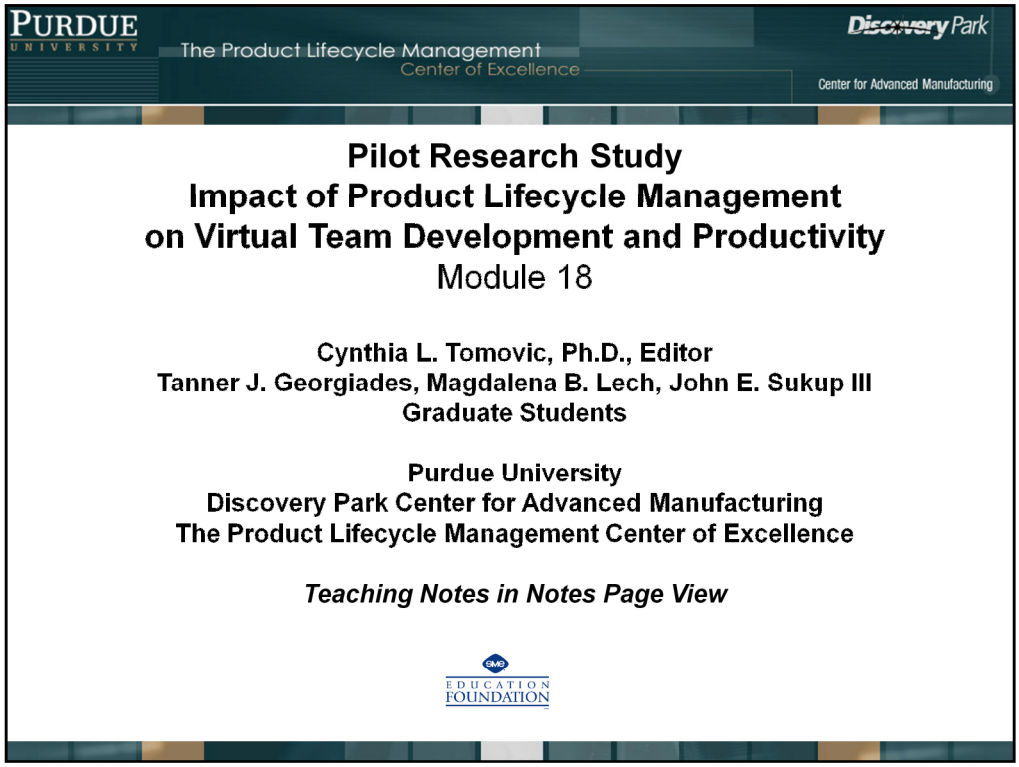
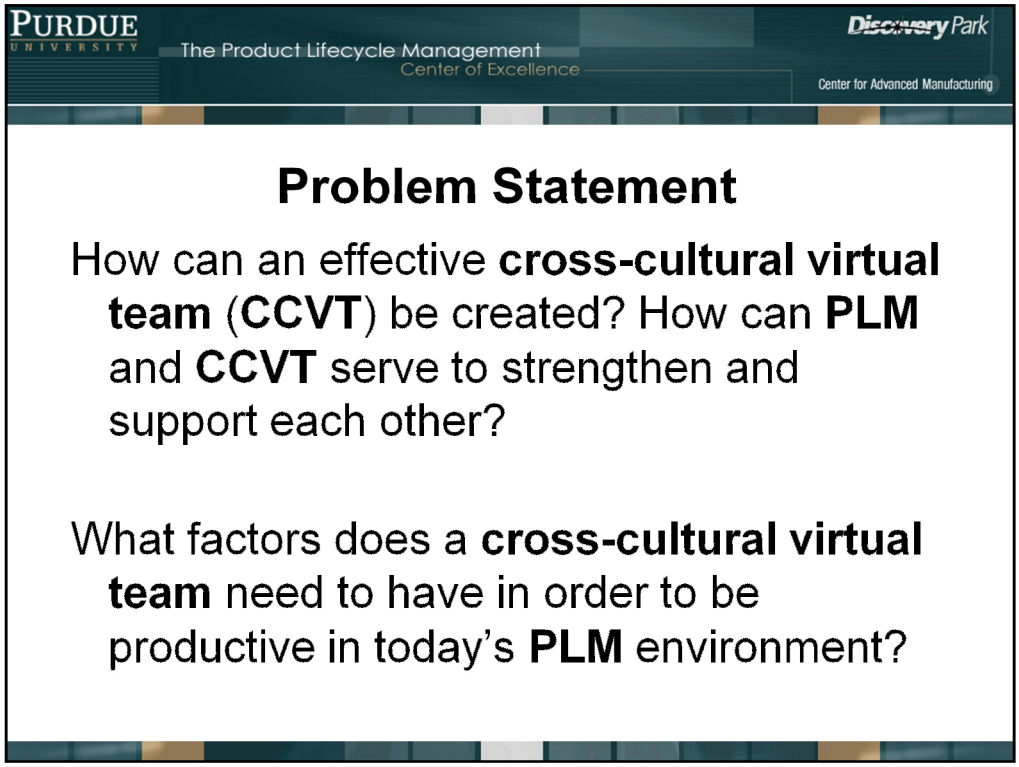
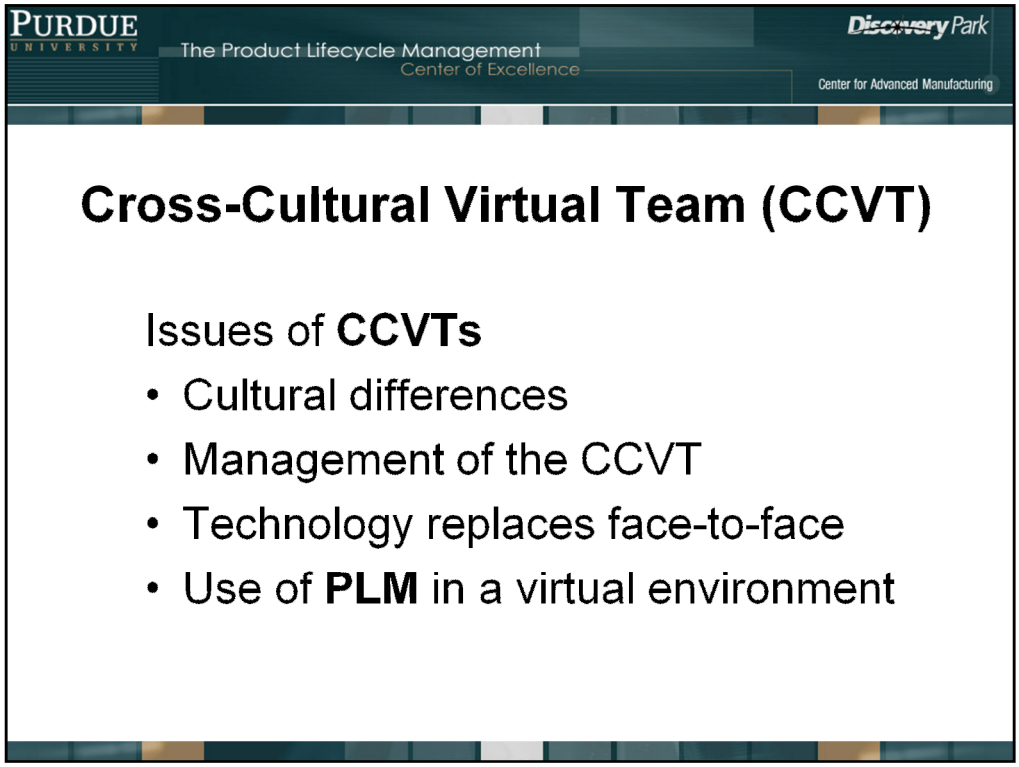


This module addresses cross-cultural virtual team considerations (CCVT) in the implementation of product lifecycle management (PLM). A cross-cultural virtual team model is suggested that will help leaders/managers more effectively create and manage cross-cultural teams.



The methodology for creating, leading, and managing cross-cultural virtual teams (CCVTM) begins with gaining an understanding of potential differences among team members due to cultural differences. Geert Hofstede and Project GLOBE offer extensive analysis of cross-cultural differences.

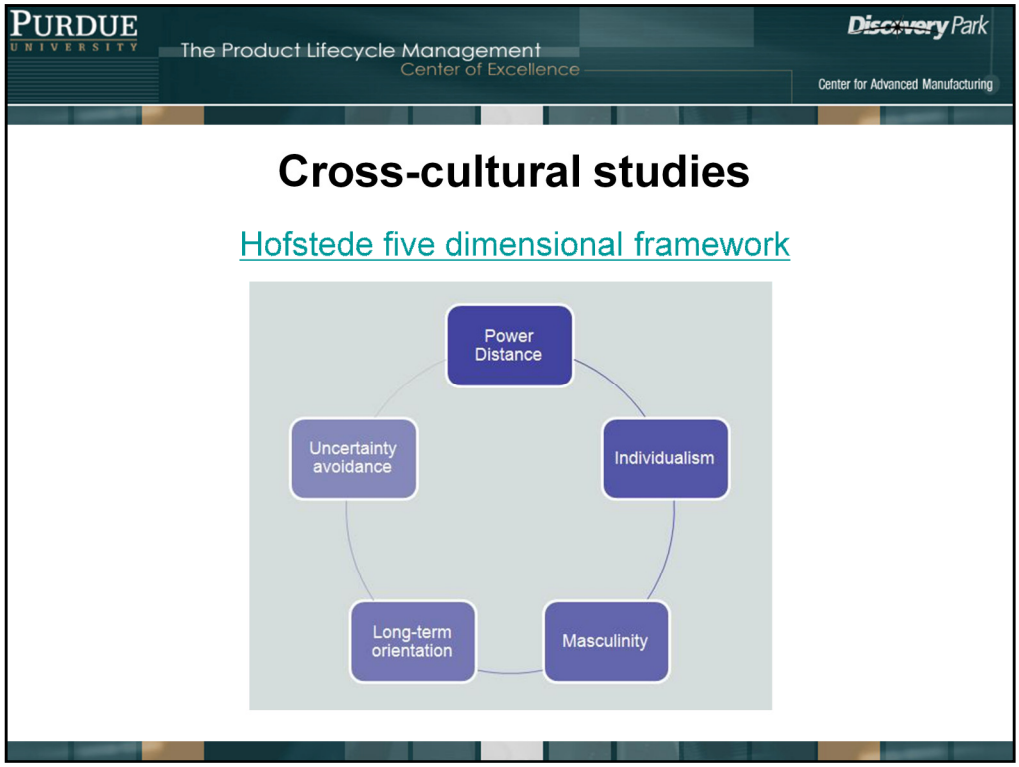
Combining issues involved with the creating and sustaining virtual teams, with knowledge on cross-cultural differences, leaders/managers will be better able to create and sustain effect cross-cultural virtual teams, and anticipate issues that may impede performance.



In today's business world, leaders must pay great attention to communications and the social system among their employees. It is critical that organizations control how employees collaborate. One of the roles of leadership is coaching. Effective leaders successfully coach member interaction and collaboration.

In a virtual environment, it is challenging to establish Virtual Team Leadership/Management. In essence, technology is a substitute for human face-to-face interaction. While time and space constraints are concerns of virtual team environments, where companies launch *global virtual team,* cross-cultural differences must be attended to as well.

PLM enables easy access to information, knowledge, and data sharing; yet some of its users in a global environment have failed to maintain well organized teams because they have not considered cultural distinctions of its members. The module provides suggestions for creating cross-cultural virtual teams, as well as, provides examples of difficulties concerning the implementation of cross-cultural teams.



Since virtual teams are such an integral part of the PLM process, it is important to create them in such a way to achieve a high level of communication, trust, and coordination. When forming cross-cultural virtual teams, cross-cultural differences must be attended to as they may dramatically affect group performance.

According to Hofstede, cultures vary greatly across levels of five major dimensions: power distance, individualism, masculinity, long-term orientation, uncertainty avoidance. In order to understand these variables, look at Geert Hofstede's Cultural Variables: Hofstede – www.geert-hofstede.com.

For more information on cross cultural differences see:

•M.J. Gannon, *Working across Cultures. Applications and Exercises*. Thousand Oaks, CA: Sage Publications. (2001).

•W.B. Gudykunst, *Cultural Variability in Communication*. Comm. Res. 24 (4) 327-348 (1997).

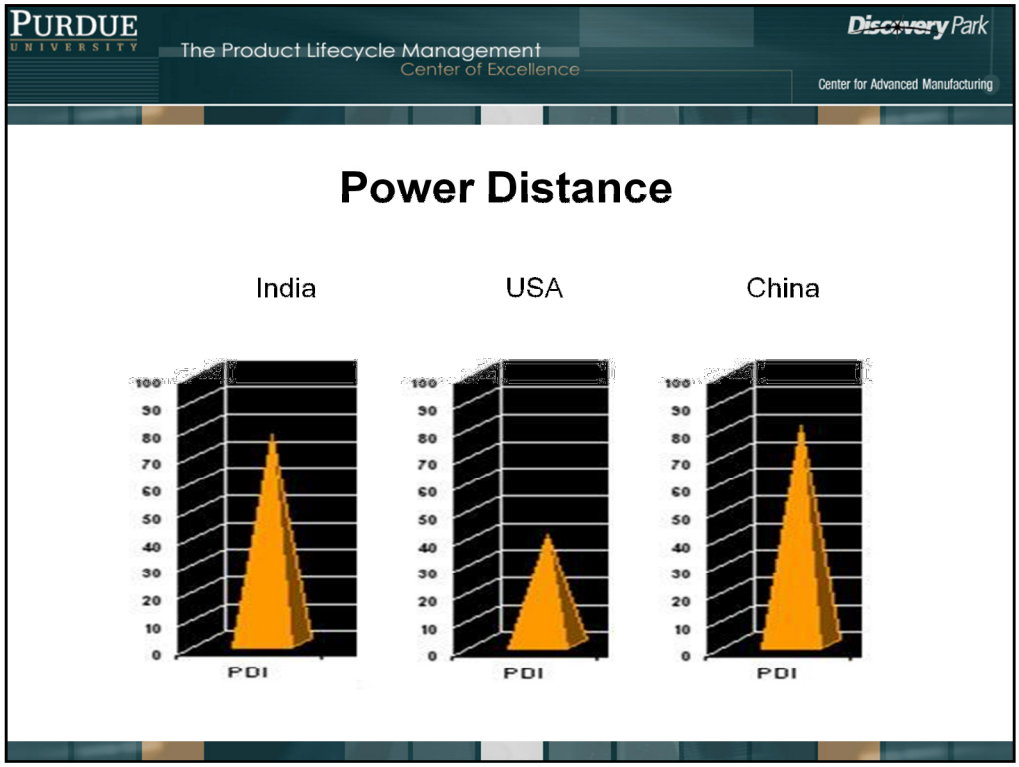
•G. Hofstede, *Culture's Consequences*; Beverly Hills CA: Sage (1980).ased manufacturing and marketing in China and India, the following slides offer definitions and examples of cross-cultural differences between US, China, and India relative to the Hofstede's five major dimensions.

•R. House, P. Hanges, M. Javidan, P. Dorfman, V. Gupta, (2004). *Culture, Leadership, and Organizations: The GLOBE Study of 62 Countries.* Thousand Oaks, California: SAGE Publications.

•R. House, P. Hanges, S. Ruiz-Quintanilla, P. Dorfman, M. Javidan, M. Dickson, et al. (n.d.). *CULTURAL INFLUENCES ON LEADERSHIP AND ORGANIZATIONS: PROJECT GLOBE.* Retrieved 3/26/07 at

•http://www.thunderbird.edu/wwwfiles/ms/globe/Links/process.pdf#search='Project%20GLOBE%20cultural%20dimensions'.

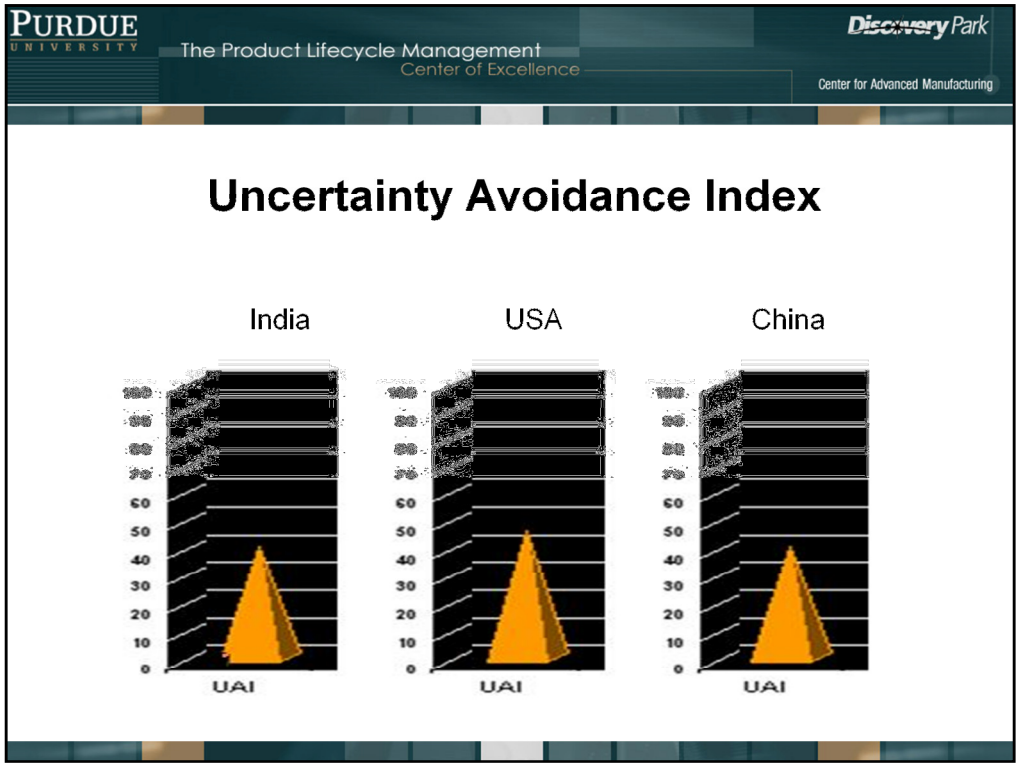
•M.. Javidan, P.W. Dorfman, M.S. de Luque, R.J. House, (Feb. 2006). *In the Eye of the Beholder: Cross Cultural Lessons in Leadership from Project GLOBE.* Academy of Management Perspectives, Vol. 20 (1)



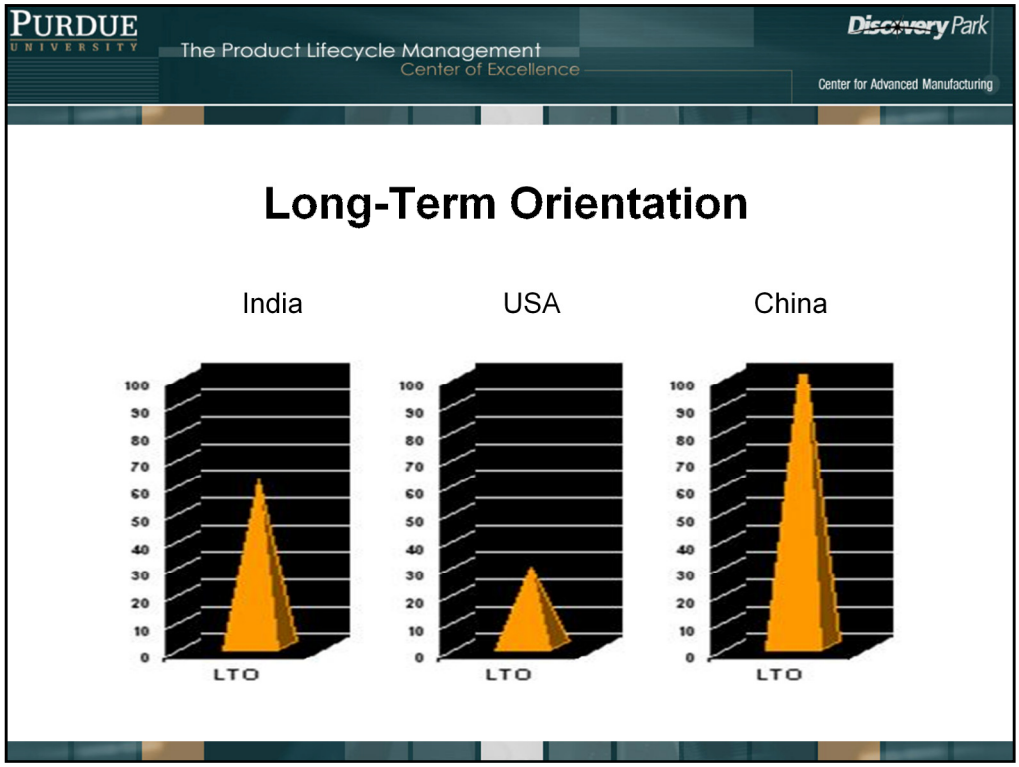
Power Distance – This dimension addresses how less powerful organizational members both accept and/or expect the distribution of power to **not** be equal. It is defined from the perspective of the subordinate and not the superior of that subordinate. What this represents is whether or not a society endorses this disproportion of power by subordinates as well as by superiors. While most societies differ in this dimension, sometimes the difference is extreme (i.e. some cultures Power Distance is so great that questioning authority in any way can lead to large consequences, whereas in others it is so small that the concept of superior and subordinate are vague or non-existent).

Individualism – This dimension shows the level of group integration within an organization. Highly individualistic cultures value personal responsibility as in being able to work by one's self and take care of one's own needs without extensively relying on other people. On the other hand, cultures ranking low in individualism are more prone to be bonded through group activity (collectivism). Collective cultures often base much of their society on rewarding the actions of the group, where as individualistic cultures reward individual effort.

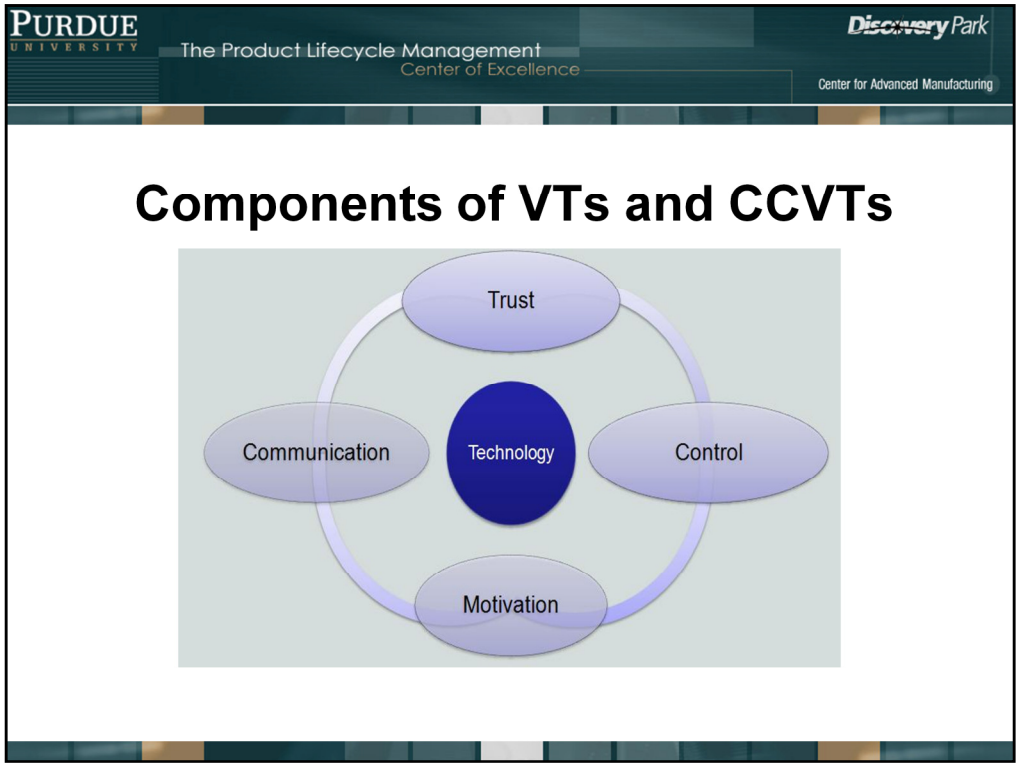
Masculinity – This gender-based dimension addresses the degree to which female and male values are differentiated and expressed. Female values are described as modest and caring, where as male values are described as assertive and competitive. Countries ranking high in masculinity value more the male value of assertiveness and competitiveness and encourage both males and females to express these behaviors. Low masculinity countries encourage male and female members to be more modest and caring.



Uncertainty Avoidance – This dimensions address the degree to which cultures accept uncertainty and ambiguity. Cultures that rank high on uncertainty avoidance tend to be rule bound, highly structure ways of behaving, tend to be less tolerant of change. Cultures with a low uncertainty avoidance index tend to be more accepting of new challenges, be more accepting of change, more tolerant. This dimension can also describe a society's aversion to accepting values that differ from their own (e.g. religion).



Long-Term Orientation – This dimension addresses the degree to which cultures have a long-term orientation. Cultures with a high long-term orientation index tend to base their decisions on outcomes in the future. Values such as perseverance, future ambitions, and fulfilling one's life goals are indicated in cultures that are long-term oriented. Conversely, short-term oriented cultures (or ones that rank low in the long-term orientation dimension) are based more on fulfilling obligations that will have a more immediate or near term impact.



Team Effectiveness: Effectiveness of all teams tend to be associated with the degree to which the teams establishe control, motivation, trust, and define acceptable means of communications. In a virtual team environment, technology, is important as well. In the case of PLM, the development and access to a common information core to all members is critical.

Trust – team members expect their partners to deliver on time and to the agreed specifications. Creating trust among team members that represent different attitudes may not be easy, but knowledge and a willingness to work together to overcome any cultural differences for mutual benefit is required.
Control – choosing the priorities for control by a team and leaving out some elements for an individual to decide on priority. A team's responsibility lies mostly in objectives and finances. The former need to be kept in focus, especially in a virtual environment.
Motivation – motivation is a critical element for a high performing project team, especially in a virtual environment. Virtual team members need to overcome the sense of isolation.
Communication – differences in culture and language may further slow communication. When co-workers are dispersed, socializing is significantly reduced. They rely heavily on information technology to communicate.

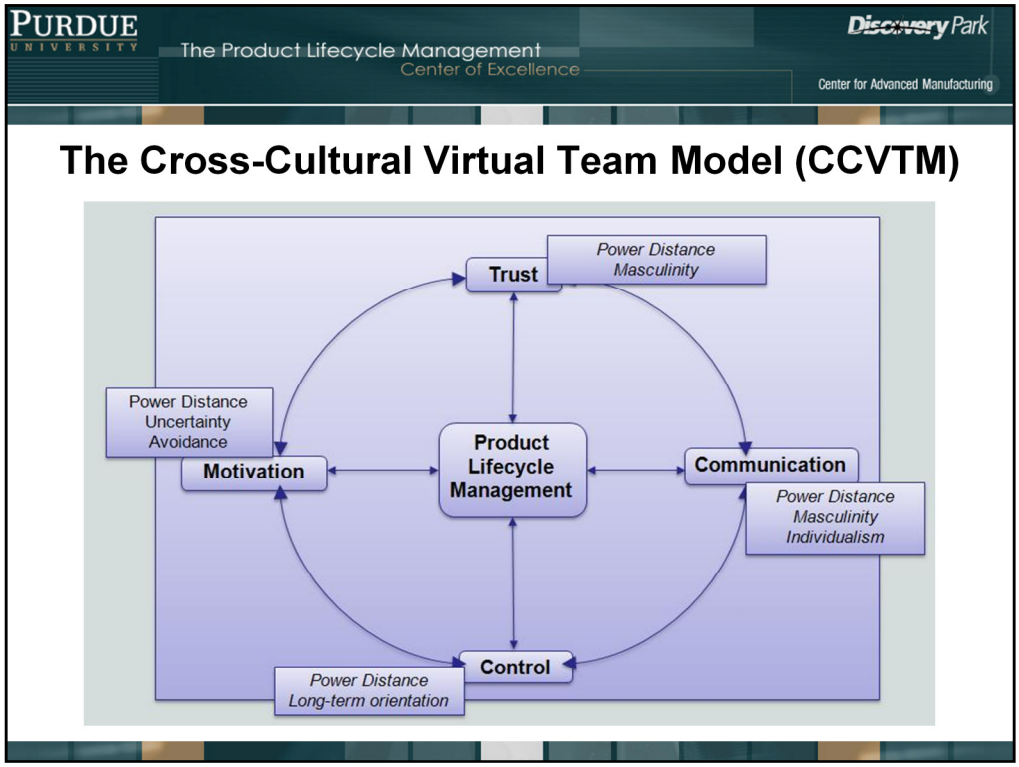
For information on teams and virtual teams see:

•C. Hastings, P. Bixby & R. Chaundhry-Lawton, *Superteams*. HarperCollins (1994).

•R. Cartwright, *Mastering Team Leadership*. Palgrave Macmillan (2003).

•S.L. Jarvenpaa & D. E. Leidner, *Communication and trust in global virtual teams*. Organization Science; 10, 6; ABI/INFORM Global, (1999). pg. 791.

•J. Lipnack & J. Stamps, *Virtual Teams: Working Across Space, Time, and Organizations*. Wiley (2000).



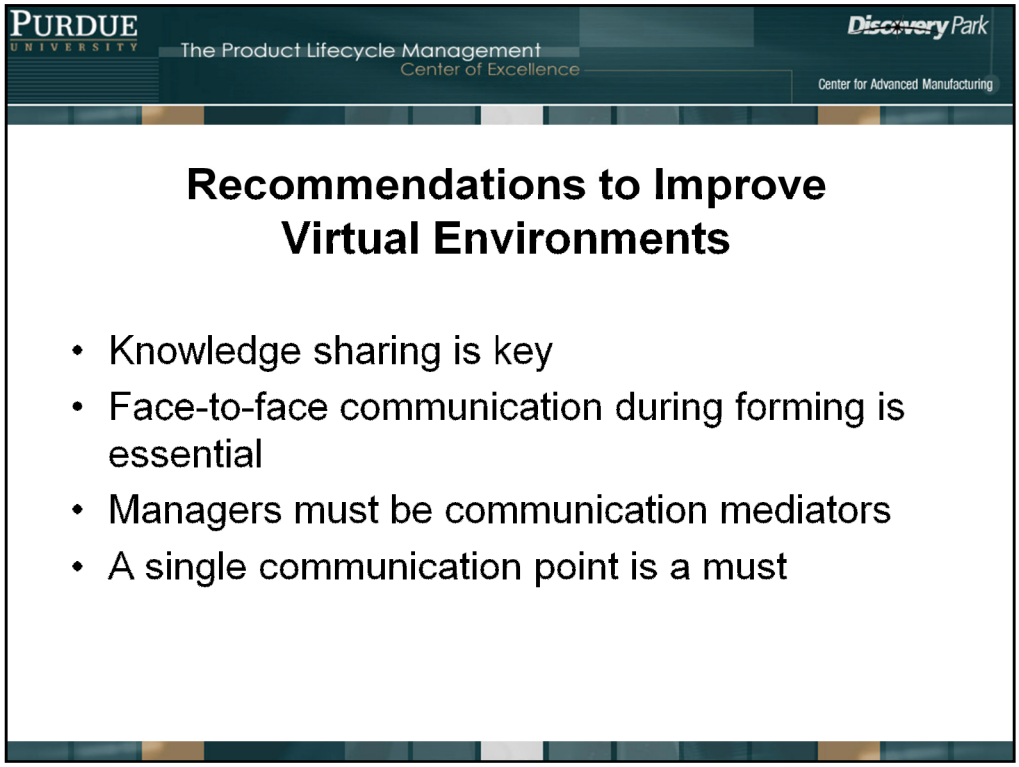
The CCVTM above illustrates that the four major factors of virtual team success are clearly dependent on some type of collaborative tool, in this case, PLM and all of the technologies that accompany it. Without PLM these factors would not be achieved easily and in the same token these factors fuel PLM itself. For example, open communication between all departments - one aspect of PLM functioning – most certainly depends on trust, motivation, communication, and control. These factors are measured based on cultural aspects. When creating a cross-cultural virtual team these cultural aspects should be inspected and chosen to create a high level of the four factors. This will increase the probability of team success within a cross-cultural virtual team environment.

Trust - As stated in a previous section, creating trust among team members representing different cultural backgrounds may not be easy. Yet, by learning that building trust may be facilitated by knowledge of power distance, in-group collectivism, and institutional collectivism of a represented culture, an understanding may be created among the team members.

Control - Depending on the kind of task, team members may be responsible for control over the task elements; however, major elements like objectives and finances are controlled by the team as a whole. Power distance and institutional collectivism are dimensions which when properly interpreted in the beginning and used accordingly, reveal prompts for team forming.

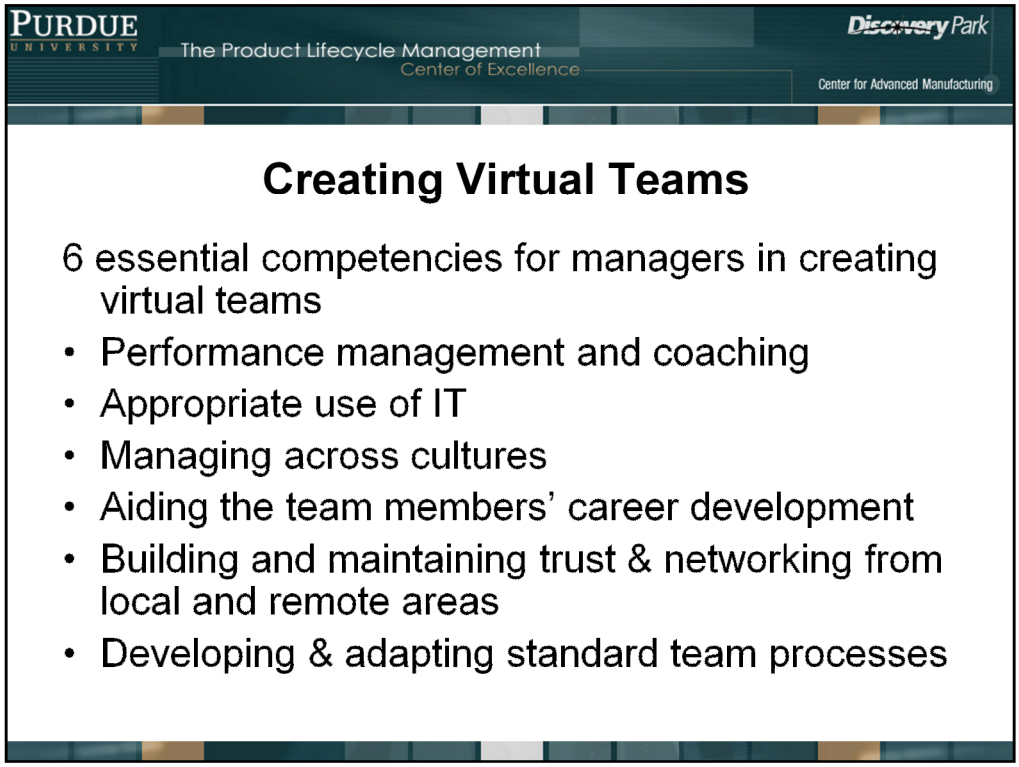
Motivation - In a virtual environment, motivation is a significant element for a successful virtual project team. No physical contact is present in the process of cooperation and depending on the background, the virtual team members' deal with this problem differently. To be more aware of these distinctions, dimensions such as in-group collectivism, institutional collectivism, performance orientation, and future orientation need to be interpreted properly.

Communication - In the virtual team environment with no physical contact, communication is dependent on information technology. The dimensions that facilitate better understanding of the communication differences include power distance, assertiveness, and gender egalitarianism.



This module makes the following recommendations regarding virtual teams:

- Members in virtual team environments often have expertise in a specific area, so there is a great need for knowledge sharing via effective communication and knowledge management techniques. Leaders should effectively implement roles and responsibilities which are essential.
- Face-to-face communication in the beginning of forming a team is an essential condition in establishing higher levels of trust and motivation among specialists working from geographically dispersed locations. The suitable use of telephones, video-conferencing, and face-to-face meetings should be considered vital for effective communication.
- Managers or team leaders must be communication mediators between the members of virtual teams in order to reduce conflict.
- A single communication point is a must to avoid idleness and conflict.



The module presents six essential competencies in creating virtual teams:

- Performance Management and Coaching (Managing Team Performance, Managing Individual Performance and Coaching, Managing Compensation)
- Appropriate use of Information Technology (matching Technology to the task and the type of team, matching technology to the team's life cycle, matching technology to the team members' backgrounds, humility and skepticism)
- Managing Across Cultures (leaders need to develop multicultural and multidiscipline perspectives)
- Aiding in Team Members' Career Development and Transition (members of virtual teams tend to be afraid that their careers will suffer; leaders need to anticipate this concern and develop specific strategies to deal with it)
- Building and Maintaining Trust & Networking (including team members, managers from local and remote functional areas, customers, partners, vendors, and suppliers).
- Developing and Adapting Standard Team Processes (in some organizations there may be significant functional and regional differences; the leader's role here is to adjust these for team's task and situation instead eliminating them)

[for more information on development of teams, refer to team related modules on this website]

Acknowledgments

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