

## **IMAMAN, Editorial, 35 (1), 2024**

### **Management, Mathematics, and Management-Mathematics: strengthening the link in a turbulent post-pandemic world**

The IMA Journal of Management Mathematics (IMAMAN) reaches its 35<sup>th</sup> volume of publication this year. Underpinning our publication is the belief that mathematics matters, and that good mathematical models have huge potential to support high quality – and often innovative – managerial decision making. We have worked continuously through this journal to highlight the value of robust mathematical models in a diverse range of settings by publishing state-of-the-art mathematical ideas and showing their value “in action” in solving contemporary management problems.

We are confident that managerial decision making has indeed improved over the last 35 years as a direct – and indirect – result of the mathematics published in the journal. We have been excited to see mathematics put to good use to solve both interesting and, crucially, important problems addressed in our pages. From sport agencies to Universities, from manufacturing companies to hospitals, and from actuaries to third party logistics providers, we have shown that mathematics can make a positive difference to management.

Despite the notable successes of mathematics in action over the years, this is just the beginning! There has never been a time when the creative and innovative use of mathematics has been so crucial. With the Covid-19 pandemic and climate change (to name but two global threats) answers are needed to new questions around human health and well-being, environmental sustainability and global supply chains.

The application of mathematics and statistics to management has never been more crucial. So too must management understand that science can help support decision making through good operationalised models and sound prescription. In this context, IMAMAN has a key role to play as a bridge between management and mathematics. Building on our 35 year foundations, we shall be working even harder now to reinforce that crucial management-mathematics connection.

As part of our renewed mission, we are launching an exciting and important new initiative, which will see every future issue opening with a piece from a thought leader in management mathematics.

We kick start this initiative with an insightful and inspirational contribution from Sridhar Tayur of Carnegie Mellon University in an article entitled, “Management Mathematics: The Audacity of BOPE (Business Optimizing Professor Entrepreneur) (Tayur, 2023). In this piece, Tayur argues that essentially good science and entrepreneurial activity are mutually reinforcing, encouraging us to think below the silos of mathematics on the one hand and management on the other.

These regular “Insights from thought leaders” will vary in nature, but will always reflect diverse research perspectives, philosophical standpoints, positioning arguments, and reflections on some issues underlying our discipline and profession, offered by colleagues who have shaped developments in their respective management maths areas.

They will take one of the following forms (though this is not an exhaustive list):

1. positioning paper offering fresh insights and typically some perspectives different from the ones collectively supported within the discipline;
2. reflective account of one’s career and approach to innovation with insights and lessons learned for (early career) management mathematicians;
3. review paper of an interesting and timely management mathematics area;
4. research paper in an area shaped by the contributor. This will typically fall within one of the 6 areas the journal is currently organised with – see below.

(Articles falling within the classes 3 and 4 will be subject to standard peer review. Classes 1 and 2 will be subject to editorial editing, being essentially extended editorial themselves.)

The journal is currently organised under the following areas (listed alphabetically):

- Decision Analysis (Ali Emrouznejad, University of Surrey, UK)
- Finance (Giorgio Consigli, Khalifa University, UAE)
- Health (Ujjal Mukherjee, University of Illinois Urbana – Champaign, USA)
- Operations (Zied Babai, Kedge Business School, France)
- Multidisciplinary Management Mathematics (Kostas Nikolopoulos)
- Sport (Phil Scarf, Cardiff University, UK)

These six areas collectively cover the whole spectrum of management mathematics. We welcome submissions within any of these areas, and we promise authors an excellent service and the communication and dissemination support of Oxford University Press (OUP). We aim, when needs be, to implement rapid reviews to make sure that, during turbulent times, we are ahead of curve in providing cutting-edge research to those organisations who could benefit from it.

We dedicate issue 1 of 2024 to the memory of our dear friend and colleague, John Boylan, who very unexpectedly passed away in July 2023. John contributed heavily to the journal over the years (and not least with his Reproducibility initiative, Boylan, 2016), and influenced the lives and careers of many colleagues within the editorial board. It has been a period of further loss, with Everette Gardner Jr (the creator of the Damped Trend Exponential Smoothing method, of the University of Houston) and Scott Armstrong (father of rule based forecasting and the forecasting methodology trees, of the Wharton School) also passing away recently. To acknowledge and celebrate their contributions, we will invite a number of articles that reflect on John Boylan, Everette Gardner Jr and Scott Armstrong’s research and its impact in forecasting and management mathematics.

## References

Boylan, J. (2016) Reproducibility. *IMA J. Manag. Math.*, 27, 107–108.  
<https://doi.org/10.1093/imaman/dpw003>

Tayur, S. (2023) Management Mathematics: The Audacity of BOPE. IMA J. Manag. Math., 34, 5–11.  
<https://doi.org/10.1093/imaman/dpad021>

Aris Syntetos  
IMAMAN Editor-In-Chief  
Cardiff University

Kostas Nikolopoulos  
IMAMAN Area Editor  
Durham University



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