

# Introducing Patterns (or any new idea) into Organizations

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**Those who have used patterns are aware that this literary form, and its corresponding process and community support, is providing a way to capture best practices and communicate them throughout organizations and the entire software industry. However, many who have tried to introduce patterns (or any new idea) into their organizations have found it to be a difficult task. Therefore, a pattern language, currently titled *Evolving a Patterns Culture*, is being written to capture solutions to the challenges in introducing patterns (or any new idea) into an organization.**

Patterns and pattern languages are a new contribution to software reuse. They have become the tool of a growing community that is attempting to capture best practices in the software development industry. Unlike other methods for doing this, patterns offer both a literary form and a process for documenting knowledge. As a recent article in the Wall Street Journal points out, patterns based on the work of Christopher Alexander [1,2] "are notable not just for what they say but for how they say it." [7] The process includes well-defined methods for shepherding [5], workshopping [4] and publishing patterns (e.g. [6]).

In recent years, there has been a promising body of empirical and anecdotal evidence to suggest their

value. This has led Coldewey and Dyson to write, "Patterns have changed the way we think about building software and have changed the way we work." [3]

Even though organizations have much to gain from a reuse approach to software development, there is little evidence that many are utilizing patterns to achieve it. This may be due, at least in part, to the observation that introducing patterns into an organization comes with many challenges (e.g. [8]).

The spark for patterns (or any new idea) in an organization most often begins with one or more enlightened individuals who has heard about or used patterns (or another new idea) and is intrigued by the potential. It then becomes the task of these individuals to enlighten the rest of the organization. It can be an easier undertaking when you have an understanding of the problems that may be encountered along the way and what can be done to address these problems.

Work towards documenting these problems and solutions in the form of patterns was begun by David DeLano and Linda Rising of AG Communication

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Systems in Arizona during their *Introducing Patterns into the Workplace*<sup>1</sup> workshop at OOPSLA'96. The patterns were later expanded to *Introducing Technology into the Workplace*.<sup>2</sup> In 1998, Mary Lynn Manns began introducing patterns into organizations, and holding "introducing patterns" workshops at various conferences. She documented her observations in the form of patterns, and this collection was workshopped at PLoP'99. In March, at the ChiliPLoP'2000 conference, Rising and Manns worked with others during a 3-day "hot topic" session to combine their two collections of patterns into a fledgling language currently titled *Evolving a Patterns Culture*.<sup>3</sup> The present focus of this language is on the introduction of patterns into organizations. The collection includes at this point: Evangelist, Disciples, Local Leader, Corporate Angel, Dedicated Champion, and others. The next task will be to add patterns to "Keep It Going" where the goal is to *evolve* an organization that is committed to including patterns as part of their software development process. As the collection of patterns grows, it will continue to reflect the close connection between the experiences of people from organizations all over the world.

During this OOPSLA'2000 workshop, participants will discuss their experiences introducing patterns (or any new idea or technology) into an organization. This will allow additional patterns to be "mined," and known uses and other improvements to be added to the existing patterns. These insights will result in a deeper understanding of this growing language and a more useful collection of patterns.

## References

[1] Alexander, C. (1979). *The Timeless Way of Building*. New York: Oxford University Press.

[2] Alexander, C. (1977). *A Pattern Language*. New York: Oxford University Press.

[3] Coldewey, J. and P. Dyson (2000). In: Harrison, H., Foote, B. Rohnert, H. (eds), *Pattern Languages of Program Design 4*. Reading, Mass: Addison-Wesley, pp. xvii-xviii.

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[5] Harrison, H. (1999). *The Language of Shepherds: A Pattern Language for Shepherding*. *Proceedings of the 6<sup>th</sup> Annual Conference on Pattern Languages of Programs*, Monticello, Illinois. pp 3.4.

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[7] Petzinger, T (1999). *The Frontlines: To Get Machines to Talk to Each Other, Two Men Write Human Language*. *The Wall Street Journal*, May 14, 1999.

[8] Rising, L. (ed) (1998). *The Patterns Handbook*. Cambridge, England: Cambridge University Press.

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<sup>1</sup> <http://www.agcs.com/patterns/oopsla/intro.htm>

<sup>2</sup> <http://st-www.cs.uiuc.edu/~plop/plop97/Proceedings/delano.pdf>

<sup>3</sup> <http://www.cs.unca.edu/~manns>