DR. HAKEEM-UR-REHMAN

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Institute of Quality & Technology Management, New Campus,

University of the Punjab, Lahore, Pakistan

RESEARCH INTEREST

Operations & Supply Chain Management, Total Quality Management, Business Analytics, and Optimization

TEACHING INTEREST

Operations & Supply Chain Management, Statistics and Probability, Business Analytics, Optimization Methods, Total Quality Management, Lean Six Sigma, Simulation & Modelling, Project Management

EDUCATION

Ph.D. Management Science and Engineering   *2013 - 2019*
Specialization in Operations & Supply Chain Management
Shanghai Jiao Tong University, Shanghai, China

MS Total Quality Management   *2005 - 2007*
University of the Punjab, Lahore, Pakistan

Master in Information & Operational Management   *2002 - 2004*
Specialization in Operations Research
University of the Punjab, Lahore, Pakistan

WORK EXPERIENCE

Teaching Experience:

- Assistant Professor (*Dec 2022 to date*), Supply Chain & Project Management Center, University of the Punjab, Lahore, Pakistan.
- Assistant Professor (*Oct 2019 to Nov 2022*), Institute of Quality & Technology Management (IQTM), University of the Punjab, Lahore, Pakistan.
- Research Assistant (*Sep 2018 - Jan 2019*), Antai College of Economics & Management, Shanghai Jiao Tong University, Shanghai, China.
- Lecturer (*Sep 2007 - Aug 2013*), Institute of Quality & Technology Management (IQTM), University of the Punjab, Lahore, Pakistan.
- Visiting Faculty Member
  - FAST School of Computing, National University of Computer and Emerging Sciences, Lahore, Pakistan, (*August 2022 - to date*).
  - Punjab College of Business Administration (PCBA), University of Central Punjab, Lahore, Pakistan, (*July 2007 - May 2011*).
  - Imperial College of Business Studies, Lahore, Pakistan, (*May 2011 - Aug 2012*).
  - Institute of Management Science (Pak–Aims), Lahore, Pakistan, (*March 2013 - June 2013*).
- Paper Setter and Head Examiner, Production & Operations Management, M. Com Part–II (2011), University of Sargodha, Sargodha, Pakistan

Professional Consultancy & Trainings / Workshops Experience:

- As a *National Expert: Productivity (Lean, Six Sigma) - Module development* in Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Project Process no.: $19.2141.0 - 001.00$, Improvement of labour, social and environmental standards in the Pakistan textile industry: Scaling up of DfS methodology for multipliers", (*September 09, 2022 to November 15, 2022*)
- As a *Quality & Productivity (National Expert)* in Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) Project no.: 81274313 & $PN2201\_UT609$, "Implementation of the DfS methodology in selected partner enterprises in the textile sector of Pakistan", (*Jan 28, 2022 to Aug 30, 2023*)
- Two Days training on Forecasting & Inventory Management organized by Asian Institute of Industrial Air (AIIA), Islamabad, Pakistan (*May, 2022*)
- Four & Eight Days training on Lean Six Sigma (Green Belt & Black Belt) organized by Bilal Consultancy Limited, Multan, Pakistan (*Nov, 2020 & Feb, 2021*)
- Two Days training on Lead Time Reduction with Lean Thinking organized by Institute of Quality and Technology Management, University of the Punjab, Lahore, Pakistan (*Jan 30-31, 2020*)
- Two Days training on Lean Thinking: Process mapping to Value stream mapping organized by National Textile University, Faisalabad, Pakistan (*Oct 05-06, 2019*)

In-House Professional Trainings:

- "Lean Thinking " (*Nov 01, 2019*) at Nishat Mills limited, Faisalabad, Pakistan
- At Haier Training Institute, A Project of Haier & Ruba (Pvt.) Limited., Lahore, Pakistan
  - "Production Planning & Control" (*Feb 12-14, 2015*)
  - "Statistical Process Control Using Excel" (*Feb 26, 2015*)

    – *"Data Analysis using Minitab"* (*March 3-4, 2015*)
    – *"Process Analysis & Improvement Techniques "* (*March 12, 2015*)

National Productivity Organization (NPO), Ministry of Industries, Pakistan
(*June 2012 to November 2020*) Trainer & Consultant:

- Online training on *"Production Planning and Inventory Control"* (*September 3, 2020*)
- Twelve Days training on Development of Productivity Specialist: Topic covered as Resource Person *"Quality Improvement Tools Using M.S. Visio & Excel "(Three Days)*.
- *"Six Sigma (Green Belt)"* (*Aug 27-30, 2013*) & *"Lean Six Sigma (Green Belt)"* (*April 15-18, 2013*).
- *"Project Management through P6"* (*Aug 23-25, 2012*).
- *Train the Trainers on Lean Management*: Topic covered as Resource Person *"Quality Improvement Tools Using Minitab & Calculating OEE "* (*July 11-14, 2012*).

Guest Lectures:

- California State University Northridge, USA.
  - *"Best practices in Lean and Six Sigma"* (*May 05, 2022*)
  - *"Application of R program in Business Analytics "* (*April 29, 2022*)
- Pakistan Society of Industrial Engineering
  - *"Time Series Forecasting Using Python "* (*August 5, 2020*)
  - *"Supply Chain Analytics Using Python "* (*July 17, 2020*)
  - *"Data Visualization Using Python "* (*July 5, 2020*)
  - *"Big Data Analytics Using Python "* (*June 22, 2020*)
  - *"Lean Six Sigma: An Overview "* (*April 5, 2015*)
  - *"Application of Operations Research Techniques for Industrial Engineers "* (*Nov 29, 2014*)
- National Textile University, Faisalabad
  - *"Lean Six Sigma: An Overview "* (*Feb 26, 2015*)
- University of Sargodha, Sargodha, Pakistan
  - *"Statistical Process Control "* (*May 26, 2010*)

RESEARCH PUBLICATIONS

1. <u>Hakeem-Ur-Rehman</u>, Guohua Wan, Raza Rafique (2023), A hybrid approach with step-size aggregation to forecasting hierarchical time series. Journal of Forecasting, Vol. 42, Iss: 1, pp. 176-192 **(Q1 Journal − IF = 2.627)**

2. Muhammad Adnan Zahid Chudhery, Sarah Safdar, <u>Hakeem-Ur-Rehman</u>, Raza Rafique, Muhammad Ali & Fenggang Li (2022), M-health services equipped with public sector community health centers (MH-PS-CHCs), an emerging public-private joint venture in China: adoption from M-health Users' Perspective. Technology Analysis & Strategic Management, **(Accepted 'DOI:10.1080/09537325.2022. 2117598': IF = 2.874)**

3. Sumreen Zia, Raza Rafique <u>Hakeem-Ur-Rehman</u>, Muhammad Adnan Zahid Chudhery (2022), A comparison between E-TailQ and E-S-Qual for measuring e-service quality in retail industry: An emerging economy case. The TQM Journal, **(Accepted 'DOI: 10.1108/TQM-02-2022-0052': Q2 Journal)**

4. Sarah Safdar, Minglun Ren, Muhammad Adnan Zahid Chudhery, Jiazhen Huo, <u>Hakeem-Ur-Rehman</u>, and Raza Rafique (2022), *Using Cloud-based Virtual Learning Environments to Mitigate Increasing Disparity in Urban-Rural Academic Competence*, Technological Forecasting and Social Change, Vol. 176,121468 **(Q1 Journal − IF = 8.593)**

5. Umair Manzoor, Sajjad Baig, Muhammad Hashim, Abdul Rehman, <u>Hakeem-Ur-Rehman</u>, and Ifrah Sajjad (2022), *The Effect of Supply Chain Agility and Lean Practices on Operational Performance: A resource-based view and dynamic capabilities perspective*, The TQM Journal, Vol. 34, Iss: 5, pp. 1273-1297 **(Q2 Journal)**

6. Zia-ur-Rehman, Mhuammad Hashim, <u>Hakeem-Ur-Rehman</u>, Shahzad Iqbal, Sajjad Baig, Yusra Khalid and Ayesha Khan (2022), *Enablers and Barriers for adoption of Lean System: A Mix Method Approach*, International Journal of Productivity and Quality Management, Vol. 35, No. 2, pp 220–240. **(Q2 Journal)**

7. <u>Hakeem-Ur-Rehman</u>, Ayyaz Ahmad, Zarak Ali, Sajjad Baig, Umair Manzoor (2021), *Optimization of Aggregate Production Planning Problems with and without Productivity Loss using Python Pulp Package*, Management and Production Engineering Review, Vol. 12, Iss: 4, pp. 38-44. **(Q2 Journal)**

8. Raza Rafique, Mohsin Nasir Jat, <u>Hakeem-Ur-Rehman</u>, and Muhammad Adnan Zahid Chudhery (2021), *Bioenergy Supply Chain Optimization for Addressing Energy Deficiency: A Dynamic Model for Large-scale Network Designs*, Journal of Cleaner Production, Vol. 318, 128495. **(Q1 Journal − IF = 9.297)**)

9. Muhammad Adnan Zahid Chudhery, Sarah Safdar, Jiazhen Huo, <u>Hakeem-Ur-Rehman</u>, Raza Rafique (2021), *Proposing and Empirically Investigating a Mobile-based Outpatient Healthcare Service Delivery Framework using Stimulus-Organism-Response Theory*, IEEE Transactions on Engineering Management, DOI: 10.1109/TEM.2021.3081571 **(Q1 Journal − IF = 2.784)**)

10. _Hakeem-Ur-Rehman_, Guohua Wan, Yang Zhan (2021), _Multi-Level Multi-Stage Lot-sizing and Scheduling in the Flexible Flow Shop with Demand Information Updating_, International Transactions in Operational Research, Vol. 28, Iss: 4, pp. 2191-2217. **(Q1 Journal − IF = 2.987)**

11. Azmat Ullah, Muhammad Ayat, _Hakeem-Ur-Rehman_, Lochan Batala (2021), _Optimal Preventive Maintenance Level for a Repairable Product under Warranty Subjects to Multi-modes Failure Process_, International Journal of Quality & Reliability Management, Vol. 38, Iss: 5, pp. 1193-1214. **(Q2 Journal)**

12. Fiza Amjad, Waseem Abbas, Muhammad Zia-Ur-Rehman, Sajjad Baig, Muhammad Hashim, Ayesha Khan, _Hakeem-Ur-Rehman_, (2021), _Effect of Green Human Resource Management Practices on Organization Sustainability: Mediating Role of Environmental and Employee's Performance_, Environmental Science and Pollution Research Vol. 28, Iss: 22, pp. 28191-28206. **(Q2 Journal − IF = 3.056)**

13. Muhammad Nazam, Muhammad Hashim, Sajjad Baig, Muhammad Abrar, _Hakeem-Ur-Rehman_, Muhammad Nazim and Ali Raza (2020), _Categorizing the Barriers in Adopting Sustainable Supply Chain Initiatives: A Way-forward towards Business Excellence_, Cogent Business & Management, Vol.7, Iss: 1. **(Q2 Journal)**

14. _Hakeem-Ur-Rehman_, Guohua Wan, Azmat Ullah, Badiea Shaukat (2019), _Individual and combination methods to forecasting hierarchical time series under correlated data set: An empirical study_, Journal of Management Analytics, Vol.6, Iss: 3, pp. 231–249. **(Q1 Journal)**

Submitted Papers:

1. Maryam Bashir, _Hakeem-Ur-Rehman_, Muhammad Adnan Zahid Chudhery, Raza Rafique and Umair Manzoor (2022), _Integration of Lean and Discrete Event Simulation for Productivity Improvement in Garment Production Line. (Journal of Quality Technology (Under Review))_

2. Junaid Ahmed, _Hakeem-Ur-Rehman_, and Sajjad Ahmad Baig (2022), _Opportunities and Challendes for Transformation of Traditional Quality to Quality 4.0. (The TQM Journal (Under Review))_

Working Papers:

1. _Hakeem-Ur-Rehman_, Guohua Wan, Yang Zhan (2022), _Integrated Production Planning and Scheduling in the Multi-Stage Production System with Dynamic Forecast Updates. (Target: International Journal of Production Research, IF: 2.623)_

CONFERENCE PROCEEDINGS

1. Umair Manzoor, Sajjad Ahmad Baig, Abdul Sami, _Hakeem-Ur-Rehman_, & Muhammad Nazam (2021), _Evaluating the Impact of Lean Practices and Supply Chain Management Practices on Firm Performance–An Empirical Evidence from Manufacturing Industries_, Asia Proceedings of Social Sciences, Vol. 7,No. 1, $57 - 59$.

2. Shahzada Zaman Khan, Muhammad Azhar Ashfaq, Muhammad Usman Awan, _Hakeem-Ur-Rehman_, Ayesha Kamal, N T X Hoa and Muhammad Shafiq, _Investigating Supply chain issues in the food processing industry_, 12th International Seminar on Industrial Engineering and Management (12th ISIEM), held on March $17 - 20$, 2020 in Batu-Malang, Indonesia.

CONFERENCE & SEMINAR PRESENTATIONS

1. _Hakeem-Ur-Rehman (Guest Speaker)_, _Talk Title: Big Data Analytics using Python_, _Doctoral Spring School 2020, Association of Media & Communication Academic Professionals_, Venue: Institute of Quality & Technology Management, University of the Punjab, Lahore, Pakistan, dated: Feb. 28 - March 8, 2020.

2. _Hakeem-Ur-Rehman_, Guohua Wan, and Yang Zhan, _Integrated Production Planning and Scheduling in the Multistage Production System with Dynamic Forecast Updates_, INFORMS Annual Meeting, 2018, Phoenix, Arizona, United States of America (USA).

3. _Hakeem-Ur-Rehman_, Guohua Wan _A Hybrid Approach for Hierarchical Time Series Forecasting_, POMS, 28th Annual Conference, 2017, Seattle, Washington, United States of America (USA).

4. Muhammad Adnan Zahid Chudhery, Sarah Safdar, Jiazhen Huo, _Hakeem-Ur-Rehman_, Raza Rafique _Framework to Reduce Outpatient's Flow from Territory-Tier Hospitals and to Amplify Community Health Center Resource Utilization: Proposing and Investigating the Acceptance from Outpatients' Perspective_, POMS International Conference in China (Tianjin University), 2019.

BOOK

- Linear Programming: Theory & Applications - Use of Excel Solver & Python PuLP (2021), _Hakeem-Ur-Rehman_, Sajjad Baig, Raza Rafique, Published by: Department of Press & Publication, University of the Punjab, Lahore, Pakistan, ISSBN No. $978 - 969 - 9325 - 62 - 6$.

PROFESSIONAL ACTIVITIES

- Reviewer for International Journal of Production Research (IJPR)
- Reviewer for IEEE Engineering Management
- Reviewer for IEEE ACCESS

INTERNATIONAL CERTIFICATIONS

- _Certified Lean Six Sigma (Master Black Belt)_, Exemplar Global (USA), 2021

- *Certified Six Sigma (Black Belt)*, SQII (Singapore), 2012
- *Lead Auditor ISO 9001 (Quality Management System)*, IRCA (UK)

PROFESSIONAL TRAINING / COURSES / WORKSHOPS

- *"Achieving Excellence through Value Stream Mapping"* (*Nov 15-17, 2012*), National Productivity Organization (NPO), Ministry of Industries, Pakistan with collaboration Asian Productivity Organization, Japan.
- *"Industrial Manufacturing Innovation: Production Excellence through Japanese Way"* (*Dec 13-15, 2012*), National Productivity Organization (NPO), Ministry of Industries, Pakistan with collaboration Asian Productivity Organization, Japan.
- *"Computer-Aided Project Management Using Oracle Primavera P6"* (*April 25-27, 2011*) at National Institute of Design & Analysis, Lahore, Pakistan.
- *"Faculty Orientation Program"* (*July 5-7, 2011*), Institute of Administrative Sciences (IAS), University of the Punjab, Lahore, Pakistan

AWARDS & ACHIEVEMENTS

- *Member Advisor Board:*
  - Pakistan Society of Industrial Engineering
- *Scholarship and Travel Grants:*
  - International Travel Grant ($3200), ACEM, Shanghai Jiao Tong University, Shanghai, China, for INFORMS 2018 Annual Meeting, Phoenix, Arizona, USA (*Nov, 2018*) & for POM 2017-28th Annual Conference, Seattle, Washington, USA (*May, 2017*).
  - Received fully funded scholarship from China Scholarship Council (CSC), Govt. of China, for the Ph.D. program (*2013*).
- *International Conferences:*
  - Member Organization Committee of 2nd & 3rd International Conferences on Assessing Quality in Higher Education, *http://www.icaqhe.org*, held on *Dec 1-3, 2008* & *Dec 6-8, 2010* at Lahore, Pakistan. Sponsored by PU Lahore, HEC Pakistan, IQTM, PU, Lahore & UMT, Lahore.
- *Curriculum Development and Course Revision:*
  - Member, Curriculum Development Committee (IQTM, P.U., Lahore, Pakistan) for
    * MS Industrial Engineering & Management Program
    * M.Sc. Quality & Performance Management Program
  - Member, Course Revision Committee (IQTM, P.U., Lahore) for B.Sc. Industrial Engineering and Management Program
- *Best Teacher Award:*
  - IQTM, University of the Punjab, Lahore, Pakistan (*2009*)

SKILLS

- *Managerial Skills:*
  - Strong Communication skills
  - Presentation and interpersonal skills
- *Analytical Skills:*
  - Competent to develop optimum solution algorithms for complex real-world systems.
  - Competent to implement Lean Six Sigma tools & techniques for quality & productivity improvement.
  - Capable of collecting and analysis the data for decision making and statistical conclusions.
- *Computer Skills:*
  - Optimization & Simulation Software: OPL CPLEX, Excel Solver, and Simio
  - Data Analysis Tools Software: Python, R-Language, Minitab, SPSS
  - Project Management Software: Primavera (P6) & MS-Project
  - Competent to use LaTex & Citation Manager: Mendeley

MEMBER

- Institute of Industrial & Systems Engineers (IISE), USA
- Production & Operations Management Society (POMS), USA
- Institute of Operations Research and Management Science (INFORMS), USA
- Pakistan Society of Industrial Engineering

COUNTRY VISITED

- China, Srilanka, United Arab Emirates (UAE), United States of America (USA)