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THE THEORETICAL BASIS, OPERATING MECHANISM AND EMPIRICAL STUDY

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理论基础、运行机制与实证研究

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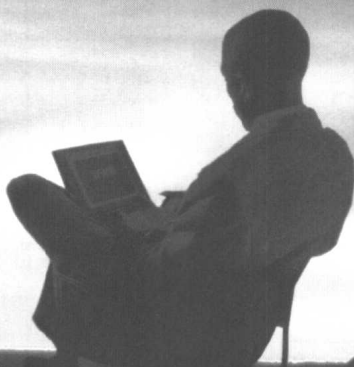
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——理论基础、运行机制与实证研究

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摘 要

虚拟团队的产生并非偶然，其快速发展更是为了应对经济全球化的需要，同时，先进的信息和通讯技术为这种新型组织形态的兴起和发展奠定了技术基础。由于这种新兴的组织形式能够满足全球化（主要标志：全球性的客户、全球性的公司、全球性的工作，知识作为全球性的产品）、组织间协作及有效配置资源的需求，所以，目前已经引起了我国学术界和企业界的关注。国内一些企业已经开始尝试组建虚拟团队，但由于理论的滞后，致使虚拟团队的组建、组织和运行缺乏理论指导，这就迫切需要理论工作者对与虚拟团队的组建、组织和运行相关的理论进行深入、系统的研究，以便对实践起指导作用。另外，虚拟团队作为网络经济条件下的一种新型组织，是组织理论的前沿课题，这样，仅从理论发展与完善的角度来看，也绝不能忽视对这种新型组织的研究，因此，就迫切需要对虚拟团队及其运行机制进行理论探讨，以丰富组织理论的内容。这就是本书的理论意义之所在。

我国加入世界贸易组织（WTO）之后，全球化程度日益加深，在这种竞争越发激烈，市场越发瞬息万变，复杂性、不确定性和多样性日益增加的环境下，企业要想做到如杰克·韦尔奇所说：“确保组织在未来取得成功的关键在于有合适的人去解决最重要的业务问题，无论他处在企业的哪个等级和组织的何种职位，也无论他处在世界上的任何角落”，那么组建以任务和关系为导向、聚散自如的虚拟团队就成为一种必然的选择。由于虚拟团队是一种新生事物，人们还十分缺乏在我国目前现有的条件下提高虚拟团队绩效的经验，所以，对虚拟团队的运行机制进行研究，具有重大

的实践意义。其成果可以帮助企业成功地组建虚拟团队，提高其绩效，从而提高整个组织的竞争力，以利于在激烈的国际竞争中立于不败之地。

本书的研究遵循“为什么要组建虚拟团队→如何组建和组织虚拟团队→如何运行和管理虚拟团队”这个总体思路进行，从而构成论文的三大部分，即理论篇、组织篇和运行篇。

“理论篇”包括四章，其中心内容是从管理学、经济学和社会心理学的角度对组建虚拟团队的理论基础进行构建，从而比较充分地解释了虚拟团队产生的原因以及虚拟团队的性质，最后用框图的形式表示出各种不同理论对虚拟团队的贡献。第一章提出虚拟团队的产生并非偶然，其快速发展更是为了应对经济全球化的需要，同时，先进的信息和通讯技术为这种新型的组织形态的兴起和发展奠定了技术基础。并对有关团队和虚拟团队的概念进行深入探讨和比较分析，使人们对虚拟团队这种新型组织形态有更加深刻的理解。第二章从社会协作系统理论、决策理论、组织结构理论、人本管理理论、学习型组织理论等角度深入分析虚拟团队产生的理论基础。第三章从制度经济学的交易费用理论、博弈论以及公共选择理论的集体行动的逻辑等角度深入分析虚拟团队产生的理论基础。第四章从群体动力学理论、公平理论、社会认同和社会表现理论等角度深入分析虚拟团队产生的理论基础。

“组织篇”包括五章，其中心内容是对虚拟团队的组织设计、组织构成要素（成员、目标、通讯技术）和组织生命周期等虚拟团队组建和组织过程中的重要问题进行探讨。指出虚拟团队是一个开放的系统，由人员、目标、通讯技术三个核心要素构成，即：人员为了实现共同的目标通过通讯技术加以联系，他们相互作用、相互影响，从而构成了一个完整的组织系统，对其中任何一个要素的忽视都会导致虚拟团队整个系统走向崩溃。在进行理论研究的同时，通过问卷和访谈的形式进行了实证研究，对得出的结论进行了验证、修正或补充。最后对虚拟团队组建和组织过程中的精髓进行概括总结。第五章提出虚拟团队的组织结构与传统实体团队的组织结构相比发生了根本性的变化，所以，在进行组织结构设计时，要改变传

统的心智模式，打破传统组织在进行组织设役时，先进行职能分工再进行组合的习惯，遵循以目标和任务为导向的“战略→结构→过程→职责”的组织结构设计思路。虚拟团队的组织程序包括确立团队身份，确定团队战略目标，制定团队规章制度以及运行流程，选拔团队成员，建立团队关系，选择通讯媒体以及召开团队组建会议七个步骤。虚拟团队没有最佳的规模，其规模的确定需要在虚拟团队的效率与整个组织的效率之间寻求平衡。第六章提出由于虚拟团队与传统的实体团队相比发生了根本性的变化，所以，对虚拟团队成员的理解、角色设计以及素质和能力等方面的要求与传统团队都有所不同，基于此，对虚拟团队的招聘流程和方法以及选拔程序进行了具体设计。第七章提出对于具有目标依赖性、角色依赖性和成果依赖性的虚拟团队来说，目标支持并发起整个虚拟团队的运行流程，是虚拟团队生命力和活力的源泉，虚拟团队适合实施目标管理。虚拟团队的目标是由愿景、使命、目标、任务和成果构成的有机系统，其目标流向的设计，遵循“目标→任务→成果”这一普遍使用的模式。虚拟团队目标的依存方式有三种，即：合作目标、独立目标和竞争目标，为了最大限度地提高虚拟团队效率和组织效率，通过相互合作实现共享的目标是最佳途径。第八章提出由于信息和通讯技术的快速发展不仅是建立虚拟团队的起因，而且也促进了虚拟团队的发展，所以，对虚拟团队使用的通讯技术的分类、特征、使用指导、沟通联系过程进行了探讨，并通过分析得出，通讯技术的特征和任务的性质是影响虚拟团队选择和使用通讯技术的主要因素，而且实证研究也验证了这一结论的正确性。第九章提出虚拟团队的整个生命周期过程，是履行任务和维护关系的过程，在生命周期的不同阶段，履行任务和维护关系的侧重点应有所不同，在具体采取措施时应把握好尺度。

“运行篇”包括六章，其中心内容是对虚拟团队运行过程中普遍存在，且亟待解决的领导、激励、信任、培训、跨文化管理和绩效测评问题进行重点探讨，以确保虚拟团队的良性动态运行。在进行理论研究的同时，通过问卷和访谈的形式进行了实证研究，对得出的结论进行了验证、修正或

补充。最后对在我国目前现有条件下提高虚拟团队绩效应注意的关键方面进行了概括和总结。第十章从领导理论的发展提出虚拟团队的领导者与传统团队的领导者相比,还必须具备一些特殊的能力,只有这样才能在团队发展的每一阶段识别出一些功能失效的信号,从目标、人员、通讯技术、信任、文化、激励、沟通、学习等要素着手实施正确的领导策略。第十一章从激励理论的发展提出适合虚拟团队成员的激励要素和激励策略,并设计了适合虚拟团队成员的基于职位胜任能力的报酬体系。第十二章对虚拟团队信任的来源,影响虚拟团队建立信任的要素,建立信任的措施、建立信任的过程,以及领导者如何通过正式的组织结构(硬环境)和非正式的组织文化(软环境)建立和维系信任进行了深入地分析和探讨。第十三章提出了虚拟团队成员的培训规划以及网络培训的要点,并创造性地提出建立学习型虚拟团队这一新概念是虚拟团队培训和开发的终极目标。第十四章从国家文化、组织文化、职能文化的角度分析了文化差异对虚拟团队以及虚拟团队文化的影响,并提出了虚拟团队应当采用的利用文化差异的战略。第十五章提出虚拟团队的绩效评估应分两个层面进行,对整体层面的绩效评估采用平衡记分法,对团队成员和团队领导者个体层面的绩效评估采用360度反馈评价模式。并设计出了虚拟团队绩效评估的具体流程以及建立了虚拟团队绩效评估的指标体系。在本篇总结中,笔者提出虚拟团队在实际运行过程中如果能够妥善处理领导、激励、信任、培训、跨文化管理和绩效测评等问题,则能够提高虚拟团队和组织的绩效,但是如果意识不到或者受到条件所限无法及时有效地处理,则不如不组建。并对在我国目前现有的条件下提高虚拟团队绩效应注意的关键方面进行了概括和总结。

本书通过运用理论与实证研究相结合的方法验证了下面假设的正确性:第一,虚拟团队的成功运用可以提高组织绩效;第二,虚拟团队的产生与全球化、信息技术、环境的复杂性、竞争的激烈性、组织的开放性有关;第三,虚拟团队的生命周期与任务周期有关,虚拟团队是以任务和关系为导向;第四,虚拟团队成员的组成与企业的社会关系网络有关;第五,通讯技术的选择和使用与通讯技术的特征和任务的性质密切相联,并

有助于提高虚拟团队的效率。

本书的主要创新点可以概括为下面几个方面：第一，目前，国内外专家学者对虚拟团队运行机制的研究虽然做了大量的工作，但主要处于经验研究阶段，尚未形成系统的理论。笔者从管理学、经济学和社会心理学的角度构架了组建虚拟团队的理论基础，比较充分地解释了虚拟团队产生的原因以及虚拟团队的性质，从而填补了国内外虚拟团队运行机制理论研究的某些空白。第二，笔者提出在对虚拟团队的组织结构进行设计时要改变传统的心智模式，打破传统组织在进行组织设计时先进行职能分工再进行组合的习惯，遵循以目标和任务为导向的“战略→结构→过程→职责”的组织结构设计思路，丰富了组织理论的内容。第三，笔者以对虚拟团队成员的新理解、角色设计以及素质和能力等方面的要求为基础，设计出了虚拟团队的招聘流程以及选拔程序，这对于提高虚拟团队人力资源管理的绩效提供了可操作性的程序和方法。第四，笔者提出虚拟团队的绩效评估应分两个层面进行，对整体层面的绩效评估采用平衡记分法，对团队成员和团队领导者个体层面的绩效评估采用360度反馈评价模式。并设计出了虚拟团队绩效评估的具体流程，建立了虚拟团队绩效评估的指标体系，为虚拟团队的绩效测评提供了实用的工具。第五，笔者在对中国虚拟团队的组建、组织和运行进行实证研究的基础上，总结出在我国目前现有条件下提高虚拟团队绩效应注意的关键方面，具有某种程度的首创性。

Abstract

The emergence of virtual teams isn't accidental, its rapid development is to meet the needs of economic globalization. At the same time, the advanced information and communications technology is providing the backbone for the rise and development of this new organizational form. Because virtual teams can meet the demands of globalization (the main four signs are the global consumer, the global corporations, the global jobs, knowledge as a global product), cooperation between organizations, and effectively distributing resources, it has attracted the attention of academic circles and business circles in China now. Some businesses in China have tried to form virtual teams, but without guidance to form, organize and operate virtual teams due to the relative backward of theory. Therefore, theory researchers make deeply and systemic study on forming, organizing and operating virtual teams is urgently needed in order to guide the practice. Furthermore, virtual teams as a new organizational form in network economy is a leading issue in the field of organization theory, so we can never ignore the study on the new organizational form just from the perspective of developing and completing theory. As a result, we urgently need to make the theoretical and empirical study on operating mechanism in virtual teams in order to enrich organization theory. This is the theoretical sense of this dissertation.

After China's entering the World Trade Organization, the de-

gree of globalization is more and more deeply. With an increasing intense level of international competition, an increasing change pace of market, an increasing complexity, uncertainty and diversity, a business wants to do like what Jack Welch had said: "The key which ensures organization to succeed in the future is looking for the suitable person to solve the most important problems, no matter which levels or positions he is in the organization, and no matter where he is in the world." It is the inevitable choice to form task-oriented and relation-oriented, gather or disperse freely virtual teams. Because virtual teams is a new thing and people are extremely short of experience on how to improve the effectiveness of virtual teams under present circumstances, we need to make study on operating mechanism in virtual teams. This is the practical sense of this dissertation. This can help us form virtual teams successfully, improve the effectiveness and enhance the competitiveness of the whole organization in order to success in the intense international competition.

The research on this dissertation follows "why to form virtual teams→how to form and organize virtual teams→how to operate and manage virtual teams" the total thinking. There are three parts in this dissertation——Theory, Organization and Operation.

"Theory" ——Section One, includes four chapters. Its main purpose is to construct a comparatively complete theoretical framework from the perspective of Management, Economy and Social Psychology in order to fully explain the emergence causes and the nature of virtual teams. Finally, it draws a frame chart to illustrate the contribution of all kinds of theories to virtual teams. The first chapter points out that the emergence of virtual teams isn't acciden-

tal, its rapid development is to meet the needs of economic globalization. At the same time, the advanced information and communications technology is providing the backbone for the rise and development of this new organizational form. Then it deeply discusses the outline of teams and virtual teams and makes the comparison and the analysis in order that people can more deeply comprehend the new organization form than ever. The second chapter makes in-depth analysis to the theoretical basis that virtual teams emerge from the perspective of Social Cooperation System Theory, Decision Theory, Organization Structure Theory, People-oriented Theory, Learning Organization. The third chapter makes in-depth analysis to the theoretical basis that virtual teams emerge from the perspective of Transaction Costs Theory, Game Theory, The Logic of Collective Action. The fourth chapter makes in-depth analysis to the theoretical basis that virtual teams emerge from the perspective of Group Dynamics Theory, Fair Theory, Social Identification and Social Representation Theory.

“Organization” ——Section Two, includes five chapters. Its main purpose is to discuss some important issues on organizational design, organizational components (people, purpose, technology) and organizational size in the process of forming and organizing virtual teams. It points out that a virtual team is a open system which is composed of people, purpose and technology and a virtual team is a group of people who work interdependently with a shared purpose using technology. These three factors interact and form a integrated organization system. If we ignore any one of these three factors, the whole system will tend to breakdown. While I make study on theory, I also make study on practice by survey and interview in order to

verify, revise or complement the conclusions which I have made. Finally, I summarize the key aspects in the process of forming and organizing virtual teams. The fifth chapter puts forward that the organization structure of virtual teams has greatly changed as compared with the organization structure of traditional teams. So when we design the structure of virtual teams, we should improve traditional mental models, break the outmoded customs, follow the goal-oriented and task-oriented “strategy→structure→process→responsibility” design thinking. Every virtual team must complete seven steps in order to achieve their results. These includes: creating a team identity, setting up strategic purposes, developing a team charter and a operating process, identifying team members, building team membership, choosing the appropriate media and holding a team-orientation meeting. There is no one “right” size for virtual teams. Size depends on making balance between the effectiveness of virtual teams and the whole organization. The sixth chapter advances that virtual teams have fundamentally changed as compared with traditional teams, so we design the recruiting process and the selection procedure in virtual teams based on the comprehension to employees, role design and the demands on employees’ quality and capability. The seventh chapter proposes that purposes support and launch the whole operating process as to virtual teams characterized by purpose-dependence, role-dependence and result-dependence. So we think purposes are the sources of vitality and energy in virtual teams. Virtual teams are fit for carrying out Management by Objectives (MBO). The purpose of virtual teams is a organic system composed of vision, mission, goal, task and result. Its natural flow follows the “goal-task-result” universal pattern of work. There are three kinds of relation-

ship among people and goals——cooperative, independent or competitive. It is the best path for us to realize shared purpose by cooperating with others in order to improve the effectiveness of virtual teams and the whole organization. The eighth chapter puts forward that the rapid advances in information and communications technology is not only the cause of forming virtual teams, but promoting the development of virtual teams. So I discuss the classification, characteristics, using tips and communicating process of information and communications technology used by virtual teams, from which I draw a conclusion that the characteristics of technology and the nature of task are the key factors to affect selecting and using technology in virtual teams. And I have verified the correction of this conclusion through empirical study. The ninth chapter points out that a virtual team's life cycle is the process of fulfilling tasks and maintaining relationships. The focus is different at the different stages of a virtual team's life cycle, so we should master the sense of propriety while taking measures.

“Operation” ——Section Three, includes six chapters. Its main purpose is to discuss the important problems (such as leading, motivating, trusting, training, managing across cultures, performance appraisal and so on) people may face in the operating process of virtual teams. These problems are universal but urgently in order to make sure the operating process in virtual teams normally. While I make study on theory, I also make study on practice by survey and interview in order to verify, revise or complement the conclusions which I have made. Finally, I sum up several key aspects on how to improve the effectiveness of virtual teams under present circumstances. The tenth chapter advances that virtual team leaders need to

possess some special competencies in addition to traditional team competencies that ensure identifying some signs of dis-function at the each stage of virtual teams and carrying out proper leading strategies from the perspective of purpose, people, technology, trust, culture, motivation, communication, learning and so on. The eleventh chapter provides several motivating factors and strategies and designs reward system based on job competency for virtual teams members. The twelfth chapter makes in-depth analysis and discussion to the sources of trust, the trust-building factors, the trust-building measures, the trust-building process in virtual teams and gives advice on how leaders should build and maintain trust through formal organization structure (tough circumstances) and informal organization culture (soft circumstances). The thirteenth chapter poses the training plan and the key aspects of E-training for virtual teams members and introduces creatively that learning virtual teams is the final aim to the training and development in virtual teams. The fourteenth chapter analyses how culture difference can affect virtual teams and the culture in virtual teams from the perspective of national, organizational and functional culture. Then it puts forward that virtual teams should adopt the strategy of using culture difference. The fifteenth chapter points out that we should make the performance appraisal in virtual teams from two levels. One level is total level, and the other level is individual level. The performance appraisal on total level should be made by Balanced Scorecard and the performance appraisal on individual level should be made by 360-degree feedback system. Furthermore, we design the actual process and set up the index system on the performance appraisal of virtual teams. In the summary of this section, I propose that if virtual teams can appropriately deal

with the important problems (such as leading, motivating, trusting, training, managing across cultures, performance appraisal and so on), it will promote the effectiveness of virtual teams and organizations. But if virtual teams can't realize these problems and can't cope with them effectively and timely under limited circumstances, they are of no value. Finally, I sum up several key aspects on how to improve the effectiveness of virtual teams under present circumstances.

This dissertation makes good combinations between theoretical research method and empirical research method to verify the correction of the following five hypotheses. Firstly, the successful application of virtual teams can improve the effectiveness of organization. Secondly, the emergence of virtual teams is closely related to globalization, information and communications technology, environmental complexity, competitive fierceness and organizational openness. Thirdly, the life cycle of virtual teams is closely related to the task cycle, and virtual teams tends to task-oriented and relation-oriented. Fourthly, the employee composition of virtual teams is closely related to the social relation network of the organization. Lastly, the selection and usage of information and communications technology is closely related to the characteristics of information and communications technology and the nature of the task, it will help improve the effectiveness of organization.

The innovation point of this dissertation is summed up as follows: Firstly, even though domestic and foreign experts and researchers have done a large number of work on studying the operating mechanism in virtual teams at the present times, it is at the stage of experience study and hasn't formed a systemic theory. So I construct a comparatively complete theoretical framework from the per-

spective of Management, Economy and Social Psychology in order to fully explain the emergence causes and the nature of virtual teams. To some degree, it fills the vacancy that domestic and foreign experts and researchers make systemic study on the operating mechanism in virtual teams. Secondly, I put forward when we design the structure of virtual teams, we should improve traditional mental models, break the outmoded customs, follow the goal-oriented and task-oriented “strategy→structure→process→responsibility” design thinking. This kind of design enriches the organization theory. Thirdly, I point out that we design the recruiting process and the selection procedure in virtual teams based on the comprehension to employees, role design and the demands on employees’ quality and capability. This provides a practical procedure and method for improving the effectiveness of human resource management in virtual teams. Fourthly, we should make the performance appraisal in virtual teams from two levels. One level is total level, and the other level is individual level. The performance appraisal on total level should be made by Balanced Scorecard and the performance appraisal on individual level should be made by 360-degree feedback system. We design the actual process and set up the index system on the performance appraisal of virtual teams that provide useful tools for making the performance appraisal in virtual teams. Lastly, I sum up several key aspects on how to improve the effectiveness of virtual teams under present circumstances based on making empirical study on forming, organizing and operating virtual teams in China. To some degree, it is creative.

导 论

