Information Systems Project Management, Second Edition
How to Deliver Function and Value in Information Technology Projects
By Author: Jolyon Hallows
(A book review by R. Max Wideman)

Introduction

Author Jolyon Hallows is a friend of mine and I am reviewing his book, not because of that, but because of the value of the book and to make a few points in the process. The book's title suggests that the subject matter is about project management in the information systems field. In a sense it is, but what it is really about is managing the technology of information systems as a project manager. Our first impression is that this book is about project managing software projects. However, the author assures us that it is more than that – it also includes infrastructure such as server installations, network design, and services such as information management.

That differentiation between project management and technology management may be subtle or even nonexistent to many. However, I think it is very important simply because it answers a perennial question. That question is: "How much do I need to know about the technology of the project I am working with to be an effective project manager in this domain?"

You see, project management and technology management are two separate areas of study. The first will stand you in good stead working on most projects in most domains most of the time. However, the second is what you need to know on a specific project to be able to understand what is, or should be, going on! As Jolyon observes at the beginning in his Acknowledgements:

"This book arises from my own personal studies of project management, my many years of working in and managing projects, and the scars I have accumulated to prove it."¹

Later in Acknowledgements Jolyon says:

"Finally, I give special thanks to my wife Sandra, to whom this book is dedicated, for her support and love during many times over the years that I questioned whether being a project manager was worth it."²

Of course, with that introduction I just couldn't resist turning to the end of the book to find out the answer to that question. On the last page Jolyon says:

"We need to find and develop people who can work with special ambiguities of project life, who can master the intricacies needed in project planning and execution, and who are powerful managers of themselves and their teams. Such people are not common. Computer systems careers lead more readily to advanced technical expertise or line management. Project management is too often seen as a stepping-stone to 'real' management or as a useful ancillary set of skills for technical leaders. Neither view is likely to produce people who are eager to make project management a lifetime career.

"This book, like others that celebrate project management as a worthwhile vocation, is an attempt to describe the complex world of projects and the range of skills needed to manage them. Above all, I have two hopes: that organizations will recognize the significance of project management in their formal career streams and that project managers will emerge who embrace the challenges and rewards inherent in a needed, exciting, and fulfilling profession."
So there you have it. If you are one of those people, plunge right in.

**Book Structure**

Jolyon's book is not really divided into chapters, but five major sections as follows:

1. Introduction
2. Understanding the Project
3. Defining the Project
4. Planning the Project, and
5. Running the Project

Each of these sections is divided into subsections ranging in number from five to eighteen. Of course, these main section headings do not really tell the story of the book's contents, and the subsection titles are too numerous to list here. The subsection headings in fact represent the project activities that Jolyon would expect to find under each heading in the chronological sequence of a full project life span. As you might expect, the two largest main sections are Planning and Running the Project. Nevertheless, to give a taste of the book's contents, here is just a small sampling of the fifty-four subsection titles.

Under Planning the Project:
- Defining and Managing Risk
- Project Assumptions and Constraints
- Planning for Quality
- Planning for Implementation and
- Planning for Completion

Under Running the Project:
- Building the Team
- Tracking Progress
- Controlling Action Items
- Solving Overrun Problems
- Managing Client Expectations

The text is illustrated with forty-nine Exhibits that are either tables or graphics. The book is also laced with sidebars providing "What If?" scenarios and suggested remedial "Actions". There are some seventy-five such examples supporting the text throughout the book.

For those that already have the first edition of this book, we counted fourteen new or significantly expanded subsections. For example, the Introduction section now includes "The Role of the Project Management Office" (assuming the organization has one – and is large enough to justify one.) Under Defining the Project, and after the subsection "Defining the Deliverables" is a new one titled "Defining the Project Objectives". (Actually, we think that logically this should have come first.)

Planning for Implementation, and Planning for Completion, are both new subsections under Planning the Project, and Closing the Project is new under Running the Project. These last two are important for reasons we'll disclose later.
**What we liked – Content**

**Text**

The text is well written in a crisp style, and with a little lighthearted humor. For example, in Planning the Project, Jolyon observes:

> The dictum that 'failing to plan is planning to fail' is better poetry than advice. While nobody plans to fail, simply creating a plan is no guarantee of success. Planning divorced from reality of the project is worse than no planning because it gives the illusion of control. A less lyrical, but more accurate statement is 'Poor planning guarantees failure.'

Or this one under "Identifying Project Risks":

> "If there is one risk that is universally the most dangerous for all projects, it is the following: Corporate management views the project manager's risk analysis as alarmist and will not take the risks seriously until they materialize."

The text is also well illustrated with many simple descriptive examples so that it is easy to follow. Where lists of check items are called for, these are provided as bulleted lists or exhibits, some of which are quite long. In this way, the book provides an excellent reference source without interrupting the flow of content for those reading it as a study text.

**What If?**

We have already mentioned the presence of "What if?" scenarios in the text. These vignettes act to illustrate the advice being dispensed by the author and are most helpful. In fact, so helpful that it would be nice to see a list of them following the Table of Contents, for quick and easy reference. Here are a couple of examples both of which situations are not uncommon.

*What If?*

**Your Estimators Present You with Estimates That You Think Are Too Low**

If your estimates are low, your project will overrun its schedule and budget, and you and your team will become frustrated in trying to meet an impossible set of targets.

**Actions**

Clarify in your own mind why you think the estimates are low. This could be because of your experience on similar projects or because you know that this particular estimator is always optimistic. Present your concerns to the estimator and ask for a commitment to complete the work within the estimate. If the estimator declines to change the estimates but fails to convince you that they are achievable, prepare your project plan using your higher estimates. However, if during the project you can assign the work to the estimator, use the lower estimates that you were given. If the team member meets the lower schedule, you will have come in under budget. If not, your schedule will accommodate the 'slippage', and you will have some background to better judge future estimates.

Note that the estimator in this example is one of the production team, not a trained estimator. Few production people are given instruction on how to estimate – it's not recognized as a necessary part of their skill set. If they were given training, perhaps they might do better. We have experienced this situation first hand. Given that the workers do not normally account for such things as progress.
meetings, coordination, personal administration, coffee and washroom breaks, to say nothing of supervision overhead, or rework arising from sheer fatigue, we have found that a useful multiplier is "three". Yes, three!

**What If?**

**The Client Does Not Agree to Prepare an Acceptance Test Plan**

You will find it extremely difficult to get project signoff. You need to determine why the client is reluctant.

**Actions**

If the client is reluctant because of concerns about how to prepare a test plan, offer to show the client some samples of acceptance plans for similar projects or to provide some guidance to the client's resources in preparing the plan. If the client is reluctant because there are not sufficient resources, you can offer to refer the client to an experienced test-script writer, either internal or external. If the client is reluctant because he or she does not want to get locked in to an acceptance process, this is a symptom that the client is not comfortable with the defined scope and does not want to be committed to specifics. You may need to involve your management to negotiate with the client.6

In our own experience, the client will not agree to more than cursory testing unless it is written into the original agreement for the project. Indeed, the "cursory testing" may be no more than a period of "trial use and comment" – after which expect more work! Serious testing requires serious quality control expertise that the client often does not have, so following Jolyon's advice is most important.

If after doing so, the client will still not agree, then we suggest that you, as project manager, should explain that "client satisfaction" is vital to the success of your project and, of course, in his or her best interests. So, then pose the question: "Under what conditions would s/he be prepared to undertake some form of review/testing and sign off on the project deliverable?" We cannot second-guess an answer that may, or may not, indicate an increase in scope, but if there is total reluctance, it is indeed time to refer such a recalcitrant client to higher management!

**What we liked – WBS & PMO**

**Work Breakdown Structure**

We were interested to see that Jolyon tackles the contentious topic of Work Breakdown Structures. This is a subject not well covered in the software world and probably less often put into practice. He deals with it in the subsection titled "Defining Project Activities" and carefully explains how to carry out this essential project management technique. A good example of a software/hardware project WBS is provided in which we were particularly pleased to note that entries are shown as nouns except at the lowest levels of each WBS branch where the entries are verbs. That should please the diehards!

Since "activities" can be major and minor, and decomposed to almost any degree, the issue arises as to when is enough, enough? Jolyon suggests:

"In deciding whether to further decompose an activity, your sole consideration must be whether the activity is large, complex, or unwieldy enough to require further breakdown. In other words, an activity is 'small enough' when you are satisfied that it is manageable."7
On (activity) contingency, Jolyon observes that:

"A contingency is an allowance for problems. It is better to state it overtly as an activity in the WBS than to covertly bury it in each work activity. If it is overt, you can make explicit decisions to use some of it and to direct it to problem areas. If it is hidden, not only can it not be formally used, but the estimates for individual work activities are overstated by the amount of the contingency. The inevitable consequence is that the work will expand to occupy the inflated time period, the contingency will be used up, and the project will take longer than it should, and, when problems arise, there will be no contingency left to deal with them."

Amen to that! But that does assume that management has not already "carved off the fat" (as they are inclined to put it) to set aside contingency for themselves. Our own strategy is to add a final (somewhat bogus but ample) activity titled "Administrative cleanup and closure". This prevents people from "helping themselves" to any item labeled "Contingency", management finds it difficult to argue with or even question, and it does give the project manager some elbow room.

Project Management Office

On the subject of a project management office (PMO), Jolyon opines:

"Until recently, most organizations treated project management as if managing projects were a matter of individual preference. . . . [However,] Organizations have come to appreciate that there are two main problems with this approach:

1. Project management is a discipline. Those who do not exercise the principles of that discipline will see their projects struggle and often collapse. Therefore, the effectiveness of project management is as spotty as the variations in formality.
2. When project managers leave the organization or are transferred to another project, it is extremely difficult for their replacements to step in and take over. This is because all of the project documentation conforms to the departing project manager's personal preference, instead of to an organizational standard.

"Some organizations, in an attempt to create standards, purchase methodologies that are supposed to provide structure and consistency to projects. Again, however, good intentions fall prey to three problems:

1. Most of these methodologies are focused on project activities themselves . . .
2. The methodologies deal primarily with applications development projects . . .
3. Any methodology is only as good as the degree of its use.

Jolyon answers his own questions with:

"So how is an organization to create and enforce standards? The answer that is gaining wide acceptance is the project management office, or PMO. The PMO is a corporate department responsible for the practice and discipline of project management within the organization, or at least within that part of the organization that falls under its control."

Downside

We do have some quibbles.

For example, planning a project should be at the heart of sound project management. In this regard,
Jolyon states that: "Planning a project consists of the following fifteen activities:"\textsuperscript{11} and then provides a list that starts out with: "1. Defining project risks and identifying actions to mitigate them." Of course, this presumes that the goals, objectives and scope of the project have already been determined, a subject dealt with in Section 3.

But there is a broader issue. What activities does the planning of a project truly consist of? Jolyon lists 15 in somewhat random order. The Institute's PMBOK Guide, under the heading "Develop Project Management Plan" also lists fifteen items as subsidiary plans.\textsuperscript{12} The problem with both these lists is that they contain items that are subsidiary to other items in the list. In other words, in project management, many important activities are naturally nested within broader activities. So, might not the first order of business be the development of a product breakdown structure (typically but incorrectly termed WBS) with its logical sequences or relationships?

In our view, a good project management plan should address each of the eight knowledge areas of the Institute's PMBOK at a level and detail appropriate to the project at hand. That means that there are up to eight subsidiary plans, calling for just eight broad planning activities – period. The rest are simply elaborations of the first to the extent necessary for manageability, as explained under "Work Breakdown Structure" discussed earlier!

Jolyon also states that:

"To define a project, you must define, document, and gain client approval for two things: the deliverables and the scope."\textsuperscript{13}

Later he says:

"In preparing a scope statement, remember that there are two types of scope: the scope of the product and the scope of the project. The scope of the product defines the work that the project will carry out, the scope of the project defines how the work will be executed."\textsuperscript{14}

Well, almost. Certainly, there has been much confusion over the years as to the meaning of "scope" and equally certainly there are two types of scope, i.e. product scope and project scope. However, the project management Institute, in its 2000 edition PMBoK Glossary made the distinction between the two as follows: \textit{Project} Scope is the work involved while \textit{Product} Scope represents the end products. It is true that only when you know the extent of the Product Scope, i.e. the deliverables, can you determine how much work is involved, but we prefer to think of the extent of that work as the Scope of Work – yet another term.\textsuperscript{15}

In discussing Scope Change Mechanisms, Jolyon says that: "Regardless of how conscientiously you define scope, it will change, which means you need a mechanism for managing it."\textsuperscript{16} He then goes on to describe that mechanism. In our view, what is missing here is any mention of a "Scope Baseline" against which comparison can be drawn to determine whether or not there has been a change in scope.

Jolyon states categorically that:

"Advocates of many SDLCs [System Development Life Cycles] refer to their approaches as 'methodologies.' This is incorrect. A methodology is a specific set of processes to prepare a set of deliverables."\textsuperscript{17}

We can well imagine people getting hot under the collar over this one. But in truth, an SDLC is no more than a particular sequence of activities, i.e. a "process". A "methodology" is also a particular sequence of activities, i.e. a "process". Ergo, an SDLC is a methodology – more or less. The difference is purely a
matter of semantics.

Jolyon declares that:
"Consulting services and training can be major expense items that can sometimes be trimmed by finding lower-cost alternatives. Some of these services may be available in-house, and the rates will be far lower than outside organizations will charge."\(^{18}\)

In our view, if such resources exist in-house and, of course, are available, then obviously use them. However, don't be misled by the apparent higher charge-out rates of external consultants. Internal hourly rates rarely include for down time, lost time, proposal preparation time and so on that is lost elsewhere in the corporate accounting system. In other words, the apparent saving to the organization shows up only in the project's records.

Our biggest beef has to do with a "Project Management Roadmap"\(^{19}\) that introduces the main sections throughout the book. It consists of boxes representing these main sections, namely: Understanding the Project; Defining the Project; Planning the Project; and Running the Project. This looks to us like an unfinished project life span, so it would be nice to see the last few subsections of the book hived off under a final main heading along the lines of "Finishing the Project".

Considering that the success of any project depends heavily on how well the product is transferred into the "care, custody and control" of the users, this, and all that it implies, is an essential final step. Perhaps in the next edition of the book this omission can be rectified and a little more of Jolyon's experience added as to how best to conduct this vital transfer phase.

**Summary**

As we said in the introduction, what this book is really about is managing the technology of information systems as a project manager. More particularly, this book is about project managing software projects. Managing such projects requires expert skills in managing budgets, people, and processes. It requires someone who is not only proficient in project management, but also someone who understands the highly complex, project-driven information technology (IT) industry. It also helps to have a few tricks up your sleeve, if not from your own experience, then from someone else's, such as author Jolyon Hallows.

In his Conclusion, Jolyon observes that:
"Project overruns are the norm. Rare is the company that consistently delivers on projects on time, on budget, and fully functional. Rarer still is the company that overtly identifies the benefits it expects and actively pursues them."\(^{20}\)

If our industry is to mature to the point where it can routinely deliver what is required of it, one of the issues we must resolve is the shortage of qualified, experienced, professional, career project managers. We need to find and develop people who can work with special ambiguities of project life, who can muster the intricacies needed in project planning and execution, and who are powerful managers themselves and their teams. Such people are not common."\(^ {21}\)

So, in this book, Jolyon has managed to dispense a wealth of practical experience and pragmatic advice specifically on managing IT projects of significant size. These come in the form of anecdotes, for light reading; worksheets, for immediate use; action plans, for "what if" scenarios; and checklists for fast
lookup. This book gives you appropriate tips and tools to solve unexpected problems and sidestep the all-too-frequent pitfalls of so many IT projects.

Whether your project entails implementing major packages, upgrading hardware, designing a technology architecture, or developing a systems plan, Jolyon’s book should improve your chances of delivering a successful product on time and on budget. But of course you have to read it, digest it, and apply it to become one of those people who are not all that common!

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1 Hallows, J., Information Systems Project Management, AMACOM, 2005
2 Ibid.
3 Ibid, p95
4 Ibid, p96
5 Ibid, pp144-145
6 Ibid, pp179-180
7 Ibid, p126
8 Ibid, p140
9 A "discipline" may be defined as: "Control gained by obedience or training".
10 Hallows, J., Information Systems Project Management, pp12-13
11 Ibid, p95
13 Hallows, J., Information Systems Project Management, p60
14 Ibid, p68
15 You can read more about the term "scope" in Issacon #1125 at: http://www.maxwideman.com/issacons1/iac1125/index.htm
16 Hallows, J., Information Systems Project Management, p72
17 Ibid, p82
18 Ibid, p166
19 Ibid, this graphic is first introduced as Exhibit 1.3 on page 21
20 Ibid, p279
21 Ibid, p280