

Curriculum Vitae



Associate Professor Luke Peh Lu Chang Vice Dean School of Science and Technology

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Education Qualifications

2011	PhD (Built Environment), National University of Singapore
2005	B.Sc. (Building), National University of Singapore

Academic and Professional Experience

2015 – Present	Vice Dean, School of Science and Technology
2016 – 2022	Academic Lead/Co-Chair/Chair, Academic Audit Committee
2012 – 2013	Head of Programme (Building and Project Management)
2010 – 2018	Head of Programme (Facilities and Events Management)

Membership and Professional Activities

- Member, International Facility Management Association
- Member, Fire Safety Managers' Association
- Assessor for Universal Design
- Certified Fire Safety Manager
- Facility Management Professional
- Project Management Professional
- Professional Certificate in Drones and Autonomous Systems (EDX)
- Professional Certificate in IBM Data Science & Machine Learning (EDX)

Consultancy and Executive Experience

- Member, Autonomous Universities' Curriculum Advisory Committee on 5G & Telecoms
- Member, Built Environment SkillsFuture (Facilities Management) Workgroup
- Member, Consultancy team for evaluating the effectiveness of e-learning in Home Team Academy (HTA)



- Reviewer for Singapore Polytechnic's Hotel and Leisure Facilities Management Diploma programme
- Reviewer for Journals of Buildings, Energies, Sustainability, Environmental Research and Public Health, Electronics and Applied Science
- School representative, Academic Audit Committee
- School representative, Student Affairs and Support Committee
- School representative, Alumni Steering Committee

Voluntary and Community Work

- Audit and Risk Committee Member, Consumer Association of Singapore (CASE)
- Council Member, CaseTrust Advisory Council
- Member of Ulu Pandan's Active Aging Committee
- Member of Ulu Pandan's Mental Wellness Taskforce
- Member of Ulu Pandan's Community Emergency and Engagement Committee & Constituency's Crisis
 Operations Centre
- Executive Member, Maple Park Residential Network

Research Interests

- Higher Education and EdTech
- Construction Economics and Management
- Integrated Digital Delivery for High-Performance, Sustainable and Smart Buildings

Selected Publications

Journal Papers:

- Kwek A. Peh, L.C. and Tan, J. (2023). Distractions, Analytical Thinking and Falling for Fake News: A Survey of Psychological Factors. Journal of Humanities & Social Sciences.
- Ba, H. Wang, Q. Chen, C. Liu, Z.W. Peh, L.C. and Tiong, R. (2023). Change Management of Organizational Digital Transformation: A Proposed Roadmap for BIM-enabled FM. Buildings.
- Peh, L.C. Cerimagic, S. and Conejos, S. (2021). Challenges of running online exams and preventing dishonesty during Covid-19 pandemic. Journal of Learning Development in Higher Education.
- Liu, Z.W. Lu, Y.J. Nath, T. Wang, Q. Lee, K.T. and Peh, L.C. (2021). Critical Success Factors for BIM Adoption during Construction Phase: A Singapore Case Study. Engineering, Construction and Architectural Management.
- Liu, Z.W. Lu, Y.J. Shen, M. and Peh, L.C. (2020). Transition from Building Information Modeling (BIM) to Integrated Digital Delivery (IDD) in Sustainable Building Management: A Knowledge Discovery Approach Based Review. Journal of Cleaner Production.
- Liu, L.W. Wang, Q. Gan, J.L. and Peh, L.C. (2020). Envelope Thermal Performance Analysis Based on



Building Information Model (BIM) Cloud Platform – Proposed Green Mark Collaboration Environment. Energies.

- Liu, Z.W. Lu, Y.J. and Peh, L.C. (2019). A Review and Scientometric Analysis of Global Building Information Modelling (BIM) Research in the Architecture, Engineering and Construction (AEC) Industry. MDPI-Buildings. Best Paper Award.
- Peh, L.C. Toor, S. and Leong, J. (2019). The Role of Scientific Terminology and Metaphors in Management Education. European Journal of Social Sciences Education and Research.
- Goh, J. and Peh, L.C (2017). The Challenge of Building & Sustaining a Green School in Singapore UNCSEA's Corporate Sustainability Journey. Case and Teaching Notes. Case Centre.
- Peh, L.C. Low, S.P. and Adi, I. (2015). Regionalization Strategies of Singapore's Architectural, Engineering and Quantity Surveying Consultancy Firms: An Overview. International Surveying Research Journal.
- Low. S.P. and Peh, L.C. (2010). The Importance of Physical Presence in Overseas Markets: Sharing of Experiences from Singapore's Domiciled Construction-related Companies in Regional Markets. The Singapore Engineer.

Conference Papers and Presentations:

- Wu, H.J. Kiam, C.H. Yong, T.L. Toh, H.L. Tiong, B.S. Ong, B.G. Tan, J.Y. Liu, Z.W. Conejo, S. Peh, L.C. and Zhu, Y.Q. (2023). Virtual Lab Workspace for Programming Computers Towards Agile STEM Education. International Conference in Learning Technologies for Education Challenges, Bangkok, Thailand
- Chee, Y.L. Peh, L.C. and Liu, Z.W. (2023). Exploring the Transformative Impact of Integrated Digital
 Delivery on the Built Environment: A Case Study of Additional and Alternative Projects. International
 Conference on E-Education, E-Business, E-Management and E-Learning (IC4E), Shenzhen, China.
- Chee, Y.L. Peh, L.C. and Liu, Z.W. (2023). Integrated Digital Delivery in Built Environment the Paradigm Shift and Value Creation it brings. International Conference on E-Business and Applications, SUSS, Singapore.
- Peh, L.C. Lin, S.J. Liu, Z.W. and Tan, K. (2022). Leveraging on Contactless Technology to Track and Locate Prefabricated Components: A Digital Platform-based Approach. South East Asia Iron and Steel Institute (SEAISI) Expo, Singapore.
- Seghier, T.E. Wong, J. Peh, L.C. and Liu, Z.W. (2022). Transition from BIM to IDD in Quantity Surveying (QS) sector: A comprehensive Comparison between Traditional Quantity Surveying (QS) Practices vs BIM-based Quantity Take-off (BIM-QTO). Pacific Asia Quantity Surveyor Congress (PAQS), Singapore
- Ong, M. Liu, Z.W. Peh, L.C. and Mohd Kassim, N.F. (2022). Driving Digital Transformation in the Built Environment Industry: A Proposed Holistic Digital Transformation Strategy (HDTS) Framework. PAQS Congress, Singapore.



- Kwek, A. Peh, L.C. and Tan, J. (2020). Justifying a Disinformation Response Competency Test Instrument. ELearning Forum Asia 2020, HongKong.
- Thiagaranjan, L.B. Li, J.Z. Peh, L.C. and Low, W.P. (2020). Continuing STEM Education amid Disruption due to Pandemic. ELearning Forum Asia 2020, HongKong.
- Li, J.Z. Low, W.P. Thiagarajan, L.B. and Peh, L.C. (2019). Data Analytics for Student Profiling and Academic Counselling. Ascilite 2019 Personalized Learning. Diverse Goals. One Heart Conference, Singapore.
- Liu, Z.W. Chen, K.Y. Peh, L. and Tan, K.W. (2017). A Feasibility Study of Building Information Modeling for Green Mark New Non-Residential Building (NRB): 2015 Analysis. World Engineers Summit – Applied Energy Symposium & Forum: Low Carbon Cities & Urban Energy Joint Conference, Singapore.
- Peh, L.C. (2016). Green, Gracious and Smart Housing in Singapore. BIT Low Carbon Green Growth Conference, Seoul, South Korea.
- Peh, L.C. and Low, S.P. (2012). Case-based Reasoning Decision Support System for Architectural and Engineering Firms. Creative Construction Conference, Budapest, Hungary.
- Peh, L.C. and Low, S.P. (2008). Using Dunning's Eclectic Paradigm to Review the Relationship between
 Flight-time and Organization Structures of Architectural and Engineering Firms in International
 Markets. 13th International Chinese Research Institute of Construction Management (CRIOCM)
 Symposium, Beijing, China.
- Peh, L.C. (2008). Supply Chain Management in Singapore's Construction Industry. BRSNet Research Symposium, School of Design and Environment Symposium, National University of Singapore. Best Presentation Award.

Book/Chapter in Book:

- 卢昱杰、刘子文、Shen, M. Peh, L.C. (2022). 从BIM 走向IDD:一种全局协同的可持续建筑发展路径. 建筑智 能工业化 第 5 卷 第 4 期 2022 年 12 月. Transition from BIM to IDD: A Holistic and Interoperable Building Approach Towards Sustainability. Architectural Intelligence Industrialization 2022.
- Peh, L.C. Low, S. and Attallah, S. (2017). Technology Advances, Societal Impact and Local Responses. SUSS Commemorative Book.
- Peh, L.C. and Low, S.P. (2013). Organization Design for International Construction Business. Springer.
- Low, S. P. and Peh, L.C. (2011) Using Case-based Reasoning Decision Support System (CBRDSS) for
 Organization Design by International Construction Firms, Chapter in Book, Rashid, K. A. et al.
 (Eds.) International Readings in Construction Business and Marketing, IIUM Press



Awards

Honorable Mention Award (Transformative Delivery Category) for paper presented at Pacific Asia Quantity Surveyor Congress Singapore 2022. For paper "Driving Digital Transformation for the Built Environment Industry: A Proposed Holistic Digital Transformation Framework in Cost Management".

Best Paper Award for MDPI-Buildings Journal. For Paper "A Review and Scientometric Analysis of Global Building Information Modeling Research in the Architecture, Engineering and Construction Industry".

Best Presentation Award at Inaugural National University of Singapore, School of Design and Environment's Building Research Network Symposium. For paper "Supply Chain Management in Singapore's Construction Industry".

Inaugural Best Facilities Management Education Service Provider awarded by Singapore International Facility Management Association.

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