



Pergamon

Internet and Higher Education
3 (2000) 299–303

THE INTERNET
AND HIGHER
EDUCATION

Book review

Mastering Virtual Teams: Strategies, Tools, and Techniques that Succeed

Deborah L. Duarte and Nancy Tennant Snyder. (2000). 2nd ed. San Francisco, CA: Jossey-Bass, 256 pages. ISBN: 0-7879-5589-2W01. US\$39.95, includes a CD-ROM

1. Overview

In their “masterful” book entitled *Mastering Virtual Teams*, Duarte and Snyder justify the material in excellent fashion as they open with a statement about the changing environment of organizations. They say that technology and globalization have created an environment in which teams communicate and collaborate virtually, across boundaries of time, geography, and organizations. They indicate that, in many organizations today, most teamworks are virtual. Even in the most provincial and domestic firms, it is rare to find all team members located in one place. In the authors’ view, most of us have quickly, and without a choice, become virtual team leaders and members.

The rationale for the book, and an indication of the breadth of coverage, is explained in the following quote from the book:

Although we have the technological capability to work across time and distance, and we dream of teams that leverage technology into competitive advantage, the fact is that we need new competencies and practices to do these things. Leading and working in virtual teams require much more than computers and technology. Success or failure depends on the attainment of competence in, and implementation of, practices that facilitate working effectively virtually. It is no longer enough to just understand that technology or national culture affects teamwork; successful team leaders and members need tools, techniques, and decision-making strategies that work in a virtual environment.

The book is organized in three parts: understanding virtual teams, creating virtual teams, and mastering virtual teams. Each part contains three or four chapters that cover different aspects of virtual teams such as critical success factors, dealing with technical and cultural boundaries, myths and competencies, the steps in virtual team development, roles of and competencies required of members, building trust, team meetings, team dynamics, and working adaptively.

Included in the book are numerous checklists and tables that help focus the reader’s attention throughout. The 28 checklists include a range of practical aids that can also be used as instruments for research on virtual teams. The range of virtual team topics covered by the checklists includes: assessing critical success factors, competence audit, sample team norms,

technology planning, trust behaviors, and team interventions. For example, the 26 tables include things such as leadership behaviors that support team success, desktop, and real-time conferencing and chat, bulletin boards, and web pages, nonreal-time conferencing, team norms, team-building considerations, and team member role assessment.

The full text of all the checklists and tables is also contained on a CD-ROM that accompanies the book. If one reads only the checklists and tables, the price of the book would be worth it. However, there is much more of use in this book. The CD contains a seamless link to the Jossey-Bass Web site if the reader is online when browsing the CD-ROM. The CD requires either a PC or Macintosh. For the PC, Windows 95 or Windows NT3.51 or later is needed, and for the Macintosh, a 68020 or higher processor or Power Mac with Apple OS version 7.0 or later is required.

The authors indicate that the book is intended for people who work in or lead virtual teams. It is appropriate for those that are new to virtual teams and for experienced leaders. The book provides answers to basic questions along with strategies and techniques for those that are new to virtual teams. In addition, more advanced information is given for more experienced team leaders and members in topics such as team dynamics, virtual meeting facilitation, and working adaptively.

In the author's view, there are many different configurations of virtual teams. One of the central themes of this book is that the task affects how a virtual team is managed. Although virtual teams can undertake almost any kind of assignment, team leaders and members need to have a solid understanding of the type of virtual team they work in and the special challenges each type presents. In the first checklist in the book, the authors describe seven basic types of virtual teams: network teams, parallel teams, project or product development teams, work or production teams, service teams, management teams, and action teams. Each of these virtual team types is described in detail along with the checklist that facilitates the assessment of the type of virtual team.

An extract from one of the checklists is provided below to show the care the authors have taken in designing useful and detailed instruments that can be applied constructively in practice or in research. A networked team is said to consist of individuals that collaborate to achieve a common goal or purpose, and these teams frequently cross time, distance, and organizational boundaries. Examples are found in consulting firms and in high-technology organizations. Organizations that develop technological products also can use networked virtual teams (NASA is one of the agencies mentioned).

A detailed listing of the content of the checklist that deals with types of teams is contained below to give the reader a sense of the breadth and depth contained in these aids for teams:

NETWORKED TEAM membership is diffuse and fluid; members come and go as needed. Team lacks clear boundaries with the organization.

PARALLEL TEAM has clear boundaries and distinct membership. Team works in short term to develop recommendations for an improvement in a process or system.

PROJECT OR PRODUCT TEAM has fluid membership, clear boundaries, and defined development of customer, technical requirement, and output. Longer-term team task is nonroutine, and team has decision-making authority.

WORK OR PRODUCTION TEAM has distinct membership and clear boundaries. Members perform regular and ongoing work, usually in one functional area.

SERVICE TEAM has distinct membership and supports ongoing customer, network activity. MANAGEMENT TEAM has distinct membership and works on a regular basis to lead corporate activities.

ACTION TEAM deals with immediate action, usually in an emergency situation. Membership may be fluid or distinct.

In addition to identifying the type of team, assessing the complexity of a virtual team is also important, and a scale is provided by the authors for this purpose in a checklist. A team has high complexity if it scores yes to between six and eight of items in the checklist. The complexity of a virtual team includes things such as the following: has members from more than one organization, has members from more than one function, has members who transition on and off the team, is geographically dispersed over more than three contiguous time zones, has members who do not have equal access to electronic communication and collaboration technology.

In their chapter on crossing technical boundaries, the authors indicate that the role of technology in virtual teamwork is one of overcoming the complexities of time and distance in communication and collaboration. Virtual teams and their leaders need up-to-date knowledge about technology and its role in facilitating performance. The authors state that the book emphasizes more than that. It includes understanding the technological needs of both the task and the team, matching the technology available to the task, and facilitating the technology to maximize team performance.

The authors list two primary factors that can help virtual teams evaluate the effectiveness of one technology over another in different situations: the amount of social presence required and the amount of information richness required. Social presence is viewed by the authors as the degree to which the technology facilitates a personal connection with the others on the team. Information richness has to do with the amount and variety of information flowing through a specific communication medium. As the authors indicate, social presence and information richness provide the bases for a virtual team to make choices about technology. The two factors can be used as key variables to predict the effectiveness of different technological options in different situations. They also say that the ideal technology will be different from one type of task to another and that more social presence and information richness are not always better.

The book contains an extensive discussion about the role of culture in virtual teams. There are three types of cultures presented by the authors that affect a virtual team: national, organizational, and functional. The authors indicate that virtual teams are multinational and even in domestic teams, cultural differences may influence the team members' ways of working.

The authors have identified six common myths about virtual team leadership. These myths are presented along with the competencies necessary for leading a team effectively, and the authors relate these competencies to the myths. One chapter in the book is organized around a competency audit and the set of six myths. One of the myths is that virtual team members can

be left alone. The authors indicate that virtual team leaders need to work with team members to develop a shared understanding of the level of detail the leader needs to know before and after a decision is made. The other myths range from complexity in using technology to reducing surprises.

The competencies for a virtual team identified by the authors are: performance management and coaching, appropriate use of information technology, managing across cultures, aiding in team members' career development and transition, building and maintaining trust, networking, and developing and adapting standard team processes. For each of these competencies, a set of developmental actions is provided. For example, for the competency category of using technology, the associated developmental actions are: developing a technology utilization plan that takes into account the appropriateness of the technology to the team's task, the type of team, and how the selection of technology may change the team's life cycle. Another item in this competency category includes attending technology conferences and demonstrations and asking to have one's team serve as a pilot team for a new technology.

Duarte and Snyder present six steps needed to establish a virtual team. These are: identifying team sponsors, stakeholders, and champions; developing a team charter; selecting team members; contacting team members; conducting a team orientation session; and developing team processes. A key aspect of team development in the authors' view is a face-to-face meeting at the beginning. They say that no technology can provide the give-and-take, the feeling of human interaction, and the understanding that develops from face-to-face meetings. They charge the virtual team leader to lobby for the needed resources and time to hold a face-to-face meeting.

An important aspect of team development is the concept of team norms. The authors indicate that establishing team norms helps to clarify expectations about acceptable and unacceptable behaviors for all persons that work in or with the team. They say that team norms guide participation, communication, conflict management, meeting management, problem solving, and decision making. These norms include things like guidelines regarding acceptable time frames for returning telephone calls and e-mail messages and the uses of voice mail and pagers. Another team norm would include procedures for scheduling meetings using group-scheduling systems. A checklist is included to assess team norms.

The authors say that it is common for people to believe that working on a virtual team will be easy since they do not physically have to attend meetings. Because of this, it could be possible for team members to over commit themselves. Maintaining a balance between coordination and collaboration may not be as easy as some people think. The load in a virtual team could be heavier than on a traditional team since the authors indicate that virtual team members often need to behave autonomously to perform activities traditionally performed by the team leader, such as networking, resolving conflicting loyalties, and clarifying ambiguous situations. The authors also say that traditional organizational structures, reporting hierarchies, processes, and systems do not ensure coordination and collaboration in virtual teams. A checklist is included for the assessment of team member roles along with an agenda for a session to perform the assessment.

Trust is another key aspect of virtual teams, and the authors provide three factors for building trust in a virtual environment. These are performance and competence, integrity, and

concern for the well being of others. They also provide three checklists and tools to help in creating and maintaining trust in virtual teams. An exercise to build trust is included.

A new model for team development is presented in the book. The model includes two dimensions: task dynamics and social dynamics. In the authors' view, team leaders and members must navigate the task dynamics and social dynamics to ensure good performance and feelings of being part of the team. In addition, they state that the goal of well-managed task dynamics is productivity and the goal of well-managed social dynamics is a feeling of team unity. The authors feel that in the long run, many of the most satisfying experiences we have are in teams that balance task performance and social dynamics. The dynamics work together in the model to create the team experience. Both are necessary for team effectiveness.

Last, but not least, the authors provide an extensive list of principles for working in adaptive environments; lists of key points are also provided at the end of each chapter. The principles are basically rules for virtual team leaders and include things such as the following: regulate distress, maintain disciplined attention, rely on distributed intelligence, encourage leadership in all members, encourage robust communication, and create a learning obligation. The final contribution to practice in the book is a face-to-face exercise to simulate working in an adaptive environment. At the end of each chapter in the book is a useful set of "points to remember". These include rules such as: an effective team orientation is essential to high performance; leading a virtual team requires the development of additional competencies that go beyond the traditional ones; and teams should maximize the use of technology to help with inclusion, participation, and decision making.

2. Conclusion

Mastering Virtual Teams is an excellent resource for practitioners in business and industry, researchers in universities, and, in my view, teachers in all educational settings. In fact, the transition going on in higher education today toward distance and online education makes this book a must for any professor's bookshelf. It is not a book to stay on the shelf for long since it has much to offer for the improvement of practice in any organization. I look forward to using the book in my own classes in project management and in my other classes in the information systems field.

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