



Journal of Smart Tourism

ISSN: 2765-2157 (Print) 2765-7272 (Online) Journal homepage: <http://strc.khu.ac.kr/>



TechTalk Interview: The Era of AI for Hospitality and Tourism in Academia: Ulrike Gretzel, Sara Dolnicar, Jame Petrick, Rainer Alt, Zheng Xiang, Bernard Jansen, Chulmo Koo

Taehyeon Um^a and Chulmo Koo^b

^a Research Professor, Smart Tourism Research Center, Kyung Hee University, Seoul, Republic of Korea

^b Professor, Smart Tourism Education Platform (STEP), College of Hotel and Tourism Management, Kyung Hee University, Seoul, Republic of Korea

The screenshot shows a Zoom meeting grid with the following participants:

- Moderator:** Prof. Ulrike Gretzel, Univ. of Southern, USA, Journal of Smart Tourism, Editor-in-Chief.
- Discussants:**
 - Prof. Sara Dolnicar, Univ. of Queensland, Australia, Annals of Tourism Research, Editor-in-Chief.
 - Prof. James F. Petrick, Texas A&M University, Journal of Travel Research, Editor-in-Chief.
 - Prof. Rainer Alt, Univ. of Leipzig, Germany, Electronic Markets, Editor-in-Chief.
 - Prof. Zheng Xiang, Virginia Polytech Institute and State Univ., USA, Journal of Information Technology and Tourism, Editor-in-Chief.
 - Prof. Bernard Jansen, Univ. Hamad Bin Khalifa, Qatar, Information Processing and Management, Editor-in-Chief.
 - Prof. Chulmo Koo, Kyung Hee University, Journal of Smart Tourism, Editor-in-Chief.

Academic Journal Editor's Panel Discussion Participants

- Moderator, Professor Ulrike Gretzel (Editor-in-Chief, Journal of Smart Tourism)
- Professor Sara Dolnicar (Editor-in-Chief, Annals of Tourism Research)
- Professor James F. Petrick (Editor-in-Chief, Journal of Travel

Research)

- Professor Rainer Alt (Editor-in-Chief, Electronic Markets)
- Professor Zheng Xiang (Editor-in-Chief, Journal of Information Technology and Tourism)
- Professor Bernard J. Jansen (Editor-in-Chief, Information Processing and Management)
- Professor Chulmo Koo (Editor-in-Chief, Journal of Smart Tourism)

*Corresponding author:

Chulmo Koo, College of Hotel and Tourism Management, Kyung Hee University, Seoul, Republic of Korea

E-mail address: helmetgu@khu.ac.kr

Received 14 October 2024; Received in revised form 24 October 2024; Accepted 11 November 2024

1. Panel discussion

Panel discussion for the era of artificial intelligence (AI) for hospitality and tourism in academia is held at the 2nd World Conference on Smart Tourism (WCST)@Seoul, July 9, 2024. Journal editors discussed how AI and research must be positioned in academia. Academic research is undergoing significant transformation with the rapid advancement of AI. Beyond the field of AI itself, discussions about the potential applications of AI in research are beginning to gain massive attention. Redefining the roles of human researchers with AI is essential in light of the growing number of ethical concerns raised by AI-raised problems. In addition, this is a great time to discuss potential issues of AI and researchers working together. Journal editors, who hold the primary responsibility for their publications, must decide to sustain the integrity of academic research for knowledge creation and dissemination of analytical methods; thus, journals should establish clear guidelines for the ethical and responsible use of AI in research.

2. Attitude toward AI

2.1 (Moderator) Professor Ulrike Gretzel

What is your overall attitude toward AI use in research? Are you AI positive? Are you an AI skeptic? Where do you maybe see the major pros and cons? We asked the Annals of Tourism Research's editor, Professor Dolnicar, would you like to comment on that?

2.2 Professor Sara Dolnicar

Honestly, I'm neutral towards it. I just don't understand the big deal is all about. AI as a research tool, which is no different from any other tool we have used in the past, and AI for other purposes. When I was studying psychology in Vienna, my professor forced me to run a factor analysis by hand. I'm grateful I don't have to do that anymore- now there's software for it. As a language enhancement tool, it has great potential to improve communication. Can it be misused? Well, absolutely. Just like anything else. The key is to focus on positives AI offers while protecting ourselves from potential mistakes, like the issue of hallucinations we heard about earlier. If we're going to use these tools, the priority should be ensuring we use them responsibly.

2.3 Professor Ulrike Gretzel

Professor Zheng Xiang, What's your stance on AI?

2.4 Professor Zheng Xiang

It's a pleasure to have the opportunity to speak with everyone. I think I'm on the positive side of AI. I agree with Professor Dolnicar-- AI can be seen as a new tool, or even a new toy. I assume that when we talk about AI, we mean the latest generation of generative AI, which includes different types of systems capable of using large datasets to generate new content. That's probably what we're referring to in a narrow sense. But AI has been around for decades, starting with expert systems, recommender systems, and neural networks developed by computer scientists. We've been using AI all along. So, as a tool, AI isn't exactly new. But as it evolves, we need to understand it better, set boundaries, and address the various issues it brings. That's my view on AI in research.

2.5 Professor Ulrike Gretzel

Professor Rainer Alt. Could you share your general perspective on AI in research?

2.6 Professor Rainer Alt

I share the views of the two previous speakers and also believe that generative AI is an excellent tool that we can and should use. However, as editors and reviewers, it's challenging to assess the extent to which these tools have been used and for what purpose. That's why I think authors should clearly declare how they've used AI and take full responsibility for their submissions. Determining whether something is AI-generated is difficult -it tests our intuition as academics. We need to take a close look at the narrative being presented, ensuring that all parts of the manuscripts fit together and that the overall contribution is clear. In my view, higher expectations should come with the use of more advanced tools.

2.7 Professor Ulrike Gretzel

Would you like to share your opinion on AI in research with us? Professor Bernard J. Jansen.

2.8 Professor Bernard J. Jansen

I'm the editor of Information Processing and Management, an applied computational journal. I'm very positive about AI. I believe that as a researcher, you need to use AI, especially for data analysis and writing, or you will risk being outperformed. I use it myself and see it as a valuable tool. Regarding the editorial process, we're in a transitional phase. Many major publishers, like Elsevier, are currently requiring disclosures about the use of generative AI. I think this is a temporary measure. For example, tools like Grammarly can generate sentences that I wouldn't write myself, but I don't need to disclose that, nor do I need to disclose copy editors. So, while we're navigating this transition with generative AI and writing, many publishers still require disclosures. In the future, this will disappear, and we make look back on this period of disclosures as a quaint period. Overall, though, I remain positive about the potential of AI.

2.9 Professor James Petrick

I'm an eternal optimist, so I feel very positive about the future of AI. I like to believe that we will use the tools we have for good rather than evil and want to trust people that people will use it responsibly. My main concern right now is about the generation of data. It's not so much about people using AI for writing or creating problem statements. As long as there's complete transparency about its use, it can be a powerful and amazing tool. However, as an editor, I worry that entire papers, or sections of manuscripts could be fabricated. That's a little bit scary. Yet, in the worst-case scenario, someone might get credit for work they didn't actually do. Unlike in critical fields like brain surgery, where mistakes could have severe consequences. It's going to evolve; and we will all need to adapt to using it as we move forward. That's all I have for now.

2.10 Professor Chulmo Koo

In terms of AI, of course, I am positive about it. In Korea, as a second-language speaker, we face real language limitations, but AI can help enhance our creativity and improve manuscript writing. AI

helps us transcend our original limitations and present ideas on a more global scale. This is a significant benefit of AI advancement.

3. Examples of a Recent Publication of AI

3.1 Professor Ulrike Gretzel

Would any of you be willing to share a recent publication from your journals that exemplifies how AI is being researched or used effectively? It would be helpful to see some concrete examples of AI applications in research.

3.2 Professor James Petrick

Yes. We have a recent online-first publication that might interest you. It examines how chatbots can nudge people towards more sustainable practices. The paper, authored by Gilang Maulana Majid, Iis Tussyadiah at University of Surrey, and Yoo Ri Kim at University of Central Florida, uses nudging theory in a qualitative study to better understand the role of AI. It was published online first in *Journal of Travel Research*. It is a great example of how AI is being researched and applied in innovative ways.

3.3 Professor Sara Dolnicar

We are seeing a routine use of large language models in various research methodologies. A recent example I remember involved using AI to design graphics for experimental stimuli, eliminating the need to hire a designer. This was done with clear disclosure about how AI was used. Another intriguing development is the use of synthetic panels. We have received a submission on this topic, and it could be a game changer. By leveraging large language models to simulate responses for manipulation checks, researchers could simplify, speed up, and reduce the cost of their experiments.

However, I also notice a lot of undisclosed using of language models like ChatGPT in submissions. It's open quite evident due to the flowery language that deviated from the dry tone typical of scientific reports. This can be amusing, especially when non-native speakers overuse these models and end up with text that read more like poetry than scientific writing. In scientific writing, terms have specific meanings, and overly flowery language can sometimes detract from clarity. So, while large language models offer significant advantages, they also come with challenges. Identifying the use of these models can be easier for experienced editors and researchers, but it might be more difficult for those who are new or have less language proficiency.

3.4 Professor Zheng Xiang

That's a fascinating example! Using ChatGPT to simulate managerial responses to hotel reviews and then comparing those AI-generated responses to actual human-generated content is a compelling way to explore AI's capabilities. It sounds like a valuable study to assess whether AI is ready to replace human input in certain contexts. It's interesting to see how diverse the applications of large language models can be. As you mentioned, this is just one example of many potential uses. I am sure we will be seeing a lot more innovative applications of AI in research in the near future.

3.5 Professor Ulrike Gretzel

Good. Professor Chulmo Koo, any examples from *Smart Tourism*?

3.6 Professor Chulmo Koo

The *Journal of Smart Tourism* is indeed in an exciting position as it navigates this paradigm shift. Being a newly launched journal offers a unique opportunity to shape the field with fresh ideas and perspectives. As you work to catch up with established journals, focusing on collecting high-quality manuscripts from renowned professors can help set a strong foundation and guide the journal into a new era. This approach not only positions the journal as a leader in the evolving landscape of smart tourism but also provides valuable direction for authors and audiences. It's a great strategy to leverage the current shift in the field to make a significant impact.

3.7 Professor Rainer Alt

Electronic Markets has indeed established a significant legacy in publishing research on AI, including recommender systems, which have long been a focus in market and platform systems. It is noteworthy that the number of papers related to AI has surged, reflecting the growing interest and importance of the field. Two of the most downloaded articles from *Electronic Markets* highlight this trend. The first is a 2021 article on machine learning and deep learning, which has become the most downloaded paper in the journal's history. The second is a 2023 article on generative AI, which has also garnered substantial downloads and citations. These publications underscore the demand for fundamental research into AI. Interestingly, while there were no submissions on large language models in 2022, the topic has seen a significant increase in submissions in 2023 and 2024. As an editor, it's essential to attract and position ourselves in emerging topics like these while maintaining rigorous desk-review and review processes. Identifying and managing papers created automatically that meet minimal quality standards has clearly become a challenge and has increased the burden for reviewers to ensure the integrity and value of published research.

3.8 Professor Bernard J. Jansen

For *Information Processing and Management (IPM)*, it's become essential for nearly every paper to address large language models or generative AI in some capacity. Authors either use these models as a baseline or state-of-the-art approach, or they explain why they didn't incorporate them. This has effectively become a desk-check criterion. Large language models have permeated almost every research domain, from data generation and labeling to clustering and qualitative analysis. As a result, it's quite challenging to find a paper in IPM from the past year that doesn't touch on these models in some way. The integration of these technologies has indeed been disruptive and transformative, reflecting their growing impact across various fields of research.

4. Idea Generation and Theory by AI

4.1 Professor Ulrike Gretzel

We've heard many examples of AI being used for data collection, analysis, and publication. But how could AI be utilized in the earlier stages of research, such as idea generation or engaging with theory?

4.2 Professor Sara Dolnicar

Absolutely, it's interesting to consider how AI can be used for idea generation and engaging with theory. While large language

models may not replace the creativity and originality of human ideas, they can provide a different approach. For example, they can generate multiple ideas, where some may be valuable even if others are not as strong. It's similar to how AI can be used for language editing—by interacting with the model, you might discover innovative ideas, much like brainstorming with humans.

You make a crucial point about differentiating between various aspects of AI. While technologies like clustering and machine learning have been around for decades, it's the advent of large language models that's truly disruptive and shifting paradigms. The impact of these models is significant and different from previous AI technologies. Regarding the editorial perspective, I completely agree. The novelty of large language models doesn't automatically guarantee the quality or significance of a paper. Just as with past trends, like Uber or Airbnb, there's a risk of a rush to publish on a "sexy" topic without substantial contributions. As editors, it's important to maintain high standards and ensure that papers on large language models offer genuine insights or advancements beyond what's already been published. Quality should always be prioritized, even with trending topics.

4.3 Professor Bernard J. Jansen

Absolutely, large language models can be incredibly effective for tackling the blank-screen problem. They can generate initial hypotheses and help structure studies, significantly speeding up the early stages of research. While not all generated ideas will be perfect or even useful, quickly getting started and finding some genuinely good ideas is a significant advantage. This can make the research process more efficient and potentially lead to valuable insights that might not have emerged as quickly otherwise.

4.4 Professor Chulmo Koo

That's a valuable observation. With AI aiding in idea generation and operational details, it's indeed crucial for authors to focus on strengthening the theoretical framework and providing a robust explanation of their results. Academic papers, especially in top-tier journals, often need to demonstrate not just innovative applications or methodologies but also a solid theoretical underpinning and meaningful contributions to the field. James Petrick and Sara Dolnicar, what are your thoughts on this emphasis on theoretical rigor in the context of AI-driven research? How do you see the balance between AI-generated ideas and the need for strong theoretical foundations in manuscript submissions?

4.5 Professor James Petrick

That's a great point. Each journal indeed has its own focus and expectations. For journals like yours, with a more practical orientation, theory may not always be the primary emphasis, but it still adds value. The key is finding the right fit for each manuscript based on its content and contribution to the field. AI can be a powerful tool for generating ideas and conducting practical research, but a strong theoretical foundation can significantly enhance a paper's quality and impact. As you mentioned, having a conceptual grounding will improve the overall strength of a submission, even if it's primarily practical in nature.

4.6 Professor Sara Dolnicar

That's a great perspective. Journals like *Annals* and *JTR* offer flexibility in accepting both theoretical and methodological

contributions, which can be advantageous for incorporating AI and large language models into research. It's true that the shift towards high-citation topics can sometimes lead to rushed or lower-quality submissions. Ensuring that work is thorough and well-presented remains crucial, regardless of the current trends. It's important for researchers to maintain high standards and provide meaningful contributions to the field.

4.7 Professor Zheng Xiang

That's a valuable insight into a journal's approach. Focusing on the intellectual and conceptual significance of research, rather than just theory or citations, provides a unique angle on how technology intersects with travel, tourism, and hospitality. It's great to see that our journals value meaningful questions and intellectual contributions, which can lead to impactful and relevant research.

4.8 Professor Rainer Alt

Our previous discussion emphasized that AI should be seen as a tool rather than a substitute for intellectual engagement. We cannot delegate the academic or intellectual aspects of our work to external sources; human insight and creativity remain irreplaceable. For instance, when we once asked ChatGPT about the appropriate venue for submitting our research paper, its suggestions did not lead to any tangible progress or success. This reinforces the idea that relying on AI for such decisions might not be effective. While querying AI about publication venues or research subjects could stimulate creativity, it should not replace thoughtful consideration and strategic planning. Having a clear, innovative concept is essential before leveraging AI as a tool. Ultimately, our goal is to produce and sustain intelligent, creative, and impactful work through our scientific publications.

5. AI Policy in Journals

5.1 Professor Ulrike Gretzel

I have a more concrete question regarding AI policies. Does your journal have a specific policy on the use of AI, such as ChatGPT, in the research and publication process? If so, could you detail what it entails? Additionally, there was a discussion about disclosure; are there specific rules or guidelines regarding the use of AI tools like ChatGPT in your submissions?

5.2 Professor James Petrick

Sage's policy is quite broad and focuses mainly on transparency rather than specific guidelines. It's good to know that your journal maintains a flexible approach, valuing transparency and the effective use of AI. If you're considering implementing more detailed guidelines or if there are any concerns about AI use, it might be worth discussing how you can further clarify and communicate the expectations to authors.

5.3 Professor Zheng Xiang

JITT is published by Springer Nature. It's certainly challenging when policies are broad and depend heavily on author honesty. As AI technology evolves, it may be worthwhile to periodically review and update guidelines to address emerging issues and enhance clarity. In the interim, promoting a culture of transparency and integrity among authors is essential. If you observe specific patterns

or issues, it could be an opportunity to refine your approach or offer additional guidance

5.4 Professor Sara Dolnicar

Elsevier's approach is quite clear. Firstly, disclosure is mandatory. Secondly, large language models cannot be listed as authors, and there's a good reason for this. One of the key criteria for authorship is the ability to take full intellectual responsibility for the work, which large language models cannot do. These guidelines seem clear to me, and I don't object to them. Overall, I think this is a reasonable way forward.

5.5 Professor Rainer Alt

Yes, we are also a Springer journal, so we follow the same generic guidelines. On one hand, we need clear guidelines for authors. On the other hand, we should also establish guidelines for reviewers to prevent them from uploading manuscripts to tools like ChatGPT. Ideally, we would have some form of plagiarism or generative-AI detection tool, but as we all know, such technology is still somewhat futuristic.

5.6 Professor Chulmo Koo

In the early days of ChatGPT, around January 2022, the technology was quite shocking and surprising. I remember searching for my journal title using ChatGPT and surprisingly adopting the keywords it recommended. These days, it seems that ChatGPT-recommended keywords are frequently appearing in journal titles. Initially, this was quite sensational, but now it appears that many authors are copying and pasting from ChatGPT. I'm concerned that this could become a problem for journal articles in the future. What are your thoughts on this issue?

5.7 (Moderator) Professor Ulrike Gretzel

It's a good point that AI's influence extends beyond idea generation to areas like title and keyword creation. It will be interesting to see how policies adapt to these challenges. Asking Professor Bernard J. Jansen for his insights on the policy and specific issues like those you mentioned should provide valuable perspectives for addressing these concerns.

5.8 Professor Bernard J. Jansen

Yes, regarding the policy, IPM is an Elsevier journal, and as Sara Dolnicar mentioned, I believe the policy is quite clear. At present, authors are required to disclose any use of ChatGPT in the writing process. Additionally, large language models, such as ChatGPT, are not permitted to be listed as authors. The policy is explicit on this matter. However, we are in a transitional period, and I anticipate that the requirement for disclosure in writing will soon become obsolete. As an editor, I assume that nearly all submissions involve the use of large language models in some capacity, whether this is disclosed or not. This also extends to reviewers; increasingly, I believe reviewers are using tools like Co-pilot, which can operate in private mode, thus avoiding the disclosure of any input. I expect that reviewers are already utilizing such tools, and, in fact, before submitting a paper, I personally upload it to Co-pilot to review my own work. This is because I expect that reviewers will immediately do the same. By doing so, I can preemptively address potential issues. Moreover, I have found that it occasionally offers valuable suggestions for

improving the manuscript. I use a specific prompt to simulate this review process effectively. In summary, I am working under the assumption that now, or in the very near future, all submissions will incorporate large language models in some form. This outlook shapes my approach to both submissions and reviews.

5.9 Professor Sara Dolnicar

As mentioned earlier, this issue presents a significant challenge for the grant funding review system, although it is less problematic for journals. In Australia, we have encountered a serious issue where grant reviewers have uploaded confidential grant applications to large language models. This raises considerable concerns, particularly when intellectual property is involved. Such property can have substantial financial value, both if the grant is funded or even if it remains unfunded, as it may still be commercially viable. The fact that this sensitive information is being shared with large language models poses a significant risk. I believe this represents a major problem moving forward.

5.10 Professor Ulrike Gretzel

I really like that idea—I'm going to start using Copilot to review my papers immediately; it's a brilliant suggestion. Hopefully, you'll share your specific prompt with us at some point.

5.11 Professor Bernard J. Jansen

It's actually very useful, Sara Dolnicar. I believe many reviewers and researchers are already using it, and it provides a valuable first step in identifying and addressing issues that large language models might detect.

5.12 (Moderator) Professor Ulrike Gretzel

Does anyone else have thoughts or examples of inappropriate use of these tools, where, as editors, you would want both reviewers and authors to understand that such practices are unacceptable and should be avoided?

5.13 Professor James Petrick

Sage has a policy where, although not stated explicitly, that large language models should not be used for reviews. At this point, they strongly discourage such utilization as it puts confidential information into the public domain. If, in the future, AI can be used to safely advance science, journals will need to consider its use.

5.14 Professor Chulmo Koo

As an author, and as a non-native English speaker, I find that using ChatGPT can be very helpful for refining the language in a manuscript. By "refining," I specifically mean improving the quality of the English. The process is similar for reviewers. When I review a manuscript, I first draft my comments quickly and informally. Then, I input these review notes into ChatGPT, which assists in enhancing the clarity and fluency of my written feedback. This is particularly beneficial for reviewers who may face language challenges. In my opinion, utilizing such tools has become an essential part of the academic process.

5.15 Professor Ulrike Gretzel

I would like to follow up on that question: Does the use of these tools change our expectations regarding the quality of research? Specifically, in terms of methodology, data analysis, presentation, language, and writing? Any thoughts on this? Professor Rainer Alt, I noticed you nodding.

5.16 Professor Rainer Alt

Yes, I believe it certainly should. With the availability of more advanced tools, we should also expect more sophisticated results. If we don't see an improvement in quality, what are we improving? Are we simply increasing quantity—producing more papers at a lower standard? Perhaps, but that should not be the objective. Our focus must be on maximizing quality. My hope and expectation is that research will be conducted more rigorously and that the narratives will improve, rather than decline.

5.17 Professor Zheng Xiang

I don't believe we should necessarily expect more. Rather, if the tool is used effectively, the overall quality and quantity of papers will naturally improve. It's a logical outcome, isn't it? Therefore, as editors, I don't think we need to actively seek out better papers; I believe better papers will emerge on their own as a result of this process.

5.18 Professor Sara Dolnicar

To return to the original question, as a non-native speaker myself, I fully understand the challenges, particularly when translating from German to English. In German, long and complex sentences are often seen as more sophisticated, so you really have to unlearn that when writing in English. However, I believe language is so integral to scientific writing that it is quite risky to assume that a large language model can handle it with complete accuracy. This serves as a warning.

You would be surprised how often I encounter this issue. When I work on a manuscript with my students, I insist that they sit beside me as we go through the text together. While they might prefer to receive Track Changes and simply "Accept All," I find it crucial for them to be part of the process. This helps them learn how to craft a narrative. You would not believe how frequently I consult a dictionary during these sessions—probably ten times per session! Even though I or my students might use a term, I always verify its precise meaning to ensure it is correct.

So, while large language models can be useful, they do not absolve authors from the responsibility of ensuring that the terminology in their final manuscript is accurate. It's a significant risk to rely solely on a model, as a well-phrased sentence doesn't necessarily convey the scientific meaning you intend.

5.19 Professor Zheng Xiang

Briefly, I'd like to add a comment. Similar to what Sara Dolnicar mentioned, I believe that as editors, we should now hold higher expectations than before. We must pay closer attention to the content of manuscripts, given the increasing role of AI in their creation. We are aware that AI relies on vast datasets, but the data used to generate content may not always be up-to-date, and the way AI produces content is not always grounded in factual information.

Therefore, we must be particularly vigilant about what is presented in these manuscripts.

5.20 Professor James Petrick

I concur with Sara Dolnicar; it is essential to ensure that technology enhances our intellectual capabilities as well. As machine learning technology improves, our role as educators will remain crucial. We must focus on how we can help young writers, future professors, and faculty members refine their skills. The advancement of technology alone does not equate to improved proficiency in academic writing. Therefore, we need to hold our students and the authors whose papers we are editing to higher standards. As these tools become more advanced, we should expect improvements in both the process and the outputs. However, the reality is that we are currently seeing an increase in poorly written papers, often due to accelerated writing processes. It is troubling to see multiple authors contributing to subpar manuscripts—how can seven collaborators fail to develop a coherent problem statement, hypotheses, and a well-structured manuscript? Thus, it is imperative that we continue to improve our own skills and be cautious about over-relying on tools and co-authors for editing and writing.

5.21 Professor Bernard J. Jansen

There are three key points to consider. Firstly, the issue of language proficiency has always been a challenge. Large language models have partially addressed this concern. Given that many authors write in a second language and that readers often engage with texts in their second language, some leniency regarding language quality is warranted. However, the use of large language models has significantly improved this situation, to the extent that I, as a native English speaker, no longer find it necessary to have my top papers professionally copy-edited. These models can enhance writing to a level comparable to high-quality English standards, which has been a positive development. On a positive note, large language models have also been beneficial in the research domain. For instance, I have employed a technique known as retrieval-augmented generation (RAG) to enhance our research capabilities. By uploading our research papers into a system, we can now query these documents to obtain specific information. This has been particularly useful for generating definitions and insights based on our prior work. Overall, I am very optimistic about the potential of large language models to facilitate the production of high-quality research that is accessible and understandable to a broad audience.

5.22 (Moderator) Professor Ulrike Gretzel

As we approach the end of our session, I would like to offer each of you the opportunity to provide a concluding statement or any final thoughts you would like to share with our audience. Professor Chulmo Koo, would you like to start?

5.23 Professor Chulmo Koo

I would like to pose a critical question to all the editors present. You mentioned the intersection of information technology and tourism, highlighting that journals like the *Journal of Information Technology (JIT)* are positioned as interdisciplinary. In contrast, *Annals of Tourism Research (ATR)* and *Journal of Travel Research (JTR)* are more focused on the traditional field of tourism, while *Electronic Markets* is an applied journal. For instance, *Electronic Markets* provided an opportunity to explore "smart tourism" in 2015,

which has since evolved—though not yet mainstream, it remains significant. Given that *IPM* involves computer science, and considering our varied positions regarding AI within our respective journals, I am interested in hearing your perspectives. How do you view the impact of this AI era on your journal and its academic focus?

5.24 Professor James Petrick

This question relates to the first topic we addressed today. Our stance is that we aim for the improvement of scientific quality and the enhancement of manuscripts. We seek innovation in research, and AI will undoubtedly play a role in this process in the future. However, we also acknowledge the importance of other factors. Our primary goal is to seek the best science available, and while AI could contribute to this objective, it is currently best-used as a tool for advancing knowledge and not for writing manuscripts.

5.25 Professor Ulrike Gretzel

Professor Bernard J. Jansen, do you have any concluding remarks, either in response to Professor Chulmo Koo's question or regarding the future direction of your journal? What aspects are most important to you?

5.26 Professor Bernard J. Jansen

From an applied technical perspective, *IPM* does include a considerable number of tourism-related articles, particularly in the area of knowledge graph analysis. It is challenging to identify a domain where large language models do not offer assistance, whether in generating ideas, developing methods, or enhancing various stages of the process—from data analysis and annotation to writing. My approach is to operate under the assumption that, sooner or later, every author will have utilized a large language model in some capacity. This is a reality we must accept, if it has not already become one.

5.27 Professor Rainer Alt

I would like to address two points. First, the integration of AI within the field of electronic markets. AI is poised to become an intrinsic component of most research papers in this area. With applications ranging from algorithms used on platforms and AI as a distinct platform, to networking among businesses and functionalities such as optimization and cluster identification, the potential for AI to enhance various aspects of this field is vast. I anticipate that AI's role will only expand, and I look forward to receiving many high-quality papers on these topics. Second, I hope that AI will also enhance the review processes. Currently, the systems we utilize for editorial purposes are relatively rudimentary and lack advanced AI capabilities. For instance, we could benefit from AI systems that accurately identify suitable reviewers based on their expertise and availability, rather than sending out numerous invitations to reviewers who may not be interested or available. Given the revenue publishers generate from our work, I believe there is a strong case for investing in AI to better support journal editors in these tasks.

5.28 Professor Zheng Xiang

I concur with the points raised by my colleagues. I would like to add one additional thought. While we have discussed AI primarily as a tool for knowledge creation, I believe that AI should also be

developed to assist editors, who act as the gatekeepers in the publishing process. As a community, we should advocate for the development of AI-based tools that can help us manage editorial processes more efficiently and effectively. For instance, *IPM* receives approximately 4,000 manuscripts annually, as mentioned earlier. Implementing AI tools could significantly streamline the management of such a large volume of submissions.

5.29 Professor Zheng Xiang

Although our journal is smaller in scale, we still handle over 600 submissions annually. One of the most tedious aspects of our editorial work is reviewing these submissions and determining which ones to desk-reject—often 80% to 90%. It would be beneficial to have straightforward tools to assist with this process. Publishers should consider investing in AI-driven tools that can facilitate this task. This is a suggestion worth considering for improving our efficiency.

5.30 Professor Sara Dolnicar

I believe we have covered a significant range of topics. To summarize, AI encompasses a broad spectrum of technologies, with large language models representing just one end of this spectrum. My colleagues in Engineering and I often debate the implications of these models. However, it is remarkable how frequently they present new advancements—transformative developments rather than incremental changes. AI includes a variety of tools, some of which are longstanding and well-established, while others are rapidly evolving. As with any tool, our goal should be to maximize its benefits while minimizing associated risks.

5.31 (Moderator) Professor Ulrike Gretzel

Wonderful! Well, it was a real pleasure; this was really a great panel. Thank you so much for getting up very early or staying up very late for us. Thank you for organizing this panel; I think it was very insightful. Have a wonderful rest of the conference, everyone.

Declaration of competing interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Acknowledgements

None

ORCID iD

Taehyeon Um  <https://orcid.org/0000-0002-5313-1827>

Chulmo Koo  <https://orcid.org/0000-0002-9822-1279>

Author Biographies

Taehyeon Um is a Research Professor at the College of Hotel & Tourism Management at Kyung Hee University in Seoul, South Korea. He is a research member of Hospitality Analytics and Innovation Lab at the Conrad N. Hilton College of Global Hospitality Leadership at the University of Houston. His areas of expertise are digital transformation, smart tourism, innovative technologies, hospitality management, and big data and business analytics.

Chulmo Koo is a Professor of Smart Tourism Education Platform (STEP), College of Hotel and Tourism Management at Kyung Hee University, South Korea. Dr. Koo has a strong record of smart tourism research and scholarship with significant contributions to both instruction and service.