

EFFECTIVENESS OF ONLINE CORPORATE COLLABORATIVE TEAMS

Effectiveness of Online Corporate Collaborative Teams

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Abstract

With this article we intend to contribute to the understanding of what can make Online Collaborative Teams (OCT) effective. This is done by identifying what can be considered best practices for individual team members, for leaders of OCT, and for the organizations that the teams are a part of. Best practices in these categories were identified from the existing literature related to online teams and collaborative work literature.

Introduction

Given the growing demand for the use of teams as fundamental building blocks in organizations (Furst, Blackburn, & Rosen, 1999), particularly geographically distributed teams, it is essential to establish a means to ensure their high performance and productivity. The first step to improve our understanding of what makes these teams effective is to identify a series of best practices that should be followed by all those involved in what we call online collaborative teams (OCT): their organizations, leaders and members.

OCT are groups of individuals who work on interdependent tasks, share responsibility for outcomes, and join their efforts from different locations. These teams are now being used by many organizations to enhance the productivity of their employees and to reach a diversity of skills and resources. Information technology can support their activities by reducing travel costs, enabling expertise to be captured where it is located, and speeding up team communication and coordination processes. Unfortunately, these distributed teams are not always productive.

Background

There are several "how-to" books on virtual teamwork and online collaboration. We reviewed some of these to identify best practices (e.g. Duarte & Snyder, 2001; Fisher & Fisher, 2001; Grenier & Metes, 1995; Haywood, 1998; Lipnack & Stamps, 1997; O'Hara-Devereaux & Johansen, 1994). We also searched the academic literature for articles that dealt with best practices for OCT.

Groups in organizations have been formally studied for over half a century, resulting in thousands of studies and a huge body of literature (Guzzo & Shea, 1992). Fortunately, there

are already several reviews of the knowledge in this field (e.g., Bettenhausen, 1991; Cohen, 1994; Cohen & Bailey, 1997; Goodman, Ravlin, & Schminke, 1987; Guzzo & Shea, 1992; Holland et al, 2000), and these reviews were used as the basis for our understanding of traditional team best practices.

Main Focus of the Article

We have organized the best practices according to three separate sets, which we will look at in detail: organizational practices, management practices and team member practices.

Table 1 – OCT Best Practices

Organizational Practices	Management Practices	Team Member Practices
Diversity	Goals an Direction	Communication
Resources and Support	Feedback	Support
Human Resource Policies	Trust	Skill sets
Team Autonomy	Empowerment	Motivation
Standardization	Motivation	
Information Sharing	Leadership	
	Self-control	

Organizational Practices

In order to succeed, OCT need some help from the Organizations that have created them, not only to ensure the team's diversity, but also to supply sufficient resources and support, as well as to develop human resource policies that stimulate high OCT performance. The Organization should encourage team member autonomy, while adopting standard processes and procedures to avoid wasting time with unnecessary repetitions of tasks, and developing an organizational culture that stimulates the sharing of information.

Diversity

Diversity is an important element to the success of an OCT and one of its main advantages. Working in an OCT can produce a diversity of backgrounds, experiences, ideas, thoughts, competencies, perspectives, and views. OCT might also involve members from different functional areas. Diversity stimulates interest and makes it more rewarding and fun to work on OCT, because there is the opportunity to learn about new cultures and interact with people beyond one's own work location.

The importance of creating teams with the appropriate mix of skills and individual traits has been extensively identified in the traditional team literature. Virtually all team models of effectiveness include team composition as an important input variable (e.g., Bettenhausen, 1991; Cohen, 1994).

Resources and Support

Organizations have to supply OCT with sufficient resources. These include such things as financial resources, time, facilities, hardware, software, communication channels, technical equipment, and proper training.

Given the need to communicate electronically, it is essential that OCT members be provided the technical resources and support for working virtually and all members should have access to electronic communication and collaboration technology (Duarte & Snyder, 2001). Fisher and Fisher (2001) also agreed that OCT members need good information and communication systems to interact effectively with the team leader and each other. The virtual work literature reinforces the importance of having good information technology (IT) support. The system has to fit with the strategy, structure, culture, processes, and IS infrastructure (e.g., training and support), implying that the organizational context has to support the use of the systems.

In addition to having the IT systems available, it is important that team members have access to continual online training and technical support so that they develop the ability to use the systems effectively (Duarte & Snyder, 2001; O'Hara-Devereaux & Johansen, 1994). Continual training and learning can be accomplished through the use of shared lessons, databases, knowledge repositories, and chat rooms. Organizations must ensure that OCT members are capable of facilitating meetings using technical and nontechnical methods (Duarte & Snyder, 2001). Furthermore, O'Hara-Devereaux and Johansen (1994) believe that IT training is much more than simply teaching users to use applications. It means continually supporting users as applications evolve, grow in functional complexity, become integrated with other applications, and as cross-platform problems are resolved.

IT training by itself is not enough. Organizations also need to provide adequate training for how to work in teams and provide team-building activities for team members. Training and team building are important, because they ensure that members develop the knowledge required to contribute to organizational performance (Cohen, 1994).

Another way an organization influences the resources OCT have is by controlling the number of people that are on the team. It is important to have an adequate number of team members on the team so that they have the resources needed to accomplish their tasks.

Human Resource Policies

The impact of the organizational context on team effectiveness was identified in collocated (e.g., Cohen, 1994) and online team research (e.g., Duarte & Snyder, 2001). Organizational human resource policies (i.e., those with reward structures for team activities) can positively affect collocated team cohesion, motivation, and effectiveness (Cohen, 1994). Cohen, Ledford, and Spreitzer (1996) found that management recognition was positively associated with team ratings of performance, trust in management, organizational commitment, and satisfaction for self-directed and traditionally managed groups in a telecommunications firm. Lawler (1986, 1992) suggested that the organization should provide employees with rewards that are tied to performance results, the development of capability, and contributions. This motivates employees to achieve their performance goals.

The design of the reward system itself also has an effect on team performance. In Wageman's study (1995), the highest performing collocated maintenance technician groups were found to be those in which the structure of the task matched the design of the reward system. Group rewards were put in place to motivate tasks that were interdependent, while individual rewards motivated individual independent tasks.

The online team literature also suggests that organizational practices and policies shape the effectiveness of OCT. According to Duarte and Snyder (2001), human resource policies must be designed and integrated in such a way that online team members are recognized, supported, and rewarded for their work. As such, it is important that an effective reward system with performance measures be in place to reward results. Grenier and Metes (1995)

and Lurey and Raisinghani (2001) also suggest that it is important for the organization to reward high levels of team performance.

Team Autonomy

According to Cohen and Bailey (1997), the organization needs to give team members autonomy in their work. Worker autonomy is shown to have clear benefits; it enhances worker attitudes, behaviours, and performance (whether measured objectively or rated subjectively by team members). Organizations should give team members the power to take action and make decisions about work and business performance (Cohen, 1994). The organization needs to share information with team members about processes, quality, business results, competitor performance, and organizational changes. If team members are given team-based rewards but do not have the autonomy needed to influence performance, then money will be wasted.

Standardization

Support for the importance of standard processes and practices can be found in the OCT literature. The use of standard processes can reduce the time needed for team startup and may eliminate the need for unnecessary reinvention of operating practices every time a new team is needed (Duarte & Snyder, 2001). Common standard technical processes include definitions of requirements, estimates of costs, procurement, team charters, project planning, documentation, reporting, and controlling. Standard communication procedures and policies may also improve an OCT ability to perform (Duarte & Snyder, 2001; Fisher & Fisher, 2001; Grenier & Metes, 1995). Fisher and Fisher (2001) suggested that a good face-to-face startup may help create bonds between team members and develop agreements on how members are

going to work together. This time can also be spent on team-building activities such as developing goals, creating measures, and clarifying roles and responsibilities.

Information Sharing

In the online team literature, one key issue is how willing an organization is to share information not only with its members but also with external partners. Grenier and Metes (1995) suggested that value is realized by sharing information with others who need to know what is going on. Conversely, treating partners as less than equal, hoarding information, forgetting to share data or results in a timely manner, and using competitive or proprietary information inappropriately can erode trust quickly (Duarte & Snyder, 2001). Therefore, organizations should work to build within their organization culture norms and values that promote communication and the sharing of information.

Traditional team research also identified the importance of having a supportive culture. Organizations should strive to ensure that there exists a cooperative work environment where norms are established that reinforce and support team behaviours, such as sharing information, responding appropriately to team members, and cooperating (Bettenhausen, 1991). This has been found to be critical for effective team performance.

Management and Team Leader Practices

Summarized in this section are practices ideas relating to the leadership and management of the team. For self-managed teams, some of these activities may come from within the team and some may come from the entity they report to, or both.

Goals and Direction

Team leaders must clearly define the direction, goals, and objectives of the team in relation to the external world. Only then will team members know what they are working against. Focusing on milestones and deliverable dates will help members keep the big picture in mind when working on their individual tasks. Successful OCT are those that are consistently able to meet these milestones within the allotted time.

The literature on OCT also emphasizes the importance of setting clear goals and establishing clear roles and clear responsibilities (Fisher & Fisher, 2001; Grenier & Metes, 1995; O'Hara-Devereaux & Johansen, 1994). Goals must be clear so that OCT members know what the objectives are and how they are to work. Defining team roles and responsibilities should also be given special attention, particularly to reduce the chance of work being duplicated or left undone.

In order to set goals, the overall purpose of the team must be clear. The OCT literature strongly suggests that effective leaders understand the importance of defining a vision for the team (Fisher & Fisher, 2001; Grenier & Metes, 1995; Lipnack & Stamps, 1997; O'Hara-Devereaux & Johansen, 1994).

According to Lipnack and Stamps (1997), a predictor of online team success is the clarity of its purpose and vision. To succeed, teams must turn their purpose and vision into action (e.g., by setting goals, roles, and responsibilities), using it to help design their work and processes (Lipnack & Stamps, 1997).

Feedback

Effective coaching is something team leaders can provide to team members to help them work more effectively. It helps members ensure that their activities and goals are in line with the team's overall goals. Team leaders need to provide members with timely feedback about

their performance so that team members know what they can do to continuously improve their performances (Duarte & Snyder, 2001). In OCT, this might require getting informal input from various people who interact with team members within and outside of the organization. It can also include formal communication with vested parties about the performances of team members.

Online leaders also need to teach and model how to give and receive feedback (Fisher & Fisher, 2001), demonstrating a mentoring quality characterized by concern for members, understanding, and empathy (Leidner & Kayworth, 2001). Staples' (2001) empirical study of remote workers and their managers' activities supports the importance of regular feedback and communication. The manager's ability to provide remote employees with advice and help was significantly related to the effectiveness of the remote employees. The modelling of appropriate virtual work habits by managers was also found to positively affect a remote employee's perceived ability to work remotely and their effectiveness (Staples, Hulland, & Higgins, 1999). Pinsonneault and Boisvert (2001) identified several aspects of the interactions between managers and employees that could potentially affect task performance. These included managers keeping remote employees well informed of organizational activities, providing regular feedback on performance and progress (and receiving regular feedback from their employees), and establishing well-structured and constant communications.

Trust

According to authors of the online team literature, one of the most important things that team leaders need to do is to build trust between themselves and the team and within the team (Duarte & Snyder, 2001; Fisher & Fisher, 2001; O'Hara-Devereaux & Johansen, 1994). Fisher and Fisher (2001) suggested that without trust, productivity suffers, as team members

play politics and spend time covering themselves instead of working on real issues that affect customers. To build trust, it is important for team leaders to communicate openly and frequently with team members. Furthermore, in order to gain trust of team members, team leaders must set the example and learn to give trust. Leaders who demonstrate openness and honesty about their actions will find that members respond with sincerity. Furthermore, team leaders will make mistakes. These mistakes should be admitted instead of covered up. Leaders should do what they say they will do and make their actions visible. Visibly keeping commitments increases trust, whereas breaking promises diminishes it (Fisher & Fisher, 2001).

Traditional team research also identified the importance of team leaders effectively communicating with their team members. How a leader listens and communicates with his or her team members is very much related to team effectiveness (Cohen & Bailey, 1997). Leaders who show high consideration actively listen to team members' inputs, whereas leaders who show low consideration listen without comment. Team members have higher perceptions of fairness and higher commitments toward the recommendations of the team leader in the group with high levels of communication. Team member attachment and trust in the leaders increases under high consideration and decreases under low consideration.

Empowerment

While a manager or team leader is expected to set guidelines, milestones, and goals, they should still give the team members the power to decide how to reach these goals. It is believed that empowered virtual teams perform better. An online team manager may define the task objectives but allow the team to decide how to reach these objectives. This best practice is related to the organizational practice of more generally providing autonomy to teams.

Motivation

Motivation is a quality necessary for the individual team member. However, motivating is also an activity that can be performed by team leaders. In an OCT environment where tasks may appear unconnected, the big picture is not always easy to visualize, and it may be difficult for members to remain committed to the project. Thus, team leaders can play a key role in helping OCT members maintain motivation.

Demonstrating how the project will result in significant outcomes for the individual team members can also foster motivation. By linking team success to individual success and opportunities, team members are highly motivated to succeed on the project.

Leadership

Appropriate leadership at the *appropriate time* is crucial for the successful OCT. During the initial phases of the project, the appropriate leader is one who can "whip up enthusiasm" and motivate the team. During the later stages, the effective leader is someone who is "getting the right people together and keeping everybody on task and keeping everything going." Therefore, the styles and activities of team leaders have to be appropriate for the stage the team is currently at and the needs at that particular time.

Self-Control

Self-leadership directly affects performance outcomes, because team members will be encouraged to perform behaviours that improve their performance. Team leaders should support the following behaviours to help improve a team's performance (Cohen, 1994): encourage self-observation/self-evaluation so that the team gathers information and monitors and evaluates performances; promote self-goal-setting so that the team sets performance

goals; encourage self-reinforcement so that the team recognizes and reinforces good performance within the team; encourage self-criticism so that the team recognizes and deals appropriately with poor team performance; promote self-expectation management so that the team has appropriately high expectations for their own performance; and encourage rehearsal so that the team plans and practices an activity before actually performing it.

Team Member Practices

Suggestions for what makes individuals effective members of OCT include specific behaviours as well as attitudes and beliefs that individuals should have.

Communication

Communication involves transferring ideas, sharing information, listening and internalizing the ideas of others, and notifying team members of any problems or issues.

Online collaborative work depends on a high level of communications and trust. Teams must develop the capabilities to work with information and communication technologies in stressful situations, with a variety of competencies in people from several locations and organizations (Grenier & Metes, 1995). With respect to the process of continuous and effective communication, OCT members should communicate when in doubt. Communication builds trust, which in turn, builds better communication; this is a positive feedback loop that OCT want to feed, not constrain (Grenier & Metes, 1995).

Traditional team research also found that team members' external communication was related to a team's effectiveness (Cohen & Bailey, 1997). Communication with managers above the team in the organizational hierarchy leads to higher team performance, as these communication activities usually involve lobbying management for resources and seeking

protection and support. Furthermore, communication conducted laterally across the organization to coordinate technical or design issues also increases team effectiveness.

Support

There are several dimensions to a supportive team. First, it is important to recognize when someone else does a good job and to congratulate or thank them accordingly. Such recognition does not have to come from management or have a monetary basis; even verbal encouragement from peers is appreciated. Second, a respectful team environment is more attractive where members were not afraid to openly discuss ideas. It is suggested that unsuccessful teams are those with "idea killers". These are outspoken individuals who are negative and pessimistic and continually critical of the ideas of others. A third dimension of being supportive is the ability to get along with others.

The way in which team members interact with each other has an effect on team effectiveness (Cohen, 1994). Coordination and caring involves working together without duplication or wasted efforts, as well as a sense of energy and team spirit.

Part of being supportive is being willing to share ideas and expertise to help others. Traditional team research (e.g., Cohen, 1994) found that team members can also improve their team's performance if they interact and share their expertise. Sharing of expertise means that team members share as well as listen to other's knowledge and expertise.

Skill Sets

Several sets of skills are important for a successful OCT member.

The ability to use time effectively is fundamental for remote employees (Staples, 2001). This includes being able to prioritize daily tasks and completing the high-priority tasks. Being able to manage one's own workload and priorities well is also identified in the online team

literature as important personal workload management skills that an online team member needs to develop. Also, members should develop a sense of "appropriate reaction times"; members should not accept another's sense of urgency unless norms have been established. Members should not hesitate to ask the team for help (reinforcing the importance of supporting fellow team members), and they should get issues on the table (i.e., be able to communicate openly) (Grenier & Metes, 1995).

Traditional team literature also identifies the importance of individual skills. The effectiveness of a team depends on the collective knowledge and skills of its members. In order to make good decisions, people in teams who have the authority to collectively make decisions about how they do their tasks need the appropriate knowledge and skills (Cohen, 1994).

People should first know how to use the electronic communication tools they have available and then be able to use an electronic social network to build and sustain team-wide relationships, develop skills in using virtual tools, and maintain cross-cultural dialogue. Specific social skills may involve learning how to negotiate creatively, mediating online disputes, and making new members of the team feel included (Grenier & Metes, 1995). Team members should create an electronic social network as soon as possible using e-mail, which is the backbone for global-work and represents an infrastructure on which more sophisticated systems can be built. Such social uses of e-mail or other electronic media (e.g., instant messaging) can promote a team spirit and corporate culture and improve overall communications (O'Hara-Devereaux & Johansen, 1994).

Motivation

Individuals should be motivated, willing to get involved, interested, feel individual responsibility, take initiative, and be prepared to "work like hell" on the assigned task. In an

OCT environment where tasks may appear unconnected, the big picture is not always easy to visualize, and it may be difficult for members to maintain commitment.

The online team literature identifies the importance of team members being self-motivated. To be successful in virtual groups, the team members must be able to work independently and be motivated to make appropriate decisions. This is made possible by having clear goals and responsibilities and having high personal commitment and motivation to the team, along with having the resources and information needed to do the job (as previously mentioned) (Lipnack & Stamps, 1997).

Future Trends

Research in this area is only just starting, which means that there are still many questions to address, starting with the identification of the order of importance of the best practices that we have identified. In other words, some of practices may have a stronger influence on the team's overall success than others.

Some other questions that future research should address include: Which of the best practices are most critical for team effectiveness? Does the impact of certain practices on effectiveness vary depending on the task and the organizational context? Does one set of practices (i.e., individual, managerial, or organizational) take precedence, such that those practices have to be in place before the other practices have a positive effect?

Understanding what practices are important leads to other questions, such as: How does an organization ensure that best practices are followed? Can training programs be developed for managers and leaders and for members of OCT? What should be in these training programs, and how should they be delivered? Can policies be developed and norms established in organizations such that supportive practices, which research suggests leads to effective virtual work, are followed? How can this be done most effectively?

The answer to some of the questions above is undoubtedly "yes," but there are many questions remaining as to "how." There are many opportunities for future research in this area. The findings from this research could help organizations create and maintain more effective Online Collaborative Teams. Given the growing use of OCT in organizations today, the need for more understanding of how to make these teams work well is great.

Conclusion

Organizations must provide a supportive environment for the team, in terms of providing necessary resources, autonomy to the team, and recognition and reward systems that are tied to the results that the team and individuals achieve. Organizations must also design teams that have the necessary diversity, in terms of skills, access to knowledge and resources, and backgrounds.

OCT team leaders have to establish clear goals and expectations such that a team can have a focus and a direction to pursue. If possible, building passion for a cause can be a powerful stimulus for everyone on the team to pull together in the same direction.

Individuals need certain skills to be effective members of OCT. Required skills include technical skills to carry out assigned parts of the team's task, interpersonal skills, teaming skills, and skills to use electronic communication and information-sharing tools. Individuals should have to be motivated and self-disciplined so that they can manage themselves and their time effectively.

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