nine staff adding two women to the team. The team now consisted of six developers, a UX director, a scrum master, and a product owner proxy. One developer is both an individual contributor and functional manager. The team is headed by the VP of software development, Ken Judy.

Ken drafted a straw man elevator statement [16] which Gerry revised to better reflect her vision. Ken created a product manifesto [17] borrowing from principles behind the "Agile Manifesto" [18] and synthesizing, the team's beliefs, past learning and Gerry's expressed values. The team uses this manifesto to evaluate product decisions whether they originate inside or outside the team.

7. A product owner and her proxy

Gerry has obligations to her company's much larger television business, to other interactive initiatives and to the cable industry itself. For example, Gerry co-hosted

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the 2007 National Cable Television Association conference. She cannot be a highly available onsite customer.

However, the team knew success required she stay engaged in the project. The product sprang from her vision and serves her mission for Oxygen. The product and the larger program of work still needed a business plan. While the software team had built Scrum/XP practices over four years of successful outcomes with their clients, agile principles were not widely understood at a senior level.

Therefore it was Gerry who would ultimately assess whether the product and the development team was successful and only Gerry who could rally the company to continue in that direction. Without her direct contribution, the product, the larger program, the team's way of working, and hence, their high level of performance would be at risk.

After some preliminary development spikes while the team added staff, The Ript™ project began its first official sprint in June 2006. The team realized the best way to introduce Gerry to the Scrum product owner role was hands on.

Ilio Krumins-Beens, a CSM and PMP, assumed the role of Gerry's proxy. As proxy, Ilio facilitates Gerry's effort to prioritize the backlog, runs traffic on a myriad of small decisions that keeps the team efficient, acts as Gerry's 'technospeak' translator, and overall helps Gerry keep in sync with the team.

Ilio sits with the team and is highly available to answer questions about priority and desired behavior. He maintains the backlog, author's user stories and works with the team on acceptance criteria. He accepts stories as they are completed, works with testing and the team to ensure product quality, and coordinates with research, marketing and other external units of the business. He also demonstrates the product for internal and external audiences.

Gerry has asked Ilio to advocate for end users. In this way, Ilio serves as proxy not only for Gerry but for the people who will ultimately use Ript™. This is a role he shares with the team's user experience (UX) director, Bob Calvano, who collaborates on visual and behavioral details but also the full scope of user interaction from initial message, provisioning and packaging to interface.

Bob sits with the team and pairs with developers on design issues. Bob, Ilio and the developers continue to maneuver the overlap between coding, architecture, design, user experience and customer value. Ilio has sway in areas of tangible customer value and Bob on questions of emotion, impression aesthetic and interaction.

True to the principles of agile, the relationship works because of radical collocation, unity of purpose, trust-based collaboration, the autonomy to self-organize, and constant inspecting and adapting.

8. Making the most of Gerry's time

The team has set up a structure with Gerry where she is able to have maximum impact without taking up too much of Gerry's time. In turn, Gerry has made a point to attend every meeting in person with the team. In the past 27 sprint reviews she has rescheduled or participated remotely only three times. This commitment is yet another way she earns the team's trust and loyalty.

Table 1. Gerry's time commitment

Frequency	Purpose	Time
2 wks	Sprint Reviews	60 min.
2 wks	Mid-sprint check in (pre-staged sprint planning)	15+ min.
3-4 mos.	Release Planning	3 x 30 min.
At Gerry's discretion	Re: business plan, potential partnerships, marketing, and consumer research	Based on Gerry's availability

Developers rotate the responsibility of presenting features for each sprint review. The remaining time is used for business issues, risks and to confirm priorities for the upcoming sprint.

Team members feel free to raise concerns, suggest new features or question existing priorities. If a decision is pressing for the next sprint, Gerry will often canvas the room before weighing in but will make sure the team can move forward.

If an issue of long-term significance remains unresolved, Gerry will ask the team to work through their disagreement and come back to her with a single or specific set of recommendations at the next review.

After the review, the latest build is installed on Gerry's computers. She is an active and avid user of the application in development.

Figure 3. One of Gerry's Ript™ pages

At some point mid-sprint, Gerry meets with representatives of the team and dev management to get update on sprint health, non-development issues related to the project, and to pre-stage priorities for the next sprint. Gerry and Ilio meet for 30 minutes prior to release

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planning to discuss priorities at the theme level. Ilio provides a straw man release backlog as a context for this meeting.

Release planning is facilitated by Ken and the scrum master, Salim Divakaran. Prior to release planning, Ken and Salim have worked with subsets of the development team to review release themes and provide rough relative sizing.

Gerry and the team spend 30 minutes at the beginning of each release planning meeting discussing release targets and their value to the business. Gerry leaves and the team then spends two hours on relative sizing of themes. They propose new themes and question others. Ilio either responds or flags it for conversation with Gerry. Ilio and the team chunk the themes into sprints. The team votes on their confidence in the resulting plan.

Gerry returns for 30 minutes at the end to discuss proposed changes to release content or priorities, address any open concerns and approve the team's release commitment.

9. Keeping the project on course

In the Ript™ project, the team and Gerry have at times been unable to come to agreement on a significant decision. Generally, that has been a bad smell of non-essential complexity or a concept with an unclear value proposition. The product has generally benefited from deferring or dropping the work related to such decisions.

Based on her instincts and judgment, Gerry has pushed the team to action on specific issues despite disagreement in the team. When she chooses to do this, how she does it and how those decisions play out have only deepened trust between Gerry and the team.

Early in the Ript™'s development, the team proposed the application flow as a sequential progression of three modes. Each mode had a corresponding user interface. Gerry objected to a transitional step between the two activities she most valued in the application. The team largely disagreed; concerned the user experience would be confusing.

Gerry challenged the team to find a different approach. In response, the development team went through two exercises. They documented how their family did related tasks with real world objects. Using fellow employees, they also organized an exercise using physical tools and materials to create the same work they would in *Ript™*.

Gerry was right. The team devised a user interface that easily transitioned between the two most compelling user activities. Further usability testing has validated this approach.

In another case, Gerry asked the team to explore alternatives for an organizing metaphor for pages created in application. The team spent several days working out alternatives but could not find any one solution to rally around. Concerned about introducing complexity in lower value features, the team proposed making simple modifications and deferring a decision on the larger organizing metaphor.

Gerry was unconvinced but decided to revisit the conversation at the next sprint review. By the next review, Gerry had concluded the team was right. She had shown the application to a potential distribution partner and they had given her similar advice. She made it clear she valued the judgment of her team and that it was the time she'd allowed herself as much as the outside advice that had swayed her.

In the first example, Gerry was ahead of the team. In the latter, she acknowledged the team was ahead of her. Reacting with humility to the sometimes surprising realization that the other person is right builds trust.

10. The development team

Figure 4. The development team and managers

At the time of this writing, the development team consists of Lee Bankewitz, Wendy Friedlander, Kris Selden, Oksana Udovitska, Robert Zurer, and Director of Development, Luke Melia. The team practices TDD, pair programming, and continuous integration.

The developers, UX director, scrum master and customer proxy sit together in one large room. The developers pair in line of site of the rest of the team. Progress on user stories and related task cards is tracked on a large board at one end of the room.

Figure 5. The developer room

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The developer's day contains two 2.5 hour blocks of "war room hours" in which no meetings are scheduled. The remaining time is either spent coding or taking care of non-coding tasks.

Early on, the team felt they were burning too much time debating features and not enough time coding. The team decided to schedule conversations about features outside of war room hours.

When conversations start up in the room, team members can opt-out; the idea being that people defer to others when they don't participate. This has reduced but not avoided rehashing conversations. The scrum master facilitates organized discussions. The team uses a talking token to make sure so speakers have the attention of the team. The scrum master has discretion to use a 2 minute egg timer in order to keep comments focused.

The team participates in 60 minute Sprint Retrospectives. The team spends 30 minutes brainstorming what "went well" and "things to change." The scrum master captures the conversation on easel-size post-its. The team identifies the top 1-3 things to change next sprint prioritizing productivity, code quality, and communication high.

The team tackles one process improvement per sprint so they can assess whether adjustments were successful. The scrum master revisits commitments from prior reviews as a way to encourage follow through.

Luke also meets with each developer one on one for 30 minutes each week to surface any concerns too sensitive for a group setting.

11. Collective product ownership is hard

Any team working towards collective product ownership should beware of the challenges.

Some disagreements cannot be resolved in the moment. The team may need more information; the situation may need to play out over time or not surrender to rational debate. The developers need to buy into decisions without necessarily achieving consensus. However, relying on majority rules results in safe decisions and a mediocre product. Sometimes the best answer is to let the individual win over the majority. On the Ript™ project, natural thought leaders emerged in specific areas. The team also relies on co-located product owner roles: UX director and product owner proxy.

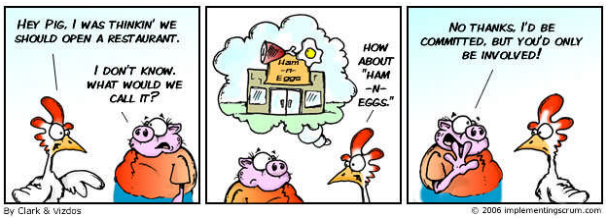

Figure 6. The tale of the pig and the chicken [19]

Collective product ownership will only emerge in an environment where people responsible to the product outcome (pigs) are given the authority and powerful stakeholders who want to give input but are ultimately unaccountable (chickens) understand their limited role.

When unaccountable stakeholders drive decisions, they diminish the team's influence and wreck shared investment in aspects outside developments direct area of control. The Ript™ project exists in a magic bubble because the product owner has ultimate authority in the organization. The challenge for Oxygen is to expand that bubble without bursting it.

12. Conclusion

Collective product ownership emerged in the Ript™ project as a result of circumstance, the unique qualities of the product owner and the capacities and practices of her agile team.

Under Gerry's guidance, the Ript™ concept originated from within the development team. Gerry is challenging assumptions both outside and within her organization filling the project with a sense of urgency and shared risk.

XP/Scrum practice aligns authority with responsibility and provides Gerry the tools to engage with the team face to face and at a level of detail.

Gerry has allowed the team to fall in love with the project by leading while listening. She's given the gift of high expectations demanding that the product be original, useful, and fun. She's treated the team as peers despite the holding much more authority. She's shared her excitement for the product while sharing credit for it. She's championed her priorities while allowing the team to question any and all aspects of the product. As a result, both Gerry and the team have had the pleasant experience of disagreeing and realizing the other was right.

I am a cable pioneer…an entrepreneur who has gotten to do a lot of cool things over the years. But I have to say being on the team (yes, I was welcomed as a true member of the team, not just as a CEO) that invented Ript™ *is one of the coolest of all. To get to learn and try and change and innovate in a brand new medium with a group of reliable (yes they keep their word), endlessly creative and resourceful folks has been exciting for me. And the end result is as good as the process!*
– G. Laybourne 12/06

13. References

[1] A. Hargreaves and M. Fullan, *What's Worth Fighting for Out There?,* Teacher's College Press, New York, 1998.

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doi: 10.1109/AGILE.2007.49

[2] I. Nonaka and H. Takeuchi, *Hitotsubashi on Knowledge Management*, John Wiley and Sons, Asia, 2004, pg 81 source Kao Corp.
[3] M, Poppedieck and T. Poppedieck, T., "Interview: Mary and Tom Poppendieck on using Lean for Competitive Advantage", Feb. 2007, http://www.infoq.com/interviews/poppendieck-lean-2007
[4] M. Folwer and J. Highsmith, "The Agile Manifesto", *Dr. Dobb's Journal*, July 16, 2001
[5] G. Laybourne, (Private Communication), Apr. 7, 2007
[6] P. Senge, *The Fifth Discipline*, Currency, New York, 1990, pg 198.
[7] M. Poppedieck and T. Poppedieck, *Lean Software Development* Addison Wesley, Boston 2003. pg 112
[8] M. Heffernan, *How She Does It*, Viking, New York 2007, Pg 106
[9] I. Nonaka and H. Takeuchi, *The Knowledge-Creating Company*, Oxford University, New York, 1995, pg 79.
[10] D. Wells, "Collective Code Ownership", 1999, www.extremeprogramming.org/rules/
[11] G. Laybourne, (Private Communication), Apr. 7, 2007
[12] *Girls Gone Wired,* Oxygen Press Release*,* April 29, 2007, http://www.oxygen.com/pressreleaseuploads/Aug06/OxygenGirlsGoneWired.doc
[13] D. Gunzerath, "Laybourne, Geraldine", September 2006 http://www.museum.tv/archives/etv/L/htmlL/laybournege/laybournege.htm
[14] L. Johnson and A. Learned, *Don't Think Pink: What Really Makes Women Buy—and How to Increase Your Share of This Crucial Market*, AMACOM, 2004.
[15] J.S. Pruitt, and T. Adlin, *The Persona Lifecycle : Keeping People in Mind Throughout Product Design* Elsevier Science & Technology, Massachusetts, 2006, pg. 151
[16] Geoffery Moore Program Mgt Training Workbook
[17] K. Judy, "Yet Another Manifesto", Mar. 10, 2007, judykat.com/ken/2007/03/10/yet-another-manifesto/
[18] M. Folwer, and J. Highsmith, "The Agile Manifesto", *Dr. Dobb's Journal*, July 16, 2001
[19] Clark and Vizdos, Implementing Scrum, May 11, 2006, www.implementingscrum.com/cartoons/implementingscrum-20060911.html

Judy, K.H.; Krumins-Beens, I.; , "Ript: Innovation and Collective Product Ownership," AGILE 2007 , vol., no., pp.316, 13-17 Aug. 2007
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