# Wurong Shih 施武榮

Department of Industrial Management and Information Southern Taiwan University of Science and

Technology

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Education

- \* Ph.D. in Systems Science & Industrial Engineering, State University of New York, 1996/06
- \* M.S. in Industrial Engineering, State University of New York, Binghamton, New York, 1991/12

# Area of Specialty

• E-Business, Operation Management, Supply Chain Management, Decision Support Systems

# **Academic Experience**

- 2010/03 ~ present Professor, Department of Industrial Management and Information, Southern Taiwan University of Science and Technology, Taiwan.
- 2014/08 ~ 2018/07 Vice Dean, Collage of Business, Southern Taiwan University of Science and Technology, Taiwan.
- 2010/08 ~ 2018/07 Director, Global MBA Program of Collage of Business, Southern Taiwan University of Science and Technology, Taiwan.
- 2010/08 ~ 2014/07 Director, Executive MBA Program of Collage of Business, Southern Taiwan University of Science and Technology, Taiwan.
- 2000/02 ~ 2010/07 Chairman, Department of Management and Information Technology, Southern Taiwan University of Science and Technology, Taiwan.
- 2000/02 ~ 2010/07 Director, Graduate program of Industrial management, Southern Taiwan University of Science and Technology, Taiwan.
- 1996/08 ~ 2010/02 Associate Professor, Department of Management and Information Technology, Southern Taiwan University of Science and Technology, Taiwan.

# **Publications**

Journal Papers

 Hai-Ninh Do, Wurong Shih, and Quang-An Ha, 'Effects of Mobile Augmented Reality Apps on Impulse Buying Behavior: An Investigation in The Tourism Field', Heliyon, Volume 6, Issue 8, e04667, pp.1-9, August 2020. (Scopus)

(http://www.sciencedirect.com/science/article/pii/S2405844020315115)

- 2. Shih, W. and Julián Nevárez Montes, 'An Index to Evaluate the Journals and Publishers', Publishing Research Quarterly, Vol. 4, No. 34, pp. 529-539, 2018. (ABI)
- Do, Ninh T. H. and Wurong Shih, 'The Integration between The UTAUT with IS Success Model in Case of Online Hotel Booking User Acceptance,' TIJ's Research Journal of Commerce & Behavioral Science - RJCBS, Vol. 5, No. 10, pp. 25-36, 2016.
- Do, Ninh T. H. and Wurong Shih, 'Destination Decision-Making Process Based on a Hybrid MCDM Model Combining DEMATEL and ANP: The Case of Vietnam as a Destination,' Modern Economy, No. 7, pp. 966-983, 2016. (ABI).
- 5. Shih, W. and Ninh T. H. Do, 'Impact of Tourism on Long-Run Economic Growth of Vietnam,' Modern Economy, No. 7, pp. 371-376, 2016. (ABI)
- Yuling Lin, W. Shih, Jinglu Hu, 'Development of Stock Evaluation System Based on Quasi-Linear Regression Model,' International Journal of Electronic Business Management, Vol.1, No. 11, pp. 23-32, 2013. (EI)
- 7. Yeh, J.M., W. Shih and F. Shu, 'An Improved Heuristics Approach in Constructing Nominal Binary



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Decision Tree,' Journal of Information Management, Vol. 1, No. 17, pp. 157-176, 2010. (in Chinese)

- Shih, W., 'The development of a BPN data mining calibration system in a SMT PCB assembly line,' International Journal of Electronic Business Management, Vol.7, No. 4, pp. 288-299, 2009. (EI)
- 9. Shih, W., 'The Hybrid Heuristic System in Balancing The PCB Assembly Line of Surface Mount Technology with Multiple Placement Machines,' International Journal of Electronic Business Management, Vol. 7, No. 1, pp.37-44, 2009. (EI)
- Shih, W. & Pei, M., J. 'International Perception of Ecommerce: A Comparison between Vietnamese and Taiwanese business Managers,' Journal of Southern Taiwan University of Technology, Southern Taiwan University of Technology, 2008. (in Chinese)
- Shih, W. & Ou, Y.K., 'The Development of A Web-based System To Solve The Multi-Depot Vehicle Routing Problem Of Fixed-Route Trucking Carriers,' International Journal of Electronic Business Management, Vol. 5, No. 4, pp.301-309,2007. (EI)
- 12. Lai, M.T., Shih, W. & Tang K.Y., 'Economic Discrete Replacement Policy for A Single-Unit System Subject to Increasing Failure Rate Shock Damage Model,' International Journal of Advanced Manufacturing Technology (SCI), 2005.
- Yeh, J.M., Shih, W. & Lin, B.H., 'Prototyping A Negotiation Support System for New Product Development,' Journal of the Chinese Institute of Industrial Engineers, Vol. 22, No. 3, pp.252-261, 2005.
- Shih, W., Lin, Y. J. & Lai, C.H., 'The Application of Consumer Behavior and Customer Relationship Management,' Mathematical and Science, National University of Tainan, 2005. (in Chinese)
- Chu, T.C., Shih, W. & City, Y.K., 'An interval arithmetic method for evaluating weapon system under fuzzy environment,' Journal of Information and Optimization Sciences, Vol. 24, No. 2, pp. 345-355, 2003.
- Shih, W., Srihari, K., & Adriance, J.A., 'Expert System Based Placement Sequence Identification for Surface Mount PCB Assembly,' International Journal of Advanced Manufacturing Technology, Vol. 113, No. 3, pp.413-423, 1996.
- 17. Shih, W., Huang, Y.W., Srihari, K., & Westby, G., 'Estimation of Yield Through Component Placement Accuracy in Surface Mount PWB Assembly,' Computers and Industrial Engineering, Vol. 29, No 1, pp. 607-611, 1995.
- 18. Shih, W., & Srihari, K., 'Distributed Artificial Intelligence in Manufacturing System Control,' Computers and Industrial Engineering, Vol. 29, No 1, pp. 199-203, 1995.
- 19. Shih, W., Srihari, K., Adriance, J., & Westby, G., 'A Heuristic Approach to Placement Sequence Identification for SMT,' Soldering and Surface Mount Technology, No 14, pp.20-24,1993.

### **Conference Papers**

- 1. Shih, W. and Julián Nevárez Montes, 'Untold Truths About Internationalization Its Facets in Higher Education', Proceeding - 2019 International Conference on Knowledge-Based Economy and Global Management, Tainan, Taiwan, 2019.
- Shih, W., Elmer Daniel Lopez Castro and Renzo Del Giudice Lopez, 'Factors That Influence Purchase Intention Using E-Commerce in Central America by Applying Tam', Proceeding - 2019 International Conference on Knowledge-Based Economy and Global Management, Tainan, Taiwan, 2019.
- 3. Shih, W. and Julián Nevárez Montes, 'The Umbrella Species of Higher Education', Proceeding 2018 International Conference on Knowledge-Based Economy and Global Management, Tainan, Taiwan, 2018.
- 4. Shih, W. and Renzo Del Giudice Lopez, 'Analysis of The Purchase Intention of Bitcoin by Applying The Technology Acceptance Model (Tam)', Proceeding 2018 International Conference on Knowledge-Based Economy and Global Management, Tainan, Taiwan, 2018.
- 5. Shih, W. and Julián Nevárez Montes, 'Journals Are Killing Science: The N-Index for Productivity',

Proceeding - 2017 International Conference on Knowledge-Based Economy and Global Management, Tainan, Taiwan, 2017.

- 6. Haininh Do and Shih, W., 'A Bibliometric Analysis of Tourism Research', Proceeding 2016 International Conference on Knowledge-Based Economy and Global Management, Tainan, Taiwan, 2016.
- 7. Shih, W. and Haininh Do, 'The Economic Impact of Tourism in Vietnam from Foreign Direct Investment,' Proceeding - 2015 International Conference on Knowledge-Based Economy and Global Management, Tainan, Taiwan, 2015.
- 8. Shih, W. and Haininh Do, 'Development of Regional tourism be Collaboration between Public Sector and Academics in the Asia Pacific Region,' Proceeding 2014 APTA Conference, Ho Chi Minh City, 2014.
- 9. Shih, W., H. Yen, and Y. S. Lai, 'The impact of Enterprise Culture, Innovation Capability, and Training to Organization Performance - The Case Study of Bicycle Industry,' Proceeding - The Conference of 2013 Industrial Management and Information Innovative Practices, Tainan, Taiwan, 2013. (in Chinese)
- Tseng, W. H., W. Shih, S. L. Chen, K. C. Lin, C. C. Huang, and W. C. Chia, 'The Study of Multi-CONWIP Production Simulation System,' Proceeding- 2013 Conference of The Application of Electronic Business, Tainan, Taiwan, 2013. (in Chinese)
- 11. Shih, W. and Marie Nikki R. Martinez, 'Drivers and Barriers to E-Commerce Adoption in The Philippines: Exploring Internet Consumers' Behavior,' Proceeding The Conference of Business Management Practices in Taiwan-Vietnam Cross Country Enterprises, Tainan, Taiwan, 2012.
- 12. Shih, W. and Krissapon Apinyaupatum, 'Factors that affecting Thai consumer behavior in milk consumption: case of Bangkok area,' Proceeding International Conference on Innovation and Management (IAM), Koror, 2012.
- Shih, W. and Krissapon Apinyaupatum, 'Internal and External Factors That Affecting Thai Consumer Behavior in Dairy Consumption - Case of Bangkok Area,' Proceeding - The Seventh International Conference on Knowledge-Based Economy and Global Management, Tainan, Taiwan, 2011.
- 14. Shih, W. & Yeh, J.M., 'An AHP Approach in Synthesizing the Preference Weights for Decision Support System,' Proceeding- International Conference on Innovation and Management, Kuala Lumpur, 2011.
- 15. Shih, W. & Chen B. Y., 'A Case Study of the Key Success Factors for A Stainless Steel Wring Industries,' Proceeding- Industrial Engineering and Management Annual Conference, Tainan, Taiwan, 2010. (in Chinese)
- Shih, W. & Vishal Madhavrao Gaikwad, 'Study of Buyer Decision Process Model in B2C E-COMMERCE: An Empirical Study of Taiwan Online Shopping,' Proceeding 2010 International Conference on Knowledge-Based Economy & Global Management, Tainan, 2010.
- Shih, W. & Lin Y., Hu J. 'Development of Stock Evaluation System Based on Quasi-Linear Regression Model,' 2010 Proceeding- 2010 Conference and Case Competition of IT Application and Trend in Industry, Taichung, Taiwan, 2010.
- Shih, W., 'A Heuristic Line-Balancing Approach in SMT Assembly Line,' Proceeding- 2010 Conference and Case Competition of IT Application and Trend in Industry, Taichung, Taiwan, 2010.
- Shih, W., 'The Case Study of A MIL-STD-1916 QC System Implementation,' Proceeding- 2010 Conference and Case Competition of IT Application and Trend in Industry, Taichung, Taiwan, 2010. (in Chinese)
- Shih, W. & Lai, Y.H., 'Applying 6 Sigma QC in the Maintenance Process of LDC Deflection Film,' Proceeding- 2010 Cross Strait Conference on Managerial Theory and Application, Tainan, Taiwan, 2010. (in Chinese)
- 21. Shih, W. & Wang, H. C., 'The distributed artificial intelligent system in shopfloor control of PCB assembly line,' Proceeding International Conference on Knowledge-Based Economy & Global Management, Tainan, 2009.

- 22. Shih, W., 'The Development of a Calibration System in PCB Assembly Line by Back-Propagation Network Data Mining,' Proceeding- 2009 Conference on Industry-University Cooperation of Electronic Business, Taipei, 2009.
- 23. Shih, W., 'The Calibration System of SMT PCB Assembly Placement Machine by Using Backpropagation Network Data Mining,' Proceeding - 2009 International Conference on Innovation and Management, Long Beach, Philippines, 2009.
- 24. Shih, W. & Chiu, C.F. 'The Hybrid Heuristic System in Balancing the PCB Assembly Line of Surface Mount Technology with Multiple Placement Machines,' Proceeding- 2008 Conference on Industry-University Cooperation of Electronic Business, Tainan, Taiwan, 2008.
- 25. Shih, W. & Bui My-Trinh 'Perception of Ecommerce: A Comparison between Vietnamese and Taiwanese Business Managers,' Proceeding- International Symposium on Knowledge-Based Economy & Global Management, Tainan, Taiwan, 2007.
- 26. Shih, W., Chen K. & Huang H. 'Parameter Calibration of Placement Machines in a SMT PCB Assembly Line Using Back-Propagation Network Data Mining, The Xvii Acme International Conference on Pacific Rim Management, Les Vegas, USA, 2007.
- Shih, W., Yifan Chang, Huiching Huang, Cong Thi Quynh Trang, 'Back-Propagation Network Data Mining in Configuring Process Parameters for SMT PCB Assembly Placement Machines,' International Conference on Knowledge-Based Economy & Global Management, Tainan, Taiwan, 2006. p. 232-244
- Shih, W., Shu-Ling Chen, Yang-Kun Ou, Mau-Kai Jhuang, 'Distribution Expert The Vehicle Routing System in A Less-Than-Truckload Transportation Industry,' Proceeding - International Symposium on Knowledge-Based Economy & Global Management, 2005, pp.119-124, Tainan, Taiwan.
- 29. Shih, W. and Wilson Huang, 'The Prototype System for Balancing Surface Mount PCB Assembly Lines with Multiple Placement Machines,' IACIS Pacific 2005 Conference Proceedings, 2005, pp.515-522, Taipei, Taiwan. (NSC94-2213-E-218-014-)
- J. Yeh and W. Shih, 'Setting Up a New Product Development Team based on Entropy Optimization, Proceeding - 21th Century Management Theory and Application Conference, pp. 313-319, 2005. (in Chinese)
- Wu, Chien-Hsing, Wurong Shih and Yi-Shun Wang, 'Managing Knowledge: An Organizational Decision Experience Model,' Proceeding - International Symposium on Knowledge-Based Economy & Global Management, 2004, pp. 364-368, Tainan, Taiwan.
- Shih, W., Yichen Lin, Huiching Huang, and Chiuhua Lai, 'A CRM Approach Applied to The Consumer Behavior Analysis - The Field Research in A Kitchenware Manufacturer and Seller,' Proceeding - International Symposium on Knowledge-Based Economy & Global Management, 2004, pp. 631-638, Tainan, Taiwan.
- Shih, W., and Wilson Huang, 'A Balancing Model of Surface Mount PCB Assembly Line with Multiple Placement Machines,' Proceeding - International Symposium on Knowledge-Based Economy & Global Management, 2004, pp. 407-414, Tainan, Taiwan.
- 34. Kuen-Horng Tsai, W. Shih, Li-Tung Chang, Ruey-Mo Lin, Guan-Liang Chang, 'Kinematic Characteristics of Degenerative and Induced Spondylolisthetic Lumbar Spine,' Proceeding of the IASTED International Conference BIOMECHANICS, 2003, Rhodes, Greece.
- KH Tsai, CY Yeh, W. Shih, JJ Chen, 'Effects on Spasticity of the SCI Patients with FES-Cycling Assistive Device,' Proceeding of Conference on Biomedical Engineering and Technology, 2002, P. 31-32, I-Shou University, Kaohsiung, Taiwan.
- 36. Shih, W., 'The Planning of Distribution Database system-A Case in Tainan Transportation Corporation, Proceedings - The 7th Taiwan Business Case Study Conference, 2002, pp. 77., Tainan, Taiwan. (Chinese Version)
- Yichen Lin, Chen Shu, Hsiu-Hsiung Hsieh, and W. Shih, 'A Field Study of CRM on Hotel Enterprises,' The First International Conference on Electronic Business Proceeding, Hong Kong, 2002, pp. 19-21.
- 38. KH Tsai, W. Shih, TS Cheng, and KS Cheng, 'Design and Development of Page Turner for People

with Upper Limb Injuries,' Rehabilitation Engineering, 2002, pp.228-229

- 39. Ta-Chung Chu and W. Shih, Selecting Alternatives Using a Fuzzy MCDM Approach, The 17th Vocational Education Conference, Industry (E), 2002, pp. 1867-1876. (Chinese Version)
- 40. YiChen Lin and W. Shih, Integrated Communications and Systems Thinking, An Assessment for Improvement, 43th Annual Conference of Operation Research Society Proceedings, Bath, U.K, 2001.
- Shih, W., Placement Sequencer- An Expert System for Placement Sequence Identification in Surface Mount PCB Assembly,' The 12th Vocational Education Conference, Industry V, 1997, pp. 169-178. (Chinese Version)
- 42. Shih, W., Srihari, K. & Emerson, C.R., 'Manufacturing System Control in Printed Wiring Board Assembly Using Distributed Artificial Intelligence,' 5th Industrial Engineering Research Conference Proceedings, Miami, Florida, 1996, pp. 97-102.
- 43. Shih, W., Srihari, K., Adriance, J., Westby, G., 'A Heuristic Approach to Placement Sequence Identification for SMT,' International Electronic Packaging Society Conference, Austin, Texas, 1992, pp. 631-644.
- 44. Shih, W., Srihari, K., & Adriance, J., 'An Expert System Approach to Placement Sequence Identification for SMT,' Proceedings SMTCON '92, Secaucus, New Jersey, 1992, pp. 129-138.

### Dissertation

- Shih, W., 'A Knowledge Based Advisor for Surface Mount Component Placement Sequence Identification', Master Thesis, State University of New York, Binghamton, New York, December 1991.
- Shih, W., 'Distributed Artificial Intelligence Based System for Manufacturing Systems Control in Surface Mount PWB Assembly', Doctoral Dissertation, State University of New York, Binghamton, New York, May 1996.

#### Books

• Shih, Wurong & Hsieh, Chih Kuang, Industrial Engineering and Management ISBN : 957-3932-09-5, Tsanghai Publication, Taipei, 2000.

# **Professional Certifications**

### **Professional Experience**

- 2020/02 ~ 2020/06 Reviewing committee member of vocational collage assessment, Taiwan Assessment and Evaluation Association, Taiwan.
- 2018/01 ~ present Reviewing member of the Stationing Reviewing Committee of Incubation Center of Southern Scientific Park, Bureau of Ministry of Technology, Taiwan.
- 3. 2018/01 ~ present Auditor of trusted board, Yean-Dean Scientific Co. Ltd., Taiwan.
- 4. 2017/08 ~ present Reviewing committee member of The Best Thesis Award of Technology Management, Technology Management Association, Taiwan.
- 5. 2016/11 ~ present Independent Director of trusted board, NANTEX Industry Co. Ltd., Taiwan.
- 2009/01 ~ present Reviewing committee member of SBIR projects, Technology Bureau of Ministry of Economics, Taiwan.
- 7. 2008/08 ~ present Council member, Chinese Service Management Association, Taiwan.
- 2010/01 ~ 2011/12 Reviewing committee member of CITD projects, Industrial Bureau of Ministry of Economics, Taiwan.
- 9. 2007/08 ~ 2009/08 Reviewing committee member of vocational collage evalualtion, Ministry of Education, Taiwan.
- 10. 2006/08 ~ 2011/08 Secretary General, Electronic Business Management Society, Taiwan.
- 11. 2006/08 ~ 2012/08 Consultant, Tainan County Association of Real Estate Brokers, Taiwan.
- 12. 2000/02 ~ 2008/08 MIS Consultant, SFL Machining Co., Taiwan.

#### Grants

# **Entrusted Practical Projects**

- 1. 2018/02 ~ 2018/07 Associated Project Director, Employee Training Program The Introduction of Business Management (No.33001070095), NT\$198,000, Ming-Xuiang Co. Ltd., Taiwan.
- 2. 2016/11 ~ 2017/07 Project Director, The Enhancement of English Teaching Proficiency of GMBA Faculty (#7231050202-GP-1), NT\$880,000, The Ministry of Education, Taiwan.
- 2016/07 ~ 2016/11 Associated Project Director, Employee Training Program Financial Management (No.321050336), NT\$472,000, Chi-Yu Co. Ltd.
- 4. 2016/05 ~ 2016/10 Project Director, The Evaluation Project of Cloud Repository Service of Product Design Figures YuDei Business Co. Ltd. (No. 311050195), NT\$72,000, Department of Industrial Technology, Ministry of Economy Affairs.
- 2015/07 ~ 2015/11 Associated Project Director, Employee Training Program Financial Management (No.321040411), NT\$576,000, Chi-Yu Co. Ltd.
- 2015/05 ~ 2015/10 Project Director, The Configuration Project of Industry 4.0 in Small and Medium Business - Aplus Molds & Plastics Co., Ltd. (No.311040327), NT\$72,000, Department of Industrial Technology, Ministry of Economy Affairs.
- 2014/06 ~ 2014/10 Project Director, Employee Training Program Statistics (No.311030384), NT\$468,000, Yean-Dean Scientific Co. Ltd.
- 2014/05 ~ 2014/10 Project Director, The Configuration Project of Service of Motor Vehicle Parts Manufacturing Industry - YuDei Business Co. Ltd. (No.311030280), NT\$72,000, Department of Industrial Technology, Ministry of Economy Affairs.
- 9. 2013/07 ~ 2013/11 Project Director, Employee Training Program Statistics (No.311020142), NT\$270,000, Yean-Dean Scientific Co. Ltd.
- 2013/06 ~ 2013/11 Project Director, The Project of Enhanced Application of Knowledge in Motor Vehicle Parts Manufacturing Industry - Leader Aid Enterprise (No.311020226), NT\$72,000, Department of Industrial Technology, Ministry of Economy Affairs.
- 11. 2012/11 ~ 2012/11 Project Director, Taiwan-Vietnam Bilateral Conference in Business Management (NSC 101-2911-I-218-001), NT\$300,000, Ministry of Science and Technology.

# Honors and Awards

• 2007 Youth Manager Award, Kaohsiung Chapter, Chinese Management Association, 2007/12/22.

# Patents