

# International Centre for Complex Project Management

## Global Perspectives and the Strategic Agenda to 2025

Stephen Hayes MBE  
MD/CEO ICCPM

[www.iccpm.com](http://www.iccpm.com)

# Presentation Outline

- The Complex Project Management Initiative and ICCPM
- The Problem Statement
- Complex versus Complicated
- What makes a project Complex?
- Traditional (Classical) versus Complex Project Management
- The Conspiracy of Optimism – Why Mega Projects Fail
- CPM Report – Summary of the Findings and Recommendations
- CPM Report – Implications of the Findings
- Your Opportunities and Challenges
- The Future
- Questions

# CPM Initiative

**International Centre for Complex Project Management (international independent not-for-profit peak body)**

## Three objectives:

- Develop and sustain effective cross sector **collaborations**
- **Educating** and developing effective leaders and organisations
- Developing and disseminating practical **knowledge and solutions**



# Partnerships, Alliances, Sponsors & Supporters



Australian Government  
Department of Defence  
Defence Materiel  
Organisation



THALES

Raytheon

EADS

Booz | Allen | Hamilton



MALLESONS STEPHEN JAQUES



CabinetOffice



Australian Government  
Department of Broadband,  
Communications and the Digital Economy



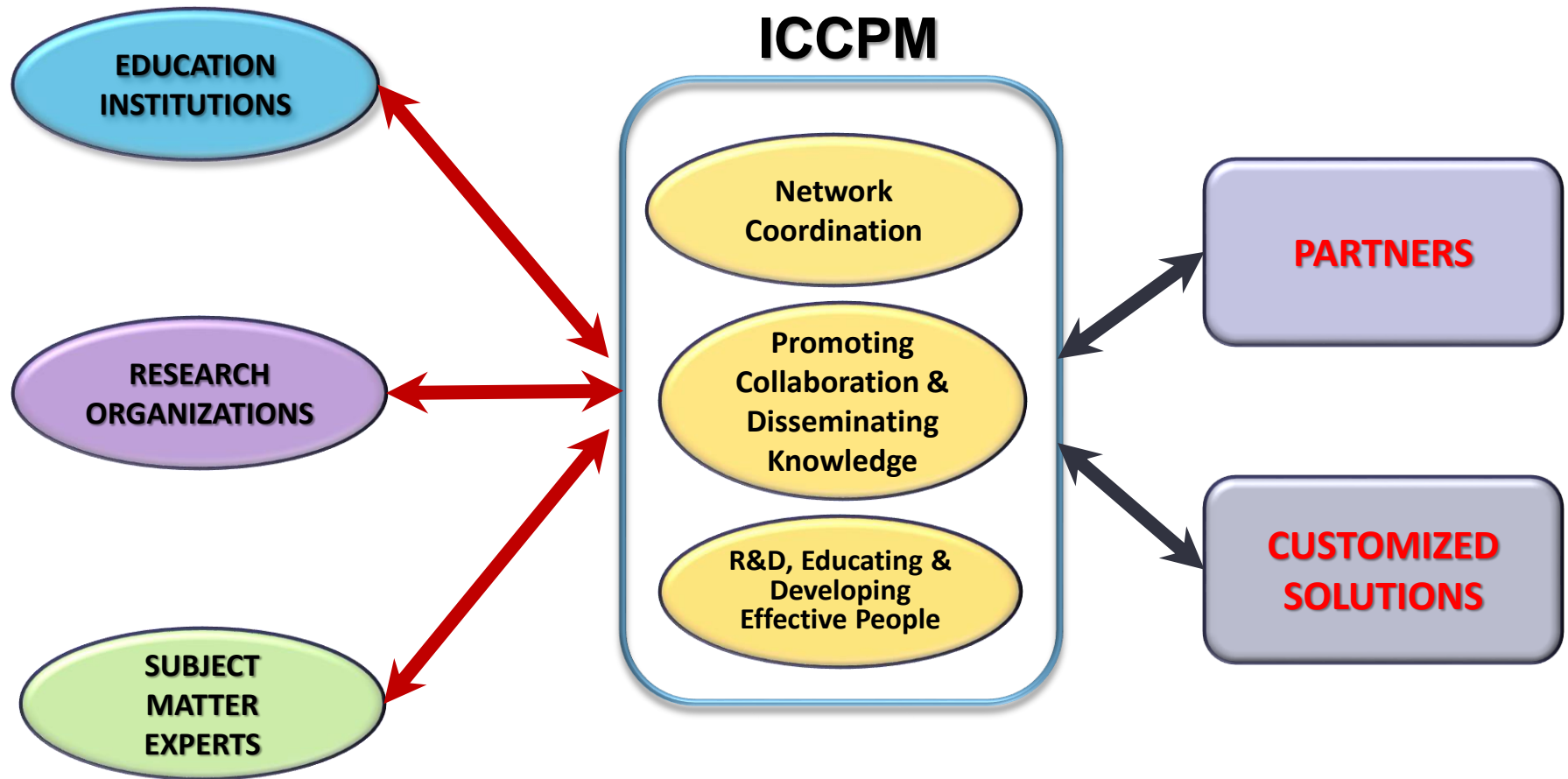
IPMA» international  
project  
management  
association



CSIS | CENTER FOR STRATEGIC &  
INTERNATIONAL STUDIES



# ICCPM Business Model



# The 21<sup>st</sup> Century Project Management Environment

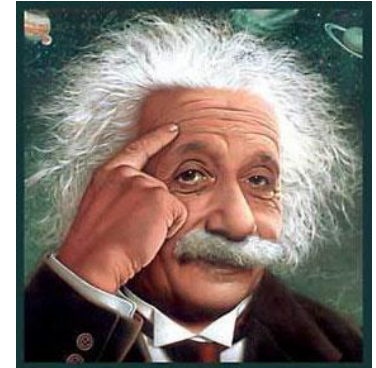
## *The Problem and the Opportunity*

- Only 40% of projects completed on time/budget
- Capacity to manage complexity identified as the No.1 issue for CEO's globally (IBM Global CEO Survey in 2009)
- Effect of complexity most apparent in non- technical areas of influence
- Organisations that manage complexity well outperform those who don't by a factor of 10 – managing projects as Complex Adaptive Systems



# Opportunities and Challenges

Insanity: doing the same thing over and over again and expecting different results. [Albert Einstein](#)



‘More process is not going to fix the problem, we need a different approach!’ [Kim Gillis – Former DCEO of Australian Department of Defence’s Defence Materiel Organisation and currently MD of Boeing Defence Australia](#)



# Complicated vs. Complex

Complicated – when you know what you have to do

Complex – when you don't



$$x + \frac{b}{2a} = \pm \sqrt{\frac{b^2 - 4ac}{4a^2}}$$
$$x + \frac{b}{2a} = \frac{\pm \sqrt{b^2 - 4ac}}{2a}$$
$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$



# Complex Projects

**Uncertainty**

**Ambiguity**

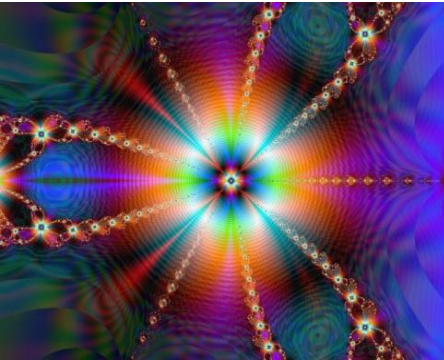
**Dynamic  
interfaces**

**Effect  
not  
solution**

**Political and  
external  
influences**

**Technology life  
cycle exceeded**

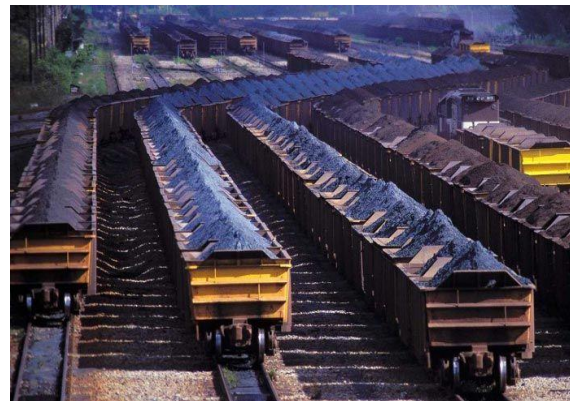
**Integration**



# Aerospace & Defence

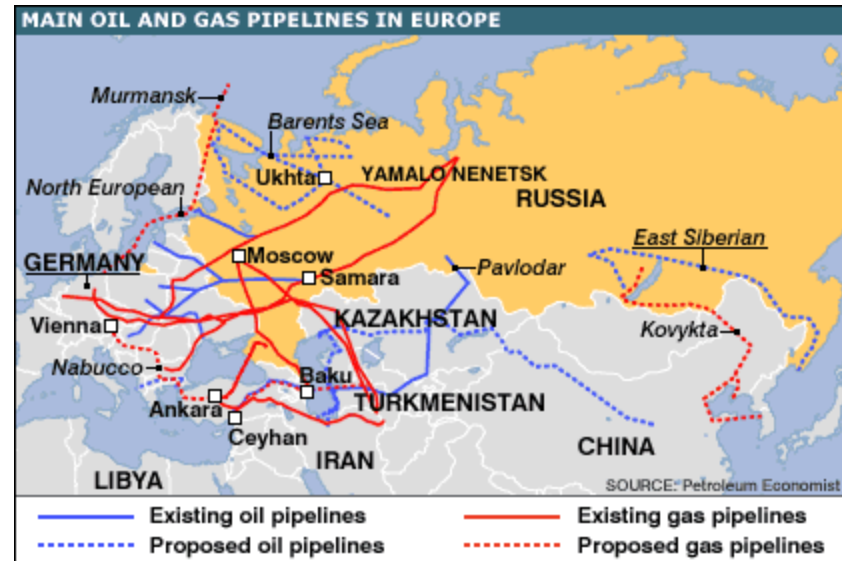


# Oil & Gas – Mining – Infrastructure





# Governments – Climate Change, Resources & Energy?



# Disaster Recovery?

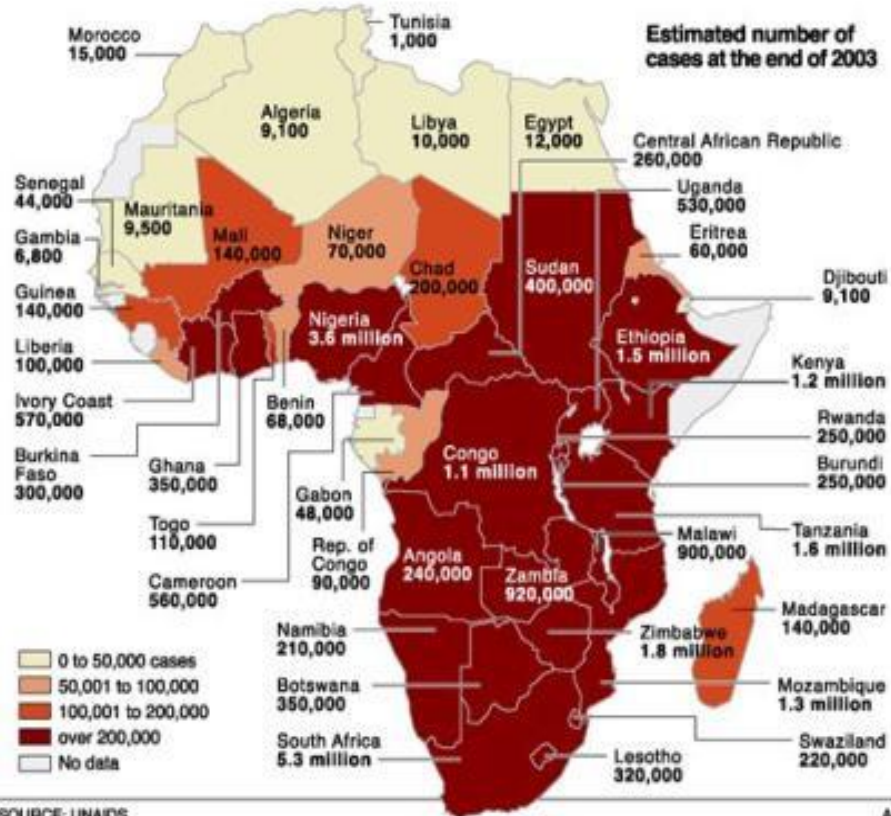


# The World Bank/UN/WHO – AIDS?

## AIDS in Africa

Of the estimated 39.4 million people living with HIV worldwide, more than two-thirds of them are in Africa.

Estimated number of cases at the end of 2003



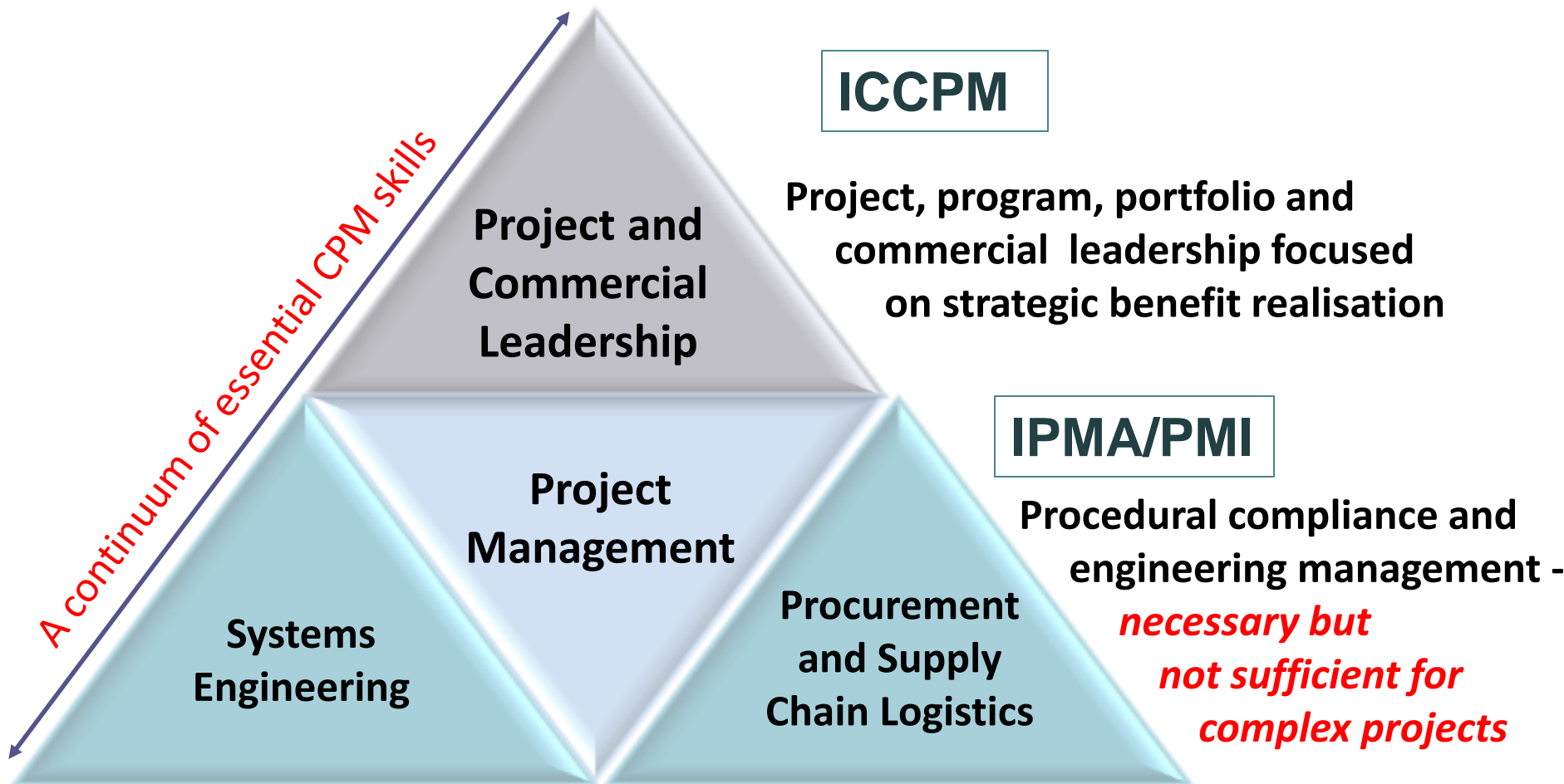
SOURCE: UNAIDS

AP





# Classical vs Complex



# Complex Project Management

## Classical Project Management

### Primacy to scope, cost and time

- Process and task focused

### Reductionist approach

- Rigid work breakdown structure
- Specified stakeholders

### Rational, universal and deterministic

- Linear, sequential approach
- Resists environmental change

### Administrative management

- Control - process compliance
- Project plan is the map of the terrain (A true reflection of reality?)

## Complex PM and Leadership

### Primacy to realising planned benefits

- Aligned with the business strategy

### Holistic approach

- System of systems
- Numerous influential stakeholders

### Complex adaptive system

- Multidimensional, unpredictable
- Environment affects and is effected

### Adaptive & enabling leadership

- Complexity management
- Plans use multiple maps relevant to the terrain (no one best map)



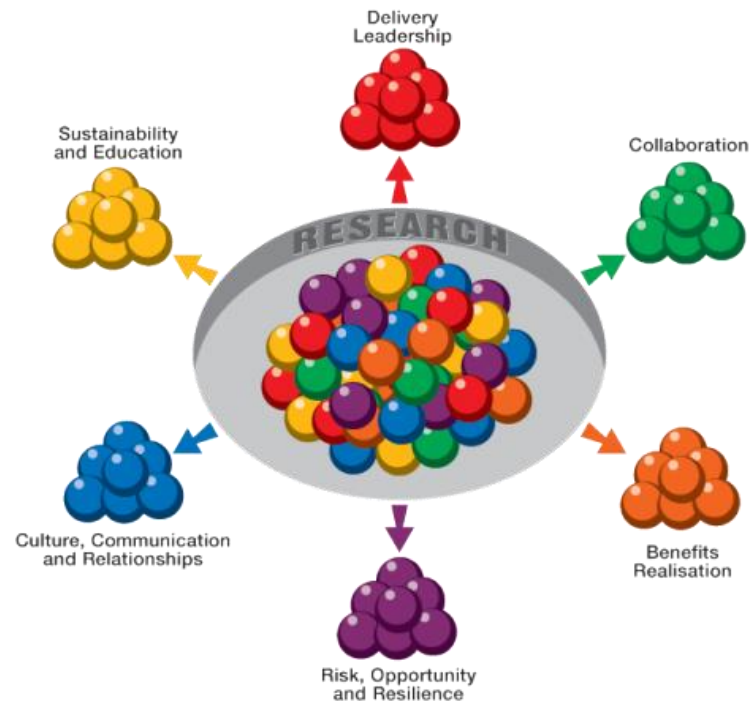
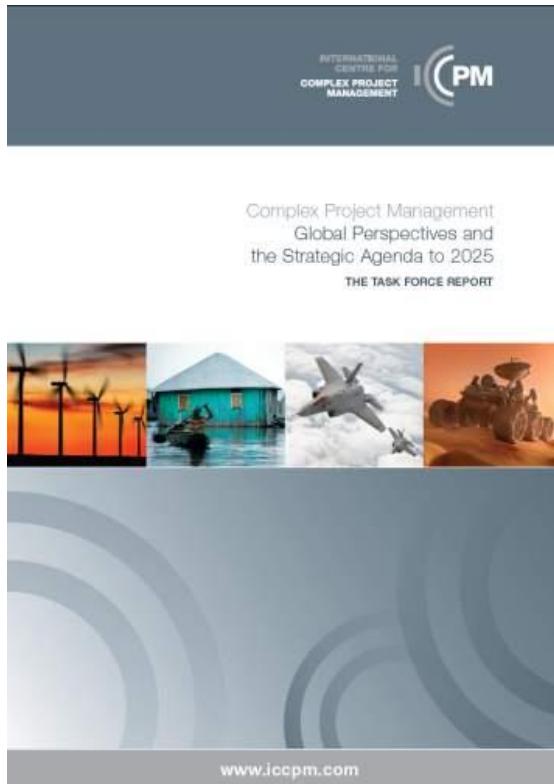
# “The Conspiracy of Optimism”

## ***Why mega projects fail:***

- Unaccommodated or unaligned stakeholder view of success
- Tension between product success and project success (product vs outcome)
- Political and public relations pressure militating against doing the right thing
- Lack of understanding or acknowledgement of non-technical risk
- Use of competition as a weapon
- Institutionalised procurement practices
- Few project managers are equipped as project delivery leaders
- Lack of opportunity for engagement between government and industry
- Future capability (projects) are predicated on attaining rational estimates
- Current tools and decision processes unsuitable for analysing uncertainty
- Inevitability of scope creep (cost & schedule) especially if contract too early

*Reference ICCPM Executive Roundtable Series 2009*

# CPM Report Main Themes



**Policy recommendations – CPM Strategy**

**Action recommendations – Implement now**

**Report is the foundation for CPM Research Framework**

# Key CPM Report Recommendations

**Delivery Leadership** – Project Managers tend to be managers first and leaders more by happenstance, how to develop excellence in leadership for the few?

**Collaboration** – How to achieve EFFECTIVE collaboration with multiple parties across the barrier between Public and Private Sectors and between natural competitors?

**Benefits Realisation** – Focusing on true long term benefits in economic environments where “here and now” prevails with the major stakeholders?

**Risk, Opportunity & Resilience** – How to get acceptance of the cost of building in resilience? How to identify, acknowledge and accept risk within risk adverse hierarchies?

# Key CPM Report Recommendations

**Culture, Communication and Relationships** – How to influence stakeholders? How to protect PMs when “unknown unknowns” are derogatory front page stories and effect short term stakeholder positions and assessment of value?

**Sustainability and Education** – The challenges of maintaining investment in developing knowledge and finding solutions during recessions

**Research** - New knowledge and practical solutions will be essential to developing and maintaining competitive advantage if not survival in the “new economy”

# Opportunities and Challenges

## ***Opportunities for Improvement:***

- Investment in CPM training and education
- Adopting new tools and practices to better manage CPM risk
- Collaboration between industry and government entities to bring about change to contract practices and provide greater flexibility
- Engagement with the international CPM community to support change and improvement
- Investment in research

## ***But the challenge.....:***

- The need to raise key stakeholder awareness of the opportunities
- Recognising this as a strategic investment requiring resilience and patience
- Understanding the need for continued investment in spite of the financial climate

*Remember that Organisations that manage complexity well outperform those who don't by a factor of 10!*

# The Future – Dealing with the ‘So What?’

Continued Dialogue with 2012 Global Roundtable Series :

- *Complexity in a Time of Global Financial Change – Program Management in the New Economy*
- Canberra/Washington/France/UK

Globalised ICCPM Associate Partner Network for CPM Education and Support Services:

- ICCPM provides a comprehensive, global, single point of access to experience based knowledge, impartial advice and direct assistance in Complex Project Management and Delivery Leadership

ICCPM's International CPM Knowledge Development and Dissemination Centre (KD2):

- Development of a universal Complexity Assessment Tool
- Development of a Complex Project Management Digital Library
- Development of Project Success Measures
- Annual Research and Innovation Conference Lille France 22-23 August 2012

*Although there may be some short-term opportunities, investment in Complex Project Management capability is a long-term strategic journey*

# Questions?

**Uncertainty, ambiguity and significant political and external influences...**

**Welcome to the world of complex projects...**

Thank You for your attention and now for some Questions!

**Stephen Hayes MBE**  
**Managing Director and CEO of ICCPM**  
[www.iccpm.com](http://www.iccpm.com)  
**twitter @iccpm**