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## Should the Future of AIS Conferences be Hybrid?

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## Should the Future of AIS Conferences be Hybrid?

### Cover Page Footnote

This manuscript underwent editorial review. It was received 3/27/2023 and was with the authors for twelve months for two revisions. Cathy Urquhart served as Associate Editor.

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## Should the Future of AIS Conferences be Hybrid?

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### Abstract:

Academic conferences provide a needed opportunity for academic community members to come together and share ideas. COVID-19 forced AIS to host conferences remotely for two years. From that experience, we learned a few things about virtualizing our conference activities including the potential for virtual conferences to widen participation and membership. In this paper, we reflect on that learning through a lens informed by reviewing published work on conference hybridization. We also make recommendations for how future conference chairs can think about AIS conferences. Changing how our conferences are delivered is risky, but simply returning to the old normal is also risky. As an association studying IT, discovering and championing the role of technology in conference experiences would seem to be a risk worth taking.

**Keywords:** Academic Conferences, Hybridization, Virtual Attendance.

This manuscript underwent editorial review. It was received 3/27/2023 and was with the authors for twelve months for two revisions. Cathy Urquhart served as Associate Editor.

## 1 Introduction

Academic conferences provide a needed opportunity for members of the academic community to come together, share ideas and findings, solicit feedback, connect with colleagues, recruit, and establish a community identity (Leimester et al., 2021). COVID-19 forced many conference organizers to host virtual conferences. From that experience, AIS and many other academic communities learned about virtualizing our conference activities, and our members experienced this departure from the “normal”. As the pandemic becomes endemic, it is time to consider the future of our conferences and their delivery channel(s). In this article, we argue that the most appropriate way forward for AIS conferences is through embracing hybrid opportunities while maintaining flexibility for conference committees. By AIS conferences, we refer to the International Conference on Information Systems (ICIS) and the Americas Conference on Information Systems (AMCIS), which are fully supported within the financial and business operations of the central AIS Office. While our discussion is informed and constrained by this definition, we believe that the discussion will be relevant and interesting to the AIS world region conferences, namely the European Conference on Information Systems (ECIS) and the Pacific Asia Conference on Information Systems (PACIS), the AIS affiliated conferences and academic conferences more broadly.

We argue in this paper that future AIS conferences should not return to the previous wholly in-person format but instead include some form of hybridization (i.e., opportunities for virtual participation) for the following reasons: 1) flexible options for conference attendance benefit our members and recent years demonstrate that we have the capacity to offer flexibility, 2) increasing awareness of the environmental impacts of air travel and more emphasis on sustainability suggests that universities may begin (if they have not already started) to encourage faculty to engage more virtually with their academic communities and decrease travel, 3) members without the ability to travel to conferences have been given the opportunity to feel more included and shifting away from hybrid conferences risks alienating those members, and 4) there is the potential to grow our member base among faculty who cannot physically attend (e.g., from schools not providing conference support, scholars located in regions where academic visitors' visa availability is constrained, or where academic calendars conflict with the timing of a conference). While we delineate the reasons to include a form of hybridization into four categories, the impetus behind each reason often overlaps with another reason. For instance, there may be someone without the capacity to travel due to time or financial constraints (reason #3), who is also someone that would not join the AIS if we did not have a method to attend the conferences in a hybrid format (reason #4, inversely).

Following the COVID-19 pandemic, AIS hosted four different conference modalities in less than two years. A full-hybrid conference was provided for ICIS 2021 in Austin, a 100% virtual conference was provided for PACIS 2022, two forms of light-hybrid conferences were offered for AMCIS 2022 in Minneapolis and AMCIS 2023 in Panama City, and a 100% face-to-face conference was delivered by ICIS 2022 in Copenhagen. This degree of flexibility in conference modality is impressive. Our efforts to document key learnings are focused on providing valuable lessons and feedback on managing risks and providing solutions. We are hopeful such efforts will aid future conference leaders as they look for effective application of different modalities in support of members in ever-changing global conditions. While these variations were the result of a reaction to the conditions imposed by the troubled times of the COVID-19 pandemic, they helped realize the great innovation potential AIS has to provide new value propositions to its members, both existing and potential. Further, new schemas have been explored where the presence of large hotels and convention facilities does not play a limiting role when selecting sites based on alternative venues, like university facilities, and taking advantage of places where public transportation is robust and efficient. These alternatives may also permit considerable savings, allowing for changes in the cost structure and pricing method that have the potential to increase affordability and inclusion. There is evidence of such schemes being successfully adopted in the past, particularly at conferences in Europe. It remains to be explored if the definition of new business models, with customizable options for participation beyond the simple selection of online versus in-person attendance, can be properly identified and implemented. In any case, these models offer increased flexibility by not being tied to strict hotel blockings, minimum food consumption on site, and binding contracts many years in advance. Reacting to sudden environmental changes could also be made easier with fewer restrictions.

Additionally, the AIS conferences are characterized by a shared responsibility between the conference chairs and the AIS office to maintain a healthy financial viability. The ability of conference chairs to add valuable items above the normal to their conferences, in the form of better food, entertainment, or

scholarships, is greatly based on the amount of sponsorship funds they can raise. It has to be pointed out, however, that the inclusion aspect has gained greater importance in the past few years, resulting in the creation of new roles in the AIS leadership and having scholarship as an ever more common element of the conference budget, in some ways changing the sponsorship needs/uses. This welcome trend toward enabling inclusion plays a particularly important role for conference participants from the Global South, and more so when the conference takes place there. To illustrate this point, we should mention that an inclusion initiative was created to attract Latin American scholars and students to attend AMCIS in Cancun, Mexico, in 2019. This initiative, however, not only included allotting an amount in the conference budget for scholarships but also offered off-conference workshops to the local community and included completing academic projects that benefitted local groups in need. This initiative was based on AIS volunteers from any part of the world to increase the impact of the conference in the host city. This initiative was recreated for AMCIS in Panama City in 2023 with outstanding results and a record number of scholarships that allowed more than 70 people to attend in person or virtually. The beneficiaries came from all over the world. Of those, almost forty were from Latin America, and 29 were from Panama alone.

Multiple papers have been published as well as conversations and meetings devoted to the topic of conference hybridization. In the IS field, several recommendations were made regarding the Business & Information Systems Engineering (BISE) conference, including: the importance of determining which elements of a conference can be online versus face-to-face, recognizing the folly of designing hybrid conferences to mimic face-to-face, and matching the hybrid format to the needs of the conference and its organizer. Recent recommendations also include out-of-the-box thinking (i.e., regional face-to-face sub-meetings that support a national or international virtual meeting) (Kranz et al., 2022). Focusing on diversity, equity, and inclusion (especially in the Global South) other authors have emphasized the importance of hybrid choices as well as giving members a voice in those solutions (Marabelli et al., 2023). This paper is largely based on the collective contributions of two AIS taskforces as well as multiple AIS Council meetings and a Council survey as well as a few additions suggested by the editor.

Within AIS, an ad hoc task force on conference hybridization was formed by the AIS Vice President for Conferences, and a set of task force meetings were conducted in 2021 focused on what elements of future conferences should be face-to-face (F2F), virtual, or both. Outcomes from these meetings were reported to the AIS Council by the VP Conferences (who is a member of the AIS Council). Multiple AIS Council meetings focused on this topic and an additional ad hoc task force was convened in Spring 2022. Both task forces were comprised of a combination of past, present, and future conference chairs and program chairs for ICIS, AMCIS, PACIS, and ECIS (members of these task forces are either authors of this paper or are acknowledged in its footnotes). In addition, an AIS Council survey, as well as recommendations from AIS office experiences have been collected. Given the past pandemic experience, we are still developing an understanding of the motivation of participants to attend conferences in person versus virtually. Below (Table 1) is a summary of likely reasons generated by our task force. While this is unlikely to be an exhaustive list, especially as our community's experience with different modalities is still nascent, it provides a starting point for consolidating this experience. It is important to note that these are reasons for attending, not necessarily reasons for submitting a paper. Previous work suggests research and administrative roles for engagement with IS conferences (Avison et al., 2005) and presents reasons for submitting to a conference (ICIS specifically) including feedback, the conference reputation, and exposing one's research ideas to the IS community (Zhang & Niederman, 2017).

**Table 1. Reasons for Attending Conferences In-Person Versus Virtually**

<b>Participants' motivations to attend a conference in person</b>	<b>Participants' reasons for choosing to attend a conference virtually</b>
<i>Network</i> , meet new people, expand one's network, meet coauthors, socialize with friends <i>Engage</i> in an immersive academic experience and/or presenting a paper <i>Attend</i> paper sessions <i>Attend</i> panels/workshops/SIG meetings <i>Recruit</i> <i>Plan</i> to host (or promote) a future conference <i>Visit</i> an attractive and/or convenient destination	<i>Cost</i> (i.e., limited travel budget) or environmental concerns <i>Convenience</i> (e.g., having the flexibility to attend paper presentations from different parallel sessions) <i>Lack</i> of social comfort (e.g., introvert, feel unwelcome, etc.) <i>Unattractive/</i> difficult to reach destination <i>Difficulties</i> in obtaining a visa <i>Opportunity</i> to sample the conference experience with a smaller commitment <i>Other</i> commitments (e.g., work, family)

Interestingly, the IS community has been engaged in research in areas related to the virtualization/hybridization of conferences for decades. Pioneering studies on group support systems, virtual teams, and social media help us understand how media can support shared patterns of coordinated behavior among individuals working in technology-supported work teams (Dennis et al., 2008); how communication behaviors can shape the development of trust in virtual teams (Jarvenpaa & Leidner, 1999); and how social media affordances impact online knowledge conversation (Majchrzak et al., 2013). In addition, there is a large body of research on technology adoption in the field of information systems. The Unified Theory of Acceptance and Use of Technology (UTAUT) predicts how performance efficiency, effort efficiency, and social influence shape users' behavioral intention to use information technology (Venkatesh et al., 2003). Equipped with this rich understanding of technology-supported collaborative work and its adoption by users, we feel well-prepared to delve into the potential forms of future conferences that may be supported by collaboration technology.

This document consolidates insights from these earlier efforts and provides advice to future conference chairs for making decisions regarding the hybridization of our conferences. In this document, we offer some thoughts on what future hybrid conferences might look like, try to highlight the benefits, and offer some thoughts on managing and mitigating risks. Perceptions of these recommendations may vary, depending on a participant's access to funds, work context, family situation, personality, and values. In the following sections, we describe hybrid options, identify risks associated with those options, and discuss ideas for mitigating those risks.

## 2 What Have We Learned About Hybrid Options?

Multiple attempts have been made to answer this question. In fact, several papers have been published in the past two years (e.g., Kranz et al., 2022; Leimester et al., 2021). An ACM presidential task force produced a document detailing what they consider best practices for hybrid conferences, summarized below (ACM Presidential Task Force, 2020).

**Table 2. ACM Presidential Taskforce Recommendations**

<b>People</b>	Conference committees need to have members specifically focused on the platform(s) for delivering virtual components, an accessibility chair is also needed
<b>Technology choices</b>	The choice of platform(s) needs to balance a sense of presence, scalability, geographic reach, and simplicity
<b>Time zones (for synchronous content)</b>	There is a 1-hour time block where most of the world (except New Zealand) is awake at 2:30 pm GMT. Presenters can also present live at a time that is convenient for them, this can be recorded and made available more broadly.
<b>Sense of presence</b>	In-person attendees may seek intense interaction; however, virtual attendees may be better served by 2-3 hours per day and significant archival material
<b>Finances</b>	Do not under-value registration
<b>Fairness/inclusivity</b>	Virtual participants may need to watch/listen from home where bandwidth may not adequately handle live streaming. Think about including download options, audio only, and dial-in options.

Below we provide key learnings from AIS efforts to understand conference hybridization. These include: 1) recent data from AMCIS, 2) survey findings from an AIS Council survey, and 3) results from two previous AIS task forces, and 4) financial recommendations developed by the AIS office.

### 2.1 AMCIS Data

AMCIS has been hosted using various modalities in recent years. For comparative purposes, Table 3 summarizes the modality type, conference location, attendance levels, and other qualitative and quantitative results of the AMCIS conference from 2019 through 2023. Three modalities are reflected in Table 4 with 2019 as a "100% Face to Face (F2F)" conference, 2020 and 2021 hosted as "100% Virtual Conferences" and 2022 and 2023 hosted as "Light Hybrid Conferences" with only 14% and 16% virtual registrants, respectively. Virtual paper authors were required to register as in-person attendees. Hence, the virtual participants were a larger number.



The results indicate that the “100% Virtual” modality enabled a significantly larger number of attendees and from a larger volume and more diverse group of countries to be represented at the conference. The “100% Virtual” modality also resulted in a larger proportion of doctoral students in attendance at the conference and nearly twice as many workshops offered. The “100% Virtual” modality also resulted in a larger number of scholarships/grants to be issued to attend the conference. Many of these went to PhD students. It is worth noting that for 2020 and 2021, VCS registration gave access to AMCIS, ECIS, and PACIS. For those years, PhD students’ registration was waived. These “scholarships” are a bit different from other years.

From an attendee satisfaction survey perspective, the results are mixed. One mostly F2F conference (in 2019) and one “light-Hybrid” (in 2023) reveal very impressive attendee satisfaction results with an 85 out of 100 satisfaction level. Many survey comments favorably view *the ability to interact with colleagues face to face*, the conference location and venue, and the ability to mix work with a vacation destination. The comments from 2023, in particular, favored the ability to see long-time friends and network with colleagues once again, the lunches, the conference hotel, the social event, the entertainment, and the richness of face-to-face discussions and dialogue during the conference. Comments also included the novelty of being able to visit and ‘discover’ a new country, new food, and new culture. However, the 2023 conference introduced many hybrid components as well. Authors could decide a priori whether they would present in person or virtually. This decision resulted in 165 virtual submissions and 91 virtual presentations. Some portion of these authors may have opted to submit anyway (even if there was only an in-person option) but it is likely many would not have been able to be physically present.

**Table 3. Comparative Results of Varying Modalities in the America’s Conference on Information Systems (AMCIS)**

AMCIS Year	2019	2020	2021	2022	2023
Location	Cancun	VCS-AMCIS	VCS-AMCIS	Minneapolis	Panama
Modality	100% F2F	100% Virtual	100% Virtual	Light Hybrid 86% F2F	Light Hybrid 84% F2F <sup>(B)</sup>
Registrants <sup>(A)</sup>	850	1795	1214	719	814
% Doctoral Students Registered	30%	46%	45%	34%	29%
No. of Scholarship/Grants to Attendees	10	1084	42	6	55
No. Countries Represented	42	79	63	39	48
Conference Hosting Expenses (Avg. Per Registrant)	\$638	\$144	\$212	\$767	\$669
Attendee Satisfaction Survey Score Overall (Low 0~, High 100)	85	80	86	71	85
No. of Workshops Offered	18	32	40	14	19
Notes: <sup>(A)</sup> Registration amounts include total paid, scholarships, comps and exclude staff and guests meals <sup>(B)</sup> This also includes the Asynchronous papers presented via authors video only					

AMCIS 2021 was a “100% Virtual” conference and earned an exceptional 86 out of 100 attendee satisfaction score. Some of the highest-rated events from AMCIS 2021 included the Journal Editors Panel, the CIO Symposium, the Engaging Women in IS panel, the virtual Welcome Reception and Awards Session, and the effectiveness of presentations and the diversity of topics.

Many have asked about the distinguishing factors that made AMCIS 2021’s virtual conference so well-received by attendees. The answer is multi-faceted and open to interpretation. Our interpretation is this, it began with superb leadership by the Conference Chairs. The conference’s modality decision was made very early in the planning cycle and never wavered, unlike many other events during this time. The chairs and the entire conference committee fully embraced the modality across each component of the conference. Every planning meeting in the months leading up to the conference discussed possible approaches and options for making the event a better fit with the chosen modality.

The conference featured live synchronous awards ceremonies, panels, keynotes, welcome events, breaks, and social events. Many survey comments favored the virtual cultural tours of Montreal and Quebec as superb, informative, art, architecture, and just as though “we were there in-person.” The TREC sessions were organized around virtual round tables of topics with online voting capabilities, mentors, and collaborative feedback. A mobile app was utilized that allowed attendees to collaborate, post on social walls, access paper proceedings, view videos, and engage in P2P gaming and competitions. The mobile app was also used to announce the program schedule, to showcase the best papers, events, sponsors, and more. Informal talks and meet-ups were scheduled with Senior Scholars using the Remo platform. This list of highlights could go on, but collectively the Conference Chairs and the entire committee fully embraced the modality from the very start through fulfillment. This is in sharp contrast to other similar events during this era, that were haphazardly arranged or were tantamount to randomly scheduled Zoom meetings for authors to present papers<sup>1</sup>.

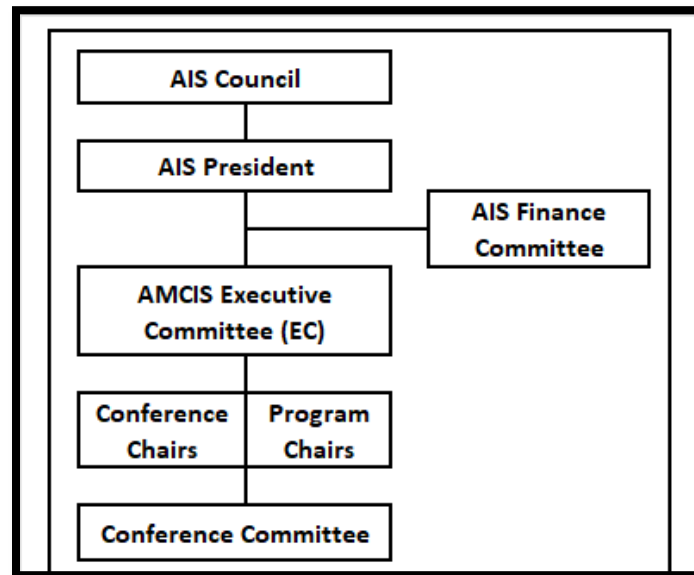


Figure 1. AMCIS Governance

## 2.2 Council Survey

In September 2021, AIS Council members were asked to complete a survey to collect information about experiences and opinions about hybrid conferences. The AIS Office conducted this survey because the continuation of some online features within our conferences felt somewhat inevitable. Overall, AIS Council members, consistent with published studies (i.e., Leimester et al., 2021; Kranz et al., 2022) believed that maintaining an online option would expand opportunities for members in more remote areas, with less university funding for travel, or provide an ability to participate for those who simply do not want to travel for many different reasons. Such enhanced access to our conferences would promote diversity, equity and inclusion (DEI), widen the scope of potential keynotes, and potentially encourage us to experiment with technological innovations at future conferences.

A survey of AIS Council members showed one element of our past VCS conferences to have overwhelming support – author videos. These came up in the strengths (i.e., provides rehearsability and reprocessibility), and many respondents offered additional comments in the final survey question. These included: creating a lasting version of a transient event, a great asset in AIS e-Library, and wider dissemination of the author’s work.

As an additional indicator of the value of the video, for the VCS 2021 we had 6,656 video streams and 1555 registered participants. As of April 2024, or three years after VCS 2021, the video streams have

<sup>1</sup>While there is no disputing the success of this fully virtual conference it is possible that the same efforts could be less successful now that face-to-face events are possible again.

grown to 26,603 streams. Overall, author videos continue to grow in popularity across the AIS eLibrary, as of April 2024 author videos have been streamed 230,860 times, making the average author video streamed 51 times (and growing). There are no advertisements, nor click-stream advertising of any kind permitted in the AIS e-Library. As videos are not restricted to registered participants, these figures suggest the videos provide wider exposure for authors' research (enhancing impact) and may provide greater opportunities for others to benefit from the research and conferences (enhancing global inclusiveness). Videos are certainly not restricted to online or even hybrid conferences, they are, however, valuable learning that took place during our forced online experience.

However, clear concerns also were identified in the survey. In Table 4, we provide a summary of the Council survey results with some thoughts on how these concerns might manifest as risks. Using a very broad set of risk categories – financial, member retention, and reputational risks. We considered how each risk category may impact financials, member retention, and AIS's reputation.

**Table 4. Summary of Risks Identified in AIS Council Survey**

<b>Concerns raised by Council members related to different conference modalities</b>	<b>Financial Risk</b>	<b>Member retention Risk</b>	<b>Reputational Risk</b>
New financial model: Do we understand the financial model of hybrid conferences well enough to navigate both our own cost structures and changes that could result within university budgets?	Some universities may see the virtual option as a cheaper way for faculty to participate. They may also select this option due to environmental/sustainability concerns.	Potentially two different classes of experiences can lead to loss of members	If we do not manage the hybrid model well, we may damage our reputation, especially because we are an IS group.
Loss of personal connections/ Reduced commitment/presence by members if attending virtually. Personal connections at conferences create a sense of community that helps members feel connected to AIS.  Poorer integration of newcomers. Initial experiences at our conferences serve as the member's view of AIS.	Reduction in future conference registrations and member renewals due to a poor experience. Poorer feelings of initial belonging for newcomers will likely reduce continued membership renewal.	Decrease in membership renewals or decrease in member participation resulting from a poor conference experience. Poorer feelings of initial belonging for newcomers will likely reduce engagement in the community.	Change in perceptions about in which community one feels a sense of belonging and potentially leading to more geographically based networks at the expense of the global community. Feel of an impersonal association. The reputation becomes one that is related to the past and not a current vibrant association.

### 2.3 Recommendations from the First Task Force

Recommendations resulting from the 2021 task force meetings mentioned above are summarized in Table 5. These meetings were held early in the COVID-19 and virtual conference timeline as a way to try to capture key learnings. These experienced conference chairs and program chairs endeavored to provide insight to future chairs about hybridization that could remain useful after the pandemic-related needs subsided. This set of recommendations is not meant to be a list of "must do's," but instead a recommended set of items to consider as one plans a conference.

**Table 5. 2021 Taskforce Recommendations on Conference Components**

<b>Component</b>	<b>Recommendation</b>
Paper Sessions (full papers and short papers)	<p>Giving the choice to the authors (after acceptance) to either present in person or from their remote location could be a technical nightmare. Decisions should be made at submission.</p> <p>Restricting full papers to in-person can drive in-person attendance; however, including asynchronous paper presentations (full or short papers) could grow participation (and AIS membership). Fundamental question, will virtual submissions cannibalize our in-person presentations? Chairs must consider these financial implications (i.e., registrations, room reservations, etc.)</p> <p>Program Chairs or Track chairs could selectively make videos available to drive interest in the conference papers (some papers may be recorded and when they are released; who can see them needs to be managed)</p>
Panels	<p>Think about offering access to panels only for non-participants (members or non-members) for some price (TBD) with a time embargo. This would be different from a virtual registration (which should include panels as well).</p> <p>Utilizing AIS funds for professional recording and editing services for a small set of conference events that have the potential to increase visibility is worth exploring.</p>
TREOs	<p>In person handled in round tables</p> <p>Online could be synchronous using the REMO platform</p> <p>Including asynchronous option could grow participation (and AIS membership), but authors should be asked at the time of submission</p>
Keynote	<p>Could host live, in person, and broadcast – or host purely virtual keynote speaker (synchronous or asynchronous).</p>
Doctoral Consortium	<p>Providing a virtual option can broaden participation from students in a wider set of schools with PhD programs who otherwise may not consider participating in the conference at all. Organizers may also consider having distinct virtual and in-person consortia so that each constituency is served appropriately. It may be useful to consider a different name for the virtual version</p>
Mid-Career	<p>Maximize ability to participate</p>
Early Career	<p>Maximize ability to participate</p>
Exhibits	<p>Tables plus REMO provides exhibitors maximum exposure</p>
Hallway conversations	<p>Conference chairs are encouraged to explore ways to use REMO and the conference app to create meetups. For example, you inbox someone and pick a time and table to meet at in Remo.</p>

## 2.4 Financial Guidelines

Learning in parallel to the conference and program chairs, the AIS office started developing an understanding of the financial risks associated with virtual and hybrid options. As a result, Figure 2 was initially provided to conference chairs to help frame their thinking about program elements.

Hybrid Delivery Options for Conference Chairs to Select		"Light Hybrid"	"Medium Hybrid"	"High Hybrid" / Austin
<b>DIGITAL CONTENT</b>				
1.0	Access to Proceedings	Included (Early Access)	Included (Early Access)	Included (Early Access)
2.0	Access to Event Hub Conf App	Included	Included	Included
3.0	Access to Author Videos	Included <sup>(2)</sup>	Included <sup>(2)</sup>	Included <sup>(2)</sup>
4.0	Access to Panel Recordings	Included <sup>(1)</sup>	Included <sup>(1)</sup>	Included <sup>(1)</sup>
5.0	Access to Keynote Recording	Included <sup>(1)</sup>	Included <sup>(1)</sup>	Included <sup>(1)</sup>
<b>LIVE STREAMING</b>				
6.0	Live - Streaming Panels	Not Included	Included <sup>(1)</sup>	Included <sup>(1)</sup>
7.0	Live - Streaming Workshops	Not Included <sup>(3)</sup>	Some Included <sup>(1)</sup>	Some Included <sup>(1)</sup>
8.0	Live - Streaming Paper Sessions	2 to 3 paper session rooms	4 to 5 paper session rooms	12 to 14 paper session rooms
<b>ESTIMATED RATES</b>				
9.0	Hybrid Registration Rates	\$175 / \$100	TBD (In-between both rates)	(F2F Rates) * (50%+)\$20
10.0	Hybrid Cost Estimates	\$35,000 to \$45,000	TBD (In-between both rates)	\$107,000 to \$225,000
13.0	Others	TBD	TBD	TBD

(1) If approved to record the panel by panelist

(2) If Program Chairs agree require it of Authors

(3) The workshop organizers will need to coordinate their own hybrid solution (if applicable)

**Figure 2. Hybrid Conference Options**

### 3 Findings from the Second Task Force: Evaluating Risks

From the meetings conducted by the second task force and informed by interactions in executive committees, council conversations, reporting from the first task force, and personal experiences leading our conferences, we identified potential risks to the hybridization of our conferences and present ways to potentially mitigate those risks.

#### 3.1 Financial Risk, Related Brand Risks

Conferences hosted by or in affiliation with AIS are often encouraged to produce financial surpluses to fund other non-revenue-generating aspects of the Association's mission<sup>2</sup>. Most conference organizers, including those employed by AIS, are very knowledgeable about how to manage the financial obligations of a conference to produce desired financial outcomes. This expertise was challenged during COVID-19 (especially when many online conferences were offered for free or with extremely low registration fees). As we think about hybrid offerings, there are financial implications. As the balance of in-person to virtual attendees shifts, the cost of those rooms in the hotel where presentations are hosted may go up (due to a failure to meet the room block requirements). Food and beverage minimums may also not be met. This forces the in-person portion of the conference to be charged more for the physical space. Further, technical requirements may be greater thus incurring more technology charges. Finally, real pressures to create low registration rates for virtual participants further erode any conference surplus.

In addition, factors such as external responses to modality changes also create risks for our brand. For instance, university administrators may expect faculty participants to avail of the virtual options thus saving airfare, hotel, food, and reduced carbon footprint. With reduced physical attendance, member perceptions of the virtual and hybrid modes must also be managed. For example, a perception that the

<sup>2</sup> Non-revenue producing aspects of the AIS mission could conceivably be paid for by other fund-raising efforts within AIS. However, AIS fund-raising efforts currently largely flow into conference budgets. As such, the outcome of such a change would mostly be a net zero for conference fundraisers.

conference does not provide meaningful experiences for virtual attendees can lead to less inclusive conditions and irate members who develop less loyalty to AIS. Additionally, perceptions that we have failed to appropriately harness technology in support of our conferences can erode member perceptions. Both perceptions can reduce membership and thus create risks for our reputation and brand. It is also worth noting if different AIS conferences follow different modalities and rules, authors and participants may be confused about which services to expect.

However, there are situations where virtual and hybrid conference models may be beneficial for AIS conferences. When conferences are held in countries that have visa restrictions and/or travel complexities, remote participation may be the only mode of participation for some attendees. Revenue loss because of low in-person attendance at these conferences will be offset by the revenue earned from the registration of the remote attendees.

### 3.2 Member Risks from Loss of Personal Connections

In-person conferences might be considered by some as a “gathering of our community interrupted by research presentations” (Leimester et al., 2021, p. 747). It is where our community manifests itself. While remote interaction can be beneficial in several ways, it can have a significant long-term impact on our community. People need to develop personal connections and often learn from one another through observation, both of which are impacted by having physical proximity to others in our community. Furthermore, conferences enable more spontaneous interactions that can lead to a more diverse group of people learning from one another (Fayard et al., 2021). Conferences also serve as a hub for unstructured interactions and collaboration for our community which flourish more organically when our community is in a face-to-face modality. Our failure to re-create or maintain that sense of community in virtual and hybrid modes will certainly reduce the sense of belonging. A further risk from a membership perspective relates to the inclusion of underrepresented communities. In principle, virtual conferences are celebrated for making conferences more affordable and accessible to communities with funding limitations. However, there is a danger that virtual attendance will reinforce the divide for such communities if they cannot participate as fully or on equal terms with F2F attendees. There is certainly a need to identify such communities and understand their perspectives and needs for conference participation better. Some of these risks from the loss of personal connections may be overcome by virtual platform features that enable attendees to get engaged in knowledge conversations. Such features can also encourage virtual attendees to take on community-sustaining roles in conference events (i.e. generative role-taking) and by being informed by relational and content ties at the events (i.e. network-informed associating). The key issue is to find a cost-effective platform solution that offers these features for remote attendees.

The need to experience a tangible community at a conference may be the most significant for newcomers, (i.e., Ph.D. students, junior faculty, and practitioners). The act of joining an informal discussion is especially difficult when one is unfamiliar with the environment. While there are platform features available that can attempt to facilitate informal conversation (e.g., Remo), attendees with less dense social networks may find it more challenging to engage (Kranz et al., 2022), whereas ‘old timers’ seek out friends and collaborators and may not be interested in a meeting that has been randomly set up by a platform. This makes the integration of newcomers in the community more challenging. If initial experiences are not welcoming for new members, this will certainly reduce future engagement with AIS and its conferences. The exchange of the more tacit knowledge embodied in the members of the community (particularly those that have been part of the community for a long time) is also difficult to transfer when we are interacting remotely (Fayard et al., 2021). Newcomers may find it challenging to learn group norms, community expectations, and develop social networks with the ability to meet a wide range of members of our community in a shared physical space. On the other hand, allowing virtual attendance for doctoral consortiums can broaden participation by students who may not otherwise be able to participate. Interestingly, Figure 1 in the appendix provides results of a recent member survey suggesting that our virtual conference offerings may have produced greater member loyalty.

### 3.3 How Might We Mitigate These Risks?

The AIS office, responsible for the management of AIS conferences, has developed a summary of hybrid conference options for consideration by conference chairs (provided in Figure 2 in the Appendix). It is worth noting that the AIS office is not advocating either purely F2F or purely virtual conferences. It recommends light, medium, and heavy hybrid configurations and provides an associated set of costs. Within these hybrid alternatives, certain programmatic elements can be delivered synchronously (i.e., live-

streamed) or asynchronously (digitized for future consumption). Light hybrid offers limited live streaming; as such, virtual attendees have very little live content. High hybrid, alternatively, offers greater live streaming and robust synchronous engagement for virtual attendees. As for decisions on the appropriate modality for workshops, it is important to note that some of those are organized entirely by the SIGs. As such, it is the SIGs who will determine the modality.

As future conference chairs think through the risks we identify above associated with hybridization, their options for managing these risks lie largely in the decisions associated with different levels of hybridization. In Table 6, we attempt to provide an analysis of the intersection of the risks identified in the AIS council survey results and offer a set of simplified modality options using color coding (red = higher risk, yellow = medium risk, and green = lower risk).

**Table 6. Risk Analysis**

Light Hybrid			Medium Hybrid			Heavy Hybrid		
The virtual registration includes limited conference access. In-person attendance and our business model is less affected.			The virtual registration includes more conference access with more of an in-person feel. Extra effort is required to select the best elements of the program to make available to virtual attendees (and to do it well).			Some risk the full virtual offering may cannibalize in-person attendance (so virtual registration must be priced well). Efforts to treat heavy hybrid as being equivalent to fully synchronous may drive prices up significantly and time zone differences could negatively impact member experiences.		
Finance	Member	Reputation	Finance	Member	Reputation	Finance	Member	Reputation
This provides fewer touch points for virtual attendees, fewer one-on-one/chance encounters with other attendees (due to reduced synchronous opportunities), and less sense of connections to AIS. This may lead to fewer membership renewals due to lower conference satisfaction for virtual attendees, but conferences will be less expensive to deliver.			Potential for some synchronous as well as asynchronous interaction with conference content. Encourages greater (or more specific) time commitment from attendees.			Maximized possibilities for live, virtual participation in every activity. Greater virtual sense of "being there." More content available, more synchronous opportunities. Potential to drive increases in membership due to higher access to conferences but more expensive to deliver.		
Finance	Member	Reputation	Finance	Member	Reputation	Finance	Member	Reputation

### 3.4 Mitigating Financial and Member Risks

As future conference chairs consider their light-, medium-, and heavy-hybrid options, the implications for the various risks are significant. As the implications of hotel room blocks and food and beverage minimums take hold, conference chairs may see forcing in-person attendance as a sound fiscal choice. They may even believe that the sense of community that face-to-face produces further supports this argument. Finally, conference chairs are publicly responsible for producing a surplus and may feel reluctant to take chances with something new like hybridization. As noted in Table 3, heavy hybrid potentially represents a significant financial risk due to its much higher cost while light hybrid can produce greater member risk by failing to create a meaningful conference experience.

First, the financial model should be considered. As noted above, the ACM recommends that virtual registration should be made "cheap." Increasingly, conferences are charging equivalent registration fees for virtual and in-person attendance. The argument in favor of this choice is that attendees (or their universities) are already saving airfare, hotel, and food. Arguments against similar fees for virtual and in-

person attendance note that conference hosts have reduced charges on account of a reduction in the food and drink budgets (minimally) and that this should be reflected in a lower virtual registration fee. Further, there are suggestions that conferences could charge a carbon-offset fee to those traveling to more than one conference per year (Kranz et al., 2022). The determination of registration fees is a negotiation between AIS and conference chairs (and the finance committee); however, a significantly lower virtual attendance fee may entice university administrators to push AIS members to attend virtually rather than in person, without concern for the fuller set of consequences of this decision.

Adding to the augmentation of inclusion initiatives, it has been declared several times during different AIS Council eras that the AIS is prepared to incur a calculated loss in specific conferences that reach out to underrepresented communities. Thus, organizing a conference in a place that might not produce the expected regular yield may prove beneficial if the target community is brought closer to the association. Yet, conference chairs and the AIS staff have been successful at going to places perceived as financially risky without incurring a loss. Furthermore, other options have proven successful in also including non-members. For example, the Information Systems in Latin America (ISLA) is a conference organized by the Latin American chapter of the AIS (LACAIS). It is fully virtual, free, and open to members and non-members. In the past few years, ISLA has been officially an ancillary event of AMCIS. Its program is included in the AMCIS program, and everybody registered for AMCIS can also attend ISLA, giving it greater visibility. This is done in parallel to the Latin American track in AMCIS, intended for AIS members only. Both include papers and panels in English, Spanish, and Portuguese. The ISLA proceedings are also published in the AIS eLibrary. Like ISLA, there are many initiatives undertaken by regional chapters that could increase the impact of the association and its conferences on non-members. Indeed, this practice has been followed by some Region 2 chapters when ICIS takes place in Europe. This discussion also shows that there is an opportunity for closer collaboration and shared learning with the Regional AIS Conferences, ECIS and PACIS, as well as smaller AIS-affiliated conferences, who also experiment with different modalities or opt for a fully in-person experience. These conferences are not jointly managed with the AIS office, and therefore there are limited opportunities for the sharing of ideas and experiences. The only notable and extremely valuable exception took place in 2020 when conference officers from all three AIS Regions joined forces to plan the Virtual Conference Series. Such collaboration can contribute to our understanding of the benefits and risks of different modalities and would be useful to pursue further, perhaps facilitated by the Regional Vice Presidents in the AIS Council, who chair the respective conference committees or Regional Boards.

Second, the modalities available to support the conference experience are more nuanced. The AIS document in Figure 2 suggests limited choices for hybrid delivery; there are, in fact, multiple combinations for delivering a hybrid experience. The first thing conference chairs need to consider is that all three choices, light-, medium-, and heavy-hybrid, are hybrid options with variance on how much of the virtual experience is synchronous. Several recommendations exist in published post-COVID work that offer a more nuanced understanding of the hybrid synchronous versus asynchronous decision. However, some recent work proposed that there is a fundamental flaw in this thinking which assumes that hybrid or virtual meetings should mimic in-person meetings (Leimeister et al., 2021). While the in-person experience is meant to be conducive to a more intense personal interaction, the online experience may be prone to mental and/or online exhaustion and need to be spread out over more days that are shorter and more content that is archived (cf. ACM Presidential Task Force, 2020). This logic suggests that for virtual participants the conference experience needs to be envisioned differently. Alternatively, with a very clear effort to improve the sustainability of our conferences while understanding concerns associated with purely virtual conferences, Kranz et al. (2022) propose a series of small in-person, regional hubs whereby conference participants attend a smaller, regional in-person meeting that is synchronous with the larger national or international meeting meetings. This option carries its own risks, related *inter alia* to the selection of appropriate hubs and the cost and ease of access to these hubs for communities located in the proximity, as the lack of funding is not necessarily mitigated when distances are reduced.

### 3.5 Mitigating Member and Reputational Risks

In-person attendance at conferences affords a greater ability to be present in the moment. Attendees are less likely to be multi-tasking or at least multi-tasking less. Virtual conference attendance from our offices or our homes allows for more interference between what is happening at the conference and what is happening locally. Again, it is worth noting that in-person attendees are often looking for a sense of community while virtual attendance can often feel impersonal and transactional (Leimeister et al., 2021). Effort and planning must go into creating a positive conference experience for virtual attendees.



Returning to why people attend conferences (either in-person or virtually) previous work and our anecdotal findings suggest that conferences provide: opportunities to present our work and get feedback, connect with other members of the community formally and informally, recruit, and feel connected to the community. Some of these activities lend themselves to virtual (asynchronous or synchronous) interactions and some may be better served by in-person attendance. For example, presenting our work likely lends itself to virtual engagement. Online seminars have begun to level the playing field for accessing and presenting research (Leimeister et al., 2021). The AIS and MIS Quarterly research webinars are a great example. Further paper-presentation videos have been popular with authors and consumers alike as noted earlier. Most recruiting has adopted the Zoom-based interview format such that in-person meetings at conferences are now largely informational.

Some potential solutions are offered in published work to allow for a more immersive, virtual experience. For example, AIS could host a series of networking or seminar events online with an annual in-person meeting at one of its conferences (Leimeister et al., 2021). This may be an effective way to help newcomers begin to socialize. In fact, the AIS Doctoral Student College is doing something similar. Stretching the virtual conference experience over a greater number of days with fewer hours per day may allow for a more attentive experience for virtual attendees. This may also help with time-zone differences (ACM Presidential Task Force, 2020).

## 4 Specific Choices Conference Chairs Can Make

As conference chairs consider the risks mentioned above and how to mitigate them, hybrid decisions are made at the level of various conference activities. Within light-, medium-, and heavy-hybrid multiple decisions can be made about various conference components and how/whether they will be available face-to-face, virtually, or both. Relevant recommendations from the AIS taskforce are presented below.

While it may take a few more years of trial and error to find the ideal new conference modalities, we do recommend that AIS continue to experiment. There are several trends suggesting moves in this direction are inevitable:

- Inclusivity (of participants from medium, low, and very low-income countries and other underrepresented groups)
- Green (reducing carbon footprint)
- Global impact (of the research, methods, knowledge, etc.)
- The cost of the hybrid technologies should continue to decline moving forward
- The capabilities of the hybrid technologies should continue to improve moving forward
- Other conferences are moving in this direction. If AIS wishes to remain competitive and relevant in the conference space moving forward then we need to offer new conference modalities.

Changing how our conferences are delivered is risky, but simply returning to the old normal is also risky. As an IS association, discovering and championing the role of technology in conference experiences would seem to be a risk worth taking.

We strongly recommend that conference chairs experiment with at least one virtual component. Further, efforts should be made to avoid drastic changes from one year to the next. Further work needs to be done to figure out how to consolidate the virtual gains of the pandemic rather than rush to return to “normal.” Some of those gains might not stand the test of time - some others most definitely will. We need to continue to ask our members what works for them (including those not attending), and the AIS office and conference leadership needs to be agile enough to deal with and adjust to future demands for hybrid opportunities.

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## Appendix

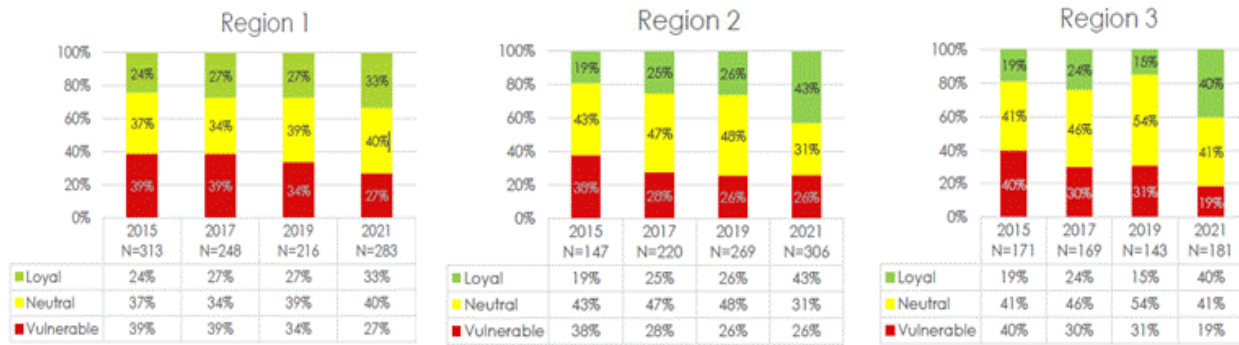


Figure 1a. Member Survey Results

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