
Preface

Why This Book?

Addressing the Challenges

In managing various projects, at first small then becoming larger with time, I faced the deficiencies of common “great” management guidelines from renowned bodies. These guidelines and standards missed the point of competence focus, recurrence of processes, uncertainty and complexity in challenges, decisive human factors in projects and, most of all, the capacity for intuitive deployment. As DeMarco and Lister put it: you’re like the vaudeville character who loses his keys on a dark street and looks for them on the adjacent street because, as he explains, “The light is better there” (DeMarco and Lister 1999). Being responsible for my small team of project managers in the company and for hundreds of my students on two continents, and striving to deliver ever-better managed projects to my customers and stakeholders, I felt it my duty to search for the keys where they were lost.

Role of Self-management

One of the key recognitions, and in consequence a distinctive feature of this book, is the impact that the personality of the project manager has on the fate of the project. I consider the project manager’s successful self-management in work and life process to be as important in any endeavour as all the other project management processes covered by the above-mentioned standards and guidelines.

Focus on Reality and ISO 21500:2012

This book attempts to reflect as closely as possible the project reality, cover the newly published ISO 21500:2012 standard, benefit from the best contributions

worldwide and provide a concise yet powerful toolbox. It aims to be easy to use and intuitively supportive for project managers. The evidence so far indicates that these targets have been successfully met.

What Is New?

With the benefit of my professional experience, I scanned all current (and there are plenty of them!) contributions in the relevant fields. Very few covered comprehensive project management as I see and experience it daily. As a result, a number of innovative methods and techniques, highly practical and real-life oriented, have been conceived. You will not find them elsewhere:

- Project management is perceived as a set of processes – in accordance with the ISO 21500:2012. This is not the perception of most popular approaches so far.
- We do work in loops, continuously monitoring our performance and choosing what action to take. Project management should also be perceived like this: as a third-order cybernetic system. In contrast to the new ISO standard, the control process is itself subject to control (and adjusting action if wanted) so it is treated as a second-order cybernetic system. First-order systems feedback through the project and the third-order system is the person of the project manager (Kato and Smalley 2011).
- The second-order cybernetics, i.e. the project management processes, never really finish until the project is closed. The ISO standard admits this and yet groups project management processes into what resemble the project lifecycle phases rather than into concurrent processes: initialization, planning, implementation and closing (and controlling). In this book, all processes are balanced and treated equally. The project manager sets the priorities and activates them.
- A project manager should act, not carry around books of good advice. So, the simple mnemonic of a clock, the L-Timer®, is introduced to facilitate taking the right action at the right time and to keep all second-order cybernetic system processes perpetually running.
- The human factor, considered decisive for project success, takes a prominent place in this book. It is treated in processes in same way as the administrative (formulaic) issues. This allows a better balancing of the efforts of the project manager and the team.
- The 5W1H of Toyota is modified to 6W to better support the project manager in planning and scheduling.
- The activity/role model is considered best for organizing a project team because it facilitates higher coverage of all relevant project issues.
- Culture is taken into consideration when organizing the team, often beyond the scientific management rules.
- The project manager has to participate in procurement processes. The thoroughly discussed WTO/GPA rules offer an excellent base for private industry as well.

- Integration means integration of the three “P”s: the product, the process and the people.
- Knowledge management in a project is handled along the Nonaka and Takeuchi conversion model, with evaluation of operational sub-processes at each stage of the model supporting the project manager in facilitating the right processes.
- All projects benefit from a clear project management handbook. However, the decision as to what is included and what is omitted is mostly arbitrary. Here, the “in” comes from the customer demands mapped onto the L-Timer® processes. Each demand is weighted. This secures the comprehensiveness and fulfilment of all customer demands and dealing with them only once at the right place, and thus enables the project manager to balance priorities.
- Knowledge management is not documentation management! Both of these have different target recipients and different goals. In this book, they are clearly treated as separate processes.
- Personalities are evaluated along the MBTI (Myers–Briggs taxonomy) for their project role suitability. You may wish to check yourself or your team members and then consider the informal roles, which impact the performance of both you and your team. The integral humanism and Max Scheler value systems are viewed as the best choices for evaluating project manager moral behaviour. This is very seldom considered in project management and yet is crucial.
- Unique and efficient is the required evaluation of candidates for project roles. In most cases, the demanded capabilities are defined by the company HRM department and have weak or no relationship to the real project tasks. In this book, only the activities relevant to execution of the project management processes are taken into consideration and mutually weighted. The capabilities required to perform exactly these activities are named and also weighted against each other. In the next step, the candidates are evaluated. In this way, a clear picture of how candidates might perform needed actions is obtained.
- There is no project in which conflicts do not occur sooner or later. So, a project manager is well advised to prepare for this. The creative and useful PACTAR (Spanish: to negotiate) technique for conflict solution is conceived especially for dealing with project team conflicts.
- Communication is proven to be the key success factor in projects. An innovative communication model based on the transactional analysis of Eric Berne takes the MBTI personalities and the informal roles mutual relationships into account.
- All stakeholders watch the project manager. The self-management ability of the project manager impacts the project and the stakeholders’ perception. A personality entities interrelation chain can be helpful here.
- The third-order cybernetics of the project manager gets us back to the project manager’s mental model. This, combined with intrinsic motivation, impacts decision making. Careful and unique selection of techniques can help the project manager to balance the demands of work and personal life.

- A well-balanced project manager becomes a leader. The holistic approach of K. Candis Best matches the cybernetic view and results in the LEAD model: launch, engage, act and deliver.
- Sense-making intelligence distinguishes a leader. A project manager needs IQ to be an expert, EQ (emotional intelligence) to be a good manager and SQ (sense-making intelligence) to become a leader, i.e. to handle project uncertainty.
- The Motivational Factor Inventory, developed by the Swiss Military Academy at the renowned Federal Institute of Technology and co-authored by the author of this book, provides project managers and stakeholders with a powerful instrument for people handling. It is now widely used in several countries on three continents.
- This book is very well organized. All chapters follow the clock, starting from 07:00 Planning & Scheduling: P&S. You will find always a “Quick look” at the beginning of each chapter, then a description of the process, followed by methods and techniques with tools, templates and checklists.
- There is a bibliography of over 400, mostly actual, sources. You may wish to benefit from this inventory of current thinking on the subject.
Isn't it enough to get into?

Who Should Read This Book?

Project Managers

Project managers facing complexity and uncertainty can find the right tool in this book. The logical and understandable guidelines and checklists cover all events in a project. The assessment of complexity and uncertainty is personality-based. This means that everyone can tailor their activities, methods and techniques to their own project and their own capabilities, yet keep the necessary balance through use of the weighting system. A specific project management handbook (charta) may be drawn along the structure of this book (I do this for my projects and have never missed anything so far).

Supplier and Purchaser Project Managers

The viewpoints of the project manager on the supplier side and the project manager on the purchasing side are different. The first has to structure the project along the technological and manufacturing issues, and the latter has to put the business case in the foreground. However, in most cases, a certain amount of technological integration with other parts of the project takes place on the purchaser side, so the challenges are ambiguously technological, organizational and social and go well beyond the project directorship. These project managers can find particular support in this book. The issues are addressed and efficiently supported with selected

methods and techniques. A complete chapter is dedicated to integration and another to WTO procurement rules, which have been adopted by most national legal systems. The management of planning, controlling, risk, change and a few others are relevant to both parties.

Experienced Project Managers

Project managers who already have some experience might find the human factor chapters highly conclusive and address their current needs. The chapters cover topics such as handling the informal roles in projects and empowering team members in leadership.

Students

The stepwise explanation of the project management processes and easy navigation through the material make this a comprehensive and understandable textbook for those acquiring basic project management knowledge.

Educators

Based on the logic presented in this book and an andragogic educational concept, a cluster of courses have been developed and are provided at several universities in Europe and Asia. PowerPoint presentations can be downloaded from the associated webpage. Educators may also find efficient support in their endeavours.

Female Project Managers

I know several highly successful female project managers and they should not feel ignored. I admire the Microsoft EMEA Enterprise Services Head of Public Sector Mrs Angelika Gifford, who lent her personality to open the Part II of the book dedicated to Human Factor Processes in Project Management. For simplicity of writing the masculine form is used, yet the intention of the author is to be gender-independent.

Content of This Book

The Introduction provides well-founded definitions, originating where available from the ISO 21500:2012 Guidance on Project Management (ISO 21500:2012 2012). Then, the basic concept of cybernetic feedback loop systems is explained and project management as a third-order cybernetic system described.

The existence of feedback reflects both its necessity and the successful practice of project management processes.

The structure of second-order cybernetic processes is further explained. To simplify memorization and application, the analogy to a watch was deliberately sought and the L-Timer® concept created.

Each of the other chapters is dedicated to a single project management process. They are sequentially ordered, beginning at 07:00 in the morning and closing 23 h later at 06:00. Every chapter has exactly the same structure:

- XX:00 Quick look: What it is about?, Why it is important? What are the steps? How to ensure that the job is well done?
- The process diagram with a feedback loop
- XX:10 The goal of this particular process
- XX:20 Selected methods for efficient process execution. The processes covered by ISO 21500:2012 are listed and later elaborated.
- XX:30 Selected techniques and tools supporting efficient process execution
- XX:40 Documentation of the process
- XX:50 Activities (checklists) and deliverables of the process, assigned to the individual process phases.

XX is the hour associated with a specific process, e.g. 07:00 is linked with planning and scheduling (as in real life, when we start to plan the day) and 20:00 with human resource management.

An elaborate and vast list of current literature accompanies each chapter. An index closes the book.

Acknowledgements

This book follows consequently the L-Timer® logic of my earlier works, yet provides a completely new and updated view on each individual issue. All the new experiences acquired meantime and the very extensive literature survey distinguish this book. Yet, I would like to collectively thank all those who made my earlier books happen. They laid down the fundamentals for further development. The outstanding support of Wistar Informatik AG in Bern, Managing Director Jörg Schildknecht and Bea Wälti, Member BoD, is gratefully acknowledged.

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