



# THE DECLARATION OF INTERDEPENDENCE

## SIX PRINCIPLES

TO BENEFIT YOU AND YOUR AGILE ORGANIZATION

BY ALISTAIR COCKBURN

### THE DECLARATION OF INTERDEP

*"We are a community of project leaders highly successful at delivering results. To achieve these results:*

*of value our results by making continuous flow*

- \* We deliver reliable results by engaging customers in frequent interactions and shared ownership
- \* We



At the 2004 Agile Development Conference, a number of project, product, and management experts started working together to answer the question “How would you extend the Manifesto for Agile Software Development to non-software products, project management, and management in general?” Their answer is a document called “The Declaration of Interdependence.”

The group included two of the original Agile Manifesto authors (Jim Highsmith and Alistair Cockburn); noted authors in product management (Preston Smith), project management (Robert Wysocki), and teamwork (Chris Avery); plus others in industry and consulting from both Europe and the US (David Anderson, Sanjiv Augustine, Mike Cohn, Doug DeCarlo, Donna Fitzgerald, Ole Jepsen, Lowell Lindstrom, Todd Little, Kent McDonald, and Pollyanna Pixton).



## THE AGILE MANIFESTO (2001)

### “WE VALUE:

- *Individuals and interactions over processes and tools*
- *Working software over comprehensive documentation*
- *Customer collaboration over contract negotiation*
- *Responding to change over following a plan*

THAT IS, WHILE THERE IS VALUE IN THE ITEMS ON THE RIGHT, WE VALUE THE ITEMS ON THE LEFT MORE.”

## THE DECLARATION OF INTERDEPENDENCE (2005)

“WE ARE A COMMUNITY OF PROJECT LEADERS HIGHLY SUCCESSFUL AT DELIVERING RESULTS. TO ACHIEVE THESE RESULTS:

- *We increase return on investment by making continuous flow of value our focus.*
- *We deliver reliable results by engaging customers in frequent interactions and shared ownership.*
- *We expect uncertainty and manage for it through iterations, anticipation, and adaptation.*
- *We unleash creativity and innovation by recognizing that individuals are the ultimate source of value and creating an environment where they can make a difference.*
- *We boost performance through group accountability for results and shared responsibility for team effectiveness.*
- *We improve effectiveness and reliability through situationally specific strategies, processes, and practices.”*

The difference in style between the Agile Manifesto and the Declaration of Interdependence (DOI) is notable. The Manifesto is memorably terse and is followed by twelve rarely quoted principles. The DOI, on the other hand, is comparatively wordy, but the six principles capture all the authors intended.

The DOI highlights what its authors feel are the most important aspects in management and were selected for three criteria. Each point is of critical importance—we can't remove any one point. Each principle contains something new, different, or surprising to mainstream managers. Finally, the full set of principles captures the personal operating framework of each of the DOI authors.

Do the six points sound like platitudes? Perhaps it's because—unlike the Agile Manifesto—the DOI doesn't name the “bad guys.” For many, it is only when they try to apply the DOI that surprises pop up and the depth of the DOI is revealed.

In this article I'll highlight some of the surprises in the DOI. As with the twelve principles of the Agile Manifesto, there are some clauses that are still a stretch for me. But the DOI shows me in which direction I ought to stretch myself.

**“WE INCREASE RETURN ON INVESTMENT BY MAKING CONTINUOUS FLOW OF VALUE OUR FOCUS.”**

The key and surprising words here are “continuous flow of value.”

Lean manufacturing teaches us that having large inventories is inefficient. It also teaches us that the overall efficiency of a process improves as the batch size passed from stage to stage is reduced. Today this has become accepted in most

(but not all) manufacturing circles, yet many people may be surprised that it also applies to software development.

When developing software, the unit of “inventory” is the unvalidated decision. This means that every written requirement; architectural decision or document; design drawing, decision, or document; and piece of written code counts as inventory until it is integrated and tested. Donald Reinertsen's *Managing the Design Factory* gives a convincing rendering of this argument. In it, the author shows how passing these inventory items from station to station in batches (think of the milestone “Release to QA”) introduces wobble and uncertainty in both the schedule and the flow of output from the group.

The ultimate process end state is “single-piece” or “continuous” flow. It is a stretch for software developers to implement, integrate, and test every decision in a single-piece flow, whether requirement, architecture, design, or code. To be honest, I can't do it—but I do understand the importance of keeping batch size down and the penalty for having large inventories. Of all the published methodologies, only Extreme Programming comes close to the continuous flow concept.

The second key word in the first DOI point is “value.” Most managers manage tasks, checking task lists and task completion. The DOI calls for integrated value. In software development, value accrues suddenly—at the moment of feature integration. All the work leading up to that moment carries no value to the purchaser of the software. Having completed 90 percent of the tasks (a standard percentage in all projects) adds no value.

Focusing on the flow and growth of value requires a very different management mindset. Agile teams make a tiny but

enormously significant alteration in the way classical earned-value charts are produced. The tiny change is that a team is credited with value for its work only after integration and testing are complete. This is a departure from common management practice in which teams are given credit for completing tasks.

The summary of the first point of the DOI is that to achieve Return On Investment, we should focus on the flow of value, not the completion of tasks, and we should strive to shrink the batch size down to single-piece flow.

For the other points in the DOI, I will simply highlight the lurking surprise phrases. An article on my Web site (see the StickyNotes for a link) pries the DOI apart a little further. Beyond that, you should put each point in front of your team or your manager, propose to do exactly what the DOI says, and watch the reaction.

**“WE DELIVER RELIABLE RESULTS BY ENGAGING CUSTOMERS IN FREQUENT INTERACTIONS AND SHARED OWNERSHIP.”**

The first surprise phrase in the second DOI point is “shared ownership.” Do your customers really feel that they share ownership of the product or project? I'd bet against it. Further, many of your customers don't even want shared ownership; they hired you to “do all that stuff” and deliver a useful system.

The second surprise is “frequent interactions.” How often does your customer, buyer, sponsor, or user show up in the programmers' area to see what the team is really doing? The Agile Manifesto says the best answer is “daily.” The DOI uses “frequent.” I'd bet that in most of your organizations it is neither.

The third surprise is that such an emphasis is placed on linking customer



## FOCUSING ON THE FLOW AND GROWTH OF VALUE REQUIRES A VERY DIFFERENT MANAGEMENT MINDSET.





# “INDIVIDUALS ARE THE ULTIMATE SOURCE OF VALUE.”



interactions and shared ownership with “reliable results.” The authors of the DOI are claiming there is a link between customer involvement and the quality and reliability of the results. I’ll leave it to you to contemplate the strength of that claim.

## “WE EXPECT UNCERTAINTY AND MANAGE IT THROUGH ITERATIONS, ANTICIPATION, AND ADAPTATION.”

Most managers probably set their goals to “eliminate uncertainty.” The DOI announces uncertainty as a fact of life and then explains what to do about it.

Next, the DOI diverges from the Agile Manifesto by specifically calling out “anticipation.” The feeling among DOI creators, including the Agile Manifesto authors present, was that the agile community had been forgetting to use the information it already had at hand. It had been costing its organizations by forcing them to react to events that should have and could have been foreseen.

To test this point of the DOI, consider in what ways and to what extent your management balances the use of iterations with anticipation, and to what extent they ever reflect or adapt.

## “WE UNLEASH CREATIVITY AND INNOVATION BY RECOGNIZING THAT INDIVIDUALS ARE THE ULTIMATE SOURCE OF VALUE AND CREATING AN ENVIRONMENT WHERE THEY CAN MAKE A DIFFERENCE.”

How many managers take seriously the phrase “Individuals are the ultimate source of value”? The authors of the DOI do. The DOI extends the Agile Manifesto by reminding us that the environment also matters. People treated as cogs in a machine do not perform as well as people who feel they can create, contribute, and make a positive difference in other people’s lives.

Is this a platitude that can be ignored? If you think so, ask the executives at

Google why they have relied so heavily on this point to establish their ever-growing lead over the rest of their industry.

## “WE BOOST PERFORMANCE THROUGH GROUP ACCOUNTABILITY FOR RESULTS AND SHARED RESPONSIBILITY FOR TEAM EFFECTIVENESS.”

Have you ever worked in a group that truly had group accountability for results, and did you notice how much more effective that group was than other groups?

Interestingly, both lean and agile manufacturing texts recommend cross-training people at adjacent workstations. The DOI goes further, suggesting that team members develop an awareness of what jobs their teammates need accomplished; if the team members can’t do the jobs, they may be able to help in some other way.

I thank Chris Avery, the teamwork specialist among the DOI authors, for clarifying the shared accountability aspect of this point. He writes, “Most people assume that *someone else* is responsible for the effectiveness—or lack thereof—in their teams, and that *someone else* should do something so the team is more effective. The DOI says that if the team isn’t as effective as *I’d* like, then it’s up to *me* to take responsibility for correcting the situation.”

Examine the implications of this point—that establishing group accountability for results and shared responsibility for team effectiveness really will boost the group’s performance. Decide to what extent you think this is true.

## “WE IMPROVE EFFECTIVENESS AND RELIABILITY THROUGH SITUATIONALLY SPECIFIC STRATEGIES, PROCESSES, AND PRACTICES.”

What works in one situation may backfire in another. Even reasonably enlightened managers, searching for

best practices to apply, often forget this. One of my little hobbies is collecting situations in which the optimal strategy requires a reversal of my usual recommendations (see the StickyNotes for a link to an example, “The Cone of Silence”).

The successful team stays alert to changing circumstances and adjusts strategies and practices to match. How often does your team upend its baseline strategy to fit a changing situation?

If you are interested in reading about, challenging, or interacting with the six principles of the DOI, then follow the leads in the StickyNotes and visit the site of the Agile Project Leadership Network. Make time for introspection, and evaluate whether your own personal management framework lies inside or outside the DOI. Ask yourself whether you and your organization really live those six principles. There are those of us who do and have found great benefit. We invite you to join us. **{end}**

*Alistair Cockburn, PhD, is a co-author of both the Manifesto for Agile Software Development and the Declaration of Interdependence. He is internationally known for his work on use cases, project management, and agile methodologies. He has written four books and dozens of articles based on more than thirty years of experience leading projects in hardware and software development all over the world.*

### Sticky Notes

For more on the following topics, go to [www.StickyMinds.com/bettersoftware](http://www.StickyMinds.com/bettersoftware)

- Alistair Cockburn’s Web site
- The Cone of Silence
- The Agile Project Leadership Network
- Further reading