Silver Bullet or Bitter Pill?
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Agilists have gone through eighteen months of expansion, learning, and progress since the Agile Manifesto was written in Snowbird in February 2001. The world has become aware of a radically different, revolutionary approach to software development. Noteworthy enough to warrant an article in The Economist, the Agile Manifesto has caused an explosion of books, articles, conferences, websites and self-proclaimed authorities. Most remarkable to many agilists, however, was their discovery that other disciplines such as manufacturing and construction were twenty years ahead of software development in adopting agile and abandoning the linear, defined approach. At XP2002 in Sardinia, noted economist Enrico Zaninotto[1] observed, "… it appeared to me that software industry was trying to mimic method of industrial organization already exhausted …industrial organization theory changed its view during the 1970's.[2]" What the software industry had been trying to mimic over the last twenty years – a more defined and granular approach to the process of software development was discredited and abandoned by a manufacturing industry that embraced lean manufacturing. Enrico observed that lean manufacturing is much like Extreme Programming and the agile processes.

Many are struggling to understand agility. Some have mistaken agility as a lightweight version of traditional approaches. Others have tried to disassemble agile into pieces that can be applied piecemeal. Others have tried to measure agility with irrelevant yardsticks such as lines of code per day. Others have come to realize, though, that agile processes are like a fine Swiss watch, an incredibly fine working of interrelated parts. Taking out the mainspring not only ruins the watch, but the mainspring by itself can't tell time. Others still have come to realize that agile is as different from traditional defined approaches as lean manufacturing and just-in-time process control are from Henry Ford's revered assembly line. This unfortunate practice of using pieces of agile processes without understanding their underlying theory or interlocking movements may well have been inadvertently started by Rational Corporation with some of its earlier marketing statements.[3]

In trying to explain agile in terms of CMM, we've come to realize that both provide stabilizing, repeatable processes up through CMM Level 3. Above that level, however, the difference in underlying theories asserts itself and they diverge rapidly. For agile processes, defined and rigorous as they are, provide only a framework within which teams evolve their own practices. The higher levels that CMM aspires to are internally

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[1] Enrico Zaninotto, professor of Operations Management at the University of Trento - Italy. Dean of the Faculty of Economics.

[2] http://www.xp2002.org/talksinfo/zaninotto.pdf

[3] "You may be able to use the RUP and incorporate selected XP techniques into it" and "When you combine the breadth of RUP with some of the XP techniques" from a 2001 advertisement.

generated and emergent, not externally defined and imposed. At INCOSE[4], Robert Thomsett chaired a panel discussion between agilists and CMM proponents. Rather than the expected debate, the CMM proponents wished the agilists well, having started CMM with a vision to also improve software development. They had grand visions and great hopes for CMM at its inception, and they wondered how the agilists were going to keep agile effective and pure; they had experienced the dilution of CMM as carpetbaggers and opportunists commercially exploited and perverted their vision and initial ideas. I've already seen widespread carpet bagging as opportunists try to agilize heavyweight methodologies by lightening them. However, reducing the weight doesn't change the underlying theoretical differences between agile and non-agile processes; as a boss of mine once remarked when we move IBM's MVS to a larger computer, "that's like putting a pig on roller-skates!" One agilist pointed out that the book; "The Alphabet Versus the Goddess[5]" predicted this as any idea went from the vision to the left-brain formalization, from the concept to the details. I had commented on this at XP2002[6], expressing concern that agilists "were becoming more concerned with counting the number of angels that can dance on the head of a pin instead of the miracle and beauty of a single angel."

Is agile a silver bullet? Some have found it to be one – those who already have excellent engineering practices in place and use agile for organization-critical projects. Product development organizations have been uniformly successful as agile helps them compete more effectively with better products. IT organizations have had limited success, initially experiencing dramatic success and then running into the bitter bill of the amount of change agility requires of them. These changes include:

1. Dramatic improvements in engineering build and code management practices. You can't build good software without them, and their absence is very obvious in agile processes.
2. Cultural changes engendered by collaborative teamwork and such supporting facilities as co-located teams, visibility and openness. The sociology of self-adapting, empowered teams is fascinating and their productivity is awesome.
3. Management change as organizations become fluid, teams become empowered, and managers give up being bosses to become coaches, mentors and facilitators.
4. Management changes as projects are tightly measured by return on investment – that is, doing the right thing well, not just doing the thing right.
5. Ownership changes as business people become responsible for project ROI on an iterative, incremental basis, constantly balancing cost, functionality, date and quality to produce the greatest benefit.

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[4] May 22, 2002, Hampton Roads Area (HRA) 2002 Seminar on Software Management and Integration, jointly hosted by the Hampton Roads Area chapter of the International Council on Systems Engineering (INCOSE), Virginia's Center for Innovative Technology, and the Hampton Roads Technology Council.
[5] *The Alphabet Versus the Goddess: The Conflict Between Word and Image*, Leonard Shlain , Viking Press, 1998
[6] XP2002, Sardinia, Italy, May, 2002 http://www.xp2002.org/

So, I'd say agility isn't a silver bullet, only a process that requires a lot of hard work, attention, caring, and teamwork. But is agile a bitter pill? Not if you consider it like fitness training – you try your hardest, day-by-day, and you get better and better at what you are doing. In literature, the traditional, defined approaches represent George Orwell's *1984*[7], and agile approaches represent Ayn Rand's Fountainhead.[8]

At XP2002, Kent Beck called for focus during the next year on "the year of the manager," as we move agile practices into IT management and even into the business and IT management relationship. Indeed! Agile causes profound changes to this relationship and practicing, educating, and assisting IT and business management in this change will be a major factor in the success of the agile processes over the next years.

The group who met in Snowbird had no idea that something this big would happen; they only knew that they were right and that agile should be done. And today, there is a new AgileAlliance[9] organization. Its goal is to build a community of those interested in agile processes, practices, and culture. This community is dedicated to spreading the word throughout the community and keeping everyone up to date as agile processes continue to become the standard for return on investment driven development. The AgileAlliance held their first annual member meeting at XP/Agile Universe[10]. It's existence surprise many, challenging the AgileAlliance board to keep up with train that has already left the station and is well underway.

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[7] 1*984*, George Orwell, Harcourt Brace Jovanovitch, 1949.
[8] *The Fountainhead*, Ayn Rand, Bobbs-Merrill Co, June 1979
[9] http://www.agilealliance.org
[10] XP/Agile Universe conference, Chicago, Illinois, August 4-7, 2002.