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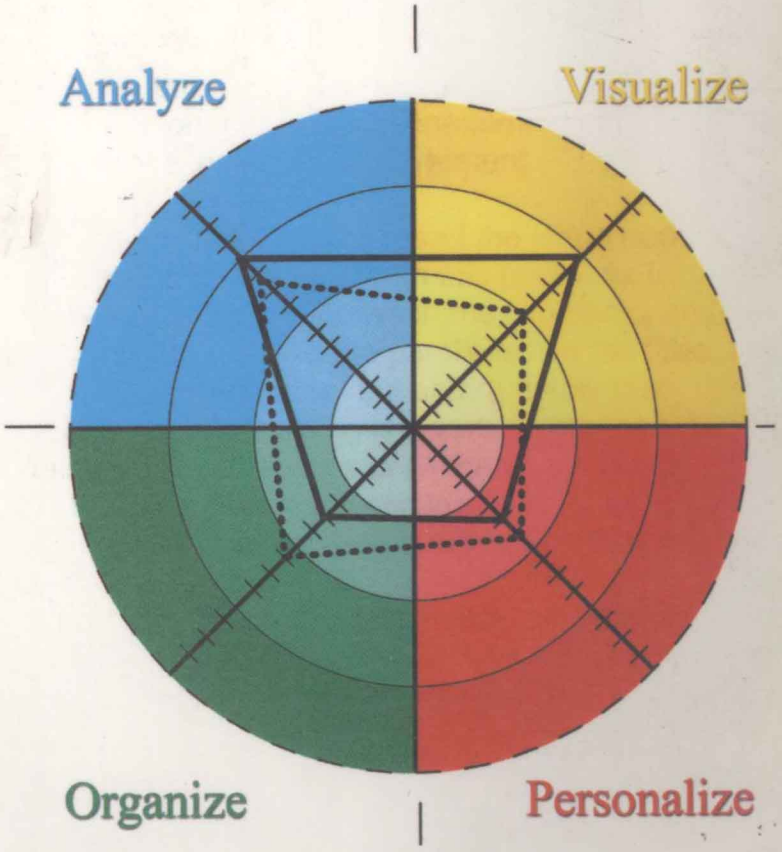
Building Effective Project Teams



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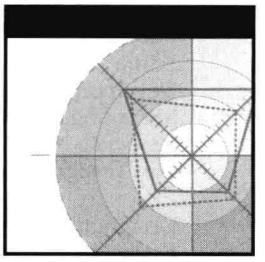

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To Mom and Dad, who taught me to love learning and reading and to always be inquisitive. I owe them more than I could ever thank them for. Dad, you are up there watching and I know you are proud.

To Nancy, my wife, companion, and friend for more than 37 years. Your support and encouragement of my aggressive and over-demanding working habits are a constant source of strength to me. Thanks for being there and staying there.

Introduction

Of all the variables that contribute to the success or failure of projects, the one that is most neglected, and in need of the most attention, is the project team itself. Yes, there are hundreds of books on building high-performance teams, but a closer look reveals that the project itself is hardly ever discussed as a factor to be considered in building high-performance teams. One might erroneously conclude that a team is a team is a team and that it really doesn't make any difference what the project is, team effectiveness and performance are invariant to the project.

After more than 35 years of practicing, training, and consulting in project management, I have reached the conclusion that that belief is just blatantly incorrect. In the chapters of this book I hope to share with you not only why I feel justified in making such a bold statement but also a set of tools that everyone should be using to improve team effectiveness as a function of the project. Positioning the project team to be more effective is a project-driven and project-dependent activity.

It's time we adopted a killer instinct and did something innovative to attack the reasons for project failures. We all know that project failure rates are unacceptably high. Surveys of IT managers conducted throughout the 1990s report failure rates ranging from 50 to 80 percent or more. Regardless of the type of business you are in, that failure rate is unacceptable. Equally unacceptable is the fact that many of the managers who were surveyed were not surprised by the reasons for those project failures. They readily admitted that they had not been very effective in taking corrective steps to reduce the incidence of project failure.

Over 50 percent of the failures that occur are due, at least in part, to the behavioral characteristics of the project team itself. I am not referring to the behavioral characteristics of any individual team member but rather to the collective behavioral characteristics of the team. For example, suppose that the team was composed of very analytic members and that the project they were working on required a great deal of creativity. What do you think would happen? You probably wouldn't get the results you were expecting. Conversely, suppose that the team was composed of all creative people and that the project required the implementation of a new computer system. What do you think would happen? Again, you might be disappointed because the creative energies of the team will somehow find a way into the project, and that is definitely not what you want to have happen. Implementation requires following a well-defined procedure, and that doesn't leave much room for creativity. Such a team would be frustrated to the point where the risk of failure would be very high.

I find it very interesting that we go to extreme lengths to build the best professional sports team but put almost no effort into building the best project team. Take baseball, for example. Compare the effort that goes into building a winning baseball team to what we do to build a project team. Players demonstrate their ability through the actions they take and the decisions they make when presented with actual game situations. This is how their coaches and managers assess them. Project team members, on the other hand, rarely are evaluated or assessed as to how they make decisions, solve problems, or resolve conflicts. Their managers seldom have an opportunity to observe performance in any of these areas. Teams are formed with little or no consideration for these less obvious, but oh so important, traits and skills.

How do you build your project team? It probably goes something like this: Harry just came off an implementation project. He's a database architect. We need a database architect on the new design project, so let's put him on the team. To form your team as casually as this is asking for trouble. There is a lot more than a person's availability to consider when forming a successful project team. You probably have guessed that technical skills are a requirement. Of course, they are, but there is more—much more. I am going to supplement your practices with a whole new set of ideas—things you may have never thought about before. If you follow my lead, you will be more successful with your projects.

As I conducted my own study of the published research on team effectiveness and the tools that are commercially available to achieve it, it was quite clear that there was no "how to" book on building effective project

teams. In addition, I was unable to find a single publication that drew all of this information together in a way that the practitioner could use it.

My book will teach you several practical team assessment, formation, development, and deployment strategies that you can use to reduce project failure rates significantly. I'll show you how to use existing tools to form a balanced team that is designed to be effective and how to assess the strengths and weaknesses of an existing team and build strategies to take advantage of its strengths and mitigate its weaknesses.

One concept that I develop in this book is that the project, the project team, and the project management process form a system. I can't claim to be the first person on the planet to come to that conclusion, but I found no mention of that idea in any of the project management books I had read. This system relationship is significant. In order for a system to work, all of its parts must perform their function. In order to perform their function, all the parts must be integrated into a functioning whole. Furthermore, the parts, when integrated and functioning according to their purpose, will create a synergy—the whole is greater than the sum of the parts. Sounds good so far. You might now be asking: "So, how do we know if the parts can be integrated?" Or, perhaps for the practitioner, the more relevant question is: "How do we make the parts so that they can be integrated?"

Integrating the three parts—the project, the project team, and the project management process—is the central theme of this book. Much of what I cover in this book is not new. What is new is the way in which I have integrated these three parts into a system. In so doing I have built a working model with the tools to support it.

What Is Not in This Book

This is not a book about project management methods. I will introduce and briefly discuss a robust five-phase project management life cycle, which is an essential part of the project team life cycle model introduced in Chapter 3, "Team Models." Other than a few comments on methods scattered elsewhere, that is all you will find about project management methods in this book. My previous book, *Effective Project Management, 2nd Edition* (Wysocki et al., Wiley, 2000), covers project management methods in more detail. You will find the ideas and concepts expressed here to be entirely consistent with that book.

This book will not cover how to improve an individual's performance as a member of your team. I am pleased to be able to refer you to a book that

I wrote with my good friend Jim Lewis and that was recently published. It is called *The World-Class Project Manager: A Professional Development Guide* (Wysocki & Lewis, Perseus Books, 2001). In that book you will find a completely developed strategy for defining your project manager career goals and building a professional development plan to achieve them. The focus of that book is the individual. The focus of this book is the project team. In this book, the only discussion of an individual's skills, competencies, and behavioral characteristics is in relation to their contribution to the team.

This book also does not cover how to build high-performance teams. Appendix A, "References and Reading List," contains a listing of some of the better-known books on the topic. The hundreds of books on building high-performance teams focus on the general characteristics of teams regardless of the work to be assigned to the team. Most of those books assume that the team is co-located and working on one assignment at a time. While there are examples of such teams, in today's contemporary world that is not a very likely situation. Team members work on several projects simultaneously and are often geographically dispersed. That radically changes the strategy one might choose for building project teams. Contemporary project teams cannot expect to spend a lot of time together (that is a prerequisite for high-performance teams).

You may be familiar with the stages of team development (forming, storming, norming, and performing). Although these are valid stages, frankly they generally won't occur in most cases because of the constraints that are placed on teams by today's business environment. We live and work in a fast-paced, fast-change, and high-demand environment. Projects tend to be of short duration. Contemporary project team membership can change at the drop of a hat. High-performance team building strategies fall apart under those conditions. It is my experience that project change is constant and can affect the characteristics of the project; hence, it can radically affect the effectiveness of the team. Only by recognizing these facts and quantifying them can we hope to build teams that can perform to expectations.

Who Should Read This Book

If you are involved in the assessment, formation, development, and deployment of project teams for mission-critical or troubled projects, you need this book. I will cover two situations. The first and most likely situation

occurs when the project manager inherits a team whose membership has already been determined. There is little or no flexibility to replace any of the members. This book can help by showing the project manager how to assess the behavioral characteristics of the team using commercially available tools. This book will also show project managers how to deploy the team most effectively based on those characteristics. It will help the project manager visualize team strengths and weaknesses and recommend assignments as well as training needs.

The second and least likely situation occurs when the project manager can recruit team members and form the entire project team. This will happen in projectized organizations. In this case, this book can help project managers by providing a decision support system. It provides the capacity for "what if" scenarios so that the project manager can examine and analyze the consequences of alternative team composition.

Once the team is formed and work on the project begins, you'll find additional uses for this book. Project phases and milestones represent major shifts in project focus and can have an impact on team member deployment. Changes could be customer initiated or market driven. A change in project scope may alter the alignment between the project and the project team, which may require an adjustment in deployment strategy or a change in team membership. The loss of one or more team members will require a replacement. This book can help the project manager evaluate alternative choices for replacing the lost member(s).

How Is This Book Organized?

This book consists of this Introduction, 13 chapters arranged in 4 parts, and 3 appendices.

Part One, The Background, consists of four chapters that provide the background and infrastructure for our journey to effective project teams.

Chapter 1, "The Successful Project," summarizes the most recent study on project failures and identifies not only the critical success factors for projects but also the critical success factors for project teams. That will lead us to consider the characteristics of successful project teams.

Chapter 2, "The Project Environment" also examines the environments in which projects are undertaken. That involves a discussion of organizational structures and team structures with reference to how they help or hinder the project team. Many of the tools discussed in this book are effective or not depending on the environment in which they are used.

We need to understand that environment in order to apply the tools effectively.

Chapter 3, "Team Models," contains brief overviews of three approaches to team role models. These represent the current thinking regarding team structure, independent of the nature of the work the team will be charged to complete. This will help the reader understand how teams have been analyzed in the past and why these models are not sufficient for today's project environment.

In Chapter 4, "Project/Team Alignment Model," I introduce my concept of the project-driven team structure that I believe addresses team effectiveness much better than the generic models in Chapter 3. I introduce my own life cycle model for describing the project team and integrate it with a robust project management life cycle. The result is a paradigm shift in thinking about the whole development process of teams that can be more effective. Let me assure you that I have not taken a radical approach to this notion but rather incorporated the best from the existing research on creating high-performance teams and merely factored the project into the models.

In addition to skill and competency assessments, which may have been done to form the initial project team, a number of other assessments are needed in order to determine the likely effectiveness of the project team. While some of these assessments may be used to further adjust team membership, the more likely scenario is to use them to formulate strategies as to how to use the existing team most effectively. *Part Two, Assessment,* covers the assessment process and introduces four tools that provide the data on which TeamArchitect depends.

Chapter 5, "The Case Study," is a brief introduction to the case study, O'Neill & Preigh Church Equipment Manufacturers. It includes a description of the business situation facing them, the project they have commissioned to build a touch-screen organ called the Gold Medallion Organ, and the candidate pool of 16 potential team members from which a project team will be formed. The next four chapters discuss the behavioral characteristics of the project team members.

In Chapter 6, "Thinking Styles," we discuss assessing the thinking styles of the project team members using the Herrmann Brain Dominance Instrument (HBDI) from Herrmann International. The HBDI is a 120-question instrument that measures the extent to which each of the four thinking styles (right-brain, left-brain, cerebral, limbic) is preferred by an individual.

Chapter 7, "Problem-Solving and Decision-Making Styles," assesses problem-solving and decision-making styles using the Learning Styles Inventory (LSI) from Hay McBer Training Resources Group. The LSI is a 12-question instrument that measures the extent to which each of the four

learning styles (assimilator, diverger, accommodator, and converger) are preferred by an individual.

Chapter 8, "Conflict Management Styles and Strategies," discusses assessing conflict management styles and strategies using the Strength Deployment Inventory (SDI) from Personal Strengths Publishing. The SDI is a 20-question instrument that measures the extent to which each of the three major value-relating styles (altruistic-nurturing, assertive-directing, and analytic-autonomizing) are preferred by an individual and the sequence of strategies they can be expected to follow in conflict situations.

Chapter 9, "Project Management Skills and Competencies," introduces the Project Manager Skill Assessment (PMSA) and the Project Manager Competency Assessment (PMCA), both available from Enterprise Information Insights. The PMSA is a 54-skill inventory based on Bloom's Taxonomy of Cognitive Learning. The PMCA is a 72-question survey that utilizes a 360-type assessment to measure the observed behavior of an individual in 18 areas involving business, personal, interpersonal, and management competencies. These five assessment tools (HBDI, LSI, SDI, PMSA, and PMCA) form the database on which TeamArchitect depends.

In choosing these assessment instruments, I tried to pick tools that did not require a specially trained consultant to interpret the results. The Learning Styles Inventory (Chapter 7) and the Strength Deployment Inventory (Chapter 8) met this criterion. Furthermore, they are both self-scoring, paper-based instruments although through this book you have access to TeamArchitect and can administer these at a password-protected Web site. The skill and competency assessments (Chapter 9) are also self-scoring, but in the case of the competency assessment, that data must be analyzed by computer to produce the necessary reports. Web-based versions of both of these instruments are available, and the reports that are automatically produced do not require a consultant for interpretation. The Herrmann Brain Dominance Instrument is different. It is not self-scoring, and it does require a certified professional to fully interpret the results. To the extent possible I will try to provide sufficient detail in Chapter 6 and all of Part Three to overcome some of that need.

The Gold Team data is included in all four chapters with interpretations provided. Also, you will have the opportunity to further assess the team members at a password-protected Web site available to you. Based on material presented in these chapters you will be able to interpret the results. This preparation will be needed in Part Three where we extend the analysis to the project team.

Formation encompasses two separate but interdependent activities: profiling the project and profiling the project team. In Part One, I advanced the

notion that team effectiveness results from having configured the team around the characteristics of the project. We already configure the team to ensure that the team has the necessary technical skills and competencies required by the project. That is, of course, necessary but by no means sufficient to ensure the formation of an effective team. More is required. To peel back the onion and better understand the relationship between project and team I developed an innovative application of a commercially available survey instrument (the HBDI) that measures the project and the team on the same set of characteristics. By applying this to the project and the project team we will be able to visualize and discuss the degree to which the project and the project team are in alignment with one another as well as proscribe strategies to account for any observed misalignment. This is the only tool that I know of that has that property.

Part Three, Formation, takes the information you compiled in Part Two and shows how the five assessment tools are used to profile a project and a project team. It consists of three chapters.

Chapter 10, "Establishing the Profile of the Project," shows how the HBDI can be used to create the profile of a project by using a modified version of the HBDI. The project profile is superimposed on the same four thinking styles as the original HBDI. We will look at several examples of the application of this pro forma capability to information technology projects. This is a new application of the HBDI and is introduced for the first time in this book.

Chapter 11, "Establishing the Profile of the Project Team," shows a number of ways we can use the individual HBDI profiles to summarize up to the project team level and represent the HBDI profile of the project team.

Chapter 12, "Assessing Team Alignment and Balance," combines the HBDI project profile with the HBDI project team profile and the other assessment reports to show overall team alignment and balance. The result is a display of the gap that exists between the two. This is also a new application of the HBDI and is introduced for the first time in this book. The analysis presented in this chapter is the basis for the team formation capabilities of TeamArchitect.

Part Four, Development and Deployment, shows how the results from Part Three are used to develop strategies for making the final team alignment decisions and how to sustain that alignment over the life of the project.

Chapter 13, "Developing and Deploying the Project Team," shows by example how alignment is enhanced through team development and through assignments of team members to specific tasks over the life of the project.

TeamArchitect

TeamArchitect is a totally new concept for project managers. It is a decision support system for the project manager. It is a comprehensive system for assessing, forming, developing, and deploying effective project teams. In its present form TeamArchitect consists of this book, an accompanying CD-ROM, and a password-protected Web site called www.teamarchitect.com.

This book introduces the concept, model, and application of TeamArchitect. For those who choose to implement TeamArchitect in their companies, this book will be an indispensable reference. It will show, by way of example, how to present and interpret team assessment data and how to develop and deploy team members to the tasks of the project. Use this book as you take on the responsibility for a project and are forming the project team with which you will want to work. This book should be your companion throughout the entire life cycle of the project. Use it to help form your team, to assess the strengths and weaknesses of your team, to develop strategies for using your team members in the most effective way possible, and to adjust team membership in the likely event of a project change.

The CD-ROM that accompanies this book has all of the data used in the case study that I developed to illustrate the full range of capabilities of TeamArchitect. Ninety-two graphic reports were generated for this case at the TeamArchitect Web site. These reports contain the assessment of a 16-person candidate pool of potential team members, the assessments of 5 different teams that were formed from the candidate pool, and the assessment data of each individual in the candidate pool. You will find this to be a rich source of data for further analysis that you may conduct on your own as you hone your TeamArchitect skills. That information is indexed for easy retrieval and analysis. The CD-ROM also contains a searchable version of the book.

And, finally, the third component of TeamArchitect is www.teamarchitect.com. For those who would like to experience, first hand, the analysis of the case study data, you can try TeamArchitect on the raw case study data. You can create your own teams, analyze the data, and make decisions on development and deployment. By working with the case study data in this fashion you will be experiencing the look and feel of TeamArchitect. If you would like to obtain TeamArchitect for your own company, you can find the details in Appendix C, "How to Get TeamArchitect Tools."

TeamArchitect is a work in progress. I am currently using TeamArchitect and have been using many of its tools for several years. The results are very encouraging. I have been able to produce good value for my clients in what is presented here. But there is much more. I continue to work with several colleagues who share my desire and approach to improving team effectiveness. I assure you that we are only beginning a great journey. And that great journey will produce a number of significant boundary-stretching tools and techniques for improving team effectiveness. I hope to affect your approach to building project teams and show you how TeamArchitect can make a measurable bottom-line impact on the business of your company.

You will undoubtedly form opinions about what I have presented and will have thoughts and ideas of your own as to how it could have been done better. If that is the case, I want to hear from you. If we can collaborate and share ideas, we can have a positive effect on project success. I want to hear from you!

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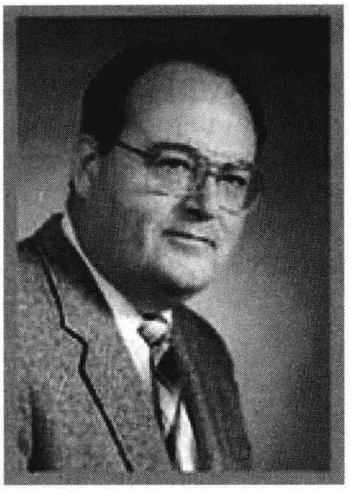
There are a number of very special people in every person's life to whom he owes a debt of gratitude and special thanks. It's hard to remember all of them, but I have a special place in my heart for my EII colleagues, especially Beth Agostino and Honorine Misner. Their support and encouragement of this project have been a source of strength for me, especially during the hard times. Beth is totally responsible for the Web site development and for bringing the simulated case to life. Her positive attitude and "can do" approach are her strengths. Honorine has been a colleague and fellow worker for more than seven years. I have worked with her on a number of projects and have always valued her candor and professional approach to her responsibilities. I truly value their friendship and contribution to the TeamArchitect concept.

There have been so many peers who have contributed to the formation and development of my approach to team formation, assessment, development, and deployment that it is impossible to list them all here. Special mention is due to Jim Lewis, a friend, colleague, and co-author. His advice and ideas regarding TeamArchitect have helped me make several improvements to earlier models. Thanks also to Ann and Pat Herrmann for their willingness to listen to new applications of the Herrmann Brain Dominance Instrument and to their father, Ned Herrmann, who passed away recently but was a source of inspiration and encouragement to me during

the formative years of the TeamArchitect model. Tim Scudder, CEO of Personal Strengths Publishing, offered food for thought as I began to incorporate the Strength Deployment Inventory into my team assessment model. Similarly, Ginny Flynn, at the Hay McBer Training Resources Group, offered her willingness to support the inclusion of the Learning Styles Instrument into my team assessment model.

Finally, to Terri Hudson, my editor, and to Kathryn Malm, my developmental editor on this project, I owe special thanks and recognition. This is the third project that the three of us have worked on together, and each one has been a productive and rewarding experience for me, personally and professionally. They have listened to my ideas, which I truly appreciate, especially when my ideas were at times somewhat unusual. We have always been able to create a better product as a result. I hope that there are many more to come.



About the Author

Robert K. Wysocki, Ph.D., has over 35 years experience as a project management consultant and trainer, information systems manager, systems and management consultant, author, training developer and provider. He has written ten books on project management and information systems management. He has over 30 publications and presentations in professional and trade journals and has made more than 100 presentations at professional and trade conferences and meetings.

In February 2001 he joined the Sapient Corporation in Cambridge, Massachusetts, where he is Director of Program Management. His responsibilities include project/program management methodology development, integration and deployment, project manager professional development and certification and project management tool evaluation, acquisition and integration. Sapient was founded in 1991 and has grown to become a leading business consulting, systems design and development, and systems integration company with offices throughout North America, Europe, and Asia.

In 1990 he founded Enterprise Information Insights, Inc. (EII), a project management consulting and training practice specializing in project management methodology design and integration, project support office establishment, the development of training curriculum, and the development of