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Editorial

CELEBRATING 30 YEARS OF EXCELLENCE: A TRIBUTE TO AUTHORS AND REVIEWERS OF THE INTERNATIONAL JOURNAL OF INDUSTRIAL ENGINEERING: THEORY, APPLICATIONS AND PRACTICE

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As we stand on the cusp of the 30th anniversary of the International Journal of Industrial Engineering: Theory, Applications and Practice (we call it "the Journal"), it is a moment to celebrate its remarkable journey and acknowledge the vital roles played by its authors and reviewers. From its inception, the Journal has evolved into a leading international journal renowned for its commitment to publishing high-quality research that has significantly impacted the field of industrial and manufacturing engineering. The Journal's scope encompasses a broad spectrum of industrial engineering disciplines. This comprehensive approach ensures that the Journal remains at the forefront of industrial engineering research and continues to serve as a valuable resource for both scholars and practitioners in the field.

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1. INTRODUCTION

As the International Journal of Industrial Engineering: Theory, Applications and Practice celebrates its 30th anniversary, it marks not only a milestone in the Journal's history but also an opportunity to reflect on the remarkable journey it has undertaken. From its humble beginnings, the Journal has weathered the winds of change, evolving into a leading bimonthly journal renowned for its commitment to publishing high-quality research that has significantly impacted the field of industrial and manufacturing engineering.

We acknowledge the pivotal roles played by individuals who have steered the Journal through its formative years. The dedication of the honorary founding editor, Anil Mital, laid the groundwork for the Journal's success. Subsequently, the second editor-in-chief, Arunkumar R. Pennathur, further nurtured its growth and solidified its position as a respected platform for scholarly discourse.

For the past ten years, since 2014, I have had the privilege of serving as the third editor-in-chief of the Journal. Witnessing firsthand the dedication and expertise of countless authors and reviewers has been a humbling and inspiring experience. Their insightful contributions, unwavering support, and commitment to excellence have been instrumental in shaping the Journal's identity and propelling it to its current position of leadership.

In Section 2, I want to review the retrospect and future trends for the wide spectrum of sections that the Journal has covered. In Section 3, I want to discuss the challenges and limitations the Journal faces. Lastly, in Section 4, I want to conclude my short tributes with the Journal's commitments to future industrial and manufacturing engineering.

2. A PLATFORM FOR CUTTING-EDGE RESEARCH IN DIVERSE FIELDS

The Journal publishes original, quality articles reporting advances in industrial engineering theory, techniques, methodology, applications, and practice; general surveys and critical reviews; educational or training articles, including case studies; short communications; keynote papers; book reviews; and announcements, concerned with traditional aspects and recent advances in Industrial Engineering. The Journal provides a vital platform for disseminating groundbreaking research across the diverse spectrum of industrial and manufacturing engineering, including:

Data Mining and Computational Intelligence:

This field is undergoing a significant transformation due to advancements in artificial intelligence (AI) and machine learning (ML). Researchers are utilizing these powerful tools to extract valuable insights from vast datasets, optimize complex systems, and predict future outcomes. For example, AI-powered algorithms are being used to:

- Identify hidden patterns and trends in data that would be difficult or impossible to detect manually.
- Optimize production processes by identifying bottlenecks and inefficiencies.
- Develop predictive models that can forecast demand, inventory levels, and other key metrics.
- Design and develop intelligent systems for autonomous manufacturing, self-driving vehicles, and smart cities.

Production Planning and Control:

The rise of Industry 4.0 and the Internet of Things (IoT) is dramatically reshaping the landscape of production planning and control. Industrial engineers are now leveraging these technologies to:

- Implement real-time production monitoring and control systems.
- Develop smart factories that can adapt to changing demand and production requirements.
- Optimize production schedules and inventory levels in real time.
- Integrate production planning and control systems with other enterprise systems, such as supply chain management and customer relationship management.

Operation Research:

Operation research (OR) continues to be a vital tool for solving complex decision-making problems in a variety of industries. Recent advancements in OR include:

- The development of new optimization algorithms that can solve complex problems more efficiently, such as genetic algorithms and ant colony optimization.
- The application of OR to emerging areas such as healthcare, disaster management, and financial engineering.
- The increasing use of OR in conjunction with other disciplines, such as data science and machine learning, for even more powerful decision support systems.

Service Engineering (Healthcare, etc.):

The service sector is a major driver of economic growth in many countries. As a result, service engineering is an increasingly important field of study. Research in service engineering focuses on:

- Developing new service delivery models that are efficient, effective, and customer-centric, such as service virtualization and omni-channel service delivery.
- Designing service systems that are resilient and adaptable to change, such as service ecosystems and platform-based service architectures.
- Improving the quality of service through process optimization and innovation, such as service design thinking and lean service management.

Sustainability (Energy, Environment, etc.):

Industrial engineers are playing a critical role in helping businesses and organizations become more sustainable. Research in this area focuses on:

- Developing sustainable manufacturing processes that minimize waste and energy consumption, such as circular economy principles and industrial ecology.
- Designing sustainable products that are durable, recyclable, and have a low environmental impact, such as life cycle assessment and eco-design.
- Creating sustainable supply chains that are efficient and environmentally friendly, such as green logistics and closed-loop supply chains.
- Developing renewable energy sources and implementing energy-efficient technologies.

Information Systems and Technology:

Information systems and technology are essential for the efficient operation of modern businesses. Research in this area focuses on:

- Developing new information systems that enable real-time data analysis and decision-making, such as big data analytics and cloud computing.
- Implementing advanced technologies such as blockchain and artificial intelligence to improve operational efficiency and security.
- Ensuring the security and privacy of data in the digital age, such as cybersecurity and data protection regulations.

Management of Technology:

Successful management of technology is essential for businesses to remain competitive in the global marketplace. Research in this area focuses on:

- Developing strategies for identifying, evaluating, and adopting new technologies, such as technology roadmapping and technology scouting.
- Analyze the trends and patents in technology developments.

Work Measurement, Human Factors, and Ergonomics:

This field is experiencing renewed interest due to the increasing automation of workplaces and the need to ensure the well-being of workers. Research in this area focuses on:

- Developing new methods for measuring work performance and workload.
- Designing workplaces and tasks that are ergonomic and minimize the risk of musculoskeletal disorders.
- Investigating the impact of new technologies, such as virtual reality and augmented reality, on human performance and well-being.

Quality, Reliability, Maintenance Engineering:

Ensuring the quality and reliability of products and services is critical for businesses to succeed in today's competitive marketplace. Research in this area focuses on:

- Developing new quality management methods, such as Six Sigma and lean manufacturing.
- Implementing predictive maintenance strategies to prevent equipment failures and downtime.
- Improving the reliability of complex systems, such as transportation networks and power grids.

Supply Chain Management:

The increasing globalization of businesses has created complex and interconnected supply chains. Research in this area focuses on:

- Developing strategies for managing global supply chains, such as risk mitigation and supplier selection.
- Optimizing logistics and transportation networks to reduce costs and improve delivery times.
- Implementing new technologies such as blockchain and the Internet of Things to enhance supply chain visibility and transparency.

Logistics and Material Handling:

The efficient movement and storage of materials are essential for businesses to operate smoothly. Research in this area focuses on:

- Developing new logistics technologies, such as automated warehousing and drones.
- Optimizing warehouse and transportation routes to reduce costs and improve efficiency.
- Implementing new materials handling technologies, such as robots and automated guided vehicles.
- Optimizing the operations of recent last-mile distribution fulfillment.

Product Design and Development:

The design and development of new products are essential for businesses to stay ahead of the competition. Research in this area focuses on:

- Using user-centered design principles to develop products that meet the needs and desires of customers.
- Leveraging computer-aided design and engineering software to create innovative and functional products.
- Implementing rapid prototyping technologies to accelerate the product development process.

Statistical Analysis:

Statistical analysis is essential for making informed decisions based on data. Research in this area focuses on:

- Developing new statistical methods for analyzing complex datasets.
- Applying statistical methods to solve real-world problems in various industries.
- Using statistical software to visualize and analyze data effectively.

Modeling and Simulation:

Modeling and simulation are powerful tools for predicting the behavior of systems and processes. Research in this area focuses on:

- Developing new simulation models for various applications, such as manufacturing processes, traffic flow, and weather forecasting.
- Using simulation models to optimize systems and processes before implementing them in the real world.
- Developing new simulation software that is easy to use and accessible to a wider audience.

Homeland Security (Defense, Disaster Preparedness, etc.):

Industrial engineers are playing an increasingly important role in homeland security. Research in this area focuses on:

- Developing new technologies for disaster preparedness and response, such as emergency management systems and disaster relief logistics.
- Improving the security of critical infrastructure, such as power grids and transportation networks.
- Using data analytics to identify and track potential threats.

These are just a few examples of the exciting research being conducted in the field of industrial and manufacturing engineering. The International Journal of Industrial Engineering is committed to publishing the highest quality research that will advance the field and benefit society.

3. CHALLENGES AND TRIUMPH

The journey of the past 30 years has not always been smooth. There have been periods of uncertainty and challenges that tested the resolve of the Journal's leadership and its community. Yet, through collaboration, innovation, and unwavering commitment to its core values, IJIE has emerged stronger and more resilient than ever before.

Amidst the celebration, it is crucial to acknowledge the changing landscape of the research journal industry. The concerning trend of monopolization by major publishers has resulted in significantly increased subscription costs, making access to vital academic resources a challenge for many libraries and individual researchers. This situation creates an environment where knowledge becomes increasingly inaccessible, hindering the progress of research and innovation within the field.

As the editor-in-chief, I have observed a recent spiking amount of research misconduct recently in relation to publication ethics. Those unethical acts are serious threats to our scientific community, and those authors must be expelled from the academia and research community. Some authors submitted their manuscripts to multiple journals at the same time, which resulted in the waste of the review efforts by our peers. It even falsifies the editorial efforts to filter the plagiarism by anti-plagiarism software such as iThentificate. Other authors tried to steal or copy other authors' manuscripts, which were obtained during the review process by other journals. In addition, many submissions of the same writing format and convention were made and are suspected as submissions by papermills, which produce fake research manuscripts or sell one's research work. I also have seen some social media posts and emails that are selling the authorships. These kinds of piracy put more burdens on the editorial efforts of the Journal. I strongly suggest that all journals identify those authors and publish their identities in

the public archive permanently. The research community or publishers can start an initiative to create a website to capture all submission history permanently using blockchain technology once any submission to any journal is made and to record the editorial and judicial investigation results. In that way, the integrity of research activities can be achieved.

However, amidst these challenges, the Journal remains steadfast in its commitment to providing an accessible platform for the dissemination of impactful research. By maintaining a reasonable subscription fee and exploring alternative open-access models, the Journal strives to ensure that its valuable content remains readily available to a diverse audience of researchers, practitioners, and students, regardless of their institutional affiliation or financial means.

4. THE JOURNAL'S COMMITMENT TO THE FUTURE

As we celebrate this momentous occasion, we reflect not only on the accomplishments of the past but also on the exciting opportunities that lie ahead. The field of industrial and manufacturing engineering is constantly evolving, driven by rapid technological advancements and emerging paradigms. The Journal remains at the forefront of this evolution, committed to adapting to the changing landscape while upholding its core values of scholarly integrity, rigor, and accessibility.

Looking ahead, the Journal is poised to continue its legacy of excellence. By embracing innovation, adapting to the evolving needs of the field, and fostering continued collaboration, the Journal will remain a beacon of knowledge and a catalyst for future advancements in industrial and manufacturing engineering.

On behalf of the entire team at the Journal, we extend our deepest gratitude to all authors, reviewers, editorial board members, and readers who have contributed to the success of the International Journal of Industrial Engineering: Theory, Applications and Practice over the past three decades. Your unwavering dedication and invaluable contributions have not only shaped the Journal's identity but also significantly impacted the trajectory of the field. As we embark on the next chapter of this remarkable journey, let us continue to collaborate, innovate, and inspire one another to ensure that the Journal remains a leading voice in the field, promoting accessibility to knowledge and propelling the future of industrial and manufacturing engineering.