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Management/Leadership/Strategic Planning/Recruitment/Training and Development/Project Management/Corporate Responsibility

√IPENZ 20/01 Can you measure leadership?

Gandossy, R and Guarnieri, R. MIT Sloan Management Review, Volume 50 Issue 1 (Fall 2008) Pages 41-46.

The article suggests that use of metrics helps to identify potential leaders and develop their skills.

√IPENZ 20/02 Leaders: Frame your messages for maximum impact.

Raffoni, M. Harvard Management Update. Volume 14 Issue 1 (January 2009) Pages 3-4.

The focus of this paper is on a critical communication skill called framing which can help motivate people to achieve a common objective. It includes several options to effectively frame issues and comments that these can be learned and developed

√IPENZ 20/03 Leadership for future construction industry: Agenda for authentic leadership.

Shamas-ur-Rehman Toor, George Ofori. International Journal of Project Management, Volume 26, Issue 6, (August 2008) Pages 620-630.

Research in the construction industry is beginning to pay more attention to project leadership. Current perception of construction project leaders is largely built around power, authority, and task-orientation. This is due to the traditional focus of the construction industry on technical and managerial features of construction projects. However, greater challenges of modern times and increasingly different business environment necessitate a renewed vision for leadership research and call for a change in traditional perception and mindset about leadership in the construction industry. Globalization and fast changing nature of construction have necessitated a need for project managers to have and apply different leadership behaviors, competencies and styles.

√IPENZ 20/04 Developing environmental awareness in engineers through Engineers Without Borders and sustainable design projects.

Johnston, C., Caswell, D and Armitage, G. International Journal of Environmental Studies, Volume 64 Issue 4 (August 2007) Pages 501-506.

√IPENZ 20/05 Peer coaching: A relational process for accelerating career learning

Parker, P. et al. Academy of Management Learning & Education. Volume 7 Issue 4 (December 2008) Pages 487-503.

The nature of peer coaching is examined and framed as a developmental tool that can boost personal and professional development. The key characteristics of peer-coaching relationships are discussed. Successful peer coaching is positively affected by building the developmental relationship, experiencing achievement in development and internalising the learning strategy.

√IPENZ 20/06 **Former government officials as outside directors : The role of human and social capital.**

Lester, R. et al. Academy of Management Journal, Volume 51 Issue 5 (October 2008) Pages 999-1013.

√IPENZ 20/07 **Can you make that clear?**

Smith, N. Engineering & Technology (IET), Volume 3 Issue 11 (21 June-4 July 2008) Pages 82-83.
An article about the deterioration of language in management. It includes six rules by George Orwell for writing clearly. The topic has proved so popular that the IET now has an online forum devoted to it.

√IPENZ 20/08 **How to become an authentic speaker.**

Morgan, N. Harvard Business Review, Volume 86 Issue 11 (November 2008) Pages 115-119.
Like the best-laid schemes of mice and men, the best-rehearsed speeches go oft astray. No amount of preparation can counter an audience's perception that the speaker is calculating or insincere. Why do so many managers have trouble communicating authenticity to their listeners? Morgan, a communications coach for more than two decades, offers advice for overcoming this difficulty.

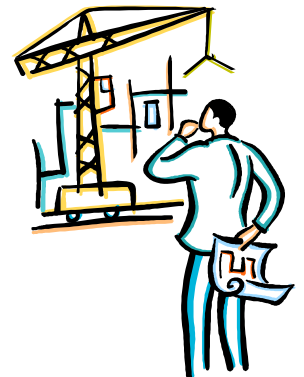
√IPENZ 20/09 **When 'stars' migrate, do they still perform like stars?**

Groysberg, B., Sant, L and Abrahams, R. MIT Sloan Management Review, Volume 50 Issue 1 (Fall 2008) Pages 41-46.

√IPENZ 20/10 **The nature and management of crises in construction projects: Projects-as-practice observations**

Hallgreen, M and Wilson, T. International Journal of Project Management, Volume 26, Issue 8 (November 2008) Pages 830-838.

The purpose of this paper thus is to review the nature of crises and their remedies that have interfered with project progress of an international construction company. Fifteen crises were studied in a "projects-as-practice" approach. Characterisation was made of both the nature of these crises and how they were managed.



√IPENZ 20/11 **Weathering the storm: a social marketing perspective on disaster preparedness and response with lessons from hurricane Katrina.**

Guion, D., Scammon, D and Aberdeen, L. Journal of Public Policy & Marketing, Volume 26 Issue 1 (Spring 2007) Pages 20-32.

√IPENZ 20/12 **A tale of two hurricanes: Comparing Katrina and Rita through a knowledge management perspective.**

Chua, A. Journal of the American Society for Information Science & Technology, Volume 58 Issue 10 (August 2007) Pages 1518-1528.

√**IPENZ 20/13 Stop the insanity of failing projects.**

Morris, R. Industrial Management. Volume 50 Issue 6 (November 2008) Pages 20-24.

According to industry figures, an astonishing 60-82 percent of projects fail. While companies seek the magic formula to prevent this from happening in their organisations, the answer is clear and simple. It is appropriate project management by developing change initiatives, limiting project scope and effective communication.

√**IPENZ 20/14 The quick wins paradox.**

Van Buren, M and Safferstone, T. Harvard Business Review, Volume 87 Issue 1, (January 2009) Pages 54-61.

Many leaders taking on new roles try to prove themselves early on by going after quick wins – fresh, visible contributions to the business. But in the pursuit of early results, those leaders often fall into traps that prevent them from benefiting from their achievements. To succeed in their new positions, leaders must realize that the teams they have inherited are also experiencing change. Instead of focusing on an individual accomplishment, leaders need to work with team members on a collective quick win. In a study of more than 5,400 new leaders, the authors found that those who were struggling tended to exhibit five behaviors characteristic of people overly intent on securing a quick win. They focused too much on details, reacted negatively to criticism, intimidated others, jumped to conclusions, and micromanaged their direct reports. Some managed to eke out a win anyway, but the fallout was often toxic. The leaders who were thriving in their new roles, by contrast, shared not only a strong focus on results – necessary for early successes – but also excellent change-management skills. They communicated a clear vision, developed constructive relationships, and built team capabilities. They seemed to realize that the lasting value of their accomplishment would be the way they managed their teams through the transition. Collective quick wins established credibility and prepared them to lead their teams to harder-won victories. The authors provide a diagnostic tool for identifying opportunities for collective quick wins, and they share some advice for organizations: When grooming new leaders, don't just shore up their domain knowledge and technical skills; help them develop the change-management skills they will need as they settle in with their new teams.

√**IPENZ 20/15 Your organization's survival plan.**

Fleming, J., Rath, T and Conchie, B. Gallup Management Journal Online; (11/13/2008,) Pages 1-4. Report back from the Gallup-Healthways Well-Being poll.

√**IPENZ 20/16 Strategic course corrections.**

Kanazawa, Mike. Industrial Management, Volume 50 Issue 6 (November 2008) Pages 25-30.

When markets are stable and trends are predictable, it is worthwhile focusing on continuous improvement of internal processes. In contrast, when dealing with volatile economic conditions, unpredictable trends or rapidly moving markets, disconnecting from an external environment in constant flux becomes dangerous. Unless a company also devises specific junctures at which to monitor external progress, in addition to its internal focus, it may drift off track and require drastic changes to survive.

√**IPENZ 20/17 How to have influence.**

Grenny, J., Maxfield, D and Shimberg, A. MIT Sloan Management Review, Volume 50 Issue 1 (Fall 2008) Pages 47-52.

√IPENZ 20/18 Managing public-private megaprojects: Paradoxes, complexity, and project design.

Alfons van Marrewijk, et al. International Journal of Project Management, Volume 26, Issue 6 (August 2008) Pages 591-600.

Recent studies show that despite their growing popularity, megaprojects - large-scale, complex projects delivered through various partnerships between public and private organisations - often fail to meet costs estimations, time schedules and project outcomes and are motivated by vested interests which operate against the public interest. This paper presents a more benign and theoretically-grounded view on what goes wrong by comparing the project designs, daily practices, project cultures and management approaches of two recent megaprojects in The Netherlands and Australia, showing how these projects made sense of uncertainty, ambiguity and risk. We conclude that project design and project cultures play a role in determining how managers and partners cooperate to achieve project objectives to a greater or lesser extent.

Technical Aspects of Engineering

√IPENZ 20/19 Unique “horseshoe truss” supports new Dublin stadium.

Civil Engineering (ASCE), Volume 78 Number 10 (October 2008) Pages 12-14.

√IPENZ 20/20 Economic analysis.

Rue, D et al. Civil Engineering (ASCE), Volume 78 Number 10 (October 2008) Pages 60-69.

A saving of \$1 million was achieved by use of structural analysis techniques when evaluating problematic deck joints in a 52 year old bridge.

√IPENZ 20/21 Developing a business process model for bridge management.

Proceedings of the Institution of Civil Engineers : Bridge Engineering, Volume 161 Issue BE3 (September 2008) Pages 115-123.

√IPENZ 20/22 Concrete cracking in tension members and application to deck slabs of bridges.

Muttoni, A and Fernández Ruiz, M. Journal of Bridge Engineering, Volume 12, Issue 5 (September 2007) Pages 646-653.

√IPENZ 20/23 The benefits of bridge condition monitoring.

Proceedings of the Institution of Civil Engineers : Bridge Engineering, Volume 161 Issue BE3 (September 2008) Pages 151-158.

√IPENZ 20/24 Cracking of rc beam/column joints: implications for practical structural analysis and design.

Cotsovos, D and Kotsovos, N. Structural Engineer, Volume 86 Issue 12 (17 June 2008) Pages 33-39.



√IPENZ 20/25 **Creep in conventional and modified asphalt mixtures.**

Aksoy, A and Iskender, E. Proceedings of the Institution of Civil Engineers: Transport, Volume 161 Issue TR4 (November 2008) Pages 185-195.

√IPENZ 20/26 **Structural reliability and performance-based engineering.**

Ellingwood, B. . Proceedings of the Institution of Civil Engineers : Structures and Buildings, Volume 161 Issue SB4 (August 2008) Pages 199-207.

√IPENZ 20/27 **Assessing and achieving structural safety.**

Brown, C., Elms, D and Melchers, R. Proceedings of the Institution of Civil Engineers: Structures and Buildings, Volume 161 Issue SB4 (August 2008) Pages 219-230.

√IPENZ 20/28 **Aerial gateway.**

Civil Engineering (ASCE), Volume 78 Number 10 (October 2008) Pages 42-51
Describes new Terminal 3 at Beijing Capital International Airport

√IPENZ 20/29 **An optimization model for prioritizing transport projects.**

Ahern, A and Anandarajah, G. Proceedings of the Institution of Civil Engineers: Transport, Volume 161 Issue TR4 (November 2008) Pages 221-230.

√IPENZ 20/30 **Innovation wave : an update on the burgeoning private sector role in U.S. highway and transit infrastructure.**

U.S. Dept of Transportation. Washington, D.C., 2008.

√IPENZ 20/31 **A model for estimating road wear on in-service roads.**

Hjelle, Harald M. International Journal of Pavement Engineering, Volume 8 Issue 3, (September 2007) Pages 237-244.

√IPENZ 20/32 **The ground: Clients remain exposed to unnecessary risk.**

Egan, D Proceedings of the Institution of Civil Engineers: Geotechnical Engineering, Volume 161 Issue GE4 (August 2008) Pages 189-195.

Many clients are unnecessarily exposed to risk due to inadequate site investigation.

√IPENZ 20/33 **Immediate settlement of shallow foundations bearing on clay.**

Foye, K. C Basu, P. Prezzi, M. International Journal of Geomechanics;, Volume 8 Issue 5, (September 2008) Pages 300-310.

√IPENZ 20/34 **What lies beneath?**

Hertlein, B and Walton, W. Civil Engineering (ASCE), Volume 77 Issue 11 (November 2007) Pages 58-63.

Looks at reuse of existing foundations in urban redevelopment.

√**IPENZ 20/35 Assessing performances of a permeable biobarrier.**

Wilson, R., Yip, W and Naas, C. Proceedings of the Institution of Civil Engineers: Water Management, Volume 161 Issue WM6 (December 2008) Pages 375-379.

√**IPENZ 20/36 Innovative scs system for marine and offshore applications.**

Liew, R. Structural Engineer, Volume 86 Issue 12 (17 June 2008) Pages 24-25.
Steel-concrete-steel sandwich technology.

√**IPENZ 20/37 Flood detention reservoirs: Geotechnical aspects of design and construction.**

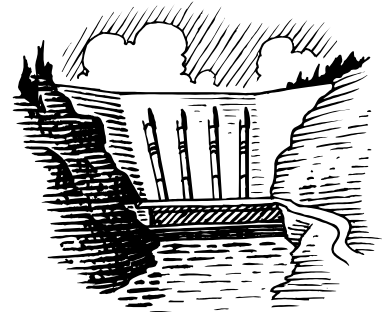
Brown, A. Dams and Reservoirs, Volume 18 Issue 2 (July 2008) Pages 71-77.

√**IPENZ 20/38 Maintenance of flood storage reservoirs.**

Harding, N. Dams and Reservoirs, Volume 18 Issue 2 (July 2008) Pages 79-83

IPENZ 20/39 Technologies for large scale seawater desalination using concentrated solar radiation.

Trieb, F. Desalination, Volume 235 Issues 1-3 (15 January 2009) Pages 33-43.



√**IPENZ 20/40 Multiple-barrier disinfection by chlorination and UV Irradiation for desalinated drinking waters: Chlorine photolysis and accelerated lamp-sleeve fouling effects.**

Wait, I. Water Environment Research, Volume 80 Issue 11 (November 2008) Pages 2183-2188.

√**IPENZ 20/41 Arsenic removal using oxidative media and nanofiltration.**

Moor, K., Huck, P and Siverns, S. American Water Works Association. Journal, Volume 100, Issue 12 (December 2008) Pages 74-83.

√**IPENZ 20/42 Sodium hypochlorite dosage for household and emergency water treatment.**

Lantagne, D. American Water Works Association. Journal, Volume 100, Issue 8 (August 2008) Pages 106-119.

√**IPENZ 20/43 Distribution of sewer exfiltration to urban groundwater.**

Chisala, B and Lerner, F. Proceedings of the Institution of Civil Engineers : Water Management, Volume 161 Issue WM6 (December 2008) Pages 333-341.

IPENZ 20/44 Bioreactor treatment of municipal solid waste landfill leachates: Characterization of organic fractions.

Palaez, A., Sanchez, J and Almendros, G. Waste Management, Volume 29 Issue 1 (January 2009) Pages 70-77.

√IPENZ 20/45 **Minimizing dust emissions at belt transfer stations.**

Bulk Solids Handling, Volume 28 Issue 7 (2008) Pages 498-500,502-503.

√IPENZ 20/46 **Assessing the damage.**

Civil Engineering (ASCE), Volume 78 Number 10 (October 2008) Pages 52-59.

Assesment of damage to underground pipelines and related infrastructure from hurricanes and flooding,

√IPENZ 20/47 **Failure analysis of stainless steel piping at an offshore platform.**

Velu, Balraj. Materials Performance, Volume 47 Issue 5 (May 2008) Pages 62-65.

√IPENZ 20/48 **Experiments and modeling of zero leakage backward pumping mechanical face seals.**

Lebeck, A. Tribology Transactions, Volume 51 Issue 4 (2008) Pages 389-395.

√IPENZ 20/49 **Parallel pumping in industrial applications.**

Ahlgren, R. Heating/Piping/Air Conditioning Engineering : HPAC, Volume 80 Issue 12 (December 2008) Pages 28-31.



√IPENZ 20/50 **The heat pipe heat exchanger: a review of its status and its potential for coolness recovery in tropical buildings**

Yau, Y. Building Services Engineering Research & Technology, Volume 29, Issue 4 (November 2008) Pages 291-310.

√IPENZ 20/51 **Heat exchanger technology: The advantages.**

Stahihut, J and Band, D. Power Engineering, Volume 112 Issue 11 (November 2008) Pages 164,166,168.

√IPENZ 20/52 **Selecting tubing materials for power generation heat exchangers .**

Janikowski, D. Materials Performance, Volume 47, Issue 9 (September 2008) Pages 58-63.

√IPENZ 20/53 **Maintaining and repairing heat exchanger tubes.**

Yokell, S. Chemical Engineering, Volume 115 Issue 3 (March 2008) Pages 60-67.

√IPENZ 20/54 **Individual control of electric lighting in a daylit space.**

Newsham, G et al. Lighting Research and Technology, Volume 40 Issue 1 (March 2008) Pages 25-41.

√IPENZ 20/55 **Multi Criteria Analysis for bioenergy systems assessments.**

Thomas Buchholz, et al. Energy Policy, Volume 37, Issue 2 (February 2009), Pages 484-495

Special focus topic : Life Cycle Costing



√IPENZ 20/56 Life cycle cost based procurement decisions: A case study of Norwegian Defence Procurement projects.

Bernt E. Tysseland. International Journal of Project Management, Volume 26 Issue 4 (May 2008) Pages 366-375.

A Norwegian Ministry of Defence publication states that when procurement decisions are made, systems that yield the lowest possible life cycle cost (LCC) for the Norwegian Defence must be procured, even if this means that initial procurement cost becomes higher. However, several projects within the community are still carried out and reviewed based on initial procurement cost alone. This study investigates four hypotheses, based on agency theory and earlier LCC work, in order to help explain why this is happening. A questionnaire was administered to all projects currently running in the defence community. Findings regarding project uncertainty, information symmetry, the project leader's attitude and knowledge about LCC, as well as control variables are discussed both towards theory and in terms of managerial implications.

√IPENZ 20/57 Analysis of life-cycle maintenance strategies for concrete bridge decks.

Ying-Hua H., Adams, T and Pincheira, J. Journal of Bridge Engineering, Volume 9 Issue 3 (May/June 2004) Pages 250-258.

√IPENZ 20/58 Life cycle costing–Theory, information acquisition and application.

Woodward, D. International Journal of Project Management, Volume 15 Issue 6 (December 1997) Pages 335-344.

Especially in the last two decades of an increasingly-competitive business environment, dwindling resources and an ever-increasing need to obtain value for money in all areas of corporate activity, it has become essential that all available resources be used optimally (*Griffith, J. W. and Keely, B. J., Cost Engineering, 1978, September/October, 165-168*). Physical assets form the basic infrastructure of all businesses and their effective management is essential to overall success. It has thus become essential to plan and monitor assets throughout their entire life cycle, from the development/procurement stage through to eventual disposal. Life cycle costing* is concerned with optimising value for money in the ownership of physical assets by taking into consideration all the cost factors relating to the asset during its operational life. Optimising the trade-off between those cost factors will give the minimum life cycle cost of the asset. This process involves estimation of costs on a whole life basis before making a choice to purchase an asset from the various alternatives available. Life cycle cost of an asset can, very often, be many times the initial purchase or investment cost (*Hart, J. M. S., Tetrotechnology Handbook, p. 22, HMSO, London, 1978; Hysom, J. L., Journal of Property Management, 1979, 44, 332-337*). It is important that management should realise the source and magnitude of lifetime costs so that effective action can subsequently be taken to control them. This approach to decision making encourages a long-term outlook to the investment decision-making process rather than attempting to save money in the short term by buying assets simply with lower initial acquisition cost. It is suggested project managers should familiarise themselves with what the approach involves, to better appreciate how they might then contribute to the enhanced quality decision making which it makes possible.

IPENZ 20/59 Life-cycle costs for railway condition monitoring.

Pedro, F et al. Transportation Research Part E: Logistics and Transportation Review. Volume 44 Issue 6 (November 2008) Pages 1175-1187.

√IPENZ 20/60 Assessment of the problems of application of life cycle costing in construction projects.

Assaf, Sadi A et al. Cost Engineering. Volume 44 Issue 2 (February 2002) Pages 17-22.
Discusses the situation with regard to construction projects in Saudi Arabia.

√IPENZ 20/61 Estimating life cycle plant maintenance costs.

Edwards, D., Holt, G and Harris, F. Construction Management & Economics. Volume 18 Issue 4 (June 2000) Pages 427-435.

To realistically determine the financial success of a maintenance strategy, actual costs need to be compared with target “predicted” values. This article presents a methodology for forecasting life cycle maintenance expenditure for tracked hydraulic excavators. The approach comprises a time series analysis for maintenance cost expenditure and modeling of cumulative costs resulting in robust performance of the model. In conclusion the direction of future research is discussed.

√IPENZ 20/62 Getting a handle on life-cycle costs.

Barker, S. Process Engineering. Volume 88 Issue 6 (November/December 2007) Pages 30-32.
When purchasing important items of manufacturing equipment, the article recommends taking whole-life costs into account. Such an approach involves working out the expenditure throughout the entire life of the system and then comparing this with alternative products.

IPENZ 20/63 Integrated life-cycle assessment and life-cycle cost analysis model for concrete bridge deck applications.

Kendall, A., Keoleian, G and Helfand, G. Journal of Infrastructure Systems. Volume 14 Issue 3 (September 2008) Pages 214-222.

√IPENZ 20/64 Life cycle cost analysis of a car, a city bus and an intercity bus powertrain for year 2005 and 2020.

Hellgren, J. Energy Policy. Volume 35 Issue 1 (January 2007) Pages 39-49.

IPENZ 20/65 Life-cycle cost analysis of reinforced concrete structures in marine environments.

Val, D. and Stewart, M. Structural Safety. Volume 25 Issue 4 (October 2003) Pages 343-362.

√IPENZ 20/66 Life cycle cost model for water, wastewater systems.

Vipulanandan, C. Underground Construction. Volume 63 Issue 10 (October 2008) Pages 80-85.
The model for this US water and wastewater sewer system has been developed at the University of Houston.

√IPENZ 20/67 Life-cycle cost for intelligent buildings.

Keel, T. Engineered Systems, Volume 20 Issue 10 (October 2003) Pages 54-58.

The article looks at the creation of benchmarking information for LCC for commercial building construction.

√IPENZ 20/68 Life-cycle cost-effective optimum design of steel bridges considering environmental stressors.

Lee, K., Cho, H and Cha, C. Engineering Structures. Volume 28 Issue 9 (July 2006) Pages 1252-1265.

√IPENZ 20/69 Life-cycle costing in municipal construction projects.

Arditi, D. Journal of Infrastructure Systems. Volume 2 Issue 1 (1996) Pages 5-14.

A survey to examine the use of LCC analysis by the largest municipalities in the US showed that 40% of the largest municipalities use LCC analysis. Reasons for not using LCC include the absence of formal guidelines and the challenge of estimating future expenses.

√IPENZ 20/70 Probability distributions of facilities management costs for whole life cycle costing in acute care NHS hospital buildings.

Boussabaine, A. and Awwad, B. Construction Management & Economics. Volume 20 Issue 3 (April 2002) Pages 251-261.

**√IPENZ 20/71 Quantifying pavement life cycle cost inflation uncertainty.**

Gransberg, D and Diekmann, J. AACE International Transactions (2004) Pages 08.1-08.11.

This case study explores an urban freeway project in Vancouver, Washington.

√IPENZ 20/72 Ratio of operating and maintenance costs to initial costs of building services systems.

Wu, S. and Clements-Croome, D. Cost Engineering; Volume 49 Issue 12 (December 2007) Pages 30-33.

Two critical issues concerned with reliability and maintenance of building services systems are addressed in this article: the ratio of operating and/or maintenance and the proportion of items that need preventive maintenance.

√IPENZ 20/73 Reconciling theory and practice of life-cycle costing.

Cole, R. and Sterner, E. Building Research & Information Volume 28 Issue 5/6 (September 2000) Pages 368-375.

While LCC is generally seen to be a useful approach for comparing alternative building designs, practical problems limit its widespread adoption. This is especially critical in green building as often many of the advantages of strategic choices can only be understood and justified within the context of LCC. The article identifies some of the difficulties and offers strategies that encourage more use of LCC.

√IPENZ 20/74 **Re-engineering the whole life cycle costing process.**

Kirkham, R. Construction Management & Economics. Volume 23 Issue 1 (January 2005) Pages 9-14.
As data capture is crucial in supporting the iterative and logical application of WLCC, the paper reports on the development of a WLCC model decision-support software application. The 'Logbook' works with a WLCC model to provide building designers with a repository of decision data and a record of decisions made using the data. The aim of the software is to encourage applying WLCC models as an iterative instead of retrospective process.

√IPENZ 20/75 **Risk-based life-cycle costing of infrastructure rehabilitation and construction alternatives.**

Salem, O. et al. Journal of Infrastructure Systems. Volume 9 Issue 1 (2003) Pages 6-15.
Using highway pavement data, a new approach derived from probability theory and simulation application is used for predicting life-cycle costs and assessing infrastructure rehabilitation and construction alternatives. A case study is included to demonstrate implementation and potential value of the model with regard to decision making.

√IPENZ 20/76 **Simulation of maintenance costs in UK local authority sport centres.**

Bousbane, A. and Kirkham, R. Construction Management & Economics. Volume 22 Issue 10 (December 2004) Pages 1011-1020.
As building maintenance costs, especially in high-demand public sector facilities, can represent a significant share of the whole life-cycle costs, it is essential to be able to accurately estimate these expenses. This paper suggests an innovative approach to maintenance costs modeling for sports centres based on simulation.

√IPENZ 20/77 **Whole life cycle cost for Chicago type bascule bridges.**

Zhang, Y et al. Cost Engineering. Volume 50 Issue 4 (April 2008) Pages 28-32.

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