

The Third Wave

May 2005



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Lessons From The Frog in the Pan

Although implementing business process management can deliver immediate value, BPM technology alone is not enough. Implementing BPM technology will not make a business “process competent” any more than the act of buying a car means a person knows how to drive. Experience with prior technology acquisitions, such as ERP, shows that businesses that adopted the same technologies—and even used the same implementation consultants—achieved very different business results as a consequence of how they actually learned to exploit the strengths, and avoid the weaknesses, of the technology. Thus, to use BPM effectively companies must develop and acquire process management competencies. Building a BPM competency requires three components:

- a sound understanding by senior managers of BPM’s strategic importance to the business;
- the setting of clear targets by strategists, defining precisely how BPM is going to be used;
- and the possession of appropriate skills by implementers so that they can do their work effectively and efficiently.

Because these three competencies reinforce one another, they must be developed together. Companies need to create a virtuous circle in which understanding, targets and skills reinforce one other to earn support for the BPM initiative by demonstrating its real value to the business. They need to make sure that the business and its customers, suppliers and trading partners fully understand and exploit the power of process management. They must consciously nurture the competencies that they gain from using and evaluating the methods and technologies.

When an organization adopts a new tool, a common assumption is that training is a binary proposition, i.e., that people are either trained, or they are not. Experience indicates that this assumption is flawed. Meilir Page-Jones, industry luminary and president of Wayland Systems, developed a seven-stage model of expertise that describes what people actually go through as they learn and develop skills associated with a new paradigm.¹ Developing an environment and a process for moving people through these seven stages should be high on the CEO’s and CIO’s priority lists. The following discussion outlines how Page-Jones’ stages may be applied to a BPM implementation.

Stage 1: Innocent—Never heard of BPM.

Some have never heard of BPM. Others have already seen references to business process management in trade publications. They may be vaguely aware of the existence of BPM, but may not see the possible relevance to their situations. Someone may be considered innocent if that person has not learned enough about BPM to be aware of some of the tradeoffs associated with it, some of its costs, some of its benefits, or where and when it might be appropriately applied.

Business processes have become insidiously more and more complex, yet there was no sharp transition. The earth was not hit by a complexity asteroid that suddenly made business processes three orders of magnitude more complex and cast our reptilian process techniques into extinction. Page-Jones calls the



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way in which process complexity actually increased the “Frog in the Pan.” This is because although a frog will jump out of a pan of hot water, a frog that is placed in a pan of cold water and slowly heated will fail to leap forth and will actually boil to death. The temperature gradient is so gradual that there will never be a point at which the frog declares, “Boy, it’s suddenly gotten hot in here! I think I should hop out.” Many Innocents are experiencing “Frog in the Pan” and are trying to tackle problems of the 21st century with approaches of the past without realizing that the problems they’re facing are the very ones that the third wave of BPM was created to alleviate.

Moving someone from the innocent stage to the next stage is a process of providing gentle introductions to the technology through articles, presentations, seminars and participation in related associations. The goal is to inform and educate. Management-level introductory presentations can place the more global issues of BPM into perspective.

Stage 2: Aware—Has read something about BPM.

Stage 2 people have noticed that the water is getting decidedly warm, if not downright hot. So, they are actively seeking BPM methods and techniques that will get them out of the pan or at least reduce the heat. Their interest level is high but their knowledge level is low, being limited to a few terms and definitions and not based on any practical BPM experience.

At stage two, the person has become aware of the benefits and costs of the technology, as well as when and where it might be successfully applied. The Aware can generally describe what is involved with BPM, and at a high level can compare and contrast BPM with older approaches. The person has a talking knowledge of the subject. The Aware technicians may seek to examine the relationship of BPM to existing EAI, workflow, portal and B2B implementation strategies. The Aware business architect will seek to understand how BPM may lead them to change the way they conduct process modeling and process improvement.

A person at this stage has not yet achieved the paradigm shift. The Aware’s intellectual framework for BPM is still based upon drawing analogies to the old ways of doing things, and the person probably still draws upon erroneous assumptions when thinking or making decisions about third-wave BPM. Moving a person from this stage to the next involves establishing and executing an initial training program of readings, seminars and workshops in the working fundamentals of BPM.

Stage 3: Apprentice—Has studied BPM.

At this stage, the person is well aware of the high level concepts of BPM; however the Apprentice may or may not have experienced the paradigm shift. This person cannot effectively apply the technology on his or her own, but can begin to contribute to the use of the methods and techniques. If a Stage 3 person absorbs everything from a seminar, then the Apprentice is minimally equipped to tackle a true, full-sized project in the corporate jungle. Usually, however, an Apprentice does not grasp everything or has difficulty scaling the techniques up from a case study to a real project. It could be said that most Stage 3 people know just enough to be dangerous!



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Moving the person from this stage to the next involves establishing and executing a training program that focuses on the details of BPM. It is now appropriate to introduce selective BPM tools training. At this stage and its transition to the next, hands-on training becomes very important. To this end, an apprentice should be teamed with a *mentor*, someone who uses the technology naturally and automatically and can explain the internal process involved with BPM technology.

For the Apprentice, it is sink or swim at this stage. It is time to throw the Apprentice into a project using the new methods and technologies. The mentor expects that the Apprentice will swallow a little water and, at times, gasp for breath. Fortunately, the mentor serves as a lifeguard. The mentor has to closely monitor the Apprentice to ascertain progress, capitalize on the lessons that are learned from mistakes, and adjust the detailed goals of the development process.

Stage 4: Practitioner—Ready to use BPM.

The rite of passage to Stage 4 is the use of BPM methods and techniques on at least one significant project. Achieving “Stage 4-hood” is for many people the most difficult transition of the six transitions between stages. The fledgling Stage 4 is asked to take newly learned techniques and apply them to a corporate project with the usual demonic cocktail of politics, deadlines, changing requirements and distractions. At the same time, the Practitioner is attempting to recall what he or she learned in class and scale up the examples 10- or 100-fold.

At this stage, the Practitioner is ready to make process-engineering decisions on his or her own. Mistakes are a significant contributor to the learning process at this level, and the Practitioner should be allowed to make them. That’s okay, because in the third wave backing out of a process change is as simple as flipping a switch and larger changes can be simulated before use. This stage is generally a self-managed process but still needs the presence of a mentor to make assignments and observe results. The Practitioner is given full responsibility for assignments and is an active participant in project review activities. The Practitioner will have begun to consider a host of related issues, including:

- The organizational implications of BPM.
- Requirements for deep integration of BPM in existing methodologies such as Six Sigma.
- The need for training and tool support.
- Implications for industry data and collaboration standardization efforts.
- Examination of the benefits to value-chain integration and adaptation.

Movement to the next stage is a function of time, practice, an increasing knowledge base and specific mentoring.

Stage 5: Journeyman—Uses BPM naturally and automatically.

At this stage, participants are able to apply the technology in normal situations and do not require the presence of a mentor to accomplish quality work. This

¹ Not necessarily a limitation in the BPEL language itself



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stage also requires a self-managed learning program to increase understanding. The Journeyman still calls upon the mentor when new or especially complex problems appear. However, the Journeyman is self-sufficient and more often the source, rather than the recipient, of BPM advice. Like those who can develop sophisticated financial planning spreadsheets today, the Journeyman commands respect because he or she has both the skills and the knowledge to build new models. The Journeyman continuously seeks opportunities to apply BPM within his or her business.

Movement to the next stage is a function of experience, increasing depth of knowledge, and the evolution of the generic, problem-solving framework. This problem-solving framework is developed through interacting with a Master-level person on new or complex situations. In this stage, the solution process is more important than the solution details.

Stage 6: Master—Has internalized BPM and knows when to break the rules.

The Master is not only adept with BPM techniques and technologies, but also possesses a profound methodological foundation. Beyond the “whats” and “hows,” the Stage 6 knows the “whys” of BPM. This depth allows the Master to sometimes break a surface rule, while adhering to a more fundamental methodological principle.

The Master will carefully consider the intersection of business strategy and BPM—how a company competes in a world where business processes can be captured, demonstrated, shared, instrumented, analyzed and deployed within and between companies. The Master may ask questions about BPM regarding complex issues such as intellectual property, the ability to formalize and potentially protect process designs through copyright, patents, contracts, trademarks or other devices.

The Master is a good instructor because his or her theoretical and practical knowledge provides the wherewithal to tackle difficult questions from others climbing the competency ladder. For the Master, continued learning is a matter of keeping up with progress being made with BPM methods and technologies. Every organization needs access to Masters, either on staff or on retainer. The Master can handle new or complex applications of BPM, review Journeyman level work, show alternative or creative solutions to problems, point out subtleties in process engineering decisions, and help keep the organization up to date.

Movement to the next stage is strictly up to the individual. It is based on the individual’s thought processes and experiences. Moving up to the Expert stage generally requires the individual to be actively engaged in a broad range of applications of BPM in new or unusual situations.

Stage 7: Expert—Writes about BPM modeling and methodology, publishes learned articles, gives lectures and develops ways to push the envelop and extend BPM methods and technologies.

The Expert is at the pinnacle of BPM methods and technologies. The Expert is generally recognized for his or her contributions to the industry, and is often asked to lecture or give presentations at national meetings for peers. In short,



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knowledge transfer is the key to success in implementing business process management throughout the enterprise. As we mentioned before, BPM is not a big-bang conversion. The seed must be planted, initial BPM infrastructure put in place, and pilot projects undertaken to establish BPM competency. Having established such a greenhouse for nurturing competencies based on the seven-stage process of BPM mastery, a company can grow into a mighty process-managed enterprise.

Corporations won't be the only "greenhouse" for developing BPM mastery. The business world needs properly trained university graduates who can hit the ground running and contribute to building the company of the future. *Internet World* magazine's August 2002 Digital Tapestry column, "The New M.B.A. Curriculum," explains and is reprinted in our book, *Business Process Management: The Third Wave* (www.bpm3.com).

At some time during the journey from *innocent* to *master* an epiphany will occur. It will be something like, "This is as it should always have been." However, no methodology and no technology is a silver bullet—including BPM. BPM is as powerful as it is precise because the designers chose trade offs based on the first principles of business and technology architecture. Even though BPM can be considered to stand at the leading edge of enterprise computing today, the underlying concept of a design-driven—in this case business-process driven—architecture is hardly new. BPM is not a panacea for software development. While the abstraction of process data and a process virtual machine—based on process calculus—does not limit the ability to develop any process, any procedure or any algorithm, initial process management systems will not be used for all application development tasks. While theoretically unlimited (because of process calculus) in its application to the construction of enterprise processes and applications, companies will find the most appropriate, unique and creative uses for BPM as they build mastery. As companies learn more and gain experience, they will then demand more from BPM systems and tools. The spreadsheet and relational data management systems were initially more limited in their capability than they are today. Likewise, BPM will advance in step with the growing communal knowledge of those who master it—after all, the software development process is a business process, too.

Note

¹ <http://www.waysys.com/>

