WORAN's occasional ‘lightning talks’ sessions are always enjoyable and inspiring, offering a glimpse into the diverse work being done by our female colleagues across OR through a series of 5-minute talks. This year, we had another great session of WORAN Lightning Talks. Speakers from various sectors delivered engaging short presentations showcasing the contributions of women in the field of OR and analytics. Covering a broad spectrum of topics, these talks highlighted the impactful roles of women in OR and analytics, leaving participants with an informative and inspiring experience.

Karrie Liu, founder and data consultant at Hypatia Analytics, kicked off the event by sharing her journey in OR. She inspired us with her dedication to making a positive social impact using OR. With over a decade of experience in sectors like healthcare and consultancy, Karrie dedicates a significant portion of her time to community projects. She highlighted two key projects: the Discovery Data Programme and her role as a trustee for Age UK. The Discovery Data Programme, created in collaboration with a young local mathematician, offers workshops to teach students data tools like Python and Tableau, making math more engaging and relevant. This initiative not only promotes math education but also fosters community engagement. As an Age UK trustee, Karrie uses her data science expertise to help the charity become more data-driven. She is involved in projects addressing cancer, dementia, and financial issues, aiming to improve community planning and resources through high-level data insights. Her talk showed us once again the importance of using OR and data science to drive meaningful change in the community and support charitable initiatives.

Then Xiaochen Feng, a Post-doctoral Research Associate at the University of Bath, took us through her research in humanitarian OR. She presented her PhD research on optimising evacuation strategies for disaster relief operations. The multi-objective mixed-integer programming model and solution method that Xiaochen developed focuses on minimising makespan evacuation, budget, and shelter utilisation during emergencies. Her findings highlight important trade-offs between evacuation time, budget, and shelter utilisation, enabling better resource allocation and reducing human suffering during disasters. Xiaochen highlighted the critical role of OR in enhancing disaster preparedness and response efforts.

Transitioning from disaster relief to healthcare planning, Ruth Kelly, Chief Analyst at the National Audit Office (NAO), shared insights into auditing the modelling behind the NHS's Long-Term Workforce Plan. Ruth emphasised the importance of robust design, documentation, uncertainty management, and communication in ensuring the reliability of critical models. By addressing challenges like long training horizons for healthcare professionals, Ruth mentioned the need for flexible planning to adapt to evolving healthcare needs. Listening to Ruth's talk left us with the idea that the external scrutiny and robust documentation serves as a reminder of the collaborative and transparent approach needed to drive impactful and sustainable change in healthcare and beyond.

Shraddha Ghatkar, Research Associate at the University of Sheffield, continued the discussion by presenting her work on the SIPHER project, focusing on addressing health inequalities through economic modelling and decision support tools. Shraddha's research, which integrates systems mapping and multi-objective optimisation, aims to maximise life expectancy, minimise inequalities, and reduce intervention costs. By emphasising the readiness of their decision support tool for policy making, Shraddha highlighted the potential for analytics to drive informed policy decisions.

Jasbir Lally, a Data Scientist at the Bank of England, shared her experiences transitioning from technical roles to a non-technical position focused on data and analytics strategy. Jasbir's reflections on the challenges and opportunities of her new role underscored the importance of leveraging technical expertise to drive organisational change. By advocating for necessary changes and building a knowledgeable network, Jasbir emphasised the value of integrating technical insights with strategic decision-making.

Concluding the event, Dilek Önkal, Professor of Business Information Systems and Analytics at Newcastle Business School, discussed her research on strengthening human systems integration in forecasting and predictive analytics. Dilek's work, spanning various domains including business, health, and security, emphasises the importance of trust and human judgement in model-based forecasts. By highlighting the role of scenario forecasting in enhancing trust and decision-making, Dilek provided valuable insights into the critical intersection of human insights and analytical models. Dilek's insights about the critical role of trust and human judgement in forecasting and decision-making beautifully complement Jasmine Ali's experiences in non-technical roles. Jasmine emphasised the importance of understanding business processes and leveraging technical knowledge to improve decision-making. In a similar perspective, Dilek's research highlights the necessity of trust and the integration of human insights to boost the effectiveness of analytical models. Together, they showed us the value of combining technical expertise with a broader strategic perspective to drive better outcomes in complex systems. Their stories illustrate how blending human intuition with technical skills can lead to more informed and impactful decisions.

Listening to these presentations is always refreshing, broadening our awareness and familiarity with the diverse areas of OR, and highly motivating to see how women in OR are making a difference. It serves as a friendly reminder of the value of being part of such a community, as it enhances our understanding and appreciation of the field.