

Waqas Ahmed


Associate Professor

NUST Business School

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About

Dr. Waqas Ahmed is working as Associate Professor in the NUST Business School. Dr. Waqas Ahmed has a PhD in Industrial and Management Engineering. Dr. Waqas Ahmed has published 29 research articles & conference papers having a citation count of 1085, carried out 4 projects and filed 0 intellectual property.

Qualifications

PhD in Industrial and Management Engineering	2016 - 2018
Hanyang University , South Korea	
MBA in Operations Management	2009 - 2012
UET Lahore , Pakistan	
MS in Mechanical Engineering	2007 - 2009
Hanyang University , South Korea	
BS in Agricultural Engineering	2002 - 2006
University of Agriculture Faisalabad , Pakistan	
F.Sc in Science	2000 - 2002
Board of Intermediate and Secondary Education, Faisalabad , Pakistan	
Matric (SSC) in Science	1998 - 2000
Board of Intermediate and Secondary Education, Faisalabad , Pakistan	

Experience

Associate Professor	2024- Present
NUST Business School	
Associate Professor	2022 - 2024
NUST Business School	
Assistant Professor	2019 - 2022
NUST Business School	
Visiting Faculty	2014 - 2015
University of Central Punjab , Johar Town, Lahore	
Deputy Manager	2009 - 2016
Millat Tractors Ltd , 9 Km Shiekhupura Road, Lahore, Pakistan	
Research Assistant	2007 - 2009
SNU Automotive Lab , Seoul National University, South Korea	
Technical Development Officer	2006 - 2007
Dupont , Dupont, Pakistan	

Awards

PhD Best Thesis Award	2019
PhD Best Thesis Award by Hanyang University, South Korea	
Inter Department Sports	
Stood 1st in Inter Faculty Badminton Championship while representing Engineering Department UAF, as a Team Captain.	

Professional Memberships

PEC

Since 2007

Industry Projects

National Projects

Consultancy at Utility Stores Corporation on Improving supply chain operations

2023

**Client:** Utility Stores Corporation (Pvt) Ltd  
**Amount:** PKR N/A  
**Status:** Completed

Supplier Selection (Foreign/local) for Designing and Development of Electric Vehicle Platform

2023

**Client:** Titan Automotive (Pvt) Ltd  
**Amount:** PKR 500,000.00  
**Status:** Approved\_inprocess

Professional development of employees on Supply Chain Management

2023

**Client:** OGDCL  
**Amount:** PKR 140,000.00  
**Status:** Completed

Supplier selection for designing and developing electric vehicle platform

2021

**Client:** N/A  
**Amount:** PKR 200,000.00  
**Status:** Approved\_inprocess

International Projects

Research Articles

The Impact of Green Procurement Practices on the Competitiveness of Small and Medium Enterprises:  
A Dual Mediation Model

2024

*Nimra Safdar Muhammad Moazzam Waqas Ahmed Abdul Salam Wajiha Manzoor Muhammad Mustafa Raziq*  
*Benchmarking: An International Journal*, Pages: 24  
**Impact Factor:** 4.500 | **Quartile:** 1  
**DOI:** <https://www.emerald.com/insight/content/doi/10.1108/bij-04-2024-0297/full/html>

Innovate, learn, sustain: unveiling dynamics of value addition in smallholder dairy farming

2024

*Muhammad Waqar Arshad Muhammad Moazzam Muhammad Mustafa Raziq Waqas Ahmed*  
*Journal of Agribusiness in Developing and Emerging Economies*, Pages:22  
**Impact Factor:** 2.400 | **Quartile:** 2  
**DOI:** 10.1108/JADEE-10-2023-0250

An inventory-based integrated model of a hybrid electricity supply chain for sustainable electricity  
storage management

2024

*Waqas Ahmed Saad Salman Muhammad Imran Mujtaba Hassan Agha Muhammad Moazzam*  
*Journal of Energy Storage*, Volume 83, Article Number:110746  
**Impact Factor:** 8.900 | **Quartile:** 1 | **Citations:** 1  
**DOI:** 10.1016/j.est.2024.110746

Green in-store operations and sustainability performance: the moderating role of organization size

2023

*Sharfah Ahmad Qazi Muhammad Moazzam Waqas Ahmed Muhammad Mustafa Raziq*  
*International Journal of Productivity and Performance Management*, Volume:72, Issue:09, Pages 17  
**Impact Factor:** 3.6 | **Quartile:** 2 | **Citations:** 4  
**DOI:** doi/10.1108/IJPPM-01-2022-0017

Sustainable Technology Strategies for Transportation and Logistics Challenges: An implementation  
Feasibility Study

2023

*Muhammad Saleem Sumbal Waqas Ahmed Huzeifa Shahzeb Felix Chan*  
*Sustainability MDPI*, Volume 15(21), Article Number 15224  
**Impact Factor:** 3.9 | **Quartile:** 2 | **Citations:** 8  
**DOI:** <https://doi.org/10.3390/su152115224>

<p><b>The impact of reverse logistics process coordination on third party relationship quality: A moderated mediation model for multichannel retailers in the fashion industry</b></p> <p><i>Mahin Haq Muhammad Moazzam Abdul Salam Waqas Ahmed</i>  <i>Journal of Retailing and Consumer Services</i>, Volume 73, Article Number 103362</p> <p><b>Impact Factor:</b> 10.972   <b>Quartile:</b> 1   <b>Citations:</b> 14  <b>DOI:</b> <a href="https://doi.org/10.1016/j.jretconser.2023.103362">https://doi.org/10.1016/j.jretconser.2023.103362</a></p>	2023
<p><b>Linking the willingness of smallholder dairy farmers to adopt minimum food safety and quality standards to the country's export potential</b></p> <p><i>Muhammad Waqar Arshad Muhammad Moazzam Muhammad Mustafa Raziq Waqas Ahmed</i>  <i>International Journal of Food Science and Technology</i>, Pages 1-11</p> <p><b>Impact Factor:</b> 3.3   <b>Quartile:</b> 1   <b>Citations:</b> 4  <b>DOI:</b> <a href="https://doi.org/10.1111/ijfs.16539">https://doi.org/10.1111/ijfs.16539</a></p>	2023
<p><b>BR-174 highway, geo tourism and socio-environmental conflicts in the northern remote regions of the Amazon</b></p> <p><i>Zujaja Wahaj Waqas Ahmed Diogo Guedes Vidal Nelson Azevedo Barros Maria Alzira Pimenta Dini Ana Sibelonia Saldanha Vera</i>  <i>GeoJournal</i> , Pages 1-13</p> <p><b>Impact Factor:</b> 0  <b>DOI:</b> <a href="https://doi.org/10.1007/s10708-022-10699-0">https://doi.org/10.1007/s10708-022-10699-0</a></p>	2022
<p><b>An inventory management for global supply chain through reworking of defective items having positive inventory level under multi-trade-credit-period</b></p> <p><i>Waqas Ahmed Muhammad Jalees Muhammad Omair Zainab Mukhtar Muhammad Imran</i>  <i>Annals of Operations Research</i> , Pages 1-28</p> <p><b>Impact Factor:</b> 4.854   <b>Quartile:</b> 1   <b>Citations:</b> 11  <b>DOI:</b> <a href="https://doi.org/10.1007/s10479-022-04646-y">https://doi.org/10.1007/s10479-022-04646-y</a></p>	2022
<p><b>Geometric programming solution of second degree difficulty for carbon ejection controlled reliable smart production system</b></p> <p><i>Andreas Se Ho Kugele Waqas Ahmed Biswajit Sarkar</i>  <i>RAIRO - Operations Research</i> , Volume 56, Number 2, Pages 1013-1029</p> <p><b>Impact Factor:</b> 1.393   <b>Quartile:</b> 4   <b>Citations:</b> 38  <b>DOI:</b> <a href="https://doi.org/10.1051/ro/2022028">https://doi.org/10.1051/ro/2022028</a></p>	2022
<p><b>Circular economy-driven two-stage supply chain management for nullifying waste</b></p> <p><i>Biswajit Sarkar Abhijit Debnath Anthony S.F. Chiu Waqas Ahmed</i>  <i>Journal of Cleaner Production</i> , Volume 339, Article Number 130513</p> <p><b>Impact Factor:</b> 11.1   <b>Quartile:</b> 1   <b>Citations:</b> 136  <b>DOI:</b> <a href="https://doi.org/10.1016/j.jclepro.2022.130513">https://doi.org/10.1016/j.jclepro.2022.130513</a></p>	2022
<p><b>The Selection of the Sustainable Suppliers by the Development of a Decision Support Framework Based on Analytical Hierarchical Process and Fuzzy Inference System</b></p> <p><i>Muhammad Omair Sahar Noor Muhammad Tayyab Shahid Maqsood Waqas Ahmed Biswajit Sarkar Muhammad Salman Habib</i>  <i>International Journal of Fuzzy Systems</i>, Pages 1-18</p> <p><b>Impact Factor:</b> 4.085   <b>Quartile:</b> 2   <b>Citations:</b> 54  <b>DOI:</b> <a href="https://doi.org/10.1007/s40815-021-01073-2">https://doi.org/10.1007/s40815-021-01073-2</a></p>	2021
<p><b>Synergic effect of reworking for imperfect quality items with the integration of multi-period delay-in-payment and partial backordering in global supply chains</b></p> <p><i>Waqas Ahmed Muhammad Moazzam Biswajit Sarkar Saif-ur-Rehman Biswajit Sarkar Saif-ur-Rehman</i>  <i>Engineering</i> , Volume 7, Issue 2, Pages 260-271</p> <p><b>Impact Factor:</b> 12.834   <b>Quartile:</b> 1   <b>Citations:</b> 81  <b>DOI:</b> <a href="https://doi.org/10.1016/j.eng.2020.07.022">https://doi.org/10.1016/j.eng.2020.07.022</a></p>	2021
<p><b>Reverse logistics network design of e-waste management under the triple bottom line approach</b></p> <p><i>Nimra Safdar Rabia Khalid Waqas Ahmed Muhammad Imran</i>  <i>Journal of Cleaner Production</i> , Volume 272, Article Number 122662</p> <p><b>Impact Factor:</b> 9.297   <b>Quartile:</b> 1   <b>Citations:</b> 88  <b>DOI:</b> <a href="https://doi.org/10.1016/j.jclepro.2020.122662">https://doi.org/10.1016/j.jclepro.2020.122662</a></p>	2020
<p><b>Simultaneous Customers and Supplier's Prioritization: An AHP-Based Fuzzy Inference Decision Support System (AHP-FIDSS)</b></p> <p><i>Muhammad Imran Mujtaba Hassan Agha Waqas Ahmed Muhammad Babar Ramzan Biswajit Sarkar</i>  <i>International Journal of Fuzzy Systems</i>, Pages 1-27</p>	2020

<b>Impact Factor:</b> 4.673   <b>Quartile:</b> 1   <b>Citations:</b> 23 <b>DOI:</b> <a href="https://doi.org/10.1007/s40815-020-00977-9">https://doi.org/10.1007/s40815-020-00977-9</a>	
<b>Sustainable ordering policies for non-instantaneous deteriorating items under carbon emission and multi-trade-credit-policies</b> <i>Sunil Tiwari Waqas Ahmed Biswajit Sarkar Sunil Tiwari Biswajit Sarkar</i> <i>Journal of Cleaner Production</i> , Volume 240, Article Number 118183 <b>Impact Factor:</b> 7.246   <b>Quartile:</b> 1   <b>Citations:</b> 101 <b>DOI:</b> 10.1016/j.jclepro.2019.118183	2019
<b>Management of next-generation energy using a triple bottom line approach under a supply chain framework</b> <i>Biswajit Sarkar Waqas Ahmed Biswajit Sarkar</i> <i>Resources Conservation and Recycling</i> , Volume 150, November 2019, 104431 <b>Impact Factor:</b> 8.086   <b>Quartile:</b> 1   <b>Citations:</b> 99 <b>DOI:</b> 10.1016/j.resconrec.2019.104431	2019
<b>Stochastic-Petri Net Modeling and Optimization for Outdoor Patients in Building Sustainable Healthcare System Considering Staff Absenteeism</b> <i>Chang Wook Kang Muhammad Imran Muhammad Omair Waqas Ahmed Misbah Ullah Biswajit Sarkar</i> <i>Mathematics</i> , Volume 7, Issue 6, Article Number 499 <b>Impact Factor:</b> 1.747   <b>Quartile:</b> 1   <b>Citations:</b> 24 <b>DOI:</b> 10.3390/math7060499	2019
<b>Sustainable Inventory Management for Environmental Impact through Partial Backordering and Multi-Trade-Credit-Period</b> <i>Biswajit Sarkar Waqas Ahmed Seok-Beom Choi Muhammad Tayyab</i> <i>Sustainability</i> , Volume 10, Issue 12, Article Number 4761 <b>Impact Factor:</b> 2.592   <b>Quartile:</b> 2   <b>Citations:</b> 41 <b>DOI:</b> 10.3390/su10124761	2018
<b>Multi-item sustainable green production system under trade-credit and partial backordering</b> <i>Sunil Tiwari Waqas Ahmed Biswajit Sarkar</i> <i>Journal of Cleaner Production</i> , Volume 204, Pages 82-95 <b>Impact Factor:</b> 6.395   <b>Quartile:</b> 1   <b>Citations:</b> 85 <b>DOI:</b> 10.1016/j.jclepro.2018.08.181	2018
<b>Impact of reparation for imperfect quality items having shortages in the system under multi-trade-credit-period.</b> <i>Waqas Ahmed Biswajit Sarkar Mehran Ullah</i> <i>DJ Journal of Engineering and Applied Mathematics</i> , Volume 5,, Issue 1, Pages 1-16 <b>Impact Factor:</b> 0 <b>DOI:</b> 10.18831/djmaths.org/2019011001	2018
<b>Impact of carbon emissions in a sustainable supply chain management for a second generation biofuel</b> <i>Waqas Ahmed Biswajit Sarkar</i> <i>Journal of Cleaner Production</i> , Volume 186, Pages 807-820 <b>Impact Factor:</b> 6.395   <b>Quartile:</b> 1   <b>Citations:</b> 169 <b>DOI:</b> 10.1016/j.jclepro.2018.02.289	2018
<b>Joint effects of variable carbon emission cost and multi-delay-in-payments under single-setup-multiple-delivery policy in a global sustainable supply chain</b> <i>Biswajit Sarkar Waqas Ahmed Namhun Kim</i> <i>Journal of Cleaner Production</i> , Volume 185, Pages 421-445 <b>Impact Factor:</b> 6.395   <b>Quartile:</b> 1   <b>Citations:</b> 104 <b>DOI:</b> 10.1016/j.jclepro.2018.02.215	2018

## Conference Proceedings

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- Application of Fuzzy FMEA to assess non-technical risks linked to a power station's operations** 2021  
*Yusma Sifwat Mahnoor Hameed Eeshah Ahsan Waqas Ahmed*  
*First International Conference on Business, Management, and Social Sciences (ICBMASS) 2021*, res.country(177,)  
**Citations:** N/A  
**DOI:** <https://icbmass.nust.edu.pk/>
- Green Supply-Chain Management and Sustainability Performance: Moderating Role of Organization Size** 2021  
*Sharfah Ahmad Qazi Muhammad Moazzam Waqas Ahmed Muhammad Mustafa Raziq*  
*First International Conference on Business, Management, and Social Sciences (ICBMASS) 2021*, res.country(177,)  
**Citations:** N/A  
**DOI:** [dx.doi.org/10.2139/](https://doi.org/10.2139/)
- Integration of Triple Sustainable Management by Considering the Multi-period Supply Chain for Next-Generation Fuel** 2020  
*Waqas Ahmed Biswajit Sarkar Mujtaba Hassan Agha*  
*IFIP International Conference on Advances in Production Management Systems*, res.country(189,)  
**Citations:** N/A  
**DOI:** [https://doi.org/10.1007/978-3-030-57993-7\\_25](https://doi.org/10.1007/978-3-030-57993-7_25)
- Flexible cell formation and scheduling of robotics coordinated dynamic cellular manufacturing system: A gateway to industry 4.0** 2019  
*Abdul Saboor Muhammad Imran Mujtaba Hassan Agha Waqas Ahmed*  
*International Conference on Robotics and Automation in Industry (ICRAI)*, res.country(177,)  
**Citations:** N/A  
**DOI:** [10.1109/ICRAI47710.2019.8967369](https://doi.org/10.1109/ICRAI47710.2019.8967369)
- Effect of carbon tax and uncertainty in an economic policy for second generation biofuel supply chain** 2017  
*Waqas Ahmed Mitali Sarkar Biswajit Sarkar Sung-jun Kim*  
*Conference of the Korean Institute of Industrial Engineers*, res.country(121,)  
**Citations:** N/A  
**DOI:** N/A

## Book Chapters

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- Mountainous Environment in the Central Region of Mucajai, Roraima, Brazil: Citizen Science and Geotouristic Approaches** 2025  
*Ana Sibelonía Saldanha Veras Waqas Ahmed Nelson Azevedo Barros Maria Alzira Pimenta Dinis*  
In: *Composing Worlds: Humanities, Health and Wellbeing in the XXI Century Towards a More Sustainable World*, Chapter 15, Pages 215-232  
**Citations:** N/A  
**DOI:** [https://doi.org/10.1007/978-3-031-87108-5\\_15](https://doi.org/10.1007/978-3-031-87108-5_15)

Editorial Activities

<b>Environment, Development and Sustainability</b> Reviewed Papers for Journals <b>Impact Factor: 4.2</b>	2025
<b>PLOS ONE</b> Reviewed Papers for Journals <b>Impact Factor: 2.6</b>	2025
<b>Energy</b> Reviewed Papers for Journals <b>Impact Factor: 9.4</b>	2025
<b>Systems and Soft Computing</b> Reviewed Papers for Journals <b>Impact Factor: 0</b>	2024
<b>International Journal of Management Science and Engineering Management</b> Reviewed Papers for Journals <b>Impact Factor: 6.7</b>	2024
<b>International Journal of Fuzzy Systems</b> Reviewed Papers for Journals <b>Impact Factor: 4.3</b>	2023
<b>International Journal of Sustainability in Higher Education</b> Reviewed Papers for Journals <b>Impact Factor: 4.12</b>	2023
<b>International Journal of Production Research</b> Reviewed Papers for Journals <b>Impact Factor: 9.018</b>	2023
 Reviewed Papers for Journals <b>Impact Factor: 9.297</b>	2022
 Reviewed Papers for Journals <b>Impact Factor: 6.158</b>	2022
 Reviewed Papers for Journals <b>Impact Factor: 3.219</b>	2021
 Reviewed Papers for Journals <b>Impact Factor: 3.643</b>	2021
 Reviewed Papers for Journals <b>Impact Factor: 0</b>	2021
 Reviewed Papers for Journals	2020
 Reviewed Papers for Journals <b>Impact Factor: 0.03</b>	2020
 Reviewed Papers for Journals <b>Impact Factor: 7.044</b>	2019
 Reviewed Papers for Journals	2019