

Paper Title (18 font bold center)

Wilkistar Otieno

Associate Professor and Past Chair
Industrial & Manufacturing Engineering
University of Wisconsin-Milwaukee (UWM)
Milwaukee, WI, USA
otieno@uwm.edu

Luis Rabelo

Professor
Department of Industrial Engineering & Management Systems
University of Central Florida
Orlando, FL, USA
luis.rabelo@ucf.edu

Ahad Ali and Don Reimer

A. Leon Linton Department of Mechanical, Robotics and Industrial Engineering (12 font center)
Lawrence Technological University
Southfield, MI 48075, USA
sali@ltu.edu, dreimer@ltu.edu

Paper Title

- 18 font with bold and center justification
- All titles should be in standard mixed case, where the first letter of each word is capitalized and followed by lower case letters, as noted below:

Lean Manufacturing, Operations Management and Six Sigma Applications

Authors and Affiliations

- Author name – 12 font with bold and center justification
- Affiliation – 12 font with center justification
- Authors with same affiliation should be together
- Authors with different affiliation should be listed separately with one space in between
- Email can be added for each author
- Single space between affiliation and abstract title

Abstract (12 font)

[illegible]

- Abstract title – 12 font with bold and center justification
- Abstract text – 10 font with full justification
- Not exceeding 250 words.

Keywords (12 font)

Keyword 1, Keyword 2, Keyword 3, Keyword 4 and Keyword 5. (10 font)

- No more than five keywords (10 font)

1. Introduction (12 font)

Add introduction here including motivation of the research (why this research is important / why this research is needed), and problem statements. (10 font)

1.1 Objectives (11 font)

Add research objectives here. Make sure to fulfil all the research objectives at the end and articulate in the conclusion. Focus on key unique research contributions (10 font)

2. Literature Review (12 font)

Add literature review here (10 font)

3. Methods (12 font)

Add methods here (10 font)

4. Data Collection (12 font)

Add data collection here. (10 font)

5. Results and Discussion (12 font)

5.1 Numerical Results (11 font)

Add numerical results here. Make sure to describe all tables and add inferences (10 font)

5.2 Graphical Results (11 font)

Add graphical results here. Make sure to describe all figures and add inferences. If needed, add statistical analysis here. (10 font)

5.3 Proposed Improvements (11 font)

Add propose improvements write here including additional numerical and graphical results (10 font)

5.4 Validation (11 font)

Add any validation here including improvement with statistical hypothesis tests write here (10 font)

6. Conclusion (12 font)

Add conclusion here. Make sure to address that all objectives are met and emphasize of unique research contribution (10 font)

References (12 font)

Add references here. Make sure to follow IEOM reference format. See details at the end. (10 font)

- Rahman, M. A., Sarker, B. R. and Escobar, L. A., Peak demand forecasting for a seasonal product using Bayesian approach, *Journal of the Operational Research Society*, vol. 62, pp. 1019-1028, 2011.
- Reimer, D., Islam, T. and Ali, A., Engineering education and the entrepreneurial mindset at Lawrence Tech, *Proceedings of the 12th Annual International Conference on Industrial Engineering and Operations Management*, vol. xx, pp. xx-xx, Istanbul, Turkey, July 3-6, 2012, <https://doi.org/10.46254/AN4.12.202201>.
- Reimer, D., Entrepreneurship and Innovation, Available: <http://www.ieomsociet.org/ieom/newsletters/>, July 2020.
- Reimer, D. and Ali, A., Engineering education and the entrepreneurial mindset at Lawrence Tech, *Proceedings of the 3rd Annual International Conference on Industrial Engineering and Operations Management*, vol. xx, pp. xx-xx, Istanbul, Turkey, July 3 – 6, 2012.
- Reimer, D., Title of the paper, *Proceedings of the 5th North American International Conference on Industrial Engineering and Operations Management*, pp. xx-xx, Detroit, Michigan, USA, August 10-14, 2020.
- Shetty, D., Ali, A. and Cummings, R., A model to assess lean thinking manufacturing initiatives, *International Journal of Lean Six Sigma*, vol. 1, no. 4, pp. 310-334, 2010.

Biography (12 font)

Add each author biography – limited to 250 words. (10 font)

Page Layout

- 8 1/2" X 11" paper
- All margins: 1.00"
- Full justification
- Times New Roman font
- Maximum 12 pages
- Single space for entire manuscript
- Each paper should have abstract, introduction, literature review with minimum 15 citations including some recent publications, methods, data analysis, numerical and graphical results, statistical analysis, validation, conclusion and references.
- Conference name as a header and copyright information as footer must be used. Copyright information implies that IEOM Society International has right to publication the paper

1. Headings (12 font)

- 12 font size with bold and left justification
- Header should have numbering

1.1 Sub-Headings (11 font)

- Title – 11 font with sub-numbering
- Text – 10 font with no indexing
- One space between paragraphs

Literature Review

If author is mentioned at the beginning for the citation:

Rener (2020) developed the SC network with uncertainty. - For Single author

Rener and Ali (2020) developed the SC network with uncertainty. - For two authors

Rener et al. (2020) developed the SC network with uncertainty. - For more than two authors

or if author is mentioned at the end for the citation:

SC network was developed with uncertainty (Rener 2020). - For single author

SC network was developed with uncertainty (Rener and Ali 2020). - For two authors

SC network was developed with uncertainty (Rener et al. 2020). - For more than two authors

Full details should be provided at the end for Reference Section:

Reimer, D., Islam, T. and Ali, A., Engineering education and the entrepreneurial mindset at Lawrence Tech, *Proceedings of the 12th Annual International Conference on Industrial Engineering and Operations Management*, vol. xx, pp. xx-xx, Istanbul, Turkey, July 3-6, 2012, <https://doi.org/10.46254/AN4.12.202201>.

Rener, A., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, 2020.

Rener, A. and Ali, A., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, 2020.

Rener, A., Ali, A. and Reimer, D., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, 2020.

Few aspects to be considered to prepare a literature review:

- Introductory write up for literature review
- Make sure to add some recent references
- Avoid paper-by-paper review. It should be based on category. Similar topics, applications or tools could be added in one paragraph. Few citations should be in a paragraph.
- A summary paragraph should be added.

Figures

- Texts of figure should be readable
- Original high quality pictures
- Center justification
- Title of Figure should be in center and it must be mentioned as “Figure x: ...”
- Title of figure should be sentence case with center justification and 10 font
- Title should be after figure
- All figure numbers must be mentioned in the body of the paper.
- One space between texts and figure, figure and title of the figure and title of the figure and texts.

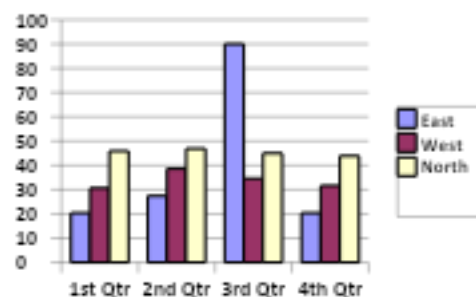


Figure 1. Name of the figure

Tables

- Texts of table should be readable
- Center justification
- Title of table should be in center and it must be mentioned as “Table x: ...” It should be added before table.
- Title of table should be sentence case with center justification and 10 font size
- All table numbers must be mentioned in the body of the paper.
- One space between texts and table, table and title of the table and title of the table and texts.

Table 1. Name of the table

Equations

Equation numbering is optional.

Acknowledgements

Add acknowledgement if needed

IEOM Reference Format

Citation Styles

If author is mentioned at the beginning for the citation, use the below format:

Renner (2020) developed the SC network with uncertainty. - For Single author

Renner and Ali (2020) developed the SC network with uncertainty. - For two authors

Renner et al. (2020) developed the SC network with uncertainty. - For more than two authors

If author is mentioned at the end for the citation, use the below format:

SC network was developed with uncertainty (Renner 2020). - For single author

SC network was developed with uncertainty (Renner and Ali 2020). - For two authors

SC network was developed with uncertainty (Renner et al. 2020). - For more than two authors

Full details should be provided at the end for Reference Section:

Reimer, D., Islam, T. and Ali, A., Engineering education and the entrepreneurial mindset at Lawrence Tech, *Proceedings of the 12th Annual International Conference on Industrial Engineering and Operations Management*, vol. 12, no. 1, pp. xx-xx, Istanbul, Turkey, July 3-6, 2012, <https://doi.org/10.46254/AN4.12.202201>.

Renner, A., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, 2020.

Renner, A. and Ali, A., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, 2020.

Renner, A., Ali, A. and Reimer, D., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, pp. xx-xx, 2020.

References Guidelines

- References title – 12 font with bold and left justification
- References texts – 10 font
- Use single space
- No empty line between two references
- No numbering should be used for references
- Last name and year should be used for any reference citation. Last name and year should be used for single author and double authors. For more than two authors, last name of the first author and “et al.” with year should be used. For examples: Reimer (2009), (Reimer 2009), Reimer and Ali (2009), (Reimer and Ali 2009), Reimer et al. (2009) and (Reimer et al. 2009). Number is not allowed in the reference citation.
- All references must be cited in the paper.
- Journal and conference names should be in italic.

- Title of the book should be in italic.
- All lines after the first line of references list should be indented one-fourth (1/4) inch from the left margin. This is called hanging indentation.
- Below are some examples.

For journal papers

One author

Last name, first initial., Title of the paper, *Journal Name*, vol., no., pp., year.

Lee, J., Measurement of machine performance degradation using a neural network model, *International Journal of Modelling and Simulation*, vol.16, no. 4, pp. 192-199, 1996.

Two author (more authors will have similar format with addition authors)

Last name, first initial. and last name, first initial., Title of the paper, *Journal/Conference Name*, vol., no., pp, year.

Cook, V. and Ali, A., End-of-line inspection for annoying noises in automobiles: trends and perspectives, *Applied Acoustic*, vol. 73, no. 3, pp. 265-275, 2012.

Rahman, M. A., Sarker, B. R. and Escobar, L. A., Peak demand forecasting for a seasonal product using Bayesian approach, *Journal of the Operational Research Society*, vol. 62, pp. 1019-1028, 2011.

Reimer, D., and Ali, A., Engineering education and the entrepreneurial mindset at Lawrence Tech, *Proceedings of the International Conference on Industrial Engineering and Operations Management*, vol. x, pp. xx-xx, Istanbul, Turkey, July 3 – 6, 2012.

Shetty, D., Ali, A. and Cummings, R., A model to assess lean thinking manufacturing initiatives, *International Journal of Lean Six Sigma*, vol. 1, no. 4, pp. 310-334, 2010.

For conference papers

One author

Last name, first initial. Title of the paper, *Conference Name*, pp. xx-xx, city, country, dates, year.

Reimer, D., Entrepreneurship learning experiences, *Proceedings of the 12th Annual International Conference on Industrial Engineering and Operations Management*, pp. xx-xx, Istanbul, Turkey, March 7-10, 2022.

O'Neill, E., Introduction to Improving Adaptive Snow-Sports through Engineering Design, Ergonomic Form and Function, *Proceedings of the 4th North American International Conference on Industrial Engineering and Operations Management*, pp. 1486-1487, Toronto, Canada, October 23-25, 2019.

Two author (more authors will have similar format with addition authors)

Last name, first initial. and last name, first initial., Title of the paper, *Conference Name*, pp. xx-xx, city, country, dates, year.

Aghimien, D. and Aigbavboa, C., Performance of selected funding schemes used in delivering educational buildings in Nigeria, *Proceedings of the 3rd North American International Conference on Industrial Engineering and Operations Management*, pp. 108-119, Washington DC, USA, September 27-29, 2018.

Reimer, D., Islam, T. and Ali, A., Engineering education and the entrepreneurial mindset at Lawrence Tech, *Proceedings of the 12th Annual International Conference on Industrial Engineering and Operations Management*, vol. 12, no. 1, pp. xx-xx, Istanbul, Turkey, July 3-6, 2012, <https://doi.org/10.46254/AN4.12.202201>.

Motsepe, Y. A., Makhanya, B. and Pretorius, J.H.C., Exploring the impact project definition readiness index on capital projects for coal-fired power station projects, *Proceedings of the First African International Conference on Industrial Engineering and Operations Management*, pp. 638-649, Pretoria, South Africa, October 29 – November 1, 2018.

For books

Last Name, First Initial. and Last Name, First Initial., *Title of the book*, edition, publisher, year.

Chang, T., Wysk, R. and Wang, H., *Computer-Aided Manufacturing*, 3rd Edition, Prentice Hall, New Jersey, 2006.

For website

Last Name, First Initial. and Last Name, First Initial., Article title article title article title article title article title,
Available: <http://www.ieomsociety.org/Details.aspx?id=xxx>, May 21, 2019. If the author's name is not listed,
begin with the title of the article for citation.

Name of the website, Available: <http://www.ieomsociety.org/Details.aspx?id=xxx>, Accessed on May 21, 2019.

For Newspaper

Last Name, First Initial. and Last Name, First Initial., Newspaper article title, date of publication, URL. Accessed
Month Day, Year. If the author's name is not listed, begin with the title of the newspaper article for citation.

All references should be organized alphabetically

References

- Aghimien, D. and Aigbavboa, C., Performance of selected funding schemes used in delivering educational buildings in Nigeria, *Proceedings of the 3rd North American International Conference on Industrial Engineering and Operations Management*, pp. 108-119, Washington DC, USA, September 27-29, 2018.
- Ali, A. and Rener, A., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, year.
- Chang, T., Wysk, R. and Wang, H., *Computer-Aided Manufacturing*, 3rd Edition, Prentice Hall, New Jersey, 2006.
- Cook, V. and Ali, A., End-of-line inspection for annoying noises in automobiles: trends and perspectives, *Applied Acoustic*, vol. 73, no. 3, pp. 265-275, 2012.
- Krstovski, S., Quality index, www.ieomsociety.org/newsletter/. Accessed May 21, 2020.
- Lee, J., Measurement of machine performance degradation using a neural network model, *International Journal of Modelling and Simulation*, vol.16, no. 4, pp. 192-199, 1996.
- Masud, A.S.M. and Whitman, L.E., Educating future engineers: An example, *Proceedings of the First International Conference on Industrial Engineering and Operations Management*, pp. 175-179, Dhaka, Bangladesh, January 9 – 10, 2010.
- Motsepe, Y. A., Makhanya, B. and Pretorius, J.H.C., Exploring the impact project definition readiness index on capital projects for coal-fired power station projects, *Proceedings of the First African International Conference on Industrial Engineering and Operations Management*, pp. 638-649, Pretoria, South Africa, October 29 – November 1, 2018.
- O'Neill, E., Introduction to Improving Adaptive Snow-Sports through Engineering Design, Ergonomic Form and Function, *Proceedings of the 4th North American International Conference on Industrial Engineering and Operations Management*, pp. 1486-1487, Toronto, Canada, October 23-25, 2019.
- Rahman, M. A., Sarker, B. R. and Escobar, L. A., Peak demand forecasting for a seasonal product using Bayesian approach, *Journal of the Operational Research Society*, vol. 62, pp. 1019-1028, 2011.
- Reimer, D., and Ali, A., Engineering education and the entrepreneurial mindset at Lawrence Tech, *Proceedings of the International Conference on Industrial Engineering and Operations Management*, Istanbul, Turkey, July 3 – 6, 2012.
- Reimer, D., Islam, T. and Ali, A., Engineering education and the entrepreneurial mindset at Lawrence Tech, *Proceedings of the 12th Annual International Conference on Industrial Engineering and Operations Management*, vol. xx, pp. xx-xx, Istanbul, Turkey, July 3-6, 2012, <https://doi.org/10.46254/AN4.12.202201>.
- Reimer, D., Entrepreneurship learning experiences, *Proceedings of the 12th Annual International Conference on Industrial Engineering and Operations Management*, vol. xx, pp. xx-xx, Istanbul, Turkey, March 7-10, 2022.
- Reimer, D., Entrepreneurship, innovation and experiential learning, Available: <http://www.ieomsociety.org/id=xxx>, May 21, 2019.

- Rener, A., Ali, A. and Reimer, D., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, year.
- Rener, A., Optimization of the supply chain network using uncertainty, *International Journal of Industrial Engineering and Operations Management*, vol. xx, no. xx, pp. xx-xx, year.
- Retnanto, A., Parsaei, H.R. and Parsaei, B., The role of program advisory board in elevating the degree program content *Proceedings of the 9th International Conference on Industrial Engineering and Operations Management*, pp. 739-741, Bangkok, Thailand, March 5-7, 2019.
- Shetty, D., Ali, A. and Cummings, R., A model to assess lean thinking manufacturing initiatives, *International Journal of Lean Six Sigma*, vol. 1, no. 4, pp. 310-334, 2010.

Biography / Biographies (for single author – biography and multiple authors- biographies) – 12 font bold

- Include bio of each author at the end of the paper
- Limited to 250 words

Biographies

Dr. Wilkistar Otieno is an Associate Professor in the Department of Industrial and Manufacturing Engineering at the University of Wisconsin–Milwaukee. She is also co-director of the U.S. Department of Energy Industrial Assessment Center at UWM. At the invitation of the Chancellor, Dr. Otieno serves as an Assistant to the Vice Chancellor for Diversity, Equity, and Inclusion on the UWM 2030 Action Plan. Her industry-driven research involves sustainable manufacturing, particularly remanufacturing and machine learning, with applications in manufacturing. She has a passion for teaching statistical-related courses, and inspiring student involvement. She is a faculty mentor to five student organizations, including the Society of Women Engineers, the Campus Advent Society and the Institute for Operations Research and Management Sciences and the Association of Energy Engineers. In addition, she is a former recipient of an NSF S-STEM \$1M grant and a long-time faculty mentor of the STEM INSPIRE Wisconsin Alliance for Minority Participation program. She received the 2022 Tony Quinn Awardee from the Louis Stokes Midwest Regional Center of Excellence (LSMRCE), and the 2022 UW System Outstanding Women of Color in Education Award. Dr. Otieno has served as the Chair of the Institute of Electrical and Electronics Engineers-Milwaukee Chapter, and as a committee member of the INFORMS Diversity, Equity, and Inclusion committee.

Dr. Luis Rabelo received a BS in Electro-Mechanical Engineering from the Technological University of Panama in 1983, an MS in Electrical Engineering from the Florida Institute of Technology in 1987, Master's and Doctorate in Engineering Management from the University of Missouri. He was a Postdoc at the University of Missouri in Nuclear Engineering. Dr. Rabelo received a dual MS in Systems and Management from the Massachusetts Institute of Technology. He has worked for the Advanced Technology Group (Goodrich) and Honeywell Laboratories. Dr. Rabelo was a NASA Fellow from 2002 to 2005, and a Project Manager at NASA from 2009 to 2011. He is currently Professor in the Industrial Engineering and Management Systems Department at UCF. He is also the Undergraduate Coordinator. He has written more than 300 articles and a book on Artificial Intelligence. He has been the principal advisor for 39 Master's students and 29 PhDs. He received the award for the Best Scientific Article of the Year in 2004 from the Society of Automotive Engineers and received the distinction "ONE NASA" in 2006. He was the recipient of the Fulbright Distinction in 2008. In November 2008, he received the honor of the Technological University of Panama (UTP) of being the 2008 Distinguished Alumni. In 2011, he was the Henaac Award Winner in Education. In 2013 and 2018, he received the Forest R. McFarland Award from the Society of Automotive Engineering (SAE). Lately, he received the SAE Russell S. Springer Award for his article on the modeling of space operations systems in 2017.

Ahad Ali is an associate professor and director of industrial engineering programs (BSIE & MSIE) and director of a graduate certificate in Lean Six Sigma at A. Leon Linton Department of Mechanical, Robotics, and Industrial Engineering of the Lawrence Technological University (LTU), Southfield, Michigan, USA. He established the Siemens Electro-Matic Industrial Engineering Lab at LTU. Dr. Ali was the primary author of the ABET self-study report of the BSIE Program at LTU in 2022. He earned a BS in Mechanical Engineering from Khulna University of Engineering and Technology (KUET), Bangladesh, a Master's in Systems and Engineering Management from Nanyang Technological University, Singapore, and a Ph.D. in Industrial Engineering from the University of

Wisconsin-Milwaukee, USA. Dr. Ali was an Assistant Professor in Industrial Engineering at the University of Puerto Rico - Mayaguez, a Visiting Assistant Professor in Mechanical, Industrial, and Manufacturing Engineering at the University of Toledo, and a Lecturer in Mechanical Engineering at the Bangladesh Institute of Technology, Khulna. He received an Outstanding Professor Award from the Industrial Engineering Department, University of Puerto Rico -Mayaguez. He has published 75 journal papers and 150 conference papers. Dr Ali conducted research projects with Chrysler, Ford, DTE Energy, New Center Stamping, Whelan Co., Delphi Automotive System, GE Medical Systems, International Truck and Engine Corporation (ITEC), and Rockwell Automation. His research interests include manufacturing systems, quality, lean, six-sigma, simulation, artificial intelligence, supply chain, and optimization. He supervised 11 doctoral students in Doctor of Engineering in Manufacturing Systems (DEMS). He is a Founder and Chief Executive Officer (CEO) of IEOM Society International. Dr. Ali serves as a Conference Co-Chair of the International Conference on Industrial Engineering and Operations Management. Dr. Ali organized IEOM conferences around the globe on six continents including Dhaka, Kuala Lumpur, Istanbul, Bali, Dubai, Orlando, Detroit, Rabat, Bristol, Bogota, Paris, Washington, DC, Lima, Johannesburg, Bangkok, Pilsen, Toronto, Costa Rica, Monterrey, Sao Paulo, Riyadh, Manila, Melbourne, New Delhi, Sydney, Augsburg, Tokyo, and Muscat. He is an associate editor of the IJIEOM. Dr. Ali is a member of IEOM, INFORMS, SME, and IEEE.

Don Reimer is a Chief Operating Officer of the IEOM Society International, Southfield, Michigan, USA. He is a managing member of The Small Business Strategy Group, L.L.C and serves as an adjunct professor at Lawrence Technological University. Professor Reimer holds a Bachelor of Science degree in Industrial Management from Lawrence Technological University and a Master of Arts degree in Political Science from the University of Detroit/Mercy. He has been recognized as a professional management consultant with over 45 years of experience in working with closely held businesses. He has taught courses in entrepreneurship, management, corporate entrepreneurship, and innovation for engineers. Professor Reimer served as a member of the Minority Economic Development Committee of New Detroit. He has served as a KEEN Fellow for The Kern Family Foundation. He is a member of the Lawrence Tech Alumni Board of Directors and has been elected a Fellow of the IEOM Society International. Professor Reimer is a faculty advisor of the Student Chapter of the IEOM Society at Lawrence Tech. He visited 17 countries to organize IEOM conferences. Professor Reimer is coordinating IEOM student chapters around the world.