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Critical Success Factors for Managing Technology-Intensive Teams in the Global Enterprise

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Abstract: The challenges of managing culturally diverse and globally dispersed project teams are examined in a field study of technology-intensive product developments. The article aims to improve the understanding of team performance in multinational project environments with implications for leadership assessment and organizational development. The results suggest that multinational team performance involves a complex set of variables related to the organizational ambience, business process, managerial tools, and most importantly, to the people in the organization. Team leaders must effectively manage relations across the entire work process, including support functions, suppliers, sponsors, and partners. Emphasis on common values and goals helps in bridging cultural and organizational differences, and in unifying the multinational team. Personal interest, pride and satisfaction with the work, professional work challenge, accomplishments, recognition, and the skill sets of the team members were identified as the strongest drivers toward unifying culturally diverse project teams and their work processes, and building a true partnership among all the contributing organizations.

Keywords: Global Project Management, Team Leadership, Technology, Product Development

EMJ Focus Areas: Program & Project Management, Building Engineering Management Actionable Knowledge, New Product Development

The role of project teams is expanding with accelerating globalization of our enterprises, leading to increased pressures for effective management of these multi-national teams (Snow et al., 1996; Smith and Blanck, 2002). As companies leverage their operations across national borders to take advantage of the best talent, most favorable cost, timing, and marketing position, new challenges require sophisticated skill sets from project leaders. Whether or not Yahoo! creates a new search engine, Sony develops a new laptop computer, or the World Health Organization rolls out a new information system—from medical research to computer systems, companies try to leverage their budgets and accelerate their schedules by forming alliances, consortia, and partnerships with other firms, universities, and government agencies. Furthermore, multinational teamwork is being driven by business strategy. Enterprises such as IBM, Boeing, or Microsoft have many of their product developments spread across international borders in order to optimize access to talents and markets (Armstrong, 2000; Kruglianskas and Thamhain, 2000; Manning et al., 2008; Shenhar et al., 2007). While this offers

great economic benefits, it also requires sophisticated managerial skills, new work processes, and business models to achieve collaboration and integration among geographically dispersed and culturally diverse work groups (Ferrante, Green, and Forster, 2006; Groysberg and Abrahams, 2006; Martinez, 1995; Mehra et al., 2006). As a result we have gained sophisticated knowledge and substantial insight into the effects and organizational dynamics of managing project teams (Anconda and Bresman, 2007; Hackman, 2006; Keller, 2001; Thamhain, 2008). Yet companies still struggle to run projects well in a global enterprise setting (Salomo et al., 2010).

Why Focus on Leadership and Team Environment? Obviously, the spectrum of influences to overall team performance and project success is very broad (Barczak, 1995; Gemunden, 2011; Kleinschmidt, 2011; Salomo et al., 2010); however, many prior studies that have examined project team performance in a broad organizational context specifically identified team leadership and ambience among the critically important factors for success (Aconda, 2007; Armstrong, 2000; Asgary et al., 2007; Chia-Chen, 2004; Hackman, 2006; Kratzer et al., 2011; Salomo et al., 2010). As specifically stated by Chia-Chen, “...managerial leadership and the organizational environment must be conducive to the professional needs of the project team.” This view is also shared in business practice. Managers often lament that relatively little is known about the effectiveness of team leadership styles and the organizational conditions most conducive to team performance in project environments that are geographically dispersed across national borders, operating in technological complex, culturally-diverse, multi-national environments, which is the focus of this study.

As such, the study addresses the following research questions:

- What type of organizational environment and working conditions are most conducive to high project team performance in multinational settings?
- What management style is most conducive to high project team performance in multinational settings?

In the broader context of enterprise management, the study connects with the organizational theory via the resource-based view of the firm. This view suggests that company resources, properly directed toward desired results such as leadership training, talent scouting, supporting tools, and techniques can create conditions favorably linked to team performance. In defining and characterizing the team environment, these conditions seem to be especially important to multinational undertakings (Snow et al., 1996; Smith and Blanck, 2004), yet difficult to investigate because of subtle influences and variations of organizational settings, policies,

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socio-political factors, and other antecedent conditions across the multinational enterprise. These are part of the challenges and limitations associated with the current exploratory field study.

Propositions

While it is premature to define and test specific hypotheses at this exploratory stage of the research, I have developed 11 propositions as a guideline for this investigation, as shown in Exhibit 1. These propositions emerged from two sources: (i) discussions with project leaders and senior managers, and (ii) observations made during action research, both during Stage I of this study and earlier exploratory field studies conducted between 2004 and 2007. These propositions are consistent with the rationale and perspective of multinational project management presented in the front-end of this article, providing the focus for the exploratory field investigation, including designing questionnaires, conducting interviews, and guiding observations.

Exhibit 1. Propositions Serving as Guidelines for this Field Investigation

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- P1: Multinational team performance can be significantly influenced by (i) local leadership, (ii) headquarter leadership and (iii) team environment.
 - P2: A professionally stimulating work environment enhances multinational collaboration and overall project performance and success.
 - P3: Clear project objectives, directions and leadership are necessary for effective cross-functional communications, collaboration and commitment.
 - P4: Project ownership and commitment enhance cross-functional communications, innovation and overall project performance.
 - P5: Useful organizational processes for technology transfer and project integration are critically important for effective cross-functional communications, collaboration, innovations and overall project performance.
 - P6: Tangible rewards, such as recognition, bonuses and raises, are important drivers for sustaining team collaboration, commitment and innovative performance.
 - P7: A favorable project image of value, priority and probability of success has a positive influence on team creativity and overall performance.
 - P8: Good team spirit, mutual trust and respect enhance team collaboration, communications and performance.
 - P9: The team leader's competence and credibility (including trust and respect by team members) is an important influence to innovation, collaboration and team performance.
 - P10: Increased project complexity reduces team collaboration and project performance (e.g. more failures).
 - P11: Job security and organizational stability have a positive influence to on team collaboration and the ability to deal with risk and conflict.
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Objectives, Scope and Method

The objective of this article is to improve the understanding of (i) the dynamics and interaction of multi-national, culturally diverse project teams, (ii) the influences of the team environment, and (iii) the influences of managerial leadership on performance. The specific focus is on technology-based, geographically dispersed project environments. The research reported here includes the

most recent phase of an ongoing exploratory field study into multinational project organizations. The article summarizes and expands on the earlier, more quantitative part of this study (Thamhain 2009, 2010). The methodology for the combined study is discussed next.

Using an exploratory research format, the design of this three-phase field investigation, conducted between 2004 and 2010, is summarized in Exhibit 2. The field study yielded data from 42 project teams with a total sample population of 495 project professionals such as engineers, scientists, and technicians, plus their managers, including 16 functional resource managers, 42 project team leaders, 18 product managers, eight directors of R&D, seven directors of marketing, and 11 general management executives at the vice presidential level. Together, the data covered over 112 technology-based projects in 27 large, "Fortune-500" type enterprises, spanning a total of 18 countries. The purpose of this combined three-stage data collection method is to leverage the information-gathering process for identifying the drivers and barriers to project team performance and for gaining insight into its management process. This combined method is particularly useful for new and exploratory investigations, such as the study reported here, which is considerably outside the framework of well-established theories and constructs (Glaser and Strauss, 1967; Eisenhardt, 1989). The format and process of the specific questionnaires and in-depth semi-structured interviews used in this study was developed and tested in previous field studies of project management, similar in context to the current investigation (Kruglianskas and Thamhain, 2000; Thamhain, 2004, 2009, 2010). The methodological details of the data collection and analysis are tabulated in Exhibit 2.

Results

The empirical results, supported by the Kendall Tau Rank-Order Correlation shown in Exhibit 3, suggest that among the four subsets of data analyzed (people, work content, work process/tools, and enterprise environment), the people side together with its culture, values, and skill sets, seem to have the strongest influence on team performance and overall project success. These influences also correlate strongly to other desired characteristics of the team environment, such as work process, communication effectiveness, and work integration. The most significant associations point at the importance of professional esteem needs and managerial leadership as particularly favorable influences on project team performance. Specifically: 1) professionally stimulating and challenging work environments [$\tau=.45$], 2) opportunity for accomplishments and recognition [$\tau=.38$], 3) clearly defined organizational objectives relevant to the project [$\tau=.36$], 4) job skills and expertise of the team members appropriate for the project work [$\tau=.36$], 5) overall directions and team leadership [$\tau=.35$], 6) trust, respect, and credibility among team members and their leaders [$\tau=.30$], 7) business process, as reflected by cross-functional cooperation and support [$\tau=.27$], 8) clear project plans [$\tau=.25$], and 9) clearly defined authority relations, and sufficient autonomy and freedom of actions in line with the managerial expectations and accountabilities [$\tau=.23$]. While many of these factors, such as clear objectives, skill sets, and effective business process deal with conventional project management practices, they also relate to the human side, conditioning the work environment for success. Hence, in a complex project environment that relies on commitment, buy-in, and personal drive for success, these influences appear to deal effectively with the integration of goals and needs between the team member and the organization. In this context, the more subtle factors seem to become catalysts

Exhibit 2. Summary of Three-Stage Research Method

	STAGE I	STAGE II	STAGE III
Scope and Objective	On-site observations and interviews to understand research environment and issues, propositions and questionnaire	Data collection via questionnaire, observation and expert panel (action research)	In-depth retrospective interviewing, gaining perspectives and additional information, leveraging the data collected in Stage II
Time Frame	2005 – 2007	2007 – 2008	2008 – 2010
Unit of Analysis	Project	Project	Project
Data Dependent Variables (Team Performance) —Judged by senior management— Independent Variables and Antecedent Conditions (Characteristics of Team Environment) —Judged by team members—	No formal data collection (exploratory only) No formal data collection (exploratory only)	<i>PRIMARY:</i> • Overall team, performance • Project success <i>SECONDARY:</i> • Innovation and creativity • Change orientation and response rate • Self-direction/little supervision • Customer/client interface efficiency • Ability to resolve conflict • Dealing with risk and uncertainty • Personal effort and commitment • Effective communications • Schedule and budget performance <i>20 variables of the team environment listed in Exhibit 2:</i> • Interesting Work • Recognition/Accomplishments • Clear Organizational Objectives • Job Skills and Expertise • Direction and Leadership • Trust/Respect/Credibility • Cross-Functional Support • Clear Project Plan and project Support • Autonomy and Freedom • Career Development opportunity • Job Security • Salary/Raise/Bonuses • Compensatory Time • Project Visibility • Team Maturity • Project Duration • Project Stability • Organizational Stability • Technological Complexity • Project Size and Complexity	
Data Collection Method	Interviews, observations, expert panels, focus groups	Questionnaires augmented by interviews	Retrospective interviews, expert panels and focus groups
Data Analysis	Content analysis Record analysis Critical thinking	Kendall's Tau rank-order correlation [†] Kruskal-Walles analysis of variance by ranks [†]	Content analysis Record analysis Critical thinking
Sample Number of companies Type of companies Number of projects Project type Projects size Project duration Number of multi-national partners Number of project teams (and team members) Management personnel	12 High-tech, Fortune 500 250 NDP, R&D \$1.2M (average), sd +/-5M 19 mos (average), sd +/-7mos 18 21 (33) 18 PMs; 5 Mktg Directors; 4 R&D Directors, 4 GM/VPs	27 High-tech, Fortune 500 112 NDP, R&D \$1.2M (average), sd +/-5M 19 mos (average), sd +/-7mos 18 42 (450) 42 PMs; 8 Mktg Directors; 7 R&D Directors, 11 GM/VPs	18 High-tech, Fortune 500 125 NDP, R&D \$1.2M (average), sd +/-5M 19 mos (average), sd +/-7mos 18 42 (68) 18 PMs; 5 Mktg Directors; 4 R&D Directors. 11 GM/VPs

[†]The causal relationship among the 31 variables investigated is highly intricate and complex, with cause and effect not always definable. Therefore, the traditional/conventional *reflective measurement model* may not be appropriate, but may need to be replaced in part by a *formative model*. In addition, many of the organizational and behavioral variables investigated contain ordinal measurements which do not follow normal distribution, distribution-free non-parametric methods, such as *Kendall's Tau rank-order correlation* and *Kruskal-Wallis* analysis of variance by ranks, have been chosen to evaluate the survey data of Stage-II.

for cross-functional communication, information sharing, and ultimate integration of the project team with focus on desired results. All associations are significant at $p = 0.10$ or better, with the most significant correlations ($p = .01$ or stronger) shown in bold, giving support to the first nine Propositions $P_1 - P_9$.

It is interesting to note that many characteristics of the work environment that were perceived by managers as important and influential to effective team performance did not correlate significantly as measured by a p -level threshold of 0.10. Others resulted even in negative correlations. As summarized in Exhibit 3, the factors of lesser influence to project team performance are: #10) career development [$\tau = .12$], #11) job security [$\tau = .12$], #12) salary increases and bonuses [$\tau = .15$], #13) time-off [$\tau = .15$], #14) project visibility and popularity [$\tau = .12$], and #15) maturity of the project team, measured in terms of time worked together as a team [$\tau = .10$]. In addition, several conditions of the work environment actually correlated negatively to performance although they were seen by the majority of project managers as important positive drivers. As summarized in Exhibit 3, they include: #16) project duration [$\tau = -.08$], #17) project requirements, stability, and minimum changes [$\tau = -.10$], #18) stable organizational structures and business

processes technological complexities, such as dependencies on multiple technologies, technological disciplines, and processes, #19) technical complexity [$\tau = -.15$], and #20) project size and project complexity, suggesting that project scope, size, and implementation challenges by themselves do not necessarily translate into lower team or project performance [$\tau = -.18$]. Although the statistical significance of these "lesser associations (#10-#20)" is weak, it is interesting to observe that several of these influences actually seem to have opposite effects to those popularly held by managers; therefore, the statistics do not support the second part of P_6 that falsely included bonuses and raises as an important driver to team performance. Nor does it support Proposition P_{10} which falsely argues that project size and complexity have an unfavorable influence on the desirable team characteristics and performance.

For the conditions with favorable associations to team performance influences, it is not surprising but yet interesting, to note that these conditions produce desirable characteristics in all variables of the team environment such as work process, communication effectiveness, and work integration. For example, project teams that indicated a high degree of professionally

Exhibit 3. Multinational Team Environment vs Performance (Kendall's τ Rank-Order Correlation)

Team Environment*	Team Characteristics and Performance#										
	Innovative, Creative	Change Oriented, High Response Rate	Self-Directed, Little Supervision	Effective Customer and Client Interface	Ability to Resolve Conflict	Ability to deal with Risk	Personal Effort, Commitment	Effective Communications	Schedule/Budget Performance	Overall Team Performance	Project Success
1. Interesting Work	.42	.30	.43	.27	.27	.39	.43	.35	.37	.45	.42
2. Recognition/Accompl	.45	.31	.39	.28	.38	.27	.35	.23	.38	.38	.35
3. Clear Org'l Objectives	.33	.29	.45	.30	.38	.21	.28	.22	.31	.36	.31
4. Job Skills/Expertise	.31	.15	.37	.28	.33	.32	.15	.11	.21	.36	.37
5. Direction/Leadership	.37	.33	.27	.33	.27	.27	.22	.13	.33	.35	.30
6. Trust/Respect/Credib	.35	.44	.36	.27	.43	.08	.40	.38	.27	.30	.28
7. Cross-Funct'l Support	.29	.12	.29	.23	.38	.37	.28	.47	.25	.27	.29
8. Clear Proj Plan, Suppt	.36	.20	.35	.40	.36	.36	.36	.29	.40	.25	.36
9. Autonomy, Freedom	.38	.14	.42	.28	.15	.34	.36	.23	.23	.23	.21
10. Career Development	.22	.17	.15	.17	.09	.10	.07	.00	.24	.12	.07
11. Job Security	.25	.29	.13	.19	.26	.30	.12	.12	.31	.12	.22
12. Salary/Raise/Bonuses	.09	.18	.05	.07	.07	-.09	.12	-.03	.20	.15	.09
13. Compensatory Time	.10	.13	-.09	.02	.00	.04	.09	-.05	.12	.15	.03
14. Project Visibility	.26	.26	.18	.22	.17	.17	.22	.17	.15	.12	.17
15. Team Maturity	.32	.30	.30	.13	.12	.11	.11	.18	.12	.10	.18
16. Project Duration	-.05	-.07	.04	.26	.11	-.16	.06	.27	.03	-.08	.02
17. Project Stability	-.12	-.10	.12	-.14	.22	.20	.05	.33	.05	-.10	-.09
18. Organizat'l Stability	-.29	.18	.17	-.22	.19	.14	-.09	.27	-.15	-.12	-.16
19. Technol' Complexity	.11	.22	.32	.09	-.11	-.13	-.12	.09	.11	-.15	-.12
20. Proj Size/Complexity	-.12	.02	-.15	-.16	.06	.07	-.10	-.07	.03	-.18	-.08

All variables were measured with descriptive statements on a 5-point Likert scale: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, (5) strongly agree.

Statistical Significance: $p = .10$ ($\tau \geq .20$), $p = .05$ ($\tau \geq .31$), $p = .01$ ($\tau \geq .36$); significance of $p = .01$ or stronger are marked bold. Negative correlations are marked in italics.

, # Symbols: Statements to measure variables were judged by [] team member, [#] senior management.

stimulating work, work challenge, recognition, trust, and respect were also seen by their managers as being able to deal effectively with technology transfers, client interfaces, changes, risks, and cross-functional communications, all components that are part of the work process. This association was specifically tested via Kendall-Tau and Kruskal-Wallis analysis of variance by rank. These correlations show at a high level of statistical significance that project teams who see themselves working in a professionally stimulating environment also seem to be part of a more effective work process, and use work-related tools and techniques effectively across multinational borders. The field study shows that the conditions that create an interesting and stimulating work environment, also serve as bridging mechanisms between the mission goals of the enterprise and the professional needs of the project team. This is especially helpful in complex multinational and technology-based project environments where it is often difficult for team members to see the big corporate picture, but more likely for team members to see the organizational environment conducive to their professional needs if they find the work professionally interesting and stimulating. Another of these bridging mechanisms is the effective leadership and involvement of all project stakeholders throughout the organization and its external partners, lending general support to P_1 and P_2 . Managers point out that, for today's technology-based projects, success is no longer the result of a few geniuses, experts, and skilled leaders. Rather, project success depends on effective multidisciplinary efforts, involving teams of people and support organizations interacting in a highly complex, intricate, and sometimes even chaotic way. Especially for multi-national efforts, the process requires experiential learning, trial and error, risk taking, and cross-functional coordinating in support of technology transfer and integration, a complex process that is being seen by many managers as fuzzy, difficult to describe or predict results with certainty.

Guidelines for Effective Team Management

The lessons that emerged from the combined three stages of this field study have been organized into ten guidelines for leading and working effectively with culturally diverse project teams. The retrospective interviews and on-site observations from the action research of Stage-III were especially helpful in validating and clarifying the statistical results of Stage-II, and to go beyond the conclusions reached from the quantitative data, gleaning additional implications useful to the practice of project management and some future research. While these guidelines emphasize the importance of conditioning the project environment for cooperation, connectivity, and unification during the early stages of project formation and start-up, management must pay continuous attention to these conditions and critical success factors throughout the project lifecycle. The suggestions advanced below provide an overall framework for managerial actions and leadership, conditioning the multinational project environment for effective teamwork.

1. *Define the Team Structure, Work Process, and Communication Channels.* Management must provide an infrastructure conducive to effective cross-functional teamwork and technology transfer. This includes properly defined interfaces, task responsibilities, reporting relations, communication channels, and work transfer protocols. Most of the tools for systematically describing the work process and team structure come from the conventional project management system: project charter—defining the mission and overall

responsibilities of the project organization, including performance measures and key interfaces; project organization chart—defining the major reporting and authority relationships; responsibility matrix or task roster; project interface chart such as the N-Squared Chart; and job descriptions and well-defined phase-gate criteria. All of these tools have been used by project managers for a long time; however, to be effective in multinational settings, they need to be fine-tuned and calibrated to the specific project situation and carefully integrated with the overall business process and its multi-cultural environment. Moreover, communication channels must be linked and effectively web accessible to all project team members.

2. *Build a High-Performance Image.* Project teams which have a clear sense of purpose and confidence in their mission, perform better. A high-performance image stimulates the team's interest, pride of participation, and sense of ownership. Common goals and shared can-do images serve as a bridging mechanism, helping to unify the team across the miles and cultures. This also builds professional confidence and encourages team members to reach "outside-the-box" to resolve issues "locally" with a minimum of central administrative support. Project leaders and senior managers can build a favorable project image by making the project visible and stressing its importance via media exposure, management involvement, and budgetary actions as well as by emphasizing critical success factors, professional opportunities, and potential rewards. These factors promote project ownership and a sense of unity behind the project objectives.
3. *Stimulate Enthusiasm, Excitement, and Professional Interests.* Factors that satisfy personal and professional needs have the strongest effect on team unification across the miles and on overall project performance. The most significant performance drivers derive from the work itself—personal interest, pride and satisfaction with the work, professional work challenge, accomplishments, and recognition. Whenever possible managers should try to accommodate the professional interests and desires of their personnel. Interesting and challenging work is a perception that can be enhanced by the visibility of the work, management attention and support, priority image, and the alignment of personnel values with organizational objectives.
4. *Adapt Project Management Tools, Techniques, and Leadership to Local Culture.* With the globally dispersed project activities, success depends not only on the effective use of managerial tools and leadership style in *one* particular location, but equally important, on the effective use of these techniques across different geographic regions that often incorporate great differences in their organizational cultures; therefore, it is important to adopt management tools, techniques, and leadership style to local cultures and organizational values without losing consistency, purpose, and managerial integrity.
5. *Unify Management Process.* Effective technology transfer and integration is crucial to the success of any project. It is particularly challenging in geographically distributed and culturally diverse project teams. "Top-down" or centralized management is often too rigid for coping with the dynamics and non-linearity. What seems to work best is a skillfully designed management process with enough flexibility and adaptability to local leadership that understands the

established norms and cultures, and is respected by the local people. Focus groups, organizational studies and developments, internal and external consultants, process action teams, professional training and teambuilding sessions, all are powerful tools for unifying and optimizing the work flow and for managing the process.

6. *Ensure Senior Management Support.* Senior management support is critically important to project performance. Effective working relationships among resource managers, project leaders, and senior management across the whole project organization, all help to build a favorable image toward project visibility and priority, and help to unify the team across its cultures and geographic boundaries.
7. *Promote Self-Direction and Commitment.* With the shift toward more self-directed teams, more flexible and less hierarchical organizations, management control is based to a large extent on commitment, motivation, and local team leadership. Senior management needs to work with all organizations across the project to build strong linkages between the local teams, their support systems, and the sponsor organization.
8. *Share Managerial Power and Influence.* Given the political nature of organizations, the diversity of organizational culture, and differences in regional management style, power is often shared between managers of local organizations and the project management office (PMO) at corporate headquarters. Shifts in power and influence among regional organizations are quite common and natural; however, they can have negative effects on cooperation and commitment, and should be monitored, examined, and dealt with to avoid the risk of organizational tension, mistrust, conflict, and power struggle.
9. *Recognize Differences in Management Style and Philosophy.* The field observations and interviews provide us with some insight into the diverse managerial thoughts and leadership styles of culturally different regions. This explains in part the difficulties experienced by managers in multinational environments trying to establish a common project management process and a unified framework for direction and leadership. The findings suggest the critical importance of adapting headquarters leadership and methods of control to the local level, a point that had already been made earlier. Further, effective managerial role performance can be enhanced via multicultural training and organizational development at all levels of the project organization.
10. *Foster a Culture of Continuous Support and Improvement.* Culturally diverse teams are intrinsically complex, highly dynamic, and continuously changing. Management can establish "listening posts" such as discussion groups, action teams, and suggestion systems that capture the "voice of the project stakeholders" as well as the lessons learned from past project experiences. Tools such as the Project Maturity Model, Six Sigma, and Agile project management process can provide a useful framework and the basis for analyzing, developing, and continuously improving the management process. Clearly all of these areas represent fruitful grounds for future research toward effective use in multinational project ventures.

Conclusions

The empirical results presented in this article show that effective management of globally dispersed project teams involves

a complex set of variables that relate to the organizational environment, business process, managerial tools, and most importantly, to the people in the organization. In many cases, the people issues have the strongest impact on project performance. People are an intricate part of most organizational subsystems; therefore, issues affecting people eventually impact the whole project organization and the broader enterprise. Management cannot expect to create a unified project team, working seamlessly across borders and cultures, by simply issuing work orders, project summary plans, or management guidelines. Emphasis must be on common values and goals, rather than on differences, to focus and unify the team. Personal interest, pride and satisfaction with the work, professional work challenge, accomplishments, recognition, and the skill sets of the team members act most favorably toward unifying culturally diverse project teams and their work processes. These conditions serve as bridging mechanisms, helpful in enhancing project performance in multi-cultural organizations. By recognizing the greater autonomy of all international partners as well as their cultural differences, management can build a true partnership among all of the contributing organizations with strong linkages for communication, decision making, and technology transfer. Moreover, to be sustainable, these multinational alliances must not only be built at the beginning of the project life cycle, but continuously be refueled and maintained over the lifetime of the project.

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