# The HUMAN SIDE of AGILE

How to Help Your Team Deliver



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# **NOTES**

#### **Preface**

Human beings have subconscious, contextual working preferences: Information/ Systems, Things, and People. Some folks naturally gravitate to working with information or systems: they might enjoy spending a whole day examining fields in a spreadsheet, or putting systems and processes in place. Others gravitate to working with things: writing code, or building stuff with their hands. The third group gets excited by working with other people; coaches are like that. Data provided by jobEQ.com for a more granular categorization, based on a European stratified sample of 1,003 respondents taken in 2011, shows that the People preference is not prevalent. This means that the natural tendency of most people at work is to deal with artifacts and activities rather than to talk, collaborate, or cocreate.

# Chapter 1

- I learned this term from Joshua Kerievsky, who applied it in the Industrial XP methodology. I believe the term originated with David Schmaltz.
- 2 Principles behind the Agile Manifesto, 2001, agilemanifesto.org/principles.html.

- Johanna Rothman presents a very pragmatic take on project management in Manage It!: Your Guide to Modern, Pragmatic Project Management (Raleigh, NC: The Pragmatic Bookshelf, 2007).
- 2 An antipattern is a specific repeated practice that may appear to be valuable but ultimately results in negative consequences.
- 3 Johanna Rothman makes this point with respect to strategic vs. tactical work in *Hiring Geeks That Fit* (Boston, MA: Rothman Consulting, 2013).
- 4 For Jerry Weinberg's approach to giving and receiving feedback, consult Charles N. Seashore, Edith Whitfield Seashore, and Gerald M. Weinberg, *What Did You Say?: The Art of Giving and Receiving Feedback* (Columbia, MD: Bingham House Books, 1997).
- Gil Broza, "Going Agile: Not with 'Ceremonies' and 'Rituals." www.3pvantage. com/going-agile-not-with-ceremonies-and-rituals/.

An often-quoted management truism is that "You get what you measure." If a certain aspect of work is measured (because it appears to be valued), the performers of the work may (perhaps subconsciously) alter their behavior to satisfy the measurement. For instance, if you insist that iterations yield a higher number of "done" points without introducing supporting process change, the team may relax the definition of "done" in order to satisfy that metric.

- 1 Marcus Buckingham and Curt Coffman, First, Break All the Rules: What the World's Greatest Managers Do Differently (New York: Simon and Schuster, 1999).
- 2 Jerry Weinberg has been leading the world-renowned "Problem Solving Leadership" (PSL) workshop for many years with various other hosts. www.estherderby. com/workshops/problem-solving-leadership-psl.
- 3 Stephen R. Covey, The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change (New York: Free Press, 2004).
- 4 Johanna Rothman and Esther Derby, Behind Closed Doors: Secrets of Great Management (Raleigh, NC: The Pragmatic Bookshelf, 2005).
- 5 Johanna Rothman, *Hiring Geeks That Fit* (Boston, MA: Rothman Consulting, 2013).
- 6 This is an abbreviation of Norm Kerth's Prime Directive for retrospectives. *Project Retrospectives:* A Handbook for Team Reviews (New York: Dorset House Publishers, 2001). In retrospectives I often shorten it even more to "Assume Best Intent."
- 7 Buckingham and Coffman, in First, Break All the Rules, claim that great managers do play favorites, because they invest more in their performers than in those not likely to reach the top. If you agree with this perspective, be careful not to create a perception of unfairness.
- 8 Byron Katie and Stephen Mitchell, Loving What Is: Four Questions That Can Change Your Life (Three Rivers Press, 2003).
- 9 This practice is documented in Esther Derby and Diana Larsen, *Agile Retrospectives: Making Good Teams Great* (Raleigh, NC: The Pragmatic Bookshelf, 2006), 119–120.
- 10 I have introduced this practice to many teams. Initially, some folks feel embarrassed to participate; I mitigate this by going first. Two other common reactions are "We did this in kindergarten!" and "This is too touchy-feely." Once a few people have offered appreciations, those concerns evaporate.
- 11 These questions are an application of the ORID process, mentioned in chapter 9.

#### Chapter 4

- 1 Groupthink occurs when a group strives for a unanimous decision or interpretation that wouldn't ruffle anyone's feathers.
- Johanna Rothman, Hiring Geeks That Fit (Boston, MA: Rothman Consulting, 2013).
- 3 Marcus Buckingham and Curt Coffman, First, Break All the Rules: What the World's Greatest Managers Do Differently (New York: Simon and Schuster, 1999). Also find examples of such questions in Rothman, Hiring Geeks That Fit (2013).
- 4 Thomas J. Allen, *Managing the Flow of Technology* (Cambridge: MIT Press, 1977). The "Allen Curve" shows that the probability of communicating technical information at least once a week drops below 8% when a ten-meter distance separates people, and levels off below 5% at 30 meters and higher.
- Walter Leite, Marilla Svinicki, and Yuying Shi, "Attempted Validation of the Scores of the VARK: Learning Styles Inventory With Multitrait–Multimethod Confirmatory Factor Analysis Models," *Educational and Psychological Measure*ment (2009): 2.

- 1 I learned this powerful question from Christopher Avery.
- 2 A famous early example from the software industry is the Black Team, a testing team at IBM. The story is recounted in Tom DeMarco and Timothy Lister, *Peopleware: Productive Projects and Teams*, 2nd ed. (New York: Dorset House, 1999).
- Jeff Weiss and Jonathan Hughes, "Want Collaboration? Accept and Actively Manage — Conflict," Harvard Business Review (March 2005) (HBR Reprint R0503F, p. 1).
- 4 Read more stories and examples of this approach in Diana Larsen and Ainsley Nies, Liftoff: Launching Agile Teams and Projects (Hillsboro, OR: Onyx Neon Press, 2012).
- The "Begin with the end in mind" principle, which you might recognize from Stephen Covey's 7 Habits of Highly Effective People, underpins many Agile practices.
- 6 Robert Cialdini, *Influence: The Psychology of Persuasion* (New York: Harper Collins, 2007), 96.
- 7 Ibid., 98.
- 8 Gil Broza and Yehoram Shenhar, "From Struggle to Success: How a Third Chance, an Eleventh Hour Rewrite, and Strict Adherence to XP and Evolu-

- tionary Design Turned Our Flailing Project into a Marketable Product," Agile Development Magazine (spring 2007).
- 9 The output of team retrospectives public feedback and action items can be made available to managers, who might review it in a second-tier retrospective.
- 10 Samuel Culbert with Lawrence Rout, Get Rid of the Performance Review!: How Companies Can Stop Intimidating, Start Managing and Focus on What Really Matters (New York: Business Plus, 2010).
- 11 Esther Derby, *The Payoff in Merit Pay (Not)*, www.estherderby.com/2009/01/the-pay-off-in-merit-pay-not.html.

- The original paper is Bruce Tuckman, "Developmental Sequence in Small Groups," *Psychological Bulletin* 63 (1965): 384–99. For a recent review of the concept, see Mark K. Smith, "Bruce W. Tuckman Forming, Storming, Norming and Performing in Groups," *Encyclopaedia of Informal Education* (2005), www.infed.org/thinkers/tuckman.htm. Of all team evolution models, Tuckman's seems to be the best known. Despite its simplistic design, I've found it useful enough for understanding what Agile teams go through and what they require on the way to high performance.
- Based on Jon R. Katzenbach and Douglas K. Smith, *The Wisdom of Teams: Creating the High-Performance Organization* (Harvard Business Review Press, 1992).
- Self-organization is defined as the emergence of order in a complex adaptive system. Glenda Eoyang's CDE model (Container Difference Exchange) integrates diverse theoretical and practical approaches to self-organizing human systems. Read about it in Glenda Eoyang, "Conditions for Self-Organizing in Human Systems" (PhD diss., Union Institute and University, 2001), hsdinstitute.academia.edu/GlendaEoyang/Papers/518048/Conditions\_for\_self-organizing in human systems.
- 4 A famous example of the potentially negative consequence of taking decisional cues from other people, an instance recently brought into question, is the Kitty Genovese story, recounted in Robert Cialdini, *Influence: The Psychology of Persuasion* (New York: HarperCollins, 2007), 129–32.
- 5 Simulations are terrific for generating insights in all stages of a team's life cycle. I use unique simulations to help people firm up their grasp of the Agile mind-set. To browse upcoming public classes or on-site options, take a look at www.3PVantage.com.

- 6 These behavioral patterns (from a total of eight) appear in the Success Insights Wheel of Target Training International. Their underpinning is in the DISC model, which dates back to William Marston, *The Emotions of Normal People* (London: K. Paul, Trench, Trubner & Co., 1928).
- 7 M. D. Seery, E. A. Holman, and R. C. Silver, "Whatever Does Not Kill Us: Cumulative Lifetime Adversity, Vulnerability, and Resilience," *Journal of Personal Social Psychology* 99, no. 6 (December 2010): 1025–41. This multi-year, longitudinal study of a national sample found that people with a history of some lifetime adversity reported better mental health and well-being outcomes than not only people with a high history of adversity but also than those with no history of adversity.
- 8 Kent Beck with Cynthia Andres, Extreme Programming Explained: Embrace Change, 2nd ed. (Boston: Addison-Wesley Professional, 2004).
- 9 Arlo Belshee, "Promiscuous Pairing and Beginner's Mind: Embrace Inexperience" (proceedings of the Agile Development Conference, July 24–29, 2005, Washington, DC: IEEE Computer Society), 125–131. dx.doi.org/10.1109/ADC.2005.37.
- For my take on the inherent misunderstanding in the question "What's the best tool for Agile testing?" read my article by the same name at 3pvantage.com/ articles/the-best-tool-for-agile-testing.htm.

- 1 Charles N. Seashore, Edith Whitfield Seashore, and Gerald M. Weinberg, What Did You Say?: The Art of Giving and Receiving Feedback (Columbia, MD: Bingham House Books, 1997).
- 2 Wikipedia contains a comprehensive entry on "Emotional Contagion": en.wiki pedia.org/wiki/Emotional contagion.
- This exposition of responsibility and its absence is largely informed by the teachings of Christopher Avery (www.christopheravery.com), Esther Derby (www.estherderby.com), and Johanna Rothman (www.jrothman.com).
- 4 Learn more about the Responsibility Process in Christopher Avery, *Teamwork Is an Individual Skill: Getting Your Work Done When Sharing Responsibility* (San Francisco: Berrett-Koehler Publishers, 2001), or consult his website, www. christopheravery.com.
- Otto Kroeger with Kanet M. Thuesen and Hile Rutledge: *Type Talk at Work:* How the 16 Personality Types Determine Your Success on the Job (New York: Dell Publishing, 2002).

- Dale Emery's *Untangling Communication* dissects communication problems using Virginia Satir's "The Ingredients of an Interaction." dhemery.com/articles/untangling communication/.
- 2 Jamie Smart, in How to Get Rapid Rapport, discusses rapport and offers exercises: www.purenlp.com/articlecontributions/jamiesmart.htm. Jonathan Altfeld, in Rapport Mirroring, discusses it further: www.mynlpresources.com/articles/20071220/print.
- These terms, and the joke they hail from, are a veritable part of Scrum lore. While the point comes across, the reference to barnyard animals has caused some backlash. The terms, and the joke, were stricken from the Scrum Guide in 2011.
- 4 Another strong indicator of modality is called eye accessing: which way the person's eyes look when he's accessing internal information. Read about it at www.renewal.ca/nlp13.htm.
- 5 Read about modality and representational systems at www.saladltd.co.uk/salad pages/Nlp tips/nlp\_tip\_6.htm.
- 6 Barbara Fredrickson, *Positivity: Groundbreaking Research Reveals How to Embrace the Hidden Strength of Positive Emotions, Overcome Negativity, and Thrive* (Crown Archetype, 2009).
- 7 Asking you to pause your reading and look around you is meant to *break your state*, specifically by distracting you. The two dialogues are supposed to trigger different states, which can work well only if the states are separated by a break.
- 8 These filters were first described in Richard Bandler and John Grinder, *The Structure of Magic:* A Book About Language and Therapy, vol. 1 (Palo Alto: Science & Behavior Books, 1975).
- 9 These patterns and their associated precision questions (challenges) are known as the Neuro-Linguistic Programming (NLP) Meta Model. Read about it at www.nlpls.com/articles/NLPmetaModel.php.
- 10 Luiz Claudio Parzianello and I first adapted the NLP Meta Model to Agile development this way for a joint workshop at the Agile 2011 conference in Salt Lake City. We combined and renamed some patterns, because we found their names in the Meta Model opaque.
- 11 These questions correspond directly to the Logical Levels. Explained in 11.5 in the context of change, logical levels apply also to growth, thinking, and self-expression.
- 12 Otto Kroeger with Kanet M. Thuesen and Hile Rutledge, Type Talk at Work: How the 16 Personality Types Determine Your Success on the Job (New York:

- Dell Publishing, 2002).
- 13 DISC is an acronym for four aspects of behavior: Dominance, Influence, Steadiness, and Compliance (see note 6 in chapter 6). Several companies provide DISC assessment tools.

- 1 Stephen R. Covey, The 7 Habits of Highly Effective People: Powerful Lessons in Personal Change (New York: Free Press, 2004).
- 2 For question-centric agendas to common Agile meetings, see Section IV in Jean Tabaka, Collaboration Explained: Facilitation Skills for Software Project Leaders (Boston: Addison-Wesley Professional, 2006).
- Tabaka, Collaboration Explained; Michael Wilkinson, The Secrets of Facilitation: The S.M.A.R.T. Guide to Getting Results with Groups (San Francisco: Jossey-Bass, 2004); Esther Derby and Diana Larsen, Agile Retrospectives: Making Good Teams Great (Raleigh, NC: The Pragmatic Bookshelf, 2006).
- 4 R. Brian Stanfield, *The Art of Focused Conversation: 100 Ways to Access Group Wisdom in the Workplace* (Canadian Institute of Cultural Affairs, 1997) (a condensed version is available at topfacilitation.net/Docs/AFC.cfm).
- I learned this term from Lyssa Adkins. You can read examples of it in her book, Coaching Agile Teams: A Companion for ScrumMasters, Agile Coaches, and Project Managers in Transition (Boston: Addison-Wesley Professional), pp. 153 and 249, and at www.coachingagileteams.com/2010/11/29/uncategorized/using-silent-work-techniques-to-get-to-astonishing-results/.
- 6 In another example, Derby and Larsen, in *Agile Retrospectives*, describe "Triple Nickels," a silent-work activity for generating ideas.
- "Sit-down meetings were 34% longer than stand-up meetings, but they produced no better decisions than stand-up meetings. Significant differences were also obtained for satisfaction with the meeting and task information use during the meeting but not for synergy or commitment to the group's decision." From Allen Bluedorn, Daniel Turban, and Mary Sue Love, "The Effects of Stand-up and Sit-down Meeting Formats on Meeting Outcomes," *Journal of Applied Psychology* 84(2) (April 1999): 277–85.
- 8 4MAT is a way to organize teaching material that follows the four common learning styles. www.aboutlearning.com/what-is-4mat.
- 9 See Wilkinson, *The Secrets of Facilitation*, and Tabaka, *Collaboration Explained*, for decision rules and various interpretations of Fist of Five.
- 10 Derby and Larsen, Agile Retrospectives, 92–93.

- 11 Kenneth Benne and Paul Sheats described 26 such group rules back in the 1940s. For a recent summary, see www.mindtools.com/pages/article/newTMM\_85.htm.
- 12 This activity is known as "+/Delta" (Derby and Larsen, Agile Retrospectives, 116–17).
- 13 Extraverts need to talk in order to think, and introverts need to think in order to talk. Since most teams will have both extraverts and introverts, choose activities that suit both.

- For a hilarious take on management, read Neil Johnson's "How to Do Nothing," at fragile.org.uk/2010/02/how-to-do-nothing/.
- 2 I heard this concise comparison between the traditional and the Agile approaches to complexity from Mary Poppendieck.
- David Spann, "Being a Collaborative Leader (and Getting Things Done)," Cutter Executive Report (Agile Product & Project Management), vol. 12, no. 4, 2011.
- The Project Management Institute, *The Project Management Body of Knowledge* (PMBOK), www.pmi.org/PMBOK-Guide-and-Standards.aspx.
- 5 Marcus Buckingham and Curt Coffman, First, Break All the Rules: What the World's Greatest Managers Do Differently (New York: Simon and Schuster, 1999).
- 6 Dan Ariely, The Upside of Irrationality: The Unexpected Benefits of Defying Logic at Work and at Home (New York: HarperCollins, 2010).
- 7 Principles behind the Agile Manifesto, 2001, agilemanifesto.org/principles.html.
- 8 This is related to the deliberate practice concept. See Geoff Colvin, *Talent Is Overrated: What Really Separates World-Class Performers from Everybody Else* (New York: Portfolio Trade, 2010).
- 9 I first learned from Christopher Avery the power of distinguishing the two concepts both in my mind and in conversation.
- 10 Daniel Pink, *Drive: The Surprising Truth About What Motivates Us* (New York: Riverhead Trade, 2011).
- 11 Ariely, The Upside of Irrationality.
- 12 Pink, Drive.
- 13 Buckingham and Coffman, First, Break All the Rules.
- 14 See Christopher Avery, "How Consensus Decision-Making Creates Shared Direction in a Team" at www.christopheravery.com/blog/how-consensusdecision-making-creates-shared-direction-in-a-team/ (blog post retrieved on May 23, 2012).

- 15 Cooperation and collaboration are another pair of terms that are often used interchangeably. They have different meanings, however. In collaboration, people have a single shared goal; in cooperation, they have individual as well as common goals. Collaboration is rooted in cocreation; cooperation is rooted in mutual assistance.
- 16 These terms were used for many years in some Scrum implementations to distinguish the team from the rest of the community (see section 8.4.1).
- 17 Alistair Cockburn coined the term "information radiators" in 2000 to denote "a publicly posted display that shows people walking by what is going on. Information radiators are best when they are big, very easy to see (e.g., not online, generally), and change often enough to be worth revisiting." Read more at alistair.cockburn.us/Information+radiator.
- 18 Esther Derby and Diana Larsen, Agile Retrospectives: Making Good Teams Great (Raleigh, NC: The Pragmatic Bookshelf, 2006), 85–86.
- 19 Ibid., 87–89.
- 20 One of the seven principles of Lean Development is "Optimize the Whole." See Mary and Tom Poppendieck, *Implementing Lean Software Development: From Concept to Cash* (Boston: Addison-Wesley Professional, 2006).

- 1 The Agile Manifesto at agilemanifesto.org/.
- Virginia Satir et al., The Satir Model: Family Therapy and Beyond (Palo Alto: Science and Behavior Books, 1991); Gerald M. Weinberg, Quality Software Management: Anticipating Change, vol. 4 (New York: Dorset House, 1997). Steven Smith's article "The Satir Change Model" at stevenmsmith.com/ar-satir-change-model/summarizes the model well.
- 3 If you'd like to learn Agile engineering from me (in a public course or privately), browse available offerings at www.3PVantage.com or write to me at gbroza@3PVantage.com.
- 4 Tom DeMarco, Slack: Getting Past Burnout, Busywork, and the Myth of Total Efficiency (New York: Broadway, 2002).
- One popular model for leading change is Dr. John Kotter's 8-Step Process for Leading Change. A good starting point for it is www.kotterinternational.com/kotterprinciples/changesteps.
- 6 For more on leadership's support of learning and change, consult books and talks by Prof. Amy Edmonson of the Harvard Business School.

- 7 Dan Ariely, The Upside of Irrationality: The Unexpected Benefits of Defying Logic at Work and at Home (New York: HarperCollins, 2010).
- 8 Robert Dilts, Changing Belief Systems with NLP (Capitola, CA: Meta Publications, 1990). Like so many other mental models, Dilts's Logical Levels model has received its share of controversy. As statistician George Box famously said, "All models are wrong, but some are useful." I've found Dilts's model useful in helping people embrace Agile thinking and behaviors.
- 9 The curious, present, and empathetic stance is so powerful that I dedicate a full hour out of some of my Agile leadership courses to it. Write to me at gbroza@3PVantage.com to get more information about these courses.
- 10 Esther Derby, "Are You Ready to Coach?" at www.estherderby.com/2011/02/are-you-ready-to-coach.html.
- 11 Rachel Davies and Liz Sedley, Agile Coaching (Raleigh, NC: Pragmatic Bookshelf, 2009); Lyssa Adkins, Coaching Agile Teams: A Companion for ScrumMasters, Agile Coaches, and Project Managers in Transition (Boston: Addison-Wesley Professional, 2010).

- 1 If you have a programming background, you might know that Object-Oriented Programming favors the opposite pattern: "Tell, don't ask."
- 2 Robert Cialdini, Influence: The Psychology of Persuasion (New York: Harper-Collins, 2007), 4–5.

- 1 Chris Sterling, Managing Software Debt: Building for Inevitable Change (Boston: Addison-Wesley Professional, 2010).
- 2 Be aware that release or project retrospectives require deeper facilitation skill. Consider engaging an external expert to do the first few ones so your coaches and ATLs can learn by example. If you'd like me to lead such a retrospective for your company, or to provide a referral, contact me at gbroza@3pvantage.com.
- 3 Harrison Owen, *Open Space Technology: A User's Guide*, 3rd ed. (San Francisco: Berrett-Koehler Publishers, 2008).
- 4 Esther Derby and Diana Larsen, Agile Retrospectives: Making Good Teams Great (Raleigh, NC: The Pragmatic Bookshelf, 2006).
- 5 Read about Atlassian's version, called "FedEx Days," in Daniel Pink, *Drive: The Surprising Truth About What Motivates Us* (New York: Riverhead Trade, 2011).
- 6 Marty Baker, "The Connection between Daydreaming and Creativity," creativity

- central.squarespace.com/creativity-central/2011/6/13/the-connection-between-daydreaming-and-creativity.html.
- 7 MIT, "Product Development Value Stream Mapping (PDVSM)" manual at lean. mit.edu/products/product-development-value-stream-mapping-pdvsm-manual.
- 8 Robert Austin and Lee Devin, Artful Making: What Managers Need to Know About How Artists Work (Upper Saddle River, NJ: Financial Times Prentice Hall, 2003).
- 9 Specifically, the team needed to do three things: (1) set up their IDEs to compile the code (they were using only shell scripts to build code), (2) untangle some dependencies so they could compile just a few modules instead of everything, and (3) get the rule revoked that forced each test class to subclass the company's test base class. The latter caused a major slowdown, since it required a server to be up before a test could be run even if the test had no need of the server.
- 10 Robert Merton, "The Unanticipated Consequences of Purposive Social Action," *American Sociological Review* 1 Issue 6 (December 1936): 894–904.
- 11 Gil Broza, *The Agile Mind-Set: Making Agile Processes Work* (3P Vantage Media, 2015) at www.TheAgileMindsetBook.info.

- 1 The sameness/difference distinction is a metaprogram identified in Neuro-Linguistic Programming (NLP). See Shelle Rose Charvet, Words That Change Minds: Mastering the Language of Influence, 2nd ed. (Dubuque, IA: Kendall/Hunt, 1997).
- 2 Proprietary data provided by jobEQ.com based on a European stratified sample of 1,003 respondents, 2011.
- 3 Peter Senge, The Fifth Discipline: The Art and Practice of The Learning Organization, rev. ed. (New York: Crown Business, 2006).
- 4 Read more on communities of practice at www.cutter.com/bia/fulltext/webinar/2011/communities-of-practice.html.
- 5 Harrison Owen, *Open Space Technology: A User's Guide*, 3rd ed. (San Francisco: Berrett-Koehler Publishers, 2008).
- 6 Malcolm Gladwell, Outliers: The Story of Success (New York: Little, Brown and Company, 2008).
- 7 Manifesto for Software Craftsmanship, manifesto.softwarecraftsmanship.org/. In addition to the manifesto, this website has a deep Further Reading section.
- 8 Gil Broza, "Today's Business World Needs Contextual Craftsmanship," in the "Software Programming as Craft: The Impact of Agile Development" issue of the Cutter IT Journal, 2010.

- 9 Gil Broza, "Could You Use Software Development Insurance?" at 3pvantage. com/articles/could-you-use-software-development-insurance.htm.
- 10 You might know this concept in its more morbid form, "bus number" or "truck number," which involves being run over instead of winning the lottery.
- 11 Much of this section's material first appeared in Johanna Rothman and Gil Broza, "I've Got Your Back," TechWell, January 2011, at manage.techwell.com/articles/ weekly/i-ve-got-your-back.
- 12 Carlos Buxton, "Go Ahead, Rock the Boat: Spot 3 Warning Signs of Apathy," www.bigvisible.com/2011/10/how-to-spot-and-combat-three-warning-signs-ofemployee-apathy/.
- 13 If you'd like my feedback and guidance about your company's Agile implementation, write to me at gbroza@3PVantage.com.

### **Appendix**

1 Johanna Rothman, Manage Your Project Portfolio: Increase Your Capacity and Finish More Projects (Raleigh, NC: The Pragmatic Bookshelf, 2009).