

COST MANAGEMENT IN CONSTRUCTION: A GLOBAL VIEW

建設工事におけるコストマネジメント:
グローバルな視点から

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AGENDA



- ▶ Why Cost Management Matters?
- ▶ Origins of the Profession
- ▶ Global Development
- ▶ Education and Competencies
- ▶ International Standards
- ▶ Future Trends
- ▶ なぜコストマネジメントが問題になるのか?
- ▶ プロフェッションの起源
- ▶ グローバル化への展開
- ▶ 教育とコンピテンシー
- ▶ 国際標準
- ▶ 今後の方向性



WHY COST MANAGEMENT MATTERS?

なぜコストマネジメントが問題になるのか？

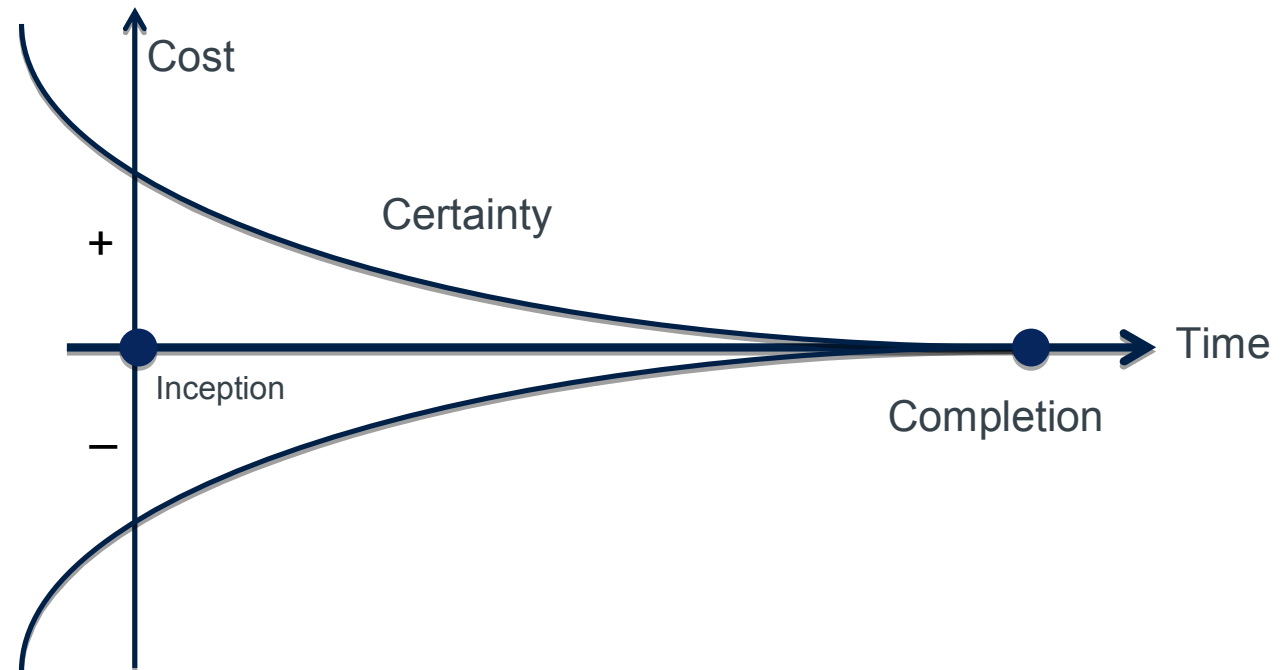


COST MANAGEMENT MATTERS

なぜコストマネジメントが問題になるのか？



- ▶ Prediction
- ▶ Procurement
- ▶ Control
- ▶ Accountability



COST MANAGEMENT MATTERS

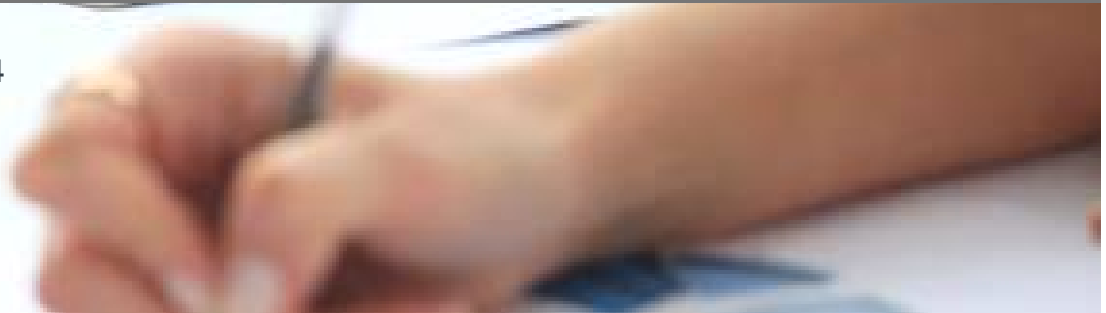
なぜコストマネジメントが問題になるのか？



Problems

- ▶ Cantorelli: (Dutch Government) – 3,500 projects – generally +40-200%
- ▶ Eurotunnel: France/UK – Cost overrun 80%
- ▶ Great Belt Fixed Link: Denmark – Cost overrun 54%
- ▶ Shinkansen – Joetsu Railway Line: Japan – Cost overrun 100%

- ▶ Source: PM World Journal, February 2014



COST MANAGEMENT MATTERS

なぜコストマネジメントが問題になるのか？



Reasons

- ▶ Technical – Management/Scope/Uncertainty
- ▶ Economic – Resourcing
- ▶ Psychological – Optimism
- ▶ Political – Manipulation



ORIGINS OF THE PROFESSION

プロフェッションの起源



ORIGINS OF THE PROFESSION

プロフェッションの起源



- ▶ Great Fire, London – 1667
- ▶ England, 1785 – Henry Cooper and Sons. First QS Practice
- ▶ Measure Quantities
- ▶ Public accountability
- ▶ British Influence: Australia, Canada, Hong Kong, Middle East



ORIGINS OF THE PROFESSION

プロフェッションの起源



Bills of Quantities

- ▶ Concept
- ▶ Development
- ▶ Classification: SMM/NRM



ORIGINS OF THE PROFESSION

プロフェッションの起源



Cost Planning

- ▶ Concept – 1951 – James Nisbet
- ▶ Prediction or Planning?
- ▶ Data – BCIS



ORIGINS OF THE PROFESSION

プロフェッションの起源



Whole Life/Carbon

- ▶ 1:5:200
- ▶ Private Finance Initiative
- ▶ Embodied Carbon



GLOBAL DEVELOPMENT

グローバル化への展開

GLOBAL DEVELOPMENT

グローバル化への展開



Terminologies and Legal Systems

- ▶ Cost Management/Cost Engineer/Project Controls
- ▶ Roman and civil codes – Hybrids
- ▶ Cultures
- ▶ Effects on cost management



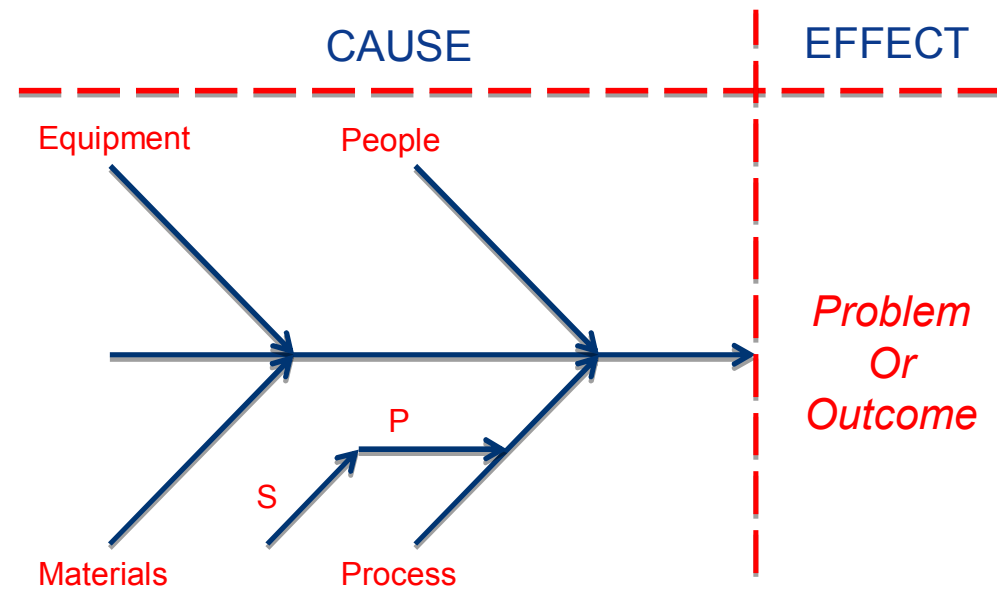
GLOBAL DEVELOPMENT

グローバル化への展開



Rise of Management Science

- ▶ Client Demands
- ▶ Project Performance
- ▶ Project Management



GLOBAL DEVELOPMENT

グローバル化への展開



Global Status

- ▶ RICS Statistics
- ▶ International Bodies
- ▶ Growth Areas



| | | |
|-----|-----------------|--------|
| 1. | UK - | 25,500 |
| 2. | Ireland - | 850 |
| 3. | Europe - | 800 |
| 4. | Russia - | 100 |
| 5. | MEA - | 2,000 |
| 6. | North Asia - | 3,900 |
| 7. | South Asia - | 200 |
| 8. | ASEAN - | 750 |
| 9. | Oceania - | 1,100 |
| 10. | North America - | 850 |
| 11. | Latin America - | 10 |

EDUCATION AND COMPETENCIES

教育とコンピテンシー



EDUCATION AND COMPETENCIES

教育とコンピテンシー



- ▶ Technical vs. Managerial
- ▶ Industry/Academia/Institution



EDUCATION AND COMPETENCIES

教育とコンピテンシー



Universities

- ▶ UK
- ▶ Overseas
- ▶ Trends



EDUCATION AND COMPETENCIES

教育とコンピテンシー



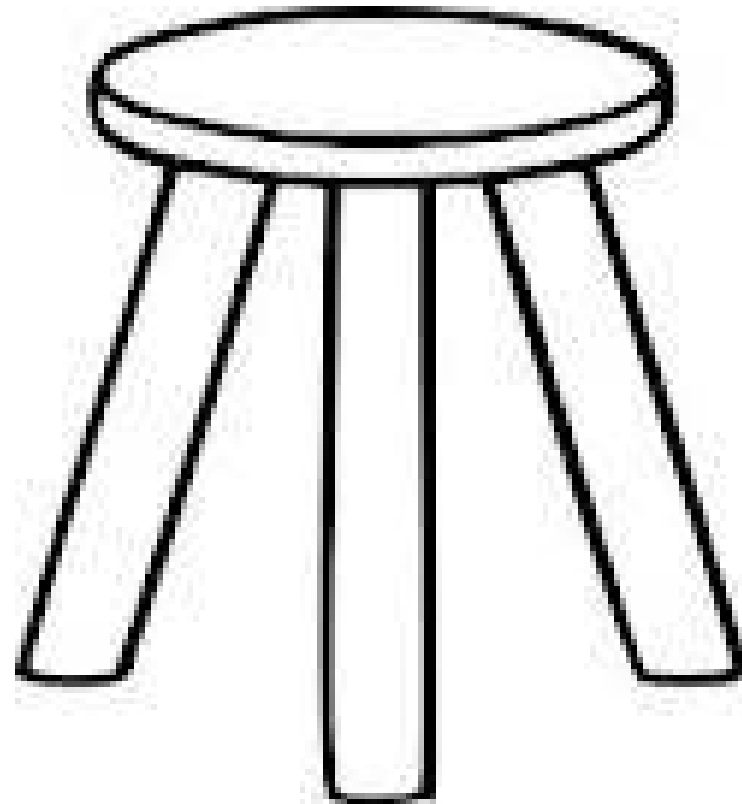
RICS Pathways and Competencies

- ▶ Cost Management: Core
- ▶ Cost Management: Optional
- ▶ Infrastructure
- ▶ International Equivalence: NARIC



INTERNATIONAL STANDARDS

國際標準



INTERNATIONAL STANDARDS

國際標準



- ▶ Concept
- ▶ Valuation, Measurement, Ethics and Sustainability
- ▶ World Bank Support



INTERNATIONAL STANDARDS

國際標準



Coalitions

- ▶ Collaborating Bodies
- ▶ Standard Setting Committee



INTERNATIONAL STANDARDS

國際標準



Work to date

- ▶ Established Committee
- ▶ Growing Membership
- ▶ Floor Areas



INTERNATIONAL STANDARDS

國際標準



Planned Construction Standards

- ▶ Cost
- ▶ Time
- ▶ Quality
- ▶ Risk
- ▶ Technology



FUTURE TRENDS

今後の方向性

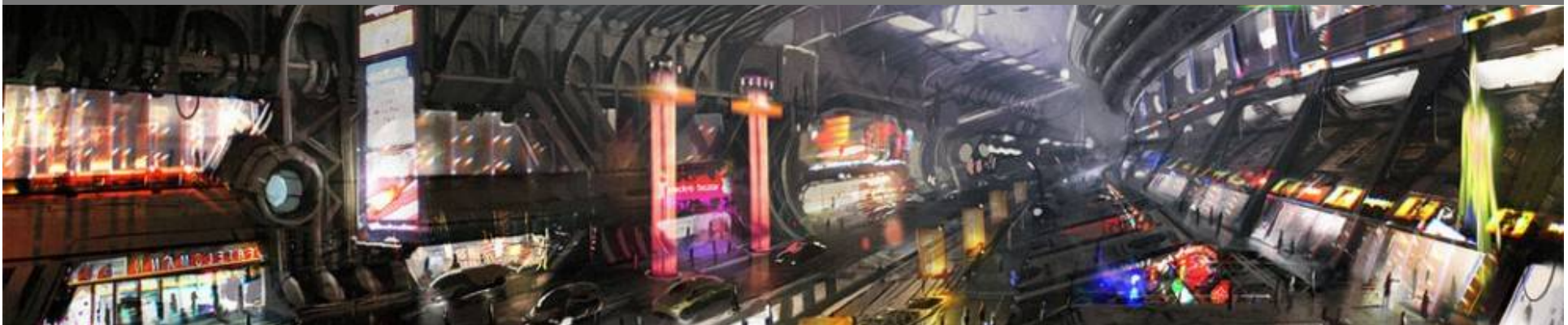


FUTURE TRENDS

今後の方向性



- ▶ Technology
- ▶ Skills
- ▶ Collaboration
- ▶ Triple Bottom Line



FUTURE TRENDS

今後の方向性



BIM

- ▶ Benefits
- ▶ Impacts
- ▶ Standards



Summary

- World of Opportunities
- Need for Standards
- The Third Industrial Revolution

