

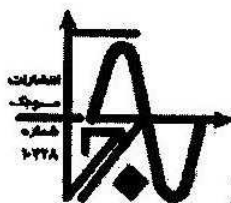
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PRODUCTIVITY INCREASING THROUGH PROJECT MANAGEMENT PERSPECTIVE

Amirhossein Akhavan Mofrad

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Creating Innovative products



Mojak Publication



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Preface

When the Manifesto for Agile Software Development (www.agilealliance.org) was written in spring 2001, it launched a movement—a movement that has raced through the software development community; generated controversy and debate; connected with related movements in manufacturing, construction; and aerospace; and been extended into project management.

The essence of this movement, whether in new product development, new service offerings, software applications, or project management, rests on two foundational goals: delivering innovative products to customers (particularly in highly uncertain situations) and creating working environments in which people look forward to coming to work each day.

Innovation continues to drive economic success for countries, industries, and individual companies. While the rates, of innovation in information technology in the last decade may have declined from prodigious to merely lofty, innovation in areas such as biotechnology and nanotechnology is picking up any slack.

New technologies such as combinatorial chemistry and sophisticated computer simulation are fundamentally altering the innovation process itself. When these technologies are applied to the innovation process, the cost of iteration can be driven down dramatically, enabling exploratory and processes to be both more effective and less costly than serial, specification-based processes. When it takes a pharmaceutical company months to develop a chemical compound and test it, errors are costly and careful laboratory design becomes the norm. When combinatorial chemistry can create hundreds, if not thousands, of compounds in a day and sophisticated instruments can test them in a few more days, careful specification and design can be less effective and more costly than careful experimentation. This same dynamic is at work in the automotive, integrated circuit, software, and pharmaceutical industries. It will soon be at work in your industry.

But taking advantage of these new innovation technologies has proved tricky. When exploration processes replace prescriptive processes, people have to change. For the chemist who now manages the experimental compounding process rather than designing compounds himself, and the manager who has to deal with hundreds of experiments rather than a detailed, prescriptive plan, new project management and organizational processes are required. Even when these technologies and processes are lower cost and higher performance than their predecessors, the transformation often proves difficult.

Experimentation matters, as the title of Harvard Business School professor Stefan Thomke's recent book exclaims (Thomke 2003), but many project managers are still mired in a prescriptive, conformance-to-plan mentality that eschews that very experimentation.

Project management, at least that sector of project management dealing with new product development, needs to be transformed. But to what? It needs to be transformed to move faster, be more flexible, and be aggressively customer responsive. Agile Project Management (APM) and agile product development answer, this transformation. In brief, APM brings together a set of principles and practices that enables project managers to catch up with the realities of modern product development.

The target audience for this book is project managers, those hearty individuals who shepherd teams through the exciting but often messy process of turning visions into products—be they cell phones or medical electronic instruments. APM rejects the view of project managers as functionaries who merely comply with the bureaucratic demands of schedules and budgets and replaces it with one in which they are intimately involved in helping teams deliver products. Agile project managers focus on products and people, not paperwork.

There are four broad topics, covered in Agile Project Management: opportunity, principles, framework, and practices. The opportunity lies in creating innovative products and services—things that are new, different, and creative. These are products that can't be defined completely in the beginning but evolve over time through experimentation, exploration, and adaptation.

The principles of APM revolve around creating both adaptive products that are easy and less expensive to change and adaptive project teams that can

respond rapidly to changes in their project's ecosystem. The framework is a set of high-level processes, or phases—Envision, Speculate, Explore, Adapt, and Close—that support exploration and experimentation and deliver results reliably, even in the face of constant change, uncertainty, and ambiguity.

Finally, the practices—from developing a product vision box to getting the right people—provide actionable ways in which project teams can deliver results. At its core, APM focuses on customers, products, and people—delivering value to customers, building adaptable products, and engaging talented people in collaborative work.

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