Chapter 9. Leading Technology Teams

Case Study: “Daimler-Chrysler's Changing Engineering Environment”

9.1 Challenges of Technical Teamwork
   9.1.1 Teamwork a Managerial Frontier

9.2 What We Know about Technology-Oriented Teams
   9.2.1 Redefining the Process
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9.3 Toward Self-Direction and Virtual Teams
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9.5 A Model for Team Building
   9.5.1 Drivers of and Barriers to High Team Performance

9.6 Building High-Performance Teams

9.7 Recommendations for Effective Team Management
Case Study: “Daimler-Chrysler’s Changing Engineering Environment” [1]; and “Can this Man Save Chrysler?” by Joann Muller in Auburn Hills, Mich, with Christine Tiemey in Frankfurt, Business Week, September 17, 2001 [2].

- Chrysler
  - Founded in 1925
  - Mid-1990, was the most profitable auto maker in the world.
    - U.S. market share climbed to 23% in 1997
    - Product development cost shrank to 2.8% of revenue – compared with 6% at Ford and 8% at GM
  - CEO Bob Eaton, ~ to 1997
  - Juergen Schrempp, CEO, described the merger, a $36 billion deal, as a marriage made in heaven
  - Chrysler Group, 1998 to 2007, owned by Daimler AG
  - Thomas T. Stallkamp, president of Chrysler Corp, 1998- Sept. 1999 (10 months)
  - Dr. Dieter Zetsche, CEO, Nov. 2000 – 2006 [3]

- Chrysler Group, Nov. 2000 - 2007
  - Rival competition – Minivan: Honda & Toyota
  - Holden was fired – severe financial problems [led to $2 billion loss in 2001 and no-profit projection until 2003 agencies, and the Daimler-Benz parent company]
  - Zetsche, CEO, Nov. 2000

  - Strategy
    - Overhaul the product development process, a highly interdisciplinary 3-year team effort involving all functional areas across Chrysler, plus hundreds of suppliers, contractors, government
    - Combining German engineering and American marketing
      - Achieved “an cooperative technology agreement” with Daimler to make diesel engines and other M-class SUV parts available for Cherokees and PT Cruisers
    - Plans
      - Install a wide array of Mercedes parts in a large number of Chrysler cars ranging from the Grand Cherokee to Dodge Intrepid
      - Starting in 2004, the new Crossfire, a two seat-roadster, will be built with a Mercedes transmission, axles, and engine
      - Will work with Mitsubishi to develop small and midsize cars
  - Implementation Challenges
    - “Not-invented-here” syndrome kept Chrysler and Mercedes from sharing technology
    - Keep customer coming without offering big price discounts
      - Require combining new styles and features with thrift and agility in the market
Counts on W. Bernhard, Chief Operating Officer, to put more focus on the early stages of the car development
  o Pulling together teams from all areas of the company, including Design, Styling, Engineering, Manufacturing, Marketing, Purchasing, and Field Services
  o Hopes to increase resource efficiency and quality, without diminishing Chrysler’s creativity and market responsiveness

Quality Gates
  o Borrowed from Mercedes, a key ingredient in the new product development process
  o Monitor and review a vehicle via 11 checkpoints throughout its three-year development cycle

Organizational Complexities and Team Challenges

Chrysler LLC, Aug. 2007 - Now
  o DaimlerChrysler AG announced the sales of 80.1% of Chrysler Group to American private equity firm Cerberus Capital Management, L.P for $7.4 billion; Zetsche was the key person in this strategic move which ended a nine-year merger so Daimler can focus on its luxury Mercedes brand and truck business.
  o 2008 Automobile Crisis, in Dec. 2008, - almost running out of cash, and might not survive past 2009
  o Dec. 19, 2008, President Bush announced a $13.4 billion rescue loan for the American automakers, including Chrysler
  o March 7, 2009, Chrysler Vice-Chairman, James Press stated the current sales volume is sufficient to keep the company going.
  o March 30, 2009, the White House announced it would provide an additional $6 billion in further support to Chrysler contingent on the company finalizing an alliance with Fiat before the end of April

Chrysler LLC – A Heritage of Innovation and Engineering First [4]
  o ENVI’s All Electric-Vehicle Technology, 150-200 mile driving range
  o uConnect – the entertainment and navigation option
  o Diesel Technology
  o Hybrid – Aspen Hybrid, Durango Hybrid
9.1 Challenges of Technical Teamwork

- Complex Organization, Team Efforts, Cultural Differences, Technology-Intensive
  - Innovation
  - Speed
  - Agility
  - Quality
  - Producability
  - Sourcing
  - High uncertainty & risks

- Team Leaders
  - Both technically and socially competent

- Critical Success Factors (CSF) for Project Teams
  - Technological
  - Organizational
  - Interpersonal issues
Table 9.1 Responsibilities and Challenges for Project Team Leaders

- Bring together the right mix of competent people who will develop into a team
- Building lines of communications among task teams, support organizations, upper management, and customer communities
- Building the specific skills and organizational support systems needed for the project team
- Coordinating and integrating multifunctional work teams and their activities to form a complete system
- Coping with changing technologies requirements and priorities, while maintaining project focus and team unity
- Dealing with anxieties, power struggles, and conflict
- Dealing with supporting departments; negotiating, coordinating, integrating
- Dealing with technical complexities
- Defining and negotiating the appropriate human resources for the project team
- Encouraging innovative risks taking without jeopardizing fundamental projects goals
- Facilitating team decision making
- Fostering a professional stimulating work environment where people are motivated to work effectively toward established project objectives
- Integrating individuals with diverse skills and attitudes into a unified workgroup with unified focus
- Keeping upper management involved, interested, and supportive
- Leading multifunctional tasks groups toward integrated results in spite of often intricate organizational structures and control systems
- Maintaining project direction and control without stifling innovation and creativity
- Providing an organizational framework for unifying the team
- Providing or influencing equitable and fair rewards to individual team members
- Sustaining high individual efforts and commitment to established objectives
9.2 What We Know about Technology-Oriented Teams

- Typical examples of multidisciplinary activities required unified teamwork for successful integration include
  - Establishing a new program
  - Transferring technology
  - Improving project-client relationships
  - Organizing for a bid proposal
  - Integrating new project personnel
  - Revolving inter-functional problems
  - Working toward major milestones
  - Reorganizing mergers and acquisitions
  - Transitioning the project into a new activity phase
  - Revitalizing an organization

Team Life Cycle

- Assessing an opportunity to product research
- Feasibility analysis
- Development
- Engineering
- Transferring technology to manufacturing
- Manufacturing
- Marketing
- Distribution
- Field service
- And other works
  - Bid proposals
  - Licensing subcontracting
  - Acquisitions
  - Offshore manufacturing
Figure 9.1 Characteristics of High-Performing Project Team

Innovative High Quality; On-Budget; On-Time

- Membership Self-Development
- Innovative Behavior
- Risk Sharing
- Committed
- Effective Communications
- Effective Cross Functional Interfaces & Alliances
- Quality Oriented
- Minimal Reliance on Procedures
- High Need for Achievements
- Enjoy Work
- High Morale & Team Spirit
- Change-Oriented
- Self-Directed
- Conflict Management
- High Response rate
9.3 Toward Self-Direction and Virtual Teams

Table 9.2 Self-Directed Teams

- Definition
- Benefits
- Challenges

Table 9.3 Virtual Teams

- Definition
- Benefits
- Challenges
9.4 Measuring Project Team Performance

Project Performance Measures

1. Project success according to agree-on results
2. On-time performance
3. On-budget performance
4. Overall customer or sponsor satisfaction
5. Responsiveness and flexibility to customer requirements and changes
6. Dealing effectively with risk and uncertainty
7. Positioning the project for future success
8. Stretching beyond planned goals
9. Organizational learning to benefit future projects

Team Effectiveness Measures

Table 9.4 Benchmarking Your Team Performance

- Work and Team Structure
- Communication and Control
- Team Leadership
- Attitudes and Values
9.5 A Model for Team Building

Figure 9.2 Model for Analyzing Team Performance

1. Drivers and barriers to high team performance
2. Managerial leadership style (components of authority, motivation, autonomy, trust, respect, credibility and friendship)
3. Organizational environment (working conditions, job content, resources, organizational support factors)
4. The social, political and economic factors of the firm’s external business environment
Table 9.5 Strongest Drivers of and Barriers to Project Team Performance

**Drivers**

1. Clear project plan and objectives  
2. Good interpersonal relations and shared values  
3. Good project leadership and credibility  
4. Professional growth potential  
5. Professionally interesting and stimulating work  
6. Project visibility, high priority  
7. Proper technical direction and team leadership  
8. Qualified, competent team personnel  
9. Recognition of sense of accomplishment  
10. Management involvement and support

**Barriers**

1. Communication problems  
2. Conflicts among team members or between team and support organizations  
3. Different outlooks, objectives, and priorities perceived by team members  
4. Poor qualification of team/project leader  
5. Poor trust, respect and credibility of team leader  
6. Insufficient resources  
7. Insufficient rewards  
8. Lack of project challenge and interest  
9. Lack of senior management support, interest, and involvement  
10. Lack of team definition, role conflict, and confusion  
11. Lack of team member commitment  
12. Poor project team/personnel selection  
13. Shifting goals and priorities  
14. Unclear team leadership, power struggle  
15. Unstable project environment, poor job security, anxieties
9.6 Building High-Performance Teams

Figure 9.3 The Four Stages of Team Development

- Stage 1. Team Formation – require a Predominately Directive Style of Team Leadership
- Stage 2. Start up - require a Predominately Directive Style of Team Leadership
- Stage 3. Partial Integration – require a combination of Directive and Participative Leadership
- Stage 4. Total Integration – Self-directed
9.7 Recommendations for Effective Team Management

- Early-Project-Life-Cycle Team Involvement
- Defined Work Process and Team Structure
- Develop Organizational Interfaces
- Staff and Organize the Project Team
- Communicate Organizational Goals and Objectives
- Build a High-Performance Image
- Build Enthusiasm and Excitement
- Define Effective Communication Channels
- Create Proper Reward Systems
- Ensure Senior Management Support
- Build Commitment
- Manage Conflict and Problems
- Conduct Team-Building Sessions
- Provide Proper Direction and Leadership
- Foster a Culture of Continuous Support and Improvement
Critical Thinking: Questions for Discussion

- Identify Chrysler’s organizational challenges and the issues that require effective project teamwork for resolution.
- Identify and profile the type of leadership style that is needed for effective managing a new product team at Chrysler.
- How do you identify the “Best” team members for a newly formed project?
- As a team leader, how can you build team commitment to the project objectives?
- As a project team leader, how can you integrate senior management into your team?
- What kind of challenges do you anticipate over the next 10 years regarding project team challenges, characteristics, and leadership style?
References


