**Paper Title (18 font bold center)**

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**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:

**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)**

Abstract Abstract Abstract Abstract Abstract Abstract Abstract Abstract Abstract Abstract (10 font)

* Abstract title  – 12 font with bold and center justification
* Abstract text – 10 font with full justification
* Not exceeding 200 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., 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*, Istanbul, Turkey, July 3 – 6, 2012, pp. xx-xx.

Reimer, D., Title of the paper, *Proceedings of the 5th North American International Conference on Industrial Engineering and Operations Management*, Detroit, Michigan, USA, August 10-14, 2020, pp. xx-xx.

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
* 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)**

* Title - 12 font size with bold and left justification
* Text Header should have numbering
* No space between header and text
* One space before header

## 1.1 Sub-Headings (11 font)

* Sub-Title – 11 font with bold and sub-numbering
* Text – 10 font with no indexing
* One space between paragraphs
* One space before sub-header

**2. Literature Review (12 font)**

Each paper should have a literature review section with minimum of 10 recent citations from journal and conference papers. Citation within the paper text should be written as below:

Single author:

* Rashid (2020) mentioned about lean application and improvement in RMG.
* Six sigma is applied for process improvement in food industries (Rashid 2020).

Two authors:

* Iqbal and Mukaddes (2020) applied simulation for quality improvement in machining systems.
* LP and IP are used line balancing optimization in small and mid-size manufacturing (Iqbal and Mukaddes 2020).

Three or more authors:

* Morshed et al. (2020) focused on smart technologies and IoT in automation industries.
* DOE is applied for improvement in healthcare systems (Morshed et al., 2020, Biswas, 2020).

**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

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**Equations**

* Equation numbering is optional.

## Acknowledgements

* Add acknowledgement if needed

## References (12 font)

* References title – 12 font with bold and left justification
* References texts – 10 font
* You may follow the IEOM referencing style as appears below or any other standard referencing style like APA, Harvard,Vancouver. etc.

IEOM referencing style [optional] >>>>

* No numbering should be used for reference title
* No numbering for
* 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 in 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. .
* Last name and first initial should be should in the reference formatting like below examples.

**For journal or conference papers**

One author

Last name, first initial., Title of the paper, *Journal/Conference 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.

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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 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, Available: http://www.iienet.org/Details.aspx?id=xxx, May 21, 2011.

# 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 200 words

**Dr Sarwar Morshed** is a Professor of Industrial and Production Engineering at the Faculty of Engineering, Ahsanullah University of Science and Technology (AUST). He started his academic career in Chittagong University of Engineering and Technology (CUET) in early 90s after receiving his undergraduate degree in Mechanical Engineering in 1993. He received his Masters in Industrial Management from the Centre for Industrial Management of Katholieke University of Leuven, Belgium and received his PhD in Manufacturing and Mechanical Engineering from the Birmingham University, UK on Optimization and Scheduling. He worked in the Birmingham University as PhD researcher before his post-doctoral research in Coventry and Bath University. He also served as a visiting academic at Bath University and affiliated as a visiting research fellow at Aalborg University, Denmark. He has published 20 articles in several journal and conferences. He has been working as a Senior Researcher and Deputy Project Leader of Aalborg-AUST Research Project (POHS-BD) which has been funded by DANIDA and collaborative work among AUST, Aalborg University and BGMEA since 2015. A sustainable maturity model has been developed by integrating lean and OHS for intervention process in RMG industries. He also developed Muti-objective knowledge based scheduling techniques of genetic algorithm (GA) for cancer patients in dynamic situation along with his hybrid GA framework for industrial and service scheduling. Prof Morshed has affiliations with HEA (UK), OR Society, IEOM Society and IEB.

**Dr. A R M Harunur Rashid** is an Associate professor of Department of Mechanical and Production Engineering (MPE) at the Islamic University of Technology (IUT). He earned his Ph.D. from Dublin City University (DCU) and B.Sc. in Mechanical Engineering from Bangladesh University of Engineering and Technology (BUET). His research activities include the area of Operations Research & Management, Quality Engineering, Ergonomics, Sustainable Product Design, , Maintenance Engineering, Life Cycle Analysis and Renewable Energy. He has supervised many under-graduate and post-graduate students in these areas. Moreover, he has published many journal papers, book chapters and conference articles in these areas He is actively involved with the activities of different professional organizations like IEOM Society International and Ergonomics Society of Bangladesh.

**Dr. Mohammad Iqbal** is currently serving as a Professor at Shahjalal University of Science and Technology (SUST) under the Department of Industrial and Production. Professor Iqbal obtained his Bachelor of Technology (Mechanical) from Sri Venkateshwara University, College of Engineering, Tirupati, Andre Pradesh, India and M.Sc. Engineering from the department of Industrial and Production Engineering, BUET, Dhaka in 1989 and 1993 respectively. He received his Ph.D. from Dublin City University, Dublin, Republic of Ireland in 2000. Professor Iqbal served as a visiting research scholar at Mary O’ Connor Process Safety Center, Texas A & M University, College Station, Texas, USA in the year 2018. He is the founder lecturer of the Department of Industrial and Production, SUST. He served as the Head of the department for 13 years and Dean of School of Applied Science and Technology for two years. He was the Head of Petroleum and Mineral Engineering Department Shahjalal University of Science and Technology (SUST), Sylhet, Bangladesh for one year. He has 30 years of industrial, research and teaching experiences. Professor Iqbal’s present research interest includes Virtual Reality, Ergonomics, Industrial safety and risk management, Supply chain management, Renewable energy and Production system analysis and Climate change and environment. He has more than 100 International publications in conference proceedings and peer review journals. He is a co-author of three engineering books namely Surveying, Engineering Materials and Industrial Health, Safety & Welfare. He is a life member of the Institution of Engineers, Bangladesh. He was the honorary secretary of the Institution of Engineers Bangladesh (IEB) Sylhet Centre, Sylhet, Bangladesh during 2018-2019. Dr. Iqbal was the Conference Chair of IEOM Society -Bangladesh Chapter held in December 2019. He was the Chair of IEOM Society – Bangladesh Chapter from March 2018 – February 2020. Professor Iqbal conducted many training programs, seminars, workshops and symposiums at home and abroad. He has been involved in several research projects funded by the Ministry of Science and Technology, Bangladesh and SUST Research Center, Shahjalal University of Science and Technology, Sylhet, Bangladesh. Professor Iqbal received International and National Awards on research papers presented at different International Conferences home and abroad.

**Dr. Md. Haider Ali Biswas** is currently affiliated with Khulna University, Bangladesh as a Professor of Mathematics under Science Engineering and Technology School and he served as the Head of Mathematics Discipline from 2015 to 2018. Prof. Biswas obtained his B Sc (Honors) in Mathematics and M Sc in Applied Mathematics in the year 1993 and 1994 respectively from the University of Chittagong, Bangladesh, M Phil in Mathematics in the year 2008 from the University of Rajshahi, Bangladesh and PhD in Electrical and Computer Engineering from the University of Porto, Portugal in 2013. He has more than 22 years teaching and research experience in the graduate and post-graduate levels at different public universities in Bangladesh. He published Three Books, Seven Book Chapters and more than 200 research papers in the peer reviewed journals and international conferences. Prof. Biswas supervised (is supervising) more than 80 undergraduate students (Undergraduate Project Thesis), 30 MSc Students (MSc Thesis and Project Thesis), 3 MPhil Students and 5 PhD Students at Different Public Universities including Khulna University in Bangladesh. Prof. Biswas has worked at several R & D projects in home and abroad as PI and/or Researcher, particularly he conducted several research projects funded by Khulna University Research Cell, the Ministry of Science and Technology, Bangladesh, University Grants Commission of Bangladesh and The World Academy of Science (TWAS), Trieste, Italy. His present research interests include Dynamic Optimization, Optimal Control with Constraints, Nonsmooth Analysis, ODEs and Dynamical Systems, Mathematical Modeling, Inventory Model in Production Management, Mathematical Ecology, Environmental modeling and Climate change, Mathematical Biology and Biomedicine, Epidemiology of Infectious Diseases. Since the last ten years, Prof. Biswas has been working on the applications of mathematical models for designing and implementing those to real life problems, specially for the sustainable/optimal management under the changing environment due to global warming. He is the life/general members of several professional societies and/or research organizations like Bangladesh Mathematical Society (BMS), Asiatic Society of Bangladesh (ASB), Institute of Mathematics and its Applications (IMA), UK, European Mathematical Society (EMS) and Society for Mathematical Biology (SMB). Dr. Biswas is the founder member of Mathematical Forum Khulna and served as the General Secretary of the Forum in 2013-2015. Dr. Biswas organized several national and international seminars/workshops/conferences in home and abroad and he has been working as Editor/Member of editorial boards of several international peer-reviewed journals. Professor Biswas delivered more than 50 Talks as Keynote/Invited/Plenary/Panel Speaker at several international conferences / seminars / workshops in home and abroad. Professor Biswas was nominated as the Member of the Council of Asian Science Editors (CASE) for 2017-2020 and the Associate Member of the Organization for Women in Science for the Developing World (OWSD) since 2017. Recently, Professor Biswas has been elected as a Member of Executive Committee of Bangladesh Mathematical Society (BMS) for the year 2019-2021, and also nominated as the Associate Editor of the international journal GANIT- Journal of Bangladesh Mathematical Society (BMS) for the year 2019-2021. Dr. Biswas has been nominated as a Member of Executive Committee of the IEOM Society, Bangladesh Chapter and also serving as the Treasurer of the IEOM Society, Bangladesh Chapter. He is also serving as the Faculty Advisor of the IEOM Society Khulna University Chapter. Professor Biswas is presently serving as the President of Bangladesh Society for Mathematical Biology (BSMB) for the year 2019-2021.