



## RESEARCHING THE VALUE OF PROJECT MANAGEMENT

Janice L. Thomas, Ph.D.  
Athabasca University

Mark E. Mullaly, PMP  
Interthink Consulting Incorporated

2008/07/14

PMI Research Conference, Warsaw, Poland

1

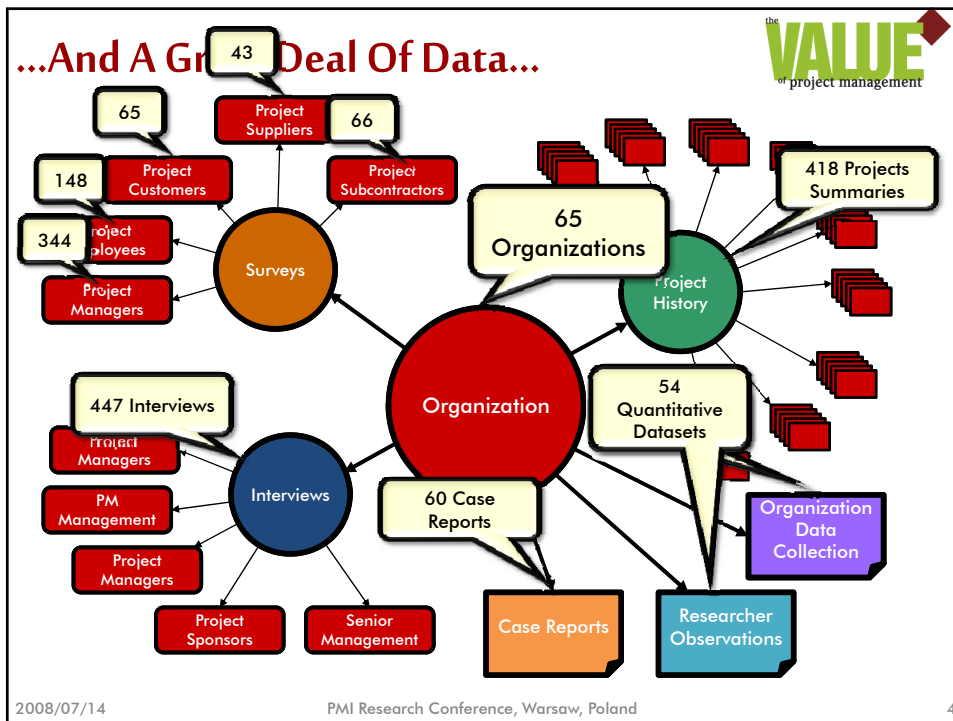
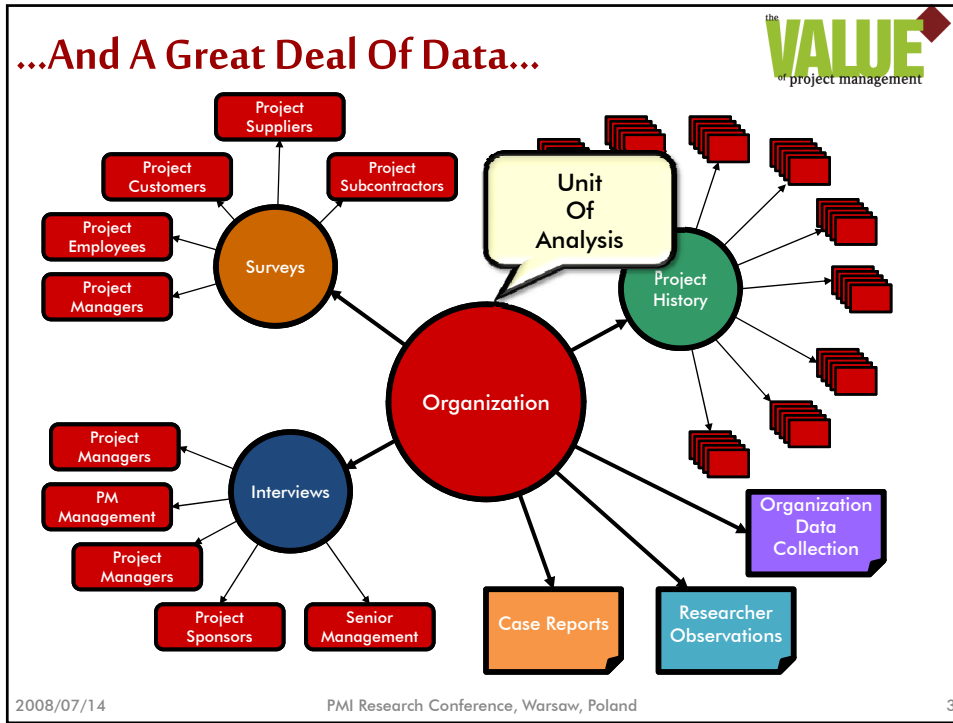
## A Conceptual Research Model...



2008/07/14

PMI Research Conference, Warsaw, Poland

2



## ...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**

2008/07/14

PMI Research Conference, Warsaw, Poland

5

## ...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?

2008/07/14

PMI Research Conference, Warsaw, Poland

6



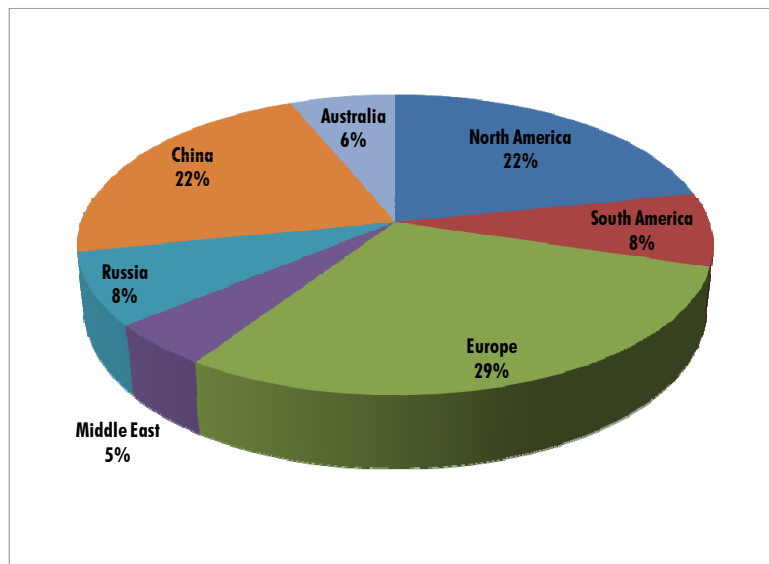
How do organizations differ?  
What differences matter to PM implementations?  
**ORGANIZATIONAL CONTEXT**

2008/07/14

PMI Research Conference, Warsaw, Poland

7

## Descriptive Statistics – By Region

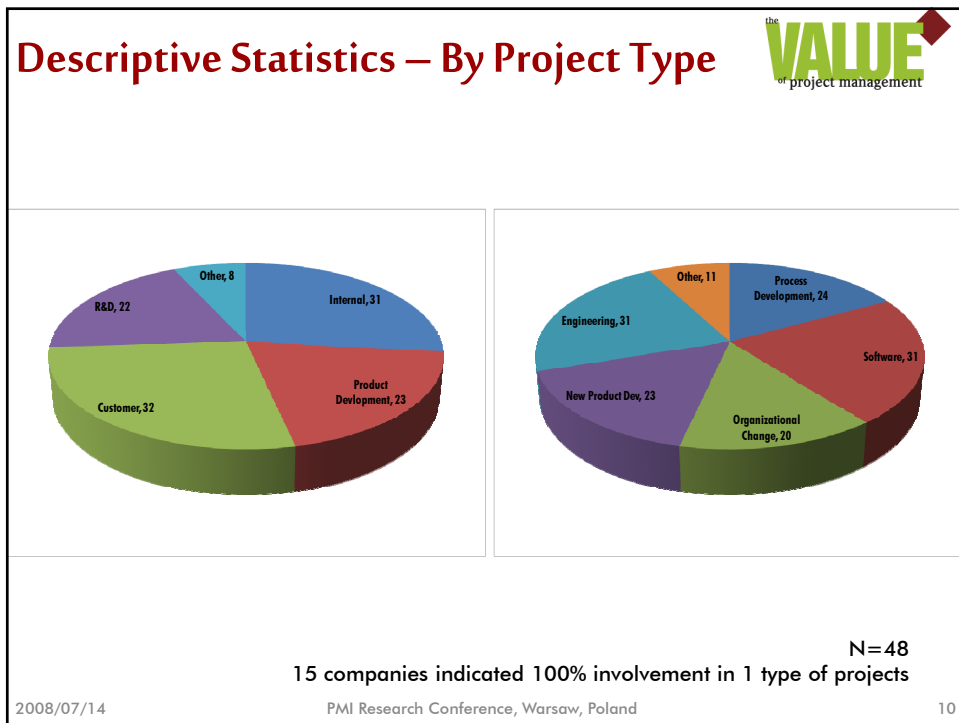
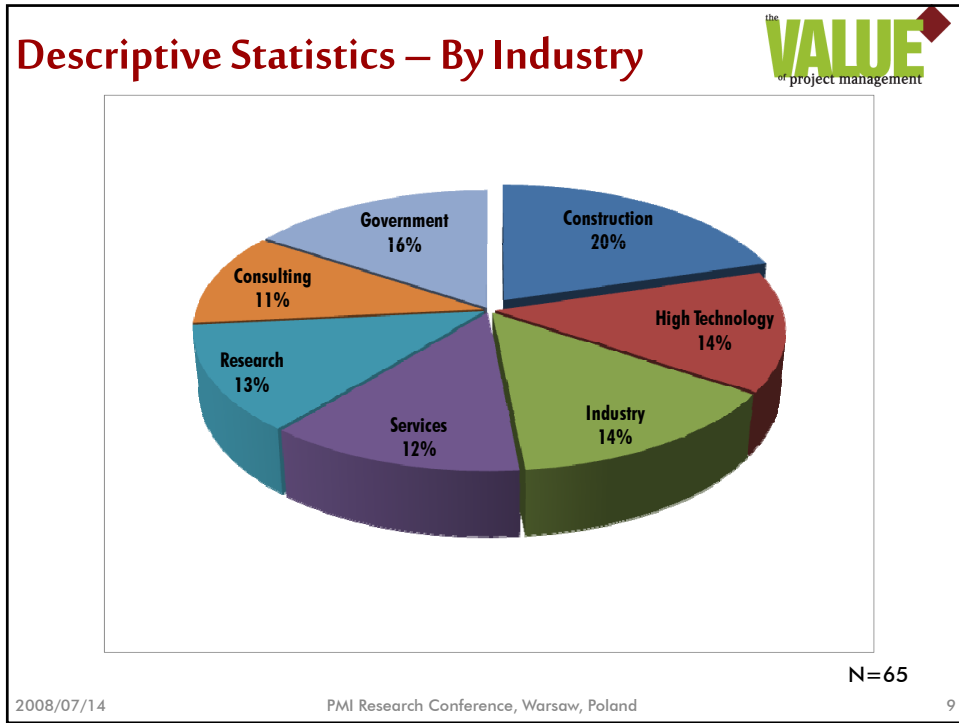


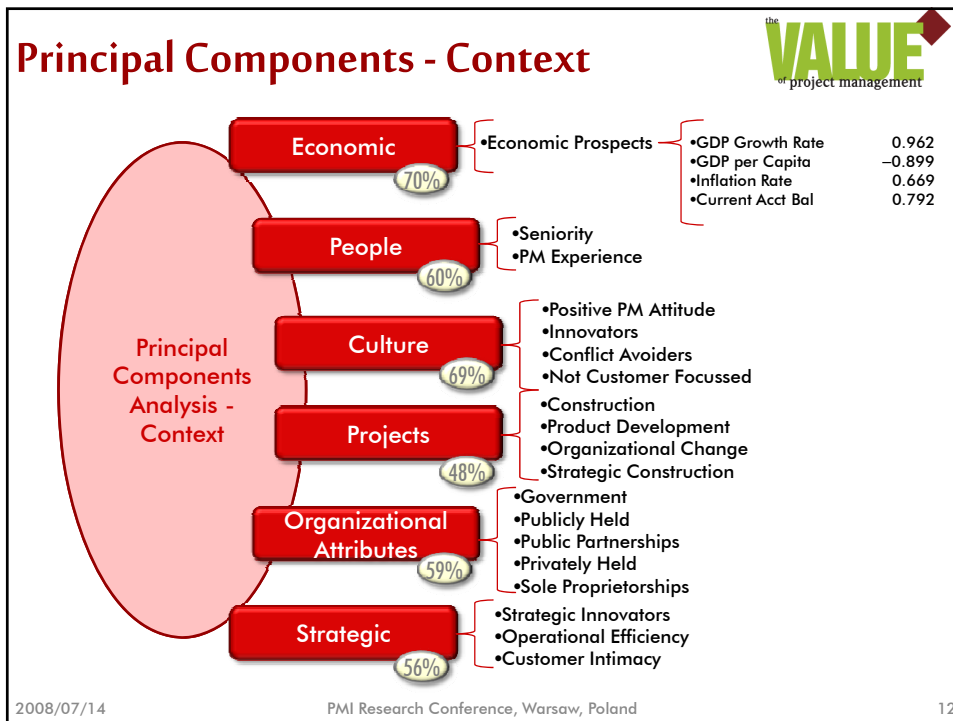
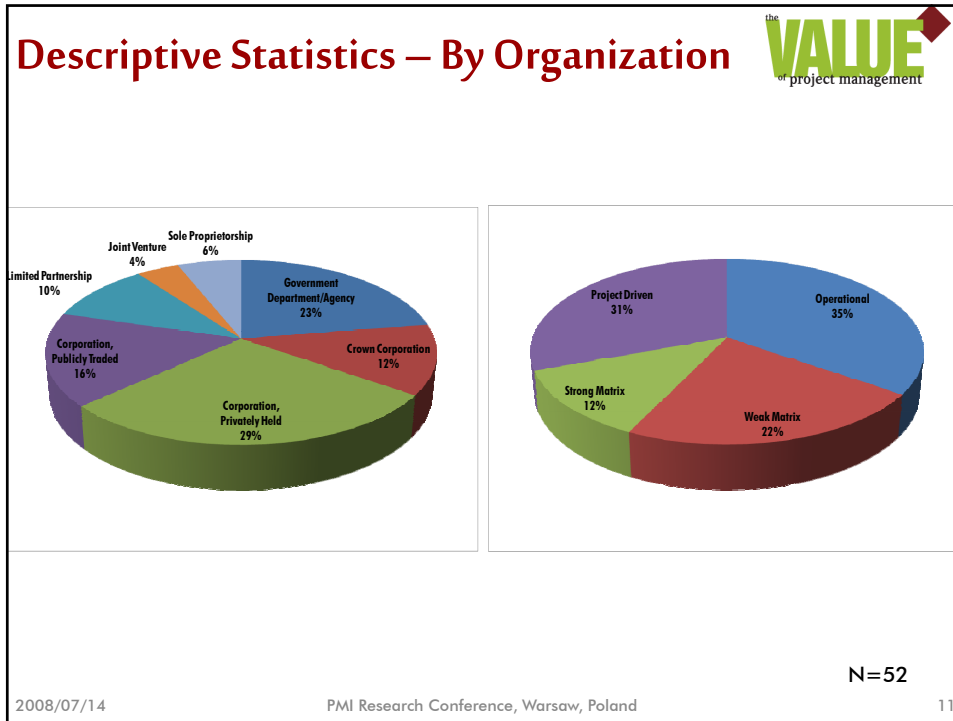
N=65

2008/07/14

PMI Research Conference, Warsaw, Poland

8





the **VALUE**  
of project management

What do organizations implement that they call project management?

**PM IMPLEMENTATION**

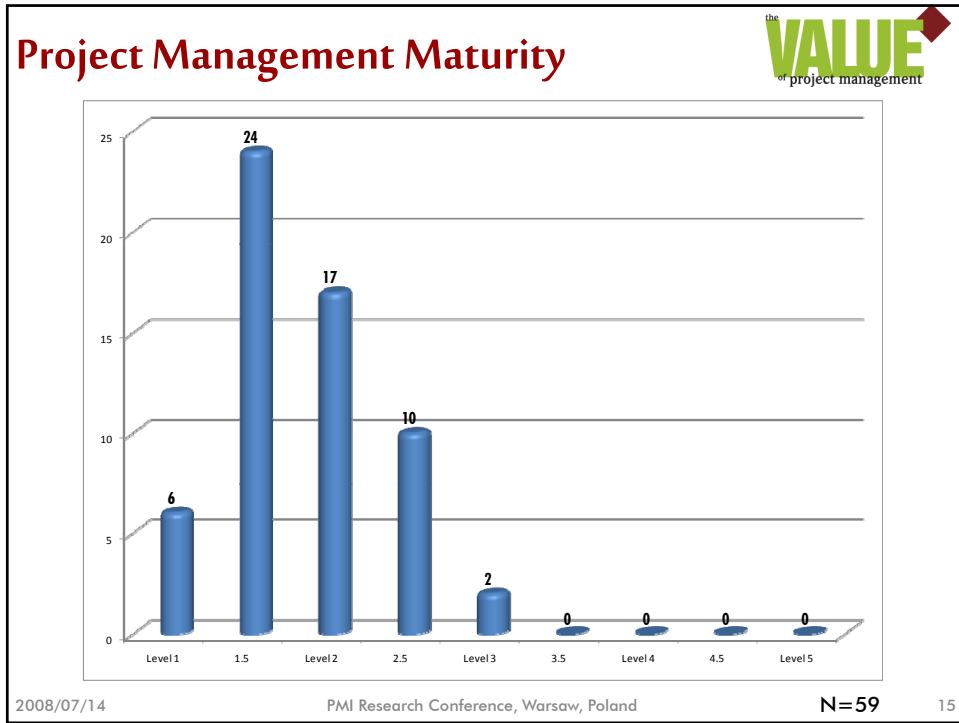
2008/07/14 PMI Research Conference, Warsaw, Poland 13


the **VALUE**  
of project management

### Principal Components – Implementation

Component	Percentage	Sub-points
Training - Topics	39%	• Full PM Training • Lunch & Learn • Distance Degree & Diploma
Training - Delivery	53%	• Tailored Internal • Informal Off-the-Shelf • Customized External
Training - Duration	67%	• Long-Term Training • Short-Term Training
Tools	54%	• Full Toolsets • Resource Management • Cost Management
People	55%	• Clear Roles & Training • Trained Experts
Motivators	46%	• Traditional Drivers • Cultural Drivers • Cultural NOT Traditional
Organization	36%	• PM Authority • PMO Influence • PMO Size

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






What is valuable to organizations and how is it measured?

**ORGANIZATIONAL VALUE**

2008/07/14 PMI Research Conference, Warsaw, Poland 17



**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

2008/07/14 PMI Research Conference, Warsaw, Poland 18

## Components Of Measuring Value



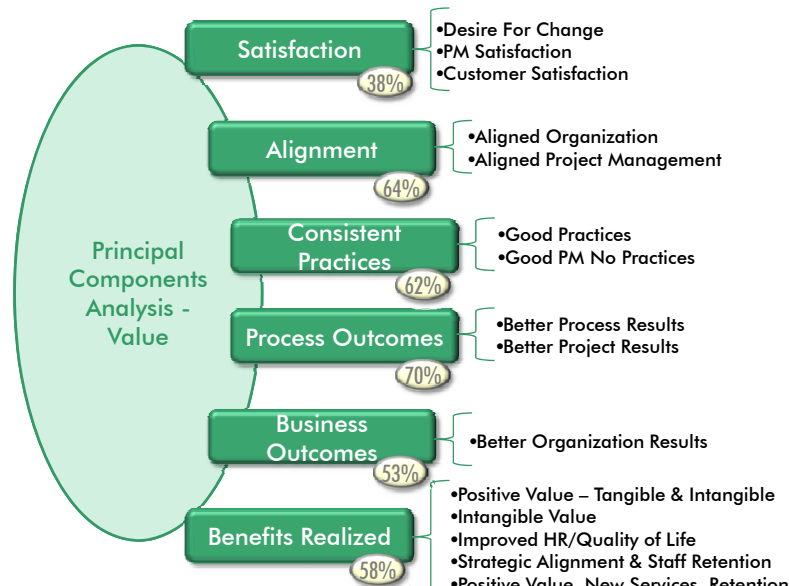
- Initial Constructs Of Value
  - Satisfaction
  - Aligned Use of Practices
  - Process Improvements
  - Outcome Improvements
  
- Derived Constructs Of Value
  - Return On Investment
    - What quantifiable benefits can be derived from the implementation?
    - How do these compare to the costs of the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

2008/07/14

PMI Research Conference, Warsaw, Poland

19

## Principal Components - Value



2008/07/14

PMI Research Conference, Warsaw, Poland

20

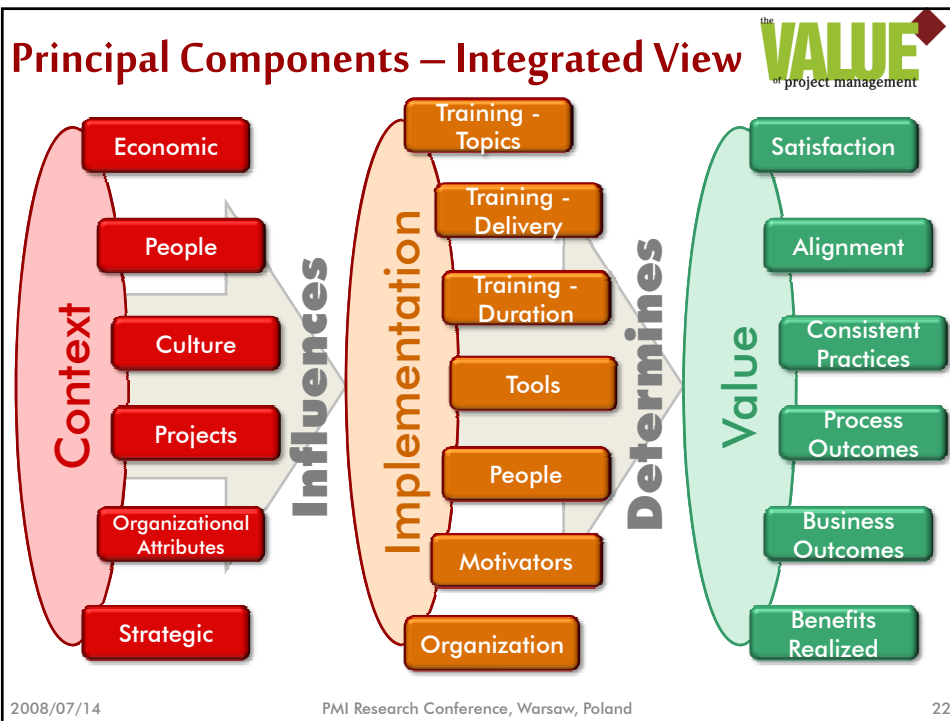


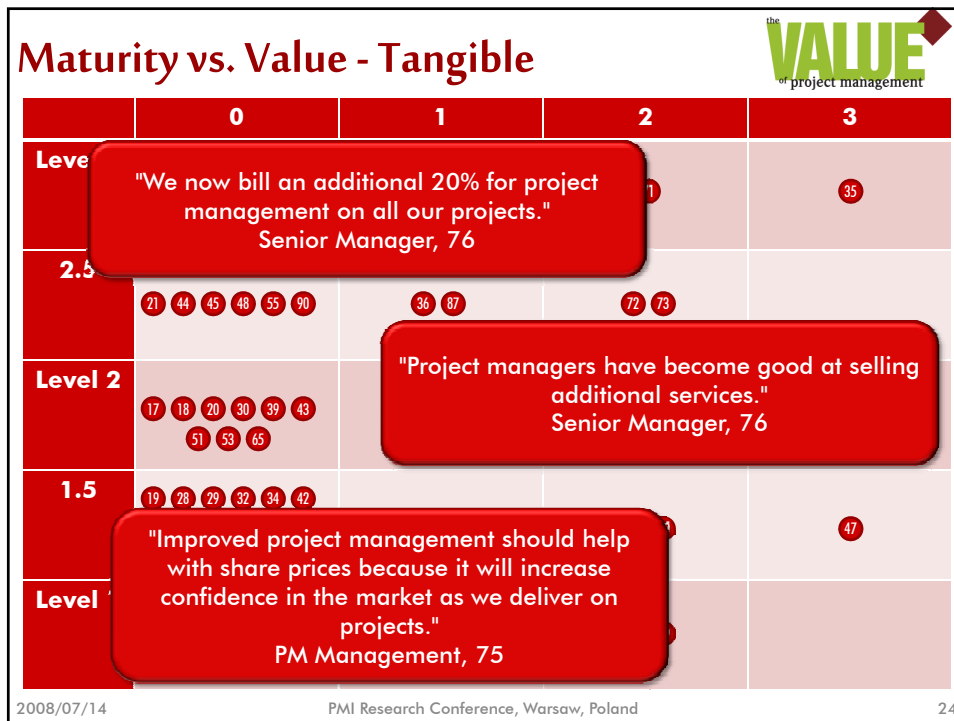
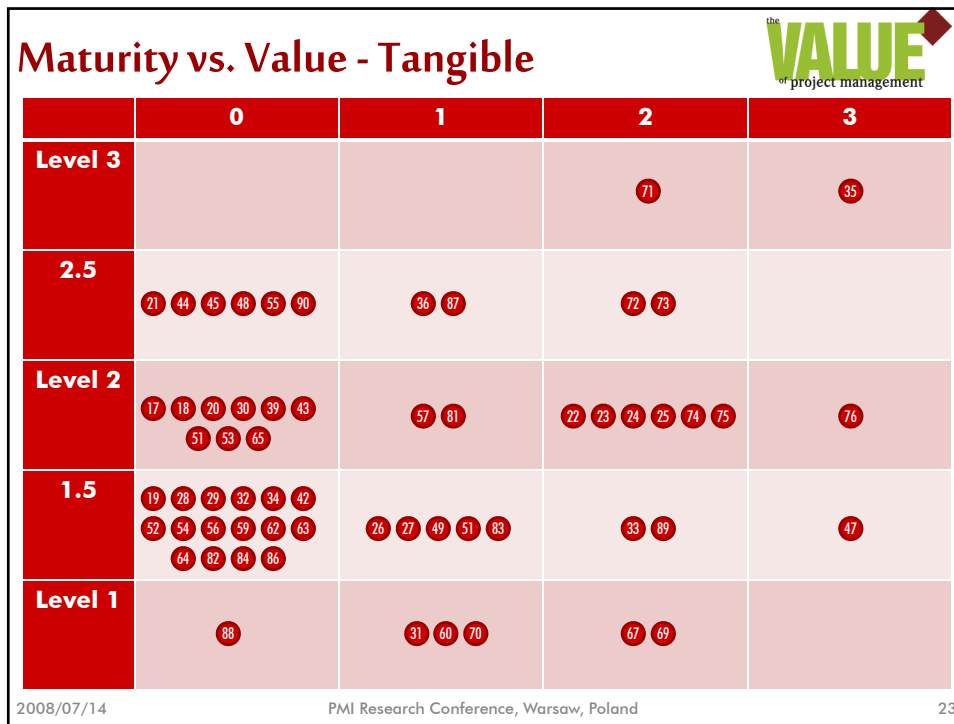
What contexts create what value?  
What implementations create what value?  
**DRIVERS OF VALUE**

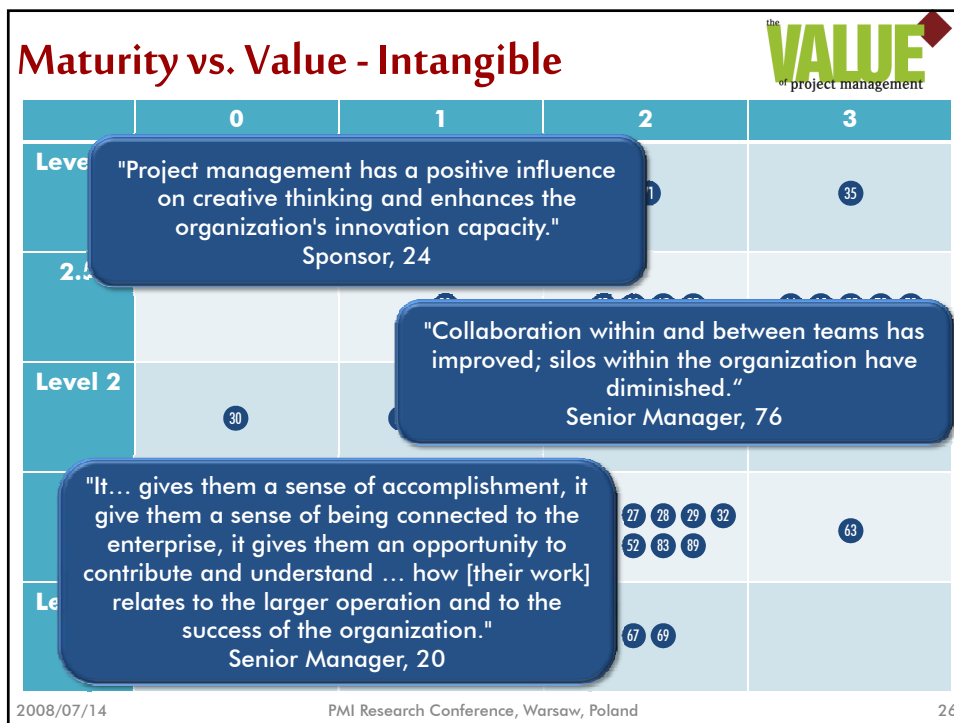
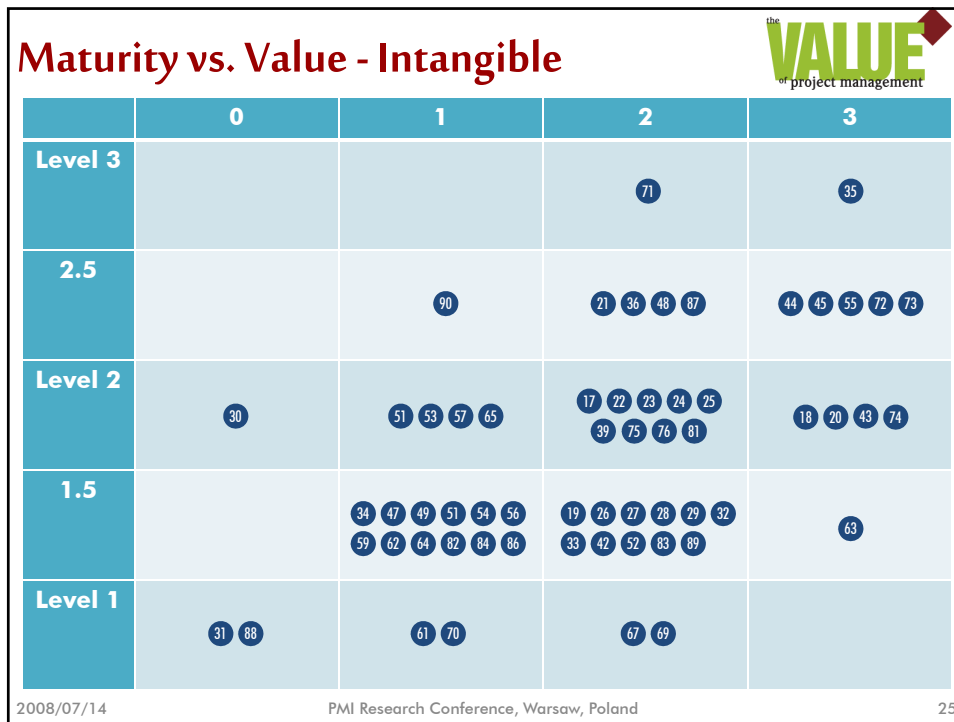
2008/07/14

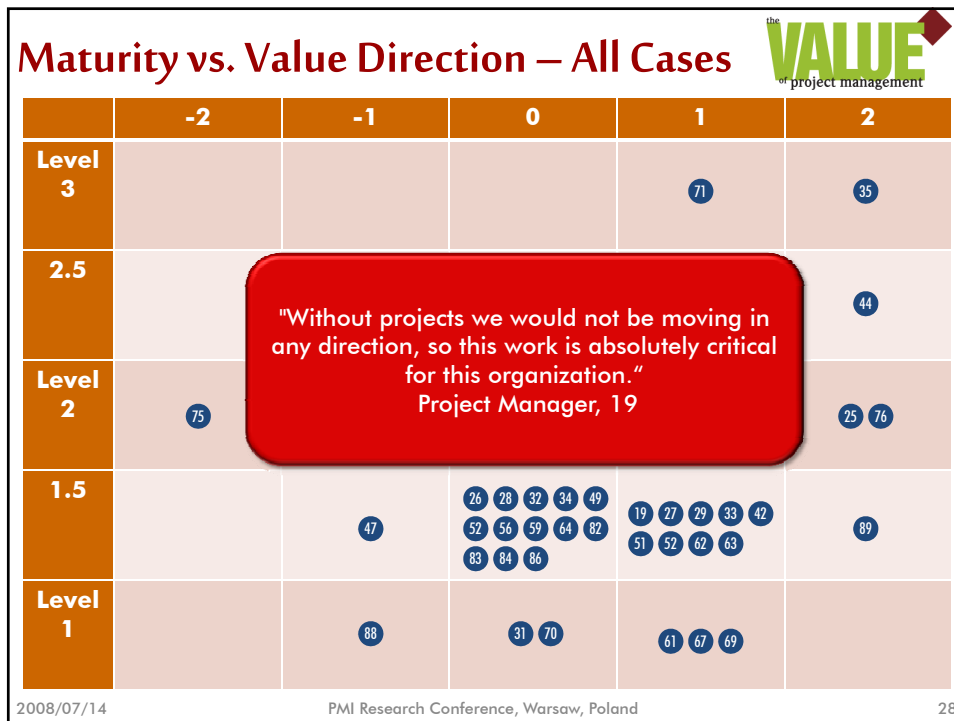
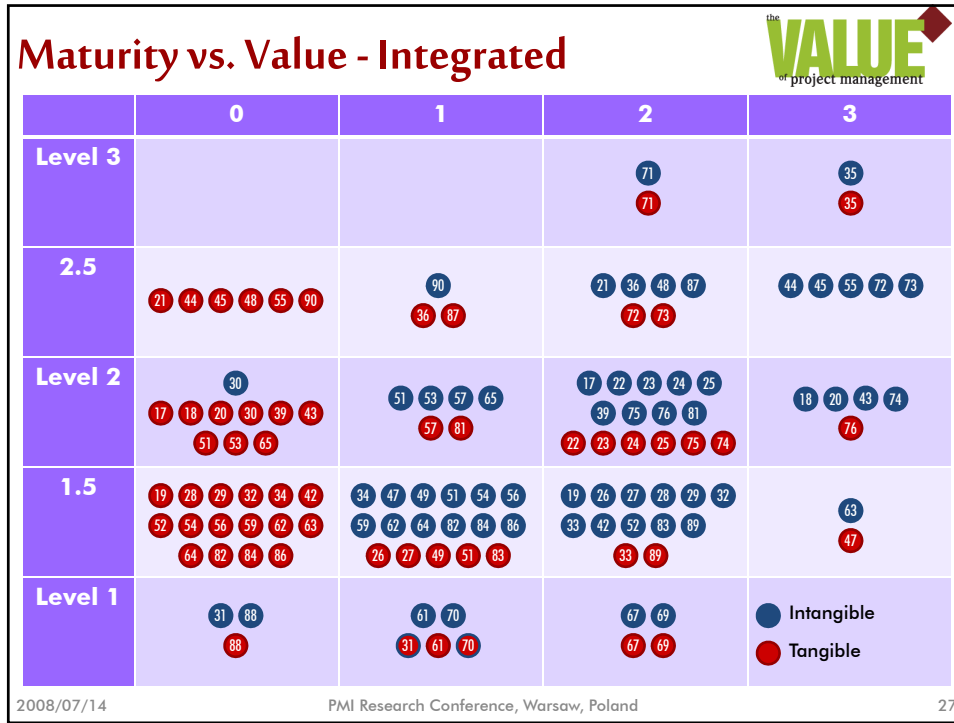
PMI Research Conference, Warsaw, Poland

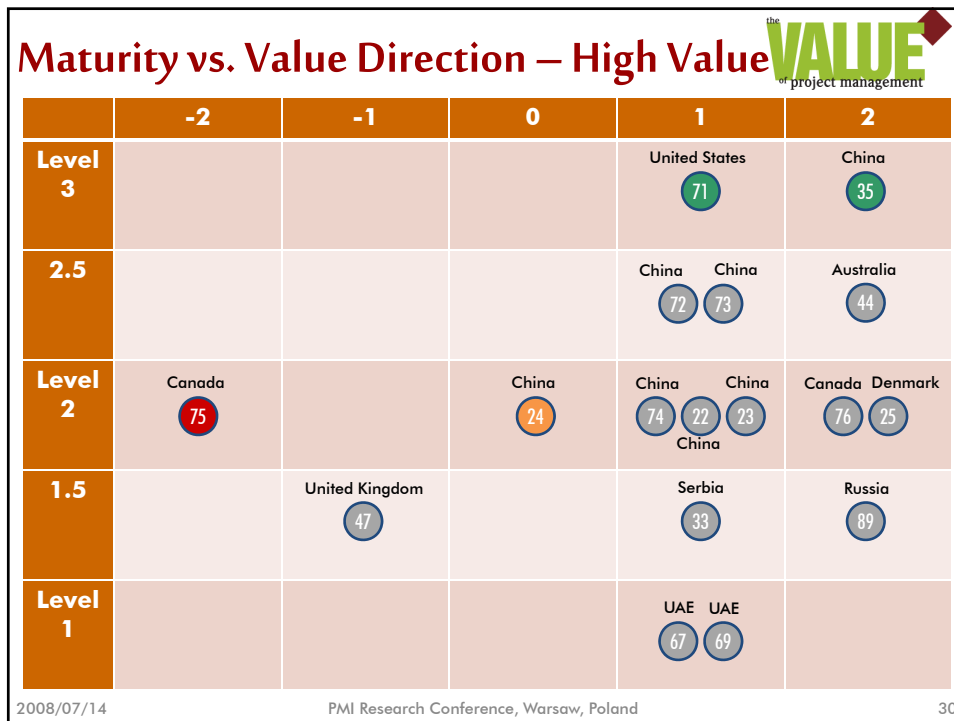
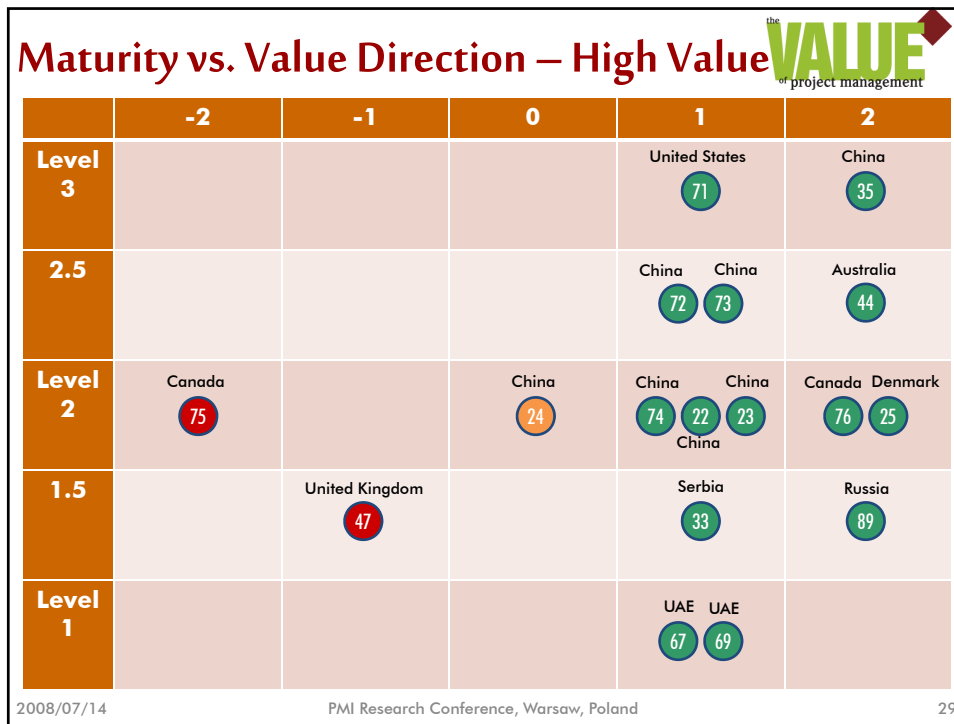
21

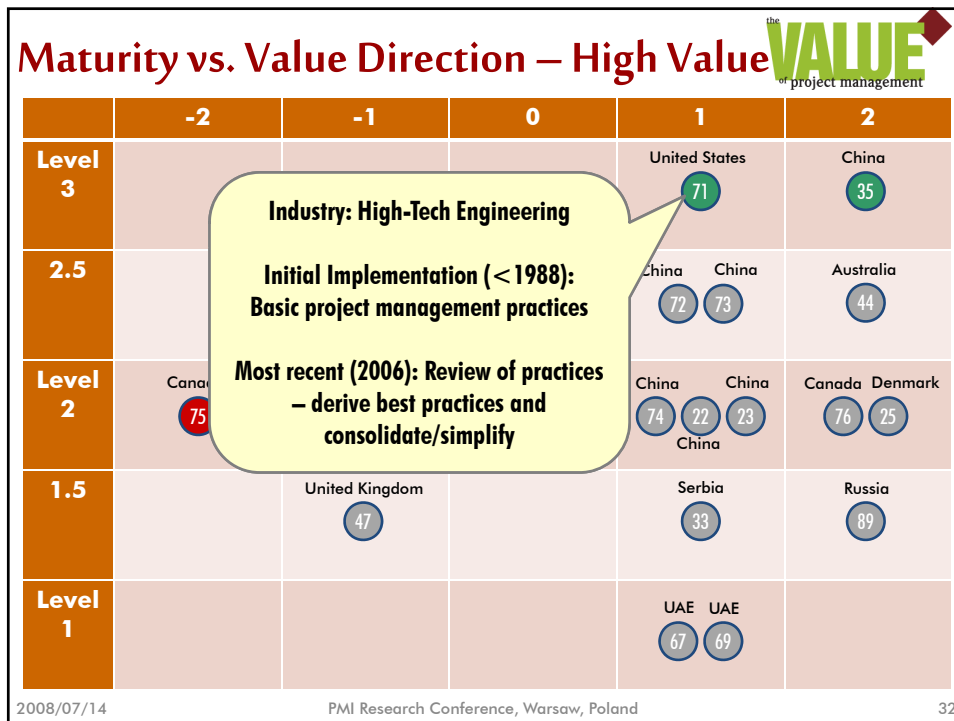
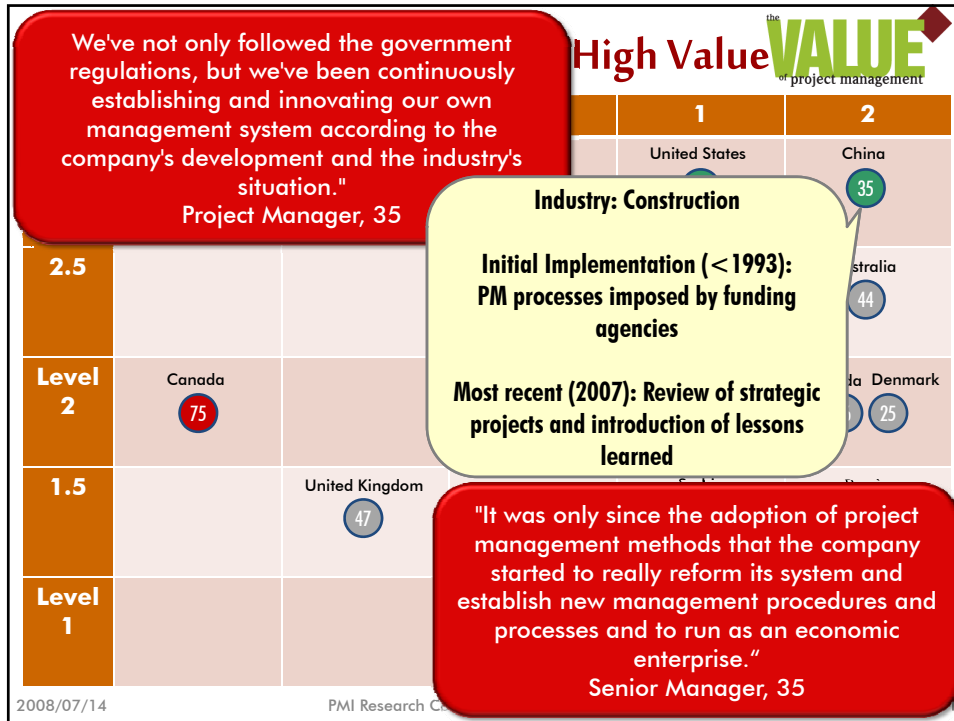


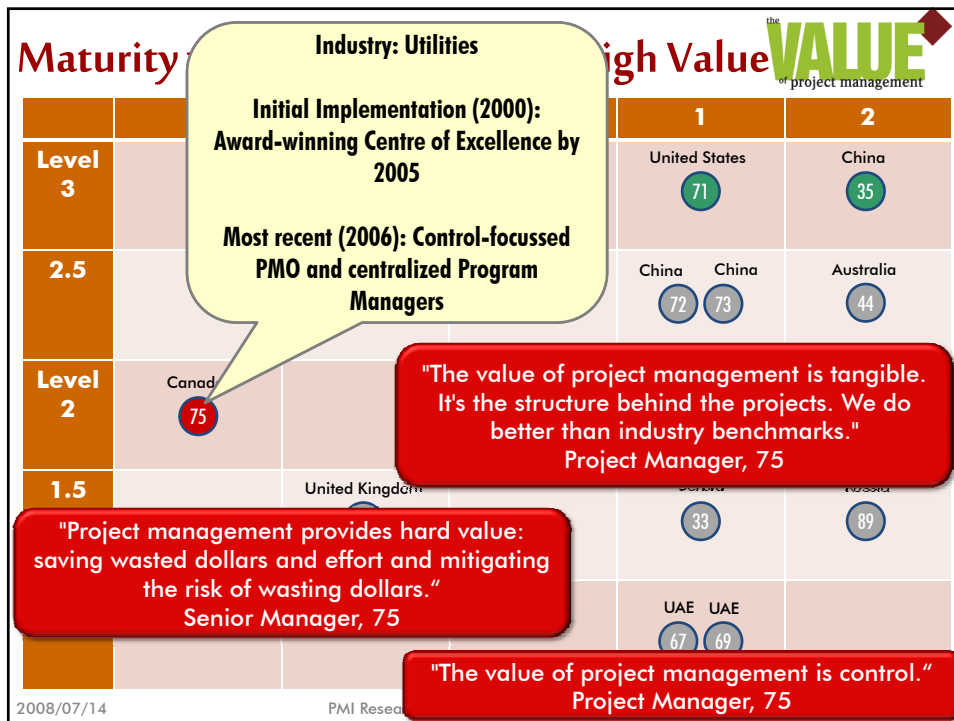
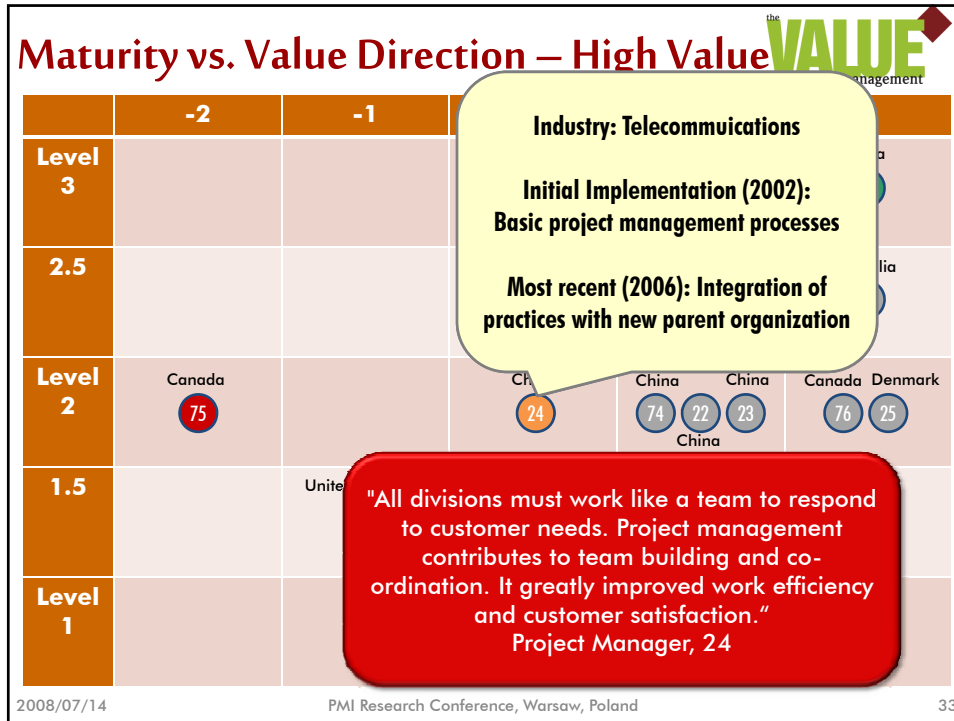












## Value Drivers



- **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'

2008/07/14

PMI Research Conference, Warsaw, Poland

35

## CONCLUSIONS



2008/07/14

PMI Research Conference, Warsaw, Poland

36

## 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

2008/07/14

PMI Research Conference, Warsaw, Poland

37

## 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)

2008/07/14

PMI Research Conference, Warsaw, Poland

38

## 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

2008/07/14

PMI Research Conference, Warsaw, Poland

39

## 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***

2008/07/14

PMI Research Conference, Warsaw, Poland

40

## 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

2008/07/14

PMI Research Conference, Warsaw, Poland

41

## 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

2008/07/14

PMI Research Conference, Warsaw, Poland

42

## 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**

2008/07/14

PMI Research Conference, Warsaw, Poland

43

## 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?

2008/07/14

PMI Research Conference, Warsaw, Poland

44

## 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

2008/07/14

PMI Research Conference, Warsaw, Poland

45

## 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?

2008/07/14

PMI Research Conference, Warsaw, Poland

46



## **CREDITS & THANKS – THE RESEARCH TEAM**

2008/07/14

PMI Research Conference, Warsaw, Poland

47



## **Proposal Team**

- Dr. Frank Anbari
- Dr. Ben Arbaugh
- Dr. Tim Brady
- Dr. Walid Belassi
- Dr. Christophe Bredillet
- Dr. Peter Checkland
- Dr Svetlana Cicmil
- Dr. Terry Cooke-Davies
- Dr. Lynn Crawford
- Dr. Fathi Elloumi
- Dr. Young Hoon Kwak
- Dr. Harvey Maylor
- Dr. Thomas Mengel
- Mr. Mark Mullaly
- Dr. Janice Thomas
- Dr. Terry Williams
- Dr. Mark Winter

2008/07/14

PMI Research Conference, Warsaw, Poland

48

## Workshop 1 – Broadway, UK



- Dr. Frank Anbari
- Dr. Erling Andersen
- Dr. Walid Belassi
- Dr. Tim Brady
- Dr. Christopher Bredillet
- Dr. Peter Checkland
- Dr. Svetlana Cicmil
- Dr. Lynn Crawford
- Dr. Terry Cooke-Davies
- Dr. Fathi Elloumi
- Dr. Patrick Fong
- Dr. Zhai Li
- Dr. Harvey Maylor
- Dr. Thomas Mengel
- Mr. Mark Mullaly
- Dr. Shi Qian
- Dr. Maria Romanova
- Dr. Jonas Soderlund
- Dr. Janice Thomas
- Dr. Rodney Turner
- Dr. Terry Williams
- Dr. Mark Winter
- Dr. Zhai Li
- Dr. Khim Teck Yeo
- Dr. Harry Stefanou
- Dr. Edwin Andrews
- Ms. Janice Janzen

2008/07/14

PMI Research Conference, Warsaw, Poland

49

## Workshop 2 - Montreal, Canada



- Dr. Frank Anbari
- Dr. Erling Andersen
- Dr. Tim Brady
- Dr. Christopher Bredillet
- Dr. Peter Checkland
- Dr. Ping Chen
- Dr. Svetlana Cicmil
- Dr. Lynn Crawford
- Dr. Terry Cooke-Davies
- Dr. Fathi Elloumi
- Dr. Pernille Eskerod
- Dr. Patrick Fong
- Dr. Merlyn Foo
- Dr. Stella George
- Dr. Zhai Li
- Dr. Harvey Maylor
- Dr. Thomas Mengel
- Dr. Qiang Maoshan
- Mr. Mark Mullaly
- Dr. Shi Qian
- Dr. Maria Romanova
- Dr. Jonas Soderlund
- Dr. Janice Thomas
- Dr. Rodney Turner
- Dr. Vaidotas Viliunas
- Dr. Terry Williams
- Dr. Mark Winter
- Dr. Xue Yan
- Dr. Khim Teck Yeo
- Dr. Harry Stefanou
- Dr. Edwin Andrews
- Ms. Marguerite LeBlanc

2008/07/14

PMI Research Conference, Warsaw, Poland

50

## Workshop 3 – Esbjerg, Denmark



- Dr. Frank Anbari
- Dr. Walid Belassi
- Dr. Christophe Bredillet
- Dr. Ping Chen
- Dr. Svetlana Cicmil
- Dr. Terry Cooke-Davies
- Dr. Lynn Crawford
- Dr. Zoran Djordjevic
- Dr. Pernille Eskerod
- Dr. Stella George
- Mr. Nils Gerdes
- Dr. Thomas Lechler
- Dr. Zhai Li
- Dr. Thomas Mengel
- Mr. Mark Mullaly
- Dr. Shi Qian
- Ms. Eva Riis
- Dr. Maria Romanova
- Dr. Jonas Soderlund
- Dr. Janice Thomas
- Ms. Anne Live Vaagaasar
- Dr. Vaidotas Viliunas
- Ms. Jia Ning Wang
- Dr. Terry Williams
- Dr. Khim Teck Yeo
- Dr. Sasa Zivanovic
- Dr. Edwin Andrews
- Ms. Marguerite LeBlanc

2008/07/14

PMI Research Conference, Warsaw, Poland

51

## Workshop 4 – Lake Louise, Canada



- Mr. Marcos Santos Abreu
- Dr. Walid Belassi
- Dr. Ping Chen
- Dr. Svetlana Cicmil
- Mr. Martin Cohen
- Dr. Terry Cooke-Davies
- Ms. Lisa Danquah
- Dr. Zoran Djordjevic
- Dr. Pernille Eskerod
- Dr. Merlyn Foo
- Dr. Stella George
- Ms. Jane Helm
- Dr. Mimi Hurt
- Dr. Zhai Li
- Dr. Thomas Mengel
- Mr. Mark Mullaly
- Dr. Shi Qian
- Ms. Eva Riis
- Ms. Kathy Sahadath
- Dr. Janice Thomas
- Dr. Rodney Turner
- Ms. Anne Live Vaagaasar
- Dr. Terry Williams
- Dr. Sasa Zivanovic
- Dr. Edwin Andrews
- Ms. Dianne Ingram

2008/07/14

PMI Research Conference, Warsaw, Poland

52


## Case Study Team Leads



<ul style="list-style-type: none"> <li>• Canada                             <ul style="list-style-type: none"> <li>– Mimi Hurt</li> <li>– Thomas Mengel</li> <li>– Mark Mullaly</li> <li>– Janice Thomas</li> </ul> </li> <li>• United States                             <ul style="list-style-type: none"> <li>– Thomas Lechler</li> </ul> </li> <li>• Brazil                             <ul style="list-style-type: none"> <li>– Marcos Santos Abreu</li> </ul> </li> <li>• United Kingdom                             <ul style="list-style-type: none"> <li>– Tim Brady</li> <li>– Svetlana Cicmil</li> <li>– Terry Cooke-Davies</li> <li>– Harvey Maylor</li> <li>– Janice Thomas</li> </ul> </li> <li>• Germany                             <ul style="list-style-type: none"> <li>– Thomas Mengel</li> </ul> </li> <li>• Serbia                             <ul style="list-style-type: none"> <li>– Svetlana Cicmil</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Denmark                             <ul style="list-style-type: none"> <li>– Pernille Eskerod</li> </ul> </li> <li>• Norway                             <ul style="list-style-type: none"> <li>– Erling Andersen</li> </ul> </li> <li>• Lithuania                             <ul style="list-style-type: none"> <li>– Vaidotas Viliunas</li> </ul> </li> <li>• Sweden                             <ul style="list-style-type: none"> <li>– Jonas Soderlund</li> </ul> </li> <li>• Russia                             <ul style="list-style-type: none"> <li>– Maria Romanova</li> </ul> </li> <li>• United Arab Emirates                             <ul style="list-style-type: none"> <li>– Walid Belassi</li> </ul> </li> <li>• China                             <ul style="list-style-type: none"> <li>– Ping Chen</li> <li>– Shi Qian</li> <li>– Xue Yan</li> <li>– Zhai Li</li> </ul> </li> <li>• Australia                             <ul style="list-style-type: none"> <li>– Lynn Crawford</li> </ul> </li> </ul>
--	--

2008/07/14
PMI Research Conference, Warsaw, Poland
53

## Analysis Team



<p><b>Qualitative Team</b></p> <ul style="list-style-type: none"> <li>• Dr. Svetlana Cicmil</li> <li>• Dr. Ping Chen</li> <li>• Dr. Pernille Eskerod</li> <li>• Dr. Zhai Li</li> <li>• Dr. Thomas Mengel</li> <li>• Mr. Mark Mullaly</li> <li>• Dr. Janice Thomas</li> </ul>	<p><b>Quantitative Team</b></p> <ul style="list-style-type: none"> <li>• Dr. Terry Williams</li> <li>• Ms. Lisa Danquah</li> <li>• Dr. Merlyn Foo</li> <li>• Dr. Thomas Lechler</li> <li>• Dr. J.W. (Mac) McDonald</li> <li>• Mr. Mark Mullaly</li> <li>• Dr. Janice Thomas</li> </ul>
--	--

2008/07/14
PMI Research Conference, Warsaw, Poland
54



And particular thanks to....

**PMI**

**AND THE CASE STUDY ORGANIZATIONS THAT  
MADE THIS RESEARCH POSSIBLE**

2008/07/14

PMI Research Conference, Warsaw, Poland

55



## **RESEARCHING THE VALUE OF PROJECT MANAGEMENT**

Janice L. Thomas, Ph.D.  
Athabasca University

Mark E. Mullaly, PMP  
Interthink Consulting Incorporated

2008/07/14

PMI Research Conference, Warsaw, Poland

56