

Leadership and trust facilitating cross-functional team success

Sheila Simsarian Webber

The Journal of Management Development; 2002; 21, 3/4; ABI/INFORM Global

pg. 201

The research register for this journal is available at
<http://www.emeraldinsight.com/researchregisters>



The current issue and full text archive of this journal is available at
<http://www.emeraldinsight.com/0262-1711.htm>

Leadership and trust facilitating cross-functional team success

Cross-functional
team success

201

Sheila Simsarian Webber

*John Molson School of Business, Concordia University, Montreal,
Quebec, Canada*

Received October 2000

Revised March 2001

Accepted March 2001

Keywords Teams, Leadership, Trust

Abstract Cross-functional teams (CFTs) have increased in use within a variety of organizations. While these teams claim to enhance organizational effectiveness, research has seen mixed results. This paper examines the challenges faced by CFTs and why these challenges facilitate the need for the development of a team climate for trust. Trust is discussed as a team-level construct, an aspect of the "micro-climate" that occurs within a team. Leadership actions particularly important to cross-functional teams and the development of trust are offered as influential in creating a team climate for trust in cross-functional teams.

Cross-functional teams (CFTs) are being hailed as the cure for companies, states *Harvard Business Review* (1994). Throughout many organizations, teams are becoming more prevalent and more diverse due to changing workforce demographics and the development of new organizational forms (Jackson *et al.*, 1995). Teams of employees from different functional areas (i.e. CFTs) are being formed with the expectation of producing more creative thinking and innovation (Jackson *et al.*, 1995). Using matrix structures, organizations are combining the benefits of project coordination and functional linkages (Ford and Randolph, 1992).

CFTs consist of a small collection of individuals from diverse functional specializations within the organization. These types of teams usually work together for a limited time and typically their members are also members of other teams. They commonly have reporting relationships to functional managers as well as multiple team or project leaders (Ford and Randolph, 1992).

The chief benefit of CFTs is that they provide a manageable way to bring together diverse resources for a specific project (Northcraft *et al.*, 1995; Parker, 1994). However, the full performance potential of CFTs is not always realized. The paradox of CFTs is that their unique characteristics lead to increased success; yet, these same characteristics also lead to difficulty in realizing the efficiency and effectiveness gains over individuals (Northcraft *et al.*, 1995). Cohen and Bailey (1997) summarize the conflicting evidence regarding the benefits of functional diversity by stating that there is mixed evidence

The author would like to thank Richard Klimoski for his helpful comments on earlier drafts of this paper. An earlier version of this paper was presented at the 1998 Academy of Management Conference, San Diego, CA. This paper received the 1998 Kenneth E. Clark Center for Creative Leadership Best Graduate Paper Award.



Journal of Management Development,
Vol. 21 No. 3, 2002, pp. 201-214.
© MCB UP Limited, 0262-1711
DOI 10.1108/02621710210420273

regarding whether heterogeneity facilitates or hinders effective performance. However, there is reason to believe that cross-functional team structures could or should result in performance gains.

As organizations move into the twenty-first century, work challenges will continue to increase and the need for cross-functional teams will be great (Griffin and Hauser, 1996). Therefore, of importance to organizations is to understand how a cross-functional team can realize its full potential. Research suggests that successful cross-functional teams are engaging in effective team processes such as communication, cooperation and coordination (Ancona and Caldwell, 1992; Pinto and Pinto, 1990). Griffin and Hauser (1996) propose that effective team processes may emerge from a team climate of trust. Teams, whose internal climate is one of mutual trust for the team, and its members will see greater success achieved through effective team processes. However, this climate is not likely to emerge without specific organizational interventions. In fact, a variety of organizational conditions may moderate the relationship between team diversity and performance (Jackson *et al.*, 1995, p. 82). A similar argument was put forth by Hackman and Morris (1975, p. 82), when they stated that interventions are needed to help group members:

... learn how to deal effectively with issues of individual differences within the group ... in which members gradually build a climate of interpersonal trust within the group

The purpose of the present paper is to examine the challenges faced by CFTs, and why these challenges facilitate the need for the development of a team climate for trust. Further, this paper proposes the critical role of the leader in building a team climate for trust. Specific leadership actions particularly important to the development of trust in CFTs are proposed.

Challenges faced by CFTs

CFTs pose a variety of unique challenges to team members. While most research focuses on the functional diversity of these teams, examining CFTs from an open systems perspective exposes other characteristics of these teams which are also challenges to their success, including diverse time allocations and diverse functional managers. First, with regard to functional diversity, cross-functional structures pose challenges to individuals who must work together but have quite different goals and values (Ford and Randolph, 1992). Second, these types of structures typically have individuals working on multiple teams simultaneously, resulting in differential time allocation to the team. Third, these structures have employees reporting to a team leader and a functional manager, violating the single line of authority structure known to be part of an organization.

Functional diversity

The fundamental differences between individuals from different functional areas create barriers to effective team processes. These differences include personality, culture, language or jargon, as well as organizational

responsibilities, reward systems and physical barriers. For example, in many organizations, R&D is rewarded for creating new products, marketing is rewarded for creating and maintaining markets and satisfied customers, while manufacturing is charged with efficient utilization of resources. Therefore, marketing wants broad product lines, manufacturing wants narrower product lines and R&D wants to develop revolutionary new products (Song *et al.*, 1997). These various perspectives create problems in the development of cooperative relationships. In effect, team functional heterogeneity often has a negative influence on team dynamics (Northcraft *et al.*, 1995).

Examining team processes in functionally diverse new product development teams, Ancona and Caldwell (1992) found that the greater the diversity, the less cohesiveness there is in the work group. They propose this to be the case because consistent interaction with outsiders to the team and their divergent views and values produces increased conflict within the team, resulting in less cohesion.

Similar arguments have been made in the top management team (TMT) literature. Researchers of TMTs have demonstrated that team member heterogeneity is negatively related to such processes as social integration and communication. Wiersema and Bantel (1992) argue that the unfamiliar language of team members having diverse backgrounds, experiences, values and beliefs leads to difficulty in communication and integration. Further, research by Smith *et al.* (1994) demonstrated empirically that heterogeneous experiences lead to decreased informal communication in the group and that the more informal the communication the greater the social integration.

Although researchers have found that functional diversity negatively impacts team processes, researchers examining the impact of functional diversity on team performance have proposed that having people from different functions enhances the team's performance; however, empirical results show little to no relationship. For example, Sethi (2000a, b) found no relationship between functional diversity and performance. Further examination of a curvilinear relationship also resulted in no significant results. In addition, a recent meta-analysis examining the impact of functional diversity on team performance found no relationship (Webber and Donahue, 2001). Therefore, researchers have begun to conclude that functional diversity may hinder social integration of team members, yet the positive impact of such diversity will not be realized without a leadership or organizational intervention (Sethi, 2000a, b; Webber and Donahue, 2001).

Time allocation diversity

Most researchers on CFTs have focused on the sole characteristic of functional diversity. Along with this characteristic, there are other features of a CFT that may lead to unrealized performance potential. One such feature is the allocation of time to the project. Specifically, within CFTs members typically work on more than one project at a time. Because of this, one team member may dedicate 40 per cent of his/her time to the project while another member may

only contribute 10 per cent. Those individuals contributing more time to the project may view the project as a significant part of their job and central to their career success. They are likely to impugn the commitment of those who can only contribute a small amount of time and effort to the project.

Multiple reporting relationships

Along with functional background differences and time distributions, Denison *et al.* (1996) state that CFTs often experience large amounts of pressure and conflict caused by reporting relationships to diverse functional managers and their cross-functional team (Ford and Randolph, 1992). Issues regarding performance appraisal, pay raises and the like are ambiguous. Further, role conflict, confusing expectations or role ambiguity, and excessive demands resulting in overload and competing priorities are typically found in cross-functional structures (Ford and Randolph, 1992). Figure 1 shows the characteristics of a CFT depicted in a relational network diagram.

Implications for team trust

Taken together, the characteristics of a CFT (e.g. functional diversity, time heterogeneity and multiple reporting relationships) provide diverse knowledge bases, but also diverse value systems resulting in difficulty achieving high performance potential. One reason for this is that diverse value systems operate against trust development. In fact, Triandis *et al.* (1965) found that functional heterogeneity was associated with low trust. Further, Sitkin and Roth (1993, p. 371) state that distrust occurs "when an individual or a group is perceived as not sharing key cultural values". Therefore, one possibility is that members of a CFT have high abilities and diverse skills and knowledge that can lead to trusting relationships and successful performance. However, value differences stemming from functional diversity, time allocation heterogeneity and differences in reporting structures result in lower trust within the team.

When examining trust at the work unit level, individuals who come from different backgrounds and have different world views will be seen as unknowns, perhaps even less trustworthy. Such is the case when diverse individuals from different genders, races or functional areas of an organization come together to work on a project (Jackson *et al.*, 1995). As such, capable, but diverse individuals are not likely to be effective together. Further, CFT characteristics, including differential time allocation to the project and

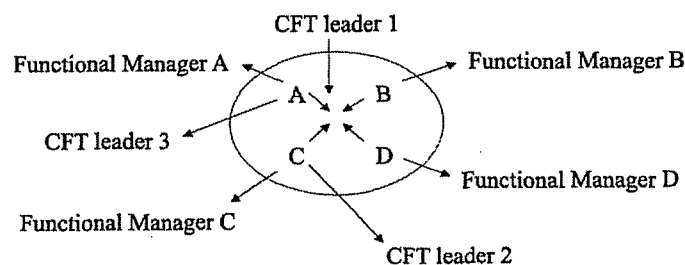


Figure 1.
Relational network of
CFT members

functional reporting relationships, can also create unknowns between group members, facilitating low trust within the team. Taken together, the characteristics of a CFT are proposed to lead to low trust during the initial forming of the team.

The implication of this for leadership is to determine interventions that operate against the development of low trust. Stated differently, it is of value to organizations to determine approaches for developing a team climate for trust in CFTs with the expectation that this climate will result in more effective team processes and ultimately effective performance. The next section will describe the concept of a team climate for trust and propose specific leadership actions to promote the development of team trust.

Team climate for trust

While various researchers have examined organizational-level climate issues, only minimal investigation of climate at the team level of analysis has occurred. As numerous organizations move to team-based systems, individuals will be asked to work on a variety of teams to complete complex projects (Jackson and Ruderman, 1996). Within each team, a climate for the team will evolve over time. Thus, within a team, shared perceptions will develop about meaningful phenomena. Across all teams, there is a concern regarding trust between members. In fact, trust has been deemed relevant only when the completion of one's own work depends on the ongoing cooperation of another person or group of people (i.e. work group) (Deutsch, 1958). Thus, team trust is a critical construct in work teams and an understudied part of their functioning.

Defining a team climate for trust

Trust has been explored numerous times in the literature with regard to an individual's relationship with specific others, their leader and their organization. Surprisingly, very few researchers have tackled trust at the team level of analysis. Recent scholarly writings on interpersonal (dyadic) trust cite the definition offered by Mayer *et al.* (1995). They argue that trust is:

... the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Mayer *et al.*, 1995, p. 712).

Rousseau *et al.* (1998, p. 395), in a special issue on trust in a between organizations, state that:

... trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another.

Adopting the definitions provided by Mayer *et al.* (1995) and Rousseau *et al.* (1998), I define a team climate for trust as:

The shared perception by the majority of team members that individuals in the team will perform particular actions important to its members and that the individuals will recognize and protect the rights and interests of all the team members engaged in their joint endeavor.

This definition is distinct from previous definitions because it involves the shared expectations of the majority of team members about the team itself, rather than an individual or team expectations about another individual, leader or organization. Using this definition, the construct implies measurement at the team level of analysis and, thus, agreement across team members about the climate for trust within their team.

Importance of trust in teams

Various researchers have examined the team processes necessary for effective project team performance. Of these processes, communication, coordination and cooperation have been examined as facilitating the success of CFTs (Ancona and Caldwell, 1992; Cohen and Bailey, 1997).

Pinto and Pinto (1990) studied cross-functional cooperation, they state that cooperation is necessary to link interdependent functions together. They define cross-functional cooperation as "the quality of different functional areas working together for the accomplishment of an organizational task(s)" (Pinto and Pinto, 1990, p. 14). Cross-functional cooperation was found to be a significant predictor of task and psycho-social outcomes in a sample of 72 CFTs.

In a related study, Janz *et al.* (1997) examined the relationship between team processes measuring "promotive interaction", which includes information sharing (communication) and helping behavior (coordination) within the team, and team performance. They found a significant positive relationship between these team processes and team performance in knowledge worker teams. Therefore, effective communication, cooperation and coordination lead to more effective team performance.

Theories of group development suggest that a group develops through a series of phases. Best known in this regard is the work of Tuckman (1965), who proposed that groups go through four stages:

- (1) forming;
- (2) storming;
- (3) norming; and
- (4) performing.

Moreover, Northcraft *et al.* (1995) argue that diversity in the team impacts the amount of time it takes for a team to move through the first three stages. Thus, the more diversity, the longer it will take for the team to be integrative. Simultaneously, researchers have stated that the early development of stable and effective group processes is critical to CFT success (Ford and Randolph, 1992).

This body of research demonstrates that organizations need to determine how to facilitate the early development of effective team processes in CFTs. Griffin and Hauser (1996) propose that such processes occur through the building of trust within a team. Further, Eigel and Kehnert (1996) state that

trust is a prerequisite for effective communication within a team. Meyerson *et al.* (1996) state that in work teams, particularly those with a finite life (e.g. project teams and cross-functional teams), trust must develop quickly. Therefore, the early development of a team climate for trust results in effective team communication, coordination and cooperation. Figure 2 illustrates the conceptual model proposed in this research. Leadership actions are proposed as a moderator of the negative relationship between CFT characteristics and team trust. Further, team trust is proposed to impact team processes positively, which results in increased performance.

The next section will describe the role of the project leader in the development of a team climate for trust. In effect, leadership actions can be strategically used as an organizational intervention to moderate the negative impact of CFT characteristics on team trust and ultimately facilitate successful performance.

Leadership promoting a team climate for trust

The critical role of the leader in teams has been implied in the literature on team effectiveness (Guzzo and Salas, 1995; Hackman, 1987; Hackman and Walton, 1986), project innovation (Griffin and Hauser, 1996), and recently in research specific to CFTs (Jassawalla and Sashittal, 2000). The purpose of this paper is not to restate those functions proposed by other researchers, but rather to focus on the leadership actions that are particularly important to the development of trust within a CFT.

Because the early development of stable and effective team processes is critical to the success of CFTs (Ford and Randolph, 1992), the focus of this paper is on those leadership actions that can impact the quick development of trust within the team. Further, as argued by Hackman and Walton (1986, p. 98), "certain leadership functions may be more appropriately filled at certain times of the group's life". Therefore, leadership actions are proposed that need to be taken prior to, and at the beginning of, the formation of the team for team trust to develop.

Prior to the life of the team

The role of the leader prior to the formation of the team is crucial. Frequently in organizations team leaders are given team members with little opportunity to participate in the selection process. However, as organizations move toward project-based structures, project leaders are playing a larger role in the design

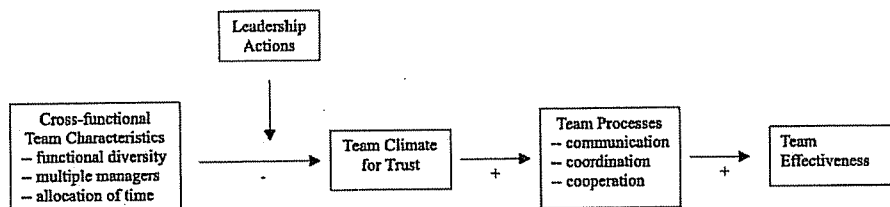


Figure 2. Leadership actions moderating the relationship between cross-functional team characteristics and a team climate for trust

and staffing of their team. In these cases, the leader has the opportunity to affect significantly the processes and outcomes of the team prior to the team even forming (Ford and Randolph, 1992).

To develop trust within the team, the selection of team members is a critical and often overlooked process. Typically, leaders select people with the best technical skills for the task without equal consideration of how the members will integrate to accomplish the team objectives. Clearly the leader needs to select the best people possible for the team. This step increases in importance with a CFT because each functional representative is relied upon as the expert for that particular area. To attract and obtain highly capable people, one approach is through a high status project. In effect, the leader needs to negotiate with top management to receive high visibility and obtain valued resources (e.g. financial, physical, etc.) to create a project with a high profile within the organization. This, in turn, will attract talented individuals who see the project as a chance to advance their career. Research on interpersonal trust has found that people who have high ability are perceived as trustworthy (Mayer *et al.*, 1995). Therefore, team leaders that create a high profile project by gaining top management support will be more likely to attract highly talented individuals, which leads to an increased team climate for trust. Even in the case where CFT members come together without any prior work experience with each other, learning about others' reputations on prior projects often forms initial impressions. The extent to which team members are respected based on previous work transfers to initial feelings of trust within the team.

Second, the leader needs to select individuals who are working at the same level within the organization. For a team composed of functionally diverse individuals where certain functional areas have more power in the organization, this will provide some similarity or commonality among the group members (i.e. same level within the organization). Perceptions of similarity increase opportunities for trust to develop (McAllister, 1995). Therefore, team leaders who select team members at the same level within the organization will facilitate similarity among members and therefore increase the opportunity for trust to develop.

Third, when possible team leaders need to choose individuals who have worked successfully together in the past on other cross-functional teams. This action will facilitate the quick development of similar expectations among team members. Research by Watson *et al.* (1993) showed that the impact of diversity on team effectiveness to reduce as time passes, such that heterogeneous groups were as effective as homogeneous groups at the 14-week performance period. One explanation for this is that team members became more familiar with each other, which changed their expectations about each other. In a second case, team member familiarity was demonstrated to result in effective performance when members possessed diverse information about the task (Gruenfeld *et al.*, 1996). Triandis (1995) discusses this in terms of acculturation, such that the more members of other cultures interact, the more they develop skills to have improved relations. Further, Triandis (1995) argues that those individuals who

have experience with heterogeneity will adapt more quickly to a diverse team than those without previous experience. By taking this approach, teams whose members are familiar with each other will have greater trust within the team. Therefore, team leaders who select team members that have worked together before on other CFTs increase familiarity, which leads to greater trust within the team.

Using the same argument, a fourth action by team leaders is to select team members they have worked with successfully in the past on other cross-functional teams. If team leaders and members have worked together successfully in the past, it is likely that they will have mutual trust for each other. This type of relationship will facilitate the initial climate within the team to be one of trust. Therefore, team leaders who select team members that they have worked with successfully in the past and whom they trust and trust them will increase the climate of trust within the team.

Overall, these actions revolve around the selection of team members. Taken together, these actions, specific to CFTs and to the development of trust, can be accomplished prior to the formation of the team. However, these actions alone may not be sufficient for the development of trust to occur quickly in all CFTs. For this reason, leadership actions are also proposed during the formation of the team.

During the formation of the team

Because members of CFTs have more than one reporting relationship, the role of the team leader needs to be the manager of relationships with functional managers. Specifically, the team leader needs to manage the conflict typically seen between the functional manager and team leader (Ford and Randolph, 1992). By managing conflict, the team leader can obtain the necessary resources from the functional manager. This includes negotiating the amount of time the team member will work on the project as well as the role of the functional area in facilitating the project's success. By taking these actions, the team leader demonstrates a positive relationship with each functional area and thereby promotes trust between team members of different functional areas. Therefore, team leaders that negotiate expectations with functional leaders will promote positive relationships between functional areas and thereby promote trust between diverse members of the team.

Similarly, team leaders need to build positive relationships with other team or project leaders. Not only will these relationships provide the leader with information regarding the competing priorities of team members, but they will also facilitate a positive view of the project team and the potential of sharing valued resources and information. In turn, the project will be viewed positively by members inside and outside the team, resulting in an increased identity for the team and greater team trust. Therefore, team leaders that build positive relationships with other team or project leaders will facilitate a positive image for the project, increasing the identity of members to the team, leading to team trust.

Within the team, the team leader needs to work to promote the centrality of the team for all members. In this regard, the leader will want to develop the commitment of all team members to the project. One approach is to make the success of the project result in career gains for the members of the team. By using the project to enhance team member careers, the team will become a central part of the member's work life resulting in greater commitment to the project and trust within the team. Therefore, team leaders that link the success of the project to team member career opportunities will create increased commitment to the project, resulting in increased trust within the team.

Research regarding inter-group conflict has cited the use of super-ordinate goals to promote effective cooperation between culturally different groups (Sherif *et al.*, 1961). Recently, Sethi (2000a) proposed the need for a super-ordinate identity to achieve CFT success. Thus, leaders of groups with individuals from different cultures within the organization need to develop and articulate a clear mission for the project, linking together the unique contributions of each team member. By creating a super-ordinate mission for the team, the leader will facilitate a common and shared objective by all team members, resulting in increased team trust. Therefore, team leaders that develop and articulate a clear mission for the project linking together aspects of each functional culture will lead to a shared objective for the team, increasing the team climate for trust.

In summary, these propositions are designed to be leadership actions unique to cross-functional teams and the development of trust. Thus, they do not encompass the full range of leadership functions that should facilitate team success. In this regard, these propositions should be combined with other work on leadership functions (see Yukl, 1994) to obtain a complete list of leadership actions needed to promote team success. What this research does accomplish is a unique look at cross-functional teams and the development of trust and offer specific leadership actions for that situation. Figure 3 summarizes the leadership actions prior to and at the beginning of the formation of the CFT.

Discussion

Teams are increasing in popularity within modern organizations. Further, many companies are moving to a project-oriented system, placing employees on multiple projects with reporting relationships to multiple different project team leaders (Katzenbach and Smith, 1997). In many organizations, these teams are composed of functionally diverse members with multiple reporting

Figure 3.
Leadership actions prior to and at the beginning of the formation of the team facilitating a team climate for trust

Actions Prior to the Formation of the Team

- Gain top management support
- Select high ability team members
- Select team members who are all the same organizational level
- Select team members that have worked well together in the past
- Select team members that have worked well with the leader in the past

Actions During the Formation of the Team

- Negotiate expectations with functional leaders
- Build positive relationships with other team leaders
- Promote a shared commitment for the project
- Develop and articulate a clear mission for the team

relationships and differing cultures, values and beliefs. These characteristics of CFTs raise unique leadership challenges for developing effective team processes.

As these trends increase across a variety of organizations, leaders must come to grips with what it takes to make CFTs effective. This research proposes that trust is a critical part of an effective team climate. Further, this paper argues for the importance of the team leader as an agent for building quick trust in teams. Specific leadership actions prior to and at the beginning of the life of the team, specific to building trust in CFTs, are offered as being critical for the success of CFTs.

Implications for research and practice

In the area of CFT research, functional diversity has been demonstrated and discussed in the literature as both a positive and negative element of these teams (Ancona and Caldwell, 1992; Griffin and Hauser, 1996). Few researchers, however, have examined approaches to understand better how this diversity could be effectively utilized so CFTs can reach their full potential. Further, prior research has provided little appreciation for the other CFT characteristics (e.g. time allocation and diverse functional managers) that also impact on the success of these teams.

Furthermore, this research provides a useful tool for practitioners as they develop cross-functional teams within their organizations. While these teams have been hailed the cure for organizations (*Harvard Business Review*, 1994), empirical support of this claim has been mixed (Cohen and Bailey, 1997; Webber and Donahue, 2001). Thus, organizations need to recognize that cross-functional teams will not achieve full performance potential without necessary interventions. One intervention is to select and train leaders to manage these teams effectively. Outlined in this paper are actions a leader should take prior to, and at the beginning of, the life of the team to create an effective team climate for trust in CFTs. These actions, coupled with those proposed by other researchers for managing work teams, will assist organizations in the development of successful CFTs.

Future research

The next phase of this research involves empirical examination of the conceptual arguments outlined in this paper. Research needs to examine if these leadership actions demonstrate an empirical relationship with a team climate for trust to prove the value of the conceptual model. While the leader has been proposed to play a critical role in this process, future research should also investigate organizational contextual factors as they impact the success of these teams. Such factors may include training systems, reward structures, physical proximity, as well as organizational culture, to name a few (Sundstrom *et al.*, 1990). These types of organizational systems and structures may be designed to impact the success of CFTs positively.

In conclusion, organizations need to recognize that CFTs will not achieve full performance potential without necessary interventions. One intervention is to select and train leaders to manage these teams effectively. This paper outlines actions a leader should take prior to, and at the beginning of, the life of the team to create an effective team climate for trust in cross-functional teams. As organizations continue to change, the use of CFTs will increase. In some cases these teams may include client members, creating even more complexity for leaders. Thus, the challenges for leaders of CFTs will continue to be multifaceted and critical for achieving organizational success.

References

- Ancona, D.G. and Caldwell, D.F. (1992), "Bridging the boundary: external activity and performance in organizational teams", *Administrative Science Quarterly*, Vol. 37, pp. 634-65.
- Cohen, S.G. and Bailey, D.E. (1997), "What makes teams work: group effectiveness research from the shop floor to the executive suite", *Journal of Management*, Vol. 23, pp. 239-90.
- Denison, D.R., Hart, S.L. and Kahn, J.A. (1996), "From chimneys to cross-functional teams: developing and validating a diagnostic model", *Academy of Management Journal*, Vol. 39 No. 4, pp. 1005-23.
- Deutsch (1958), "Trust and suspicion", *Journal of Conflict Resolution*, Vol. 2, pp. 265-79.
- Eigel, K.M. and Kehnert, K.W. (1996), "Personality diversity and its relationship to managerial team productivity", in Ruderman, M.N., Hughes-James, M.W. and Jackson, S.E. (Eds), *Selected Research on Work Team Diversity*, American Psychological Association, Washington, DC.
- Ford, R.C. and Randolph, W.A. (1992), "Cross-functional structures: a review and integration of matrix organization and project management", *Journal of Management*, Vol. 18, pp. 267-94.
- Griffin, A. and Hauser, J.R. (1996), "Integrating R&D and marketing: a review and analysis of the literature", *Journal of Product Innovation Management*, Vol. 13, pp. 191-215.
- Gruenfeld, D.H., Mannix, E.A., Williams, K.Y. and Neale, M.A. (1996), "Group composition and decision making: how member familiarity and information distribution affect process and performance", *Organizational Behavior and Human Decision Processes*, Vol. 67, pp. 1-15.
- Guzzo, R.A. and Salas, E. (1995), *Team Effectiveness and Decision Making in Organizations*, Jossey-Bass, San Francisco, CA.
- Hackman, J.R. (1987), "The design of work teams", in Lorsch, J.W. (Ed.), *Handbook of Organizational Behavior*, Prentice-Hall, Englewood Cliffs, NJ, pp. 315-42.
- Hackman, J.R. and Morris, C.G. (1975), "Group tasks, group interaction process, and group performance effectiveness: a review and proposed integration", in Berkowitz, L. (Ed.), *Advances in Experimental Social Psychology*, Academic Press, New York, NY.
- Hackman, J.R. and Walton, R.E. (1986), "Leading groups in organizations", in Goodman, P.S. and associates (Eds), *Designing Effective Work Groups*, Jossey-Bass, San Francisco, CA, pp. 72-119.
- Harvard Business Review* (1994), "Cross-functional teams: are they always the right move?", *Harvard Business Review*, November/December.
- Jackson, S.E. and Ruderman, M.N. (1996), *Diversity in Work Teams*, American Psychological Association, Washington, DC.

- Jackson, S.E., May, K.E. and Whitney, K. (1995), "Understanding the dynamics of diversity in decision making teams", in Guzzo, R.A. and Salas, E. (Eds), *Team Effectiveness and Decision Making in Organizations*, Jossey-Bass, San Francisco, CA.
- Janz, B.D., Colquitt, J.A. and Noe, R.A. (1997), "Knowledge worker team effectiveness: the role of autonomy, interdependence, team development, and contextual support variables", *Personnel Psychology*, Vol. 50, pp. 877-904.
- Jassawalla, A.R. and Sashittal, H.C. (2000), "Strategies of effective new product team leaders", *California Management Review*, Vol. 42 No. 2, pp. 34-51.
- Katzenbach, J. and Smith, D. (1997), "The discipline of teams", in Katz, R. (Ed.), *The Human Side of Managing Technology Innovation*, Oxford University Press, New York, NY.
- McAllister, D.J. (1995), "Affect- and cognitive-based trust as foundations for interpersonal cooperation in organizations", *Academy of Management Journal*, Vol. 38 No. 1, pp. 24-59.
- Mayer, R.C., Davis, J.H. and Schoorman, F.D. (1995), "An integrative model of organizational trust", *Academy of Management Review*, Vol. 20, pp. 709-34.
- Mayerson, D., Weick, K.E. and Kramer, R.M. (1996), "Swift trust and temporary groups", in Kramer, R.M. and Tyler, T.R. (Eds), *Trust in Organizations: Frontiers of Theory and Research*, Sage, Thousand Oaks, CA, pp. 166-95.
- Northcraft, G.B., Polzer, J.T., Neal, M.A. and Kramer, R.M. (1995), "Diversity, social identity, and performance: emergent social dynamics in cross-functional teams", in Jackson, S.E. and Ruderman, M.N. (Eds), *Diversity in Work Teams*, American Psychological Association, Washington, DC, pp. 17-46.
- Parker, G.M. (1994), "Cross-functional collaboration", *Training and Development*, October, pp. 49-52.
- Pinto, M.B. and Pinto, J.K. (1990), "Project team communication and cross-functional cooperation in new program development", *Journal of Product Innovation Management*, Vol. 7, pp. 200-12.
- Rousseau, D.M., Sitkin, S.B., Burt, R.S. and Camerer, C. (1998), "Not so different after all: a cross-discipline view of trust", *Academy of Management Review*, Vol. 23, pp. 393-404.
- Sethi, R. (2000a), "New product quality and product development teams", *Journal of Marketing*, Vol. 64, pp. 1-14.
- Sethi, R. (2000b), "Superordinate identity in cross-functional product development teams: its antecedents and effect on new product performance", *Journal of Academy of Marketing Science*, Vol. 28 No. 3, pp. 330-44.
- Sherif, M., Harvey, O.J., White, B.J., Hood, W.E. and Sherif, C.W. (1961), *Intergroup Conflict and Cooperation: The Robber's Cave Experiment*, University of Oklahoma Book Exchange, Norman, OK.
- Sitkin, S.B. and Roth, N.L. (1993), "Explaining the limited effectiveness of legalistic remedies for trust/distrust", *Organization Science*, Vol. 4 No. 3, pp. 367-92.
- Smith, K.G., Smith, K.A., Olian, J.D., Sims, H.P., O'Bannon, D.P. and Scully, J.A. (1994), "Top management team demography and process: the role of social integration and communication", *Administrative Science Quarterly*, Vol. 39, pp. 412-38.
- Song, X.M., Montoya-Weiss, M.M. and Schmidt, J.B. (1997), "Antecedents and consequences of cross-functional cooperation: a comparison of R&D, manufacturing, and marketing perspectives", *Journal of Product Innovation Management*, Vol. 14, pp. 35-47.
- Sundstrom, E., De Meuse, K.P. and Futrell, D. (1990), "Work teams: applications and effectiveness", *American Psychologist*, Vol. 45 No. 2, pp. 120-33.
- Triandis, H.C. (1995), "The importance of contexts in studies of diversity", in Jackson, S.E. and Ruderman, M.N. (Eds), *Diversity in Work Teams*, American Psychological Association, Washington, DC, pp. 17-46.

- Triandis, H.C., Hall, E.R. and Ewen, R.B. (1965), "Member heterogeneity and dyadic creativity", *Human Relations*, Vol. 18, pp. 33-55.
- Tuckman, B.W. (1965), "Developmental sequence in small groups", *Psychological Bulletin*, Vol. 63, pp. 354-99.
- Watson, W.E., Kumar, K. and Michaelsen, L.K. (1993), "Cultural diversity's impact on interaction process and performance: comparing homogeneous and diverse task groups", *Academy of Management Journal*, Vol. 36 No. 3, pp. 590-602.
- Webber, S.S. and Dohanue, L.M. (2001), "Impact of highly and less job-related diversity on work group cohesion and performance: a meta-analysis", *Journal of Management*, in press.
- Wiersema, M.F. and Bantel, K.A. (1992), "Top management team demography and corporate strategic change", *Academy of Management Journal*, Vol. 35, pp. 91-121.
- Yukl, G. (1994), *Leadership in Organizations*, Prentice-Hall, Englewood Cliffs, NJ.