

ROLE OF ORGANIZATIONAL CULTURE ON QUALITY PROJECT PERFORMANCE

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ASQ May Chapter Meeting

May 10, 2008



Problem

- Why Quality Management practices fail?

Facts: 75% of all business transformation projects fail, only 16% of U.S IT projects were completed on time and budget. New U.S consumer products fail 95% of the time and industry product launches fail about 40% of the time (Ives, 2005, Clancy & Stone, 2005, Stevens and Burley, 2003)

- Do we have an integrative system in place?

Fact: All of the winners of Malcolm Baldrige Award have excellent project management systems in place (Kerzner, 2005)



Problem

- Failure to change organizational culture

Fact: Three quarters of reengineering, TQM, strategic planning, and downsizing efforts have failed entirely or created serious problems that the survival of the organization was threatened (Cameron and Quinn, 1999).



Components of failure

- Conflicting priorities between executives, line managers, and project managers
- Too many unresolved policy issues
- No functional commitment
- No employee commitment
- Poor motivation
- Poor human relations
- Poor morale
- Resistance to change

Which one of these have you experienced?



- Involvement
- Lack of vision
- Resistance



Causes of Resistance

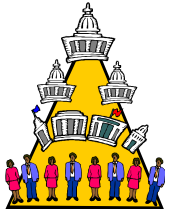
- ***Potential changes in work habits*** (new guidelines/processes, a fragmented work environment, changing comfort zones)
- ***Potential changes in social groups*** (unknown new relationships, multiple boss reporting, multiple temporary assignments, severing established ties)
- ***Embedded fears*** (fear of failure, fear of termination, fear of added workload, fear of embarrassment, dislike of unknowns/uncertainty)
- ***Potential changes in the wage and salary administration*** (lack of recognition after the changes, unknown rewards and punishment, multiple boss reporting, improper personal performance evaluation)



Causes of Resistance

Views from the audience

- Asked to do it (being controlled)
- Multiple boss demanding different issues, having different priorities
- Fear of resignation



Organizational culture link

A significant and positive linear relationship between team leader effectiveness and team satisfaction and the organizational culture that supports communication and cooperation among teams

Doolen, et. al , 2003; Gopalakrishnan, S. and Santoro, M, 2004

- A significant relationship between organizational climate and cooperative learning

Janz and Prasarnphabich, 2003

- Positive relationship between customer orientation and beliefs, between beliefs and time-based manufacturing, and between time-based manufacturing and performance.

Nahm, et al., 2004

- Restraining nature of organizational culture

Eskerod, P and Skriver, P, 2007



Organizational culture experiences (audience)

- Tried to get the work done
- Conflicts between new and old team member
- Gap between administration and team level
- Recognition issues
- Corporate culture , international culture differences



Organizational Culture-1

The set of values, beliefs, and behavioral norms that guide how members of the organization get work done. It consists of shared values and meanings.

- ***Schein's hierarchy (1992):*** artifacts-organizational structure, processes, technology; *espoused values*-strategies, goals, philosophies and *underlying assumptions*, beliefs, perceptions, thoughts.



Organizational Culture-2

- **Schein's hierarchy, 1992**

Beliefs on: working with others, customer orientation, investing in facilities and equipment, making decisions that are global, management control, integrating with suppliers.

- **Denison and Mishra, 1995**

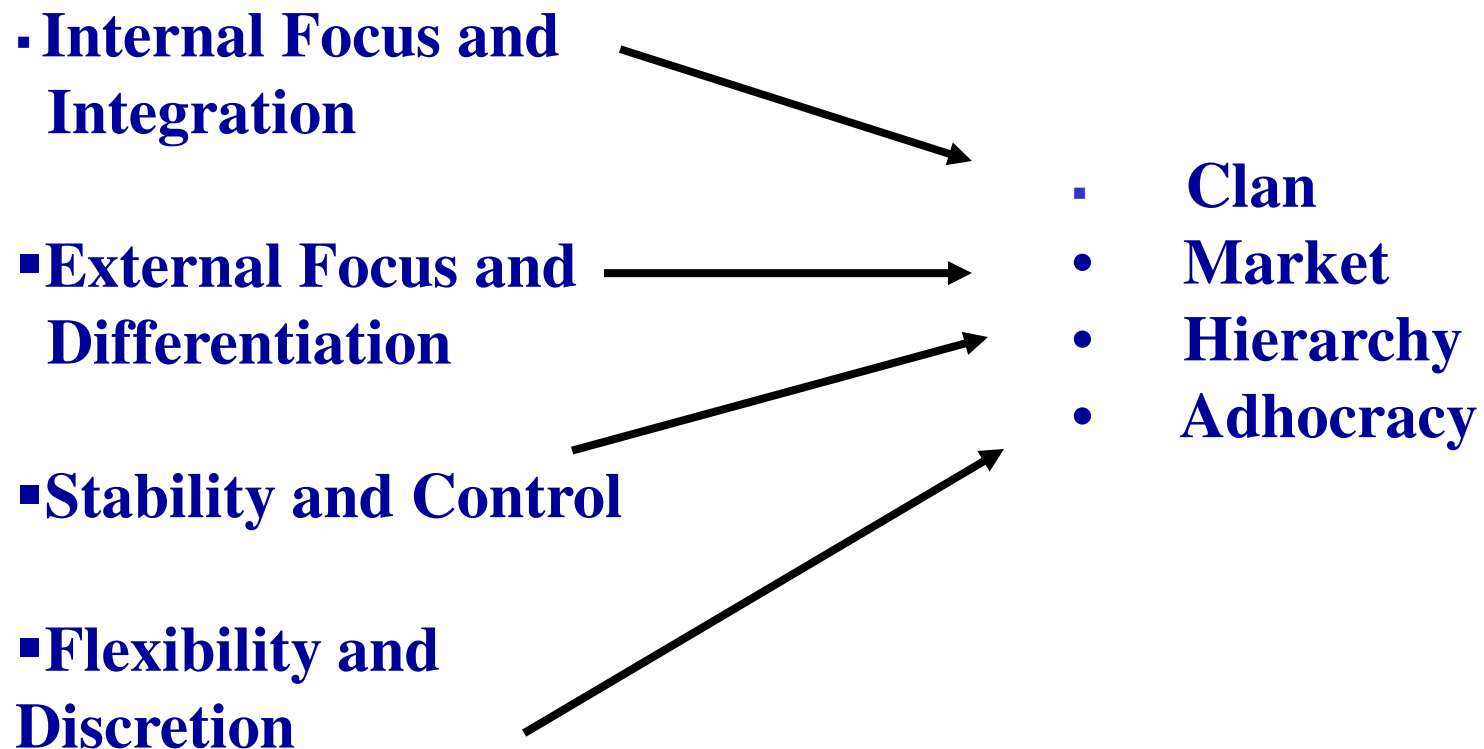
Four cultural traits: involvement, adaptability, consistency, sense of mission

- **Cameron, K. S and Quinn, R.E., 1999**

Determines a culture profile (plot) based on Competing Values Framework (CVF). Organizational Culture Instrument (OCAI) measures six constructs relevant to this framework



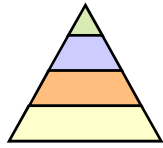
Organizational Culture elements (Cameron & Quinn, 1999)



Organizational Culture Constructs

Cameron and Quinn

- **Dominant Characteristics**, what the organization is like
- **Organizational Leadership** style and approach
- **Management of Employees**, the style that characterizes how employees are treated, and what the working environment is like
- **Organization Glue**, bonding mechanisms that hold the organization together
- **Strategic Emphases**, what areas of emphasis drive the organization's strategy
- **Criteria of Success**, how victory is defined and what gets rewarded and celebrated



Organizational Culture types-1

- **CLAN**

The organization is a very personal place. It is like an extended family. People seem to share a lot of themselves.

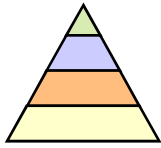
The leadership in the organization is generally considered to exemplify mentoring, facilitating, or nurturing.

The management style in the organization is characterized by teamwork, consensus, and participation.

The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.

The organization emphasizes human development. High trust, openness, and participation persist.

The organization defines success on the basis of the development of human resources, teamwork, employee commitment, and concern for people.



Organizational Culture types-2

- **MARKET**

The organization is very results oriented. A major concern is with getting the job done. People are very competitive and achievement oriented.

The leadership in the organization is generally considered to exemplify a no-nonsense, aggressive, results-oriented focus.

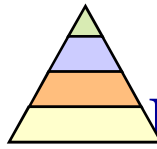
The management style in the organization is characterized by hard-driving competitiveness, high demands, and achievement.

The glue that holds the organization together is the emphasis on achievement and goal accomplishment. Aggressiveness and winning are common themes.

The organization emphasizes competitive actions and achievement. Hitting stretch targets and winning in the marketplace are dominant.

The organization defines success on the basis of winning in the marketplace and outpacing the competition. Competitive market leadership is key.

Organizational Culture types-3



HIERARCHY

The organization is a very controlled and structured place.

Formal procedures generally govern what people do.

The leadership in the organization is generally considered to exemplify coordinating, organizing, or smooth-running efficiency.

The management style in the organization is characterized by security of employment, conformity, predictability, and stability in relationships.

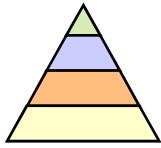
The glue that holds the organization together is formal rules and policies. Maintaining a smooth-running organization is important.

The organization emphasizes permanence and stability.

Efficiency, control and smooth operations are important.

The organization defines success on the basis of efficiency.

Dependable delivery, smooth scheduling, and low-cost production are critical.



Organizational Culture types-4

- **ADHOCRACY**

The organization is a very dynamic and entrepreneurial place.

People are willing to stick their necks out and take risks

The leadership in the organization is generally considered to exemplify entrepreneurship, innovating, or risk taking.

The management style in the organization is characterized by individual risk-taking, innovation, freedom, and uniqueness.

The glue that holds the organization together is commitment to innovation and development. There is an emphasis on being on the cutting edge.

The organization emphasizes acquiring new resources and creating new challenges. Trying new things and prospecting for opportunities are valued.

The organization defines success on the basis of having the most unique or newest products. It is a product leader and innovators.

Which cultures do you observe? (audience)

- 3M: adhoc, market
- Google, apple: more adhoc
- Hierarchy: military
- Clan: laboratory setting
- Accounting firm: hierarchy, sometimes adhoc
- Country culture affecting organization culture



Research Objectives & Hypotheses

- Determine relationships between organizational culture and project performance
H1: A significant relationship exists between organizational culture and project performance
- Determine the relationship between organizational culture and business performance
H2: A significant relationship exists between organizational culture and business internal and external performance.



Research Objectives & Hypotheses

- Determine relationships between PMM and project performance

H1: A significant relationship exists between PMM and project performance

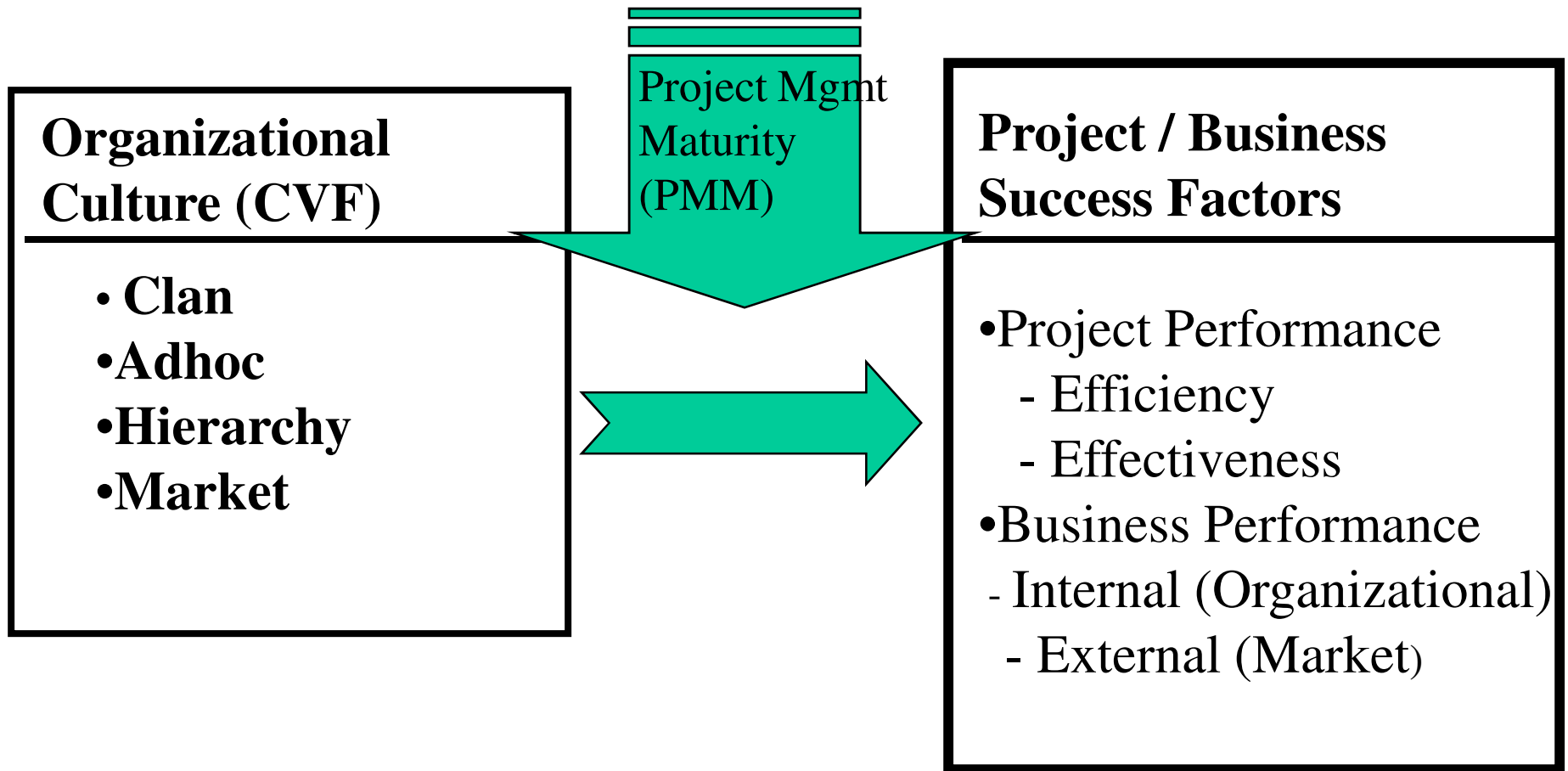
- Determine the relationship between PMM and business performance

H2: A significant relationship exists between PMM and business internal and external performance.

- Determine the interaction of PMM and organizational culture on performance

H3: A significant interaction exists between PMM and organizational culture

Research Framework





Project performance measures

*Nahm, A.Y., Vonderembse, M.A., Koufteros, X.A, 2004
Shim, D. and Lee, M., 2001, Bryde et al., 2004; Doolen et al., 2003; Dvir et al., 2006*

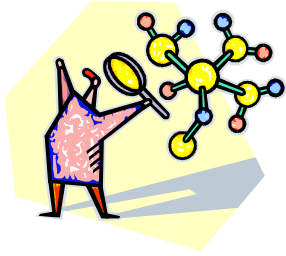
- **Project Efficiency**
 - The extent the project budget and planned time was met
- **Project Effectiveness**
 - The degree the project met client expectations
 - Team member satisfaction (whether team members enjoyed working together)



Business performance measures

Nahm, A.Y., Vonderembse, M.A., Koufteros, X.A, 2004
Dvir et al., 2006, Sabherwal and Sabherwal, 2005

- **Internal performance**
 - Saving benefits to the organization
 - Sales growth
 - Improved organizational performance compared to last year
- **External performance**
 - Increased market share
 - Improved competitive position
 - Improved performance compared to the best worldwide competition



Research Design

- Sample: 400 distributed to project managers on-line
- 86 valid responses
- Questionnaire: 5 demographics questions, 24 items for organizational culture for Current and Preferred levels: 100 is distributed among four styles of clan, adhocracy, market, hierarchy for the 6 constructs.
- 1-5 Likert scale for the maturity levels for the 9 constructs of PMM, including 0 for not available or not enough information
- 10 constructs of project management performance, 100 is distributed among the scale of four: (A: to a great extent; D: not at all or not applicable)



Descriptives (Mediating variables)- Demographics 1

Manufacturing	0.34
Service(banking, IT, education, consulting, education, health care, utility)	0.56
Government	0.08
Construction	0.02

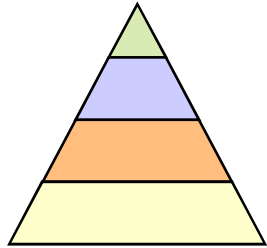
Male	0.66
Female	0.34



Descriptives- Demographics2

Age	
Less than 30	7
Between 30 and 40	26
Between 40- 55	40
Over 55	10

Number of subordinates	
0	37
1-3	16
4-10	15
12-18	8
more than 19	8



Organizational Culture constructs Descriptives

	Current	Preferred
Clan	22.9	29.9
Adhocracy	16.6	22.6
Market	31.7	21.5
Hierarchy	28.8	26.0



Results -1

- With respect to current organizational culture orientation, **clan culture** is significantly related to **project performance** (time, budget, expectations, team satisfaction)
- **Clan culture** is significantly related to business **internal performance** (sales growth, savings benefit, organizational performance improvement compared to last year)
- **Clan culture** is significantly related to business **external performance** (market share, competitive position, Organizational performance improvement compared to your best worldwide competition)
- For **preferred** organizational culture, **Clan** is related to project performance, and **hierarchical** culture to overall performance.



Expected managerial competencies

- **Positive influence of employee empowerment,** participation & involvement of the teams, cross-functional teamwork, horizontal communication and caring climate, and recognition for employees.
- Managers are to be competent in **managing teams,** interpersonal relationships, and development of others
- Managers should facilitate effective cohesive, smooth functioning **high performance teamwork.**
- Managers should also facilitate **effective interpersonal relationships,** and help individuals improve their performance, expand their competencies, and obtain personal development opportunities.



PMM- Project Management Maturity Levels

Crawford, K., 2002; Kerzner, H., 2005

- Level 1
- **Initial Process**
 - Ad hoc processes
 - Management awareness
- Level 2
- **Structure Process and Standards**
 - Basic processes; not standard on all projects; used on large, highly visible projects
 - Management supports and encourages use
 - Mix of intermediate and summary-level information
 - Estimates, schedules based on expert knowledge and generic tools
 - Mostly a project-centric focus



PMM- Project Management Maturity Levels-2

- Level 3

- **Organizational Standards and Institutionalized Process**

- All processes, standard for all projects, repeatable
- Management has institutionalized processes
- Summary and detailed information
- Baseline and informal collection of actuals
- Estimates, schedules may be based on industry standards and organizational specifics
- More of an organizational focus
- Informal analysis of project performance



PMM- Project Management Maturity Levels-3

Level 4

Managed Process

- Processes integrated with corporate processes
- Management mandates compliance
- Management takes an organizational entity view
- Solid analysis of project performance
- Estimates, schedules are normally based on organization specifics
- Management uses data to make decisions

• Level 5

• **Optimizing Process**

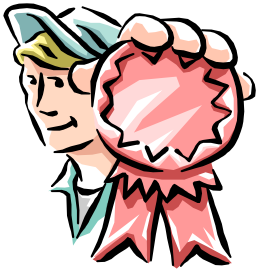
- Processes to measure project effectiveness and efficiency
- Processes in place to improve project performance
- Management focuses on continuous improvement

PMM- Project Management Maturity Levels

Categories	Percent scores				
	1	2	3	4	5
Project Integration Management	22.4	30.4	22.1	11.2	7.2
Project Scope Management	22.4	27.1	25.3	14.9	8.2
Project Time Management	22.4	27.7	25.3	9.6	10.9
Project Cost Management	21.1	36.3	17.1	13.6	8.3
Project Quality Management	18.3	30.3	14.3	15.7	13.7
Project Human Resource Mana	29.0	29.3	12.7	12.7	7.3
Project Communications Mana	18.7	34.7	24.3	12.3	7.7
Project Risk Management	23.7	30.1	17.3	10.7	5.3
Project Integration Management	18.0	23.0	12.0	8.0	7.0
Project Scope Management	21.0	19.0	13.0	15.0	4.0
Project Time Management	20.0	24.0	12.0	9.0	8.0
Project Cost Management	17.0	26.0	16.0	7.0	5.0
Project Quality Management	14.0	29.0	7.0	15.0	7.0
Project Human Resource Mana	24.0	18.0	18.0	6.0	5.0
Project Communications Mana	18.0	21.0	17.0	11.0	4.0
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Average Percent Scores	20.5	26.9	16.8	11.2	7.0

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Project Quality Management

- Quality Planning
- Quality Assurance
- Quality Control
- Management Oversight

Level 2 shows that a basic organizational policy has been adopted and management encouragement is present. The organization's quality policy and objectives are stated.

Goal: Level 3: Quality Process is well documented and is an organizational standard. Mgmt signs off on the Q plan and participates in quality reviews. Quality has a program focus. Mgmt supports the development of a quality department.



Performance Scores

PERFORMANCE MEASURES	TOTAL WEIGHTED SCORES
Team satisfaction	294.0
Met expectations	281.0
Improve its competitive position	268.0
Savings benefits	264.0
Organizational performance improvement	261.0
Met budget requirements	253.0
On time completion	245.0
Sales growth	243.0
Market share increase	242.0
Performance improvement compared to best worldwide competition	230.0



Results - 2

- Majority of companies are at Level 2 project maturity level, i.e., structured process and standards: basic processes, not standard in all, management supports and encourages use; mix of intermediate and summary level information, mostly a project centric focus.
- PMM is related to project performance, internal and external performance
- Although Clan continues to relate to performance, Market style culture interacts with PMM
- Highest performance is achieved at team satisfaction followed by meeting project expectations



Future Discussion

- Organizational culture differences based on organization type
- Culture differences at project groups from different countries