RESEARCHING THE VALUE OF PROJECT MANAGEMENT

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A Conceptual Research Model...

PM Constructs
PM Implementation
Business Orientation
Organizational Context
Environment
Fit
Process Criteria
Value of Project Management
Outcome Criteria
Organizational Value
...And A Great Deal Of Data...

- Project Suppliers
- Project Customers
- Project Employees
- Project Managers
- Surveys
- Interviews
- Senior Management
- Project Sponsors
- Project Subcontractors
- Organization
- Unit Of Analysis
- Project History
- Organization Data Collection
- Researchers' Observations
- Case Reports
- Data Collection
- Researcher Observations
- Case Reports
- Organization Summaries
- 418 Projects Summaries
- 65 Organizations
- 60 Case Reports
- 54 Quantitative Datasets

2008/07/14
PMI Research Conference, Warsaw, Poland
...Adopting A Multi-Method Approach...

- Qualitative Methods
  - Between- and within-case analysis
  - Manual coding and interpretation
  - Content analysis

- Quantitative Methods
  - Principal Components Analysis
  - Regression analysis
  - Cluster analysis

- Integration Of Analysis Approaches
  - Qualitative analysis has helped frame quantitative exploration
  - Quantitative analysis has both framed and reinforced qualitative results

- Theory Generation

...To Answer A Comprehensive Question

- What Is The Value Project Management Delivers To Organizations?
  - Organizational Context
    - How do organizations differ?
    - What differences matter to PM implementations?
  - PM Implementation
    - What do organizations do or put in place and call PM?
  - Organizational Value
    - What is valuable to organizations and how is it measured?
How do organizations differ?
What differences matter to PM implementations?

ORGANIZATIONAL CONTEXT

Descriptive Statistics – By Region

N=65
Descriptive Statistics – By Industry

- Construction: 20%
- Government: 16%
- Consulting: 11%
- Research: 13%
- Services: 12%
- High Technology: 14%
- Industry: 14%

N=65

Descriptive Statistics – By Project Type

- Internal, 31
- Product Development, 23
- Customer, 32
- R&D, 22
- Other, 8

- Process Development, 29
- Engineering, 31
- New Product Dev, 23
- Organizational Change, 30
- Software, 31

N=48

15 companies indicated 100% involvement in 1 type of projects
Descriptive Statistics – By Organization

Principal Components - Context
What do organizations implement that they call project management?

**PM IMPLEMENTATION**
"The PM process has become normal and ordinal, which reduced individual heroism in PM."

Project Manager, 23
ORGANIZATIONAL VALUE

What is valuable to organizations and how is it measured?

Components Of Measuring Value

• Initial Constructs Of Value
  – Level 1 – Satisfaction
  – Level 2 – Aligned Use of Practices
  – Level 3 – Process Improvements
  – Level 4 – Outcome Improvements
  – Level 5 – Return On Investment (ROI)

Source: Phillips, 1998
Components Of Measuring Value

- Initial Constructs Of Value
  - Satisfaction
  - Aligned Use of Practices
  - Process Improvements
  - Outcome Improvements

- Derived Constructs Of Value
  - Return On Investment
    - What quantifiable benefits can be derived from the implementation?
    - How do these compare to the costs of the implementation?
  - Fit
    - What implementations and context are associated with what value?

Principal Components - Value

- Satisfaction 38%
  - Desire For Change
  - PM Satisfaction
  - Customer Satisfaction

- Alignment 64%
  - Aligned Organization
  - Aligned Project Management

- Consistent Practices 62%
  - Good Practices
  - Good PM No Practices

- Process Outcomes 70%
  - Better Process Results
  - Better Project Results

- Business Outcomes 53%
  - Positive Value – Tangible & Intangible
  - Intangible Value
  - Improved HR/Quality of Life
  - Strategic Alignment & Staff Retention
  - Positive Value, New Services, Retention

- Benefits Realized 58%

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What contexts create what value?
What implementations create what value?

**DRIVERS OF VALUE**

**Principal Components – Integrated View**

- **Economic**
- **People**
- **Culture**
- **Projects**
- **Organizational Attributes**
- **Strategic**

- **Training - Topics**
- **Training - Delivery**
- **Training - Duration**
- **Tools**
- **People**
- **Motivators**
- **Organization**

- **Satisfaction**
- **Alignment**
- **Consistent Practices**
- **Process Outcomes**
- **Business Outcomes**
- **Benefits Realized**
## Maturity vs. Value - Tangible

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"We now bill an additional 20% for project management on all our projects."
Senior Manager, 76

"Project managers have become good at selling additional services."
Senior Manager, 76

"Improved project management should help with share prices because it will increase confidence in the market as we deliver on projects."
PM Management, 75
### Maturity vs. Value - Intangible

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2008/07/14 PMI Research Conference, Warsaw, Poland

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**Project management has a positive influence on creative thinking and enhances the organization’s innovation capacity.**

Sponsor, 24

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**Collaboration within and between teams has improved; silos within the organization have diminished.**

Senior Manager, 76

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**It... gives them a sense of accomplishment, it gives them a sense of being connected to the enterprise, it gives them an opportunity to contribute and understand ... how [their work] relates to the larger operation and to the success of the organization.**

Senior Manager, 20
Maturity vs. Value - Integrated

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Maturity vs. Value Direction – All Cases

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“Without projects we would not be moving in any direction, so this work is absolutely critical for this organization.”
Project Manager, 19
### Maturity vs. Value Direction – High Value

The table below shows the maturity levels and value directions for selected countries as of 2008.

<table>
<thead>
<tr>
<th>Level</th>
<th>Country</th>
<th>Value Direction</th>
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The table represents the value maturity levels for different countries. The values range from -2 to 3, indicating different stages of project management maturity.
### Maturity vs. Value Direction – High Value

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<td>3</td>
<td>High-Tech Engineering</td>
<td>Basic project management practices</td>
<td>Review of practices – derive best practices and consolidate/simplify</td>
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<tr>
<td>2.5</td>
<td>Construction</td>
<td>PM processes imposed by funding agencies</td>
<td>Review of strategic projects and introduction of lessons learned</td>
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**Project Manager, 35:**

“We’ve not only followed the government regulations, but we’ve been continuously establishing and innovating our own management system according to the company’s development and the industry’s situation.”

**Senior Manager, 35:**

“It was only since the adoption of project management methods that the company started to really reform its system and establish new management procedures and processes and to run as an economic enterprise.”
### Maturity vs. Value Direction – High Value

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*"All divisions must work like a team to respond to customer needs. Project management contributes to team building and coordination. It greatly improved work efficiency and customer satisfaction."*

Project Manager, 24

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### Maturity vs. Value Direction – High Value

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*"The value of project management is tangible. It's the structure behind the projects. We do better than industry benchmarks."*

Project Manager, 75

*"Project management provides hard value: saving wasted dollars and effort and mitigating the risk of wasting dollars."*

Senior Manager, 75

*"The value of project management is control."*

Project Manager, 75
**Value Drivers**

- **Creation Of Value**
  - Collective perception of ‘Fit’
  - Continuous investment, focus and commitment
  - Perceiving value in project management

- **Destruction Of Value**
  - Changes in personnel responsible for driving/leading implementation
  - Lack of attention, focus, maintenance, will
  - Over-implementation or over-bureaucratization
  - Inconsistent alignment of needs
    - Particularly between management and project managers

- **Uncertainty Of Value**
  - Political changes and conflicts
  - Control issues/imposition of control frameworks
  - Project management implementation as a ‘fad’
  - PM as something that people ‘have to do’

**CONCLUSIONS**
For This Project To Be Successful...

• Our Proposal Asserted That We Needed To Demonstrate:
  – Unequivocal and compelling evidence of the value of project management

• To Do This, We Identified The Following Requirements:
  – A strong, international, multi-disciplinary team
  – An approach that addresses the problems of earlier studies
  – A cohesive and integrated research strategy that explores the overall phenomenon of project management
  – An integrated, multi-method design that develops common, credible and defensible measures of tangible and intangible value
  – Leveraging PMI’s investment through matching funds and donations-in-kind from other institutions and organizations

Conclusions

• Project Management Delivers Value

• Why are we so sure?
  – Large international team effort
  – Sound multi-method, multi-paradigm approach
  – Cohesive and integrated research strategy
  – Strong reliability and validity within and across paradigms
  – 1.2 M USD from PMI leveraged by additional funds (380,000) and donations-in-kind (~1.2M USD)
Conclusions

• Half Our Case Study Organizations Demonstrate Tangible Value

• Organizations That Could Calculate ROI…
  – Should have data
  – Are those that deliver projects for customers

• However, Even Where ROI Could Be Calculated
  – It isn’t
  – The data isn’t being collected
  – The answer isn’t considered meaningful

• Resistance To Calculating ROI Appears To Stem From:
  – Lack of interest in the answer
  – Fear of accountability
  – Perceived complexity of the measurement

Conclusions

• Most Organizations Demonstrate Intangible Value

• Value Tends To Be Around
  – Decision making
  – Communication
  – Effective work culture
  – Alignment of approach, terminology and values
  – Effectiveness of the organization

• Realization Of Intangible Value Is Correlated With The Maturity Of Organizational Implementation

• This Reinforces The Lack Of Interest Of Many Organizations In Direct Measures Of ROI
Conclusions

• Increased Maturity Delivers Greater Value

• Intangible Value Appears To Increase In Proportion To Maturity
  – Greater levels of intangible value are reported in organizations with higher level of maturity

• However, Tangible Value Is Seen At All Levels Of Maturity
  – Even organizations with cynical motives for implementation are able to attain tangible value

Conclusions

• Implementation AND Value Are Largely Influenced By Culture

• These Include Differences In:
  – National culture
    • Illustrated by different approaches to this study
  – Organizational culture
    • Process vs. results driven cultures
  – Project management culture
    • PM as control and policing vs. PM as leadership and coaching
Conclusions

• Even Organizations That Demonstrate Significant Value Today Are Not Assured Of Continued Value Moving Forward

• Many Organizations Appear To Be At An Inflection Point
  – Continued delivery of value is open to question

• Some Organizations Demonstrating Significant Value And Actively Investing In Their PM Implementation Are In Fact Destroying Value

Conclusions

• Where Value Is Being Sustained And Continuing To Grow, There Is On-going Focus And Improvement Underway

• Organizations That Stop Focussing On Value, Or Believe That They Are ‘Done’:
  – Stop demonstrating value
  – The act of not enhancing value appears to destroy value

• This Raises A Question On The Nature Of The Decline:
  – Are organizations actually losing value?
  – Are organizations perceiving a loss of value?
Conclusions

• The Value Of Project Management Implementations Are Fundamentally Determined By ‘Fit’:
  – How well what is implemented meets the needs of the organization

• ‘Fit’ Can Be Inferred By Satisfaction
  – This is at best a proxy measure

• Measurement Of ‘Fit’ Requires Determining What Contexts And Implementations Deliver What Value
  – This is what this study has delivered

Future Research Directions

• Testing Of Exploratory Theories
  – Expansion of data collection beyond 65 organizations
  – Large-scale, online, focussed data collection

• Additional Analysis On Existing Dataset
  – Cultural Impacts
  – Professionalization
  – Industries
  – Organizational change and PM

• Exploration Of Additional Topics
  – What makes PM sustainable?
  – What drives destruction of value?
  – How can we better align management and project manager expectations?
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PMI

AND THE CASE STUDY ORGANIZATIONS THAT
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