Feedback from the participants of the ADBIS, TPDL and EDA 2020 joint conferences

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1 Introduction

The 24th European Conference on Advances in Databases and Information Systems (ADBIS 2020), the 24th International Conference on Theory and Practice of Digital Libraries (TPDL 2020) and the 16th EDA days on Business Intelligence & Big Data (EDA 2020) were jointly organized from August 25 to August 27, 2020. The event also hosted a common Doctoral Consortium (DC) and six workshops: the 1st Workshop on Assessing Impact and Merit in Science (AIMinScience 2020), the 2nd International Workshop on BI & Big Data Applications (BBIGAP 2020), the International Workshop on Intelligent Data – From Data to Knowledge (DOING 2020), Modern Approaches in Data Engineering and Information System Design (MADEISD 2020), the 10th International Symposium on Data-Driven Process Discovery and Analysis (SIMPDA 2020) and Scientific Knowledge Graphs (SKG 2020).

Because of the worldwide pandemic context, the organization committee and respective steering committees decided to organize the event online. This choice led to great challenges in choosing the right options and tools to ensure that participants get the most out of the conferences. We chose to have the conferences take place on about the same days that we had planned for the physical meeting in Lyon. Conference days and talks were shortened, as attending streaming presentations is tiring. The schedule was centered around lunchtime to allow as many participants to attend, especially researchers from North and South America and Asia. Registration fees were decreased accordingly and participants without a paper could register for free.

The videoconferencing system we used was Big Blue Button (BBB)¹. The platform was hosted at the University of Lyon 2, which allowed us to have more control on both the infrastructure and the system. We asked speakers to prepare a prerecorded presentation in MP4 format with respect to constraints much inspired from the presenter guidelines of the 14th International Baltic Conference on Databases and Information Systems (DB&IS 2020)². The length of presentations were: keynotes 20 minutes, long papers 10 minutes and short papers 5 minutes. We assisted chairpersons with "projectionists" who were in charge of playing the prerecorded presentations. Questions and Answers (Q&A) sessions after presentations were live, by chat only, and moderated by the chairperson as usual. The duration of Q&A sessions were: keynotes 10 minutes, long papers 5 minutes and short papers 5 minutes.

Overall, the event appealed to more than 500 registered participants. Yet, attendance was most probably not this high, with a little bit more than 100 maximum connections at the highest peak. We also noticed that the free non-speaker fee attracted "ghost participants" who never connected. Hence, setting up even a low registration fee would presumably be a better idea. Detailed attendance figures are provided in Tables 1, 2, 3 and 4.

DC	AIMinScience	BBIGAP	DOING	MADEISD	SIMPDA	SKG	Total	Average
37	54	32	46	23	16	64	272	38.9

Table 1: Attendance to the DC and workshops

Keynote 1	Keynote 2	Keynote 3	Keynote 4	Keynote 5	Total	Average	
63	36	67	66	66	299	59.8	

Table 2: Attendance to keynote speeches

¹https://bigbluebutton.org

²https://dbis.ttu.ee/index.php?page=53

ADBIS1	ADBIS2	ADBIS3	ADBIS4	ADBIS5	TPDL1	TPDL2	TPDL3	EDA	Total	Average
40	40	36	38	40	61	44	49	42	390	43.3

Table 3: Attendance to regular sessions

	Opening session	Virtual reception	Virtual coffee room (1 day)	Closing session	Total	Average
ĺ	57	27	5	55	144	36.0

Table 4: Attendance to other events

In order to evaluate what has worked and what has not, we proposed a survey to get the attendants' feedback. We also hope this report can guide the choices for the organization of future conferences. The survey whose results are presented thereafter was answered by 106 participants, which amounts to 20.9% of registered attendants. Thus, we believe that the results obtained on the basis of this sample can be considered representative.

2 Survey Methodology

The questions we defined in our survey are inspired from the experience of the 36th IEEE International Conference on Data Engineering (ICDE 2020) [Bonifati et al., 2020] and the 42nd European Conference on Information Retrieval (ECIR 2020) Workshops [Nunes et al., 2020]. More specifically, survey questions, which explicitly appear in caption of Section 3's figures, can be categorized in five groups.

- 1. Questions on participant characteristics. These questions aim at better knowing the profiles of participants who attended the conferences; and also whether virtualization made easier for non-Europeans to participate.
- 2. Questions on session attendance. In this category, questions aim at measuring and comparing session audiences, as perceived by participants (we also recorded *in situ* that actual number of participants in each session). This is especially important to identify the attractiveness of sessions and provide hints for next editions.
- 3. Questions on participant experience. Here, we focus on the participants' appreciation of the conferences' organization. Our goal was to evaluate whether we succeeded in meeting the double challenge of *virtually* organizing *three* joint conferences.
- 4. Questions on participant preferences for future editions. Since we had to make certain choices when we switched from a live to an online event, we asked a posteriori whether participants shared our arbitration. Moreover, we asked participant to suggest better options for future editions in case they were not fully satisfied.
- 5. Questions on virtualization. We also introduced the question of whether virtualization could be desirable beyond this pandemic context, notably to reduce the cost of conferences in terms of time, funding and CO2 emissions [Ong et al., 2014].

Eventually, we added a free textual field to collect general comments on the conferences.

The resulting questionnaire has been sent to all participants, including authors/speakers, by email. Let us notice that all responses were anonymous, so no personal information has been collected.

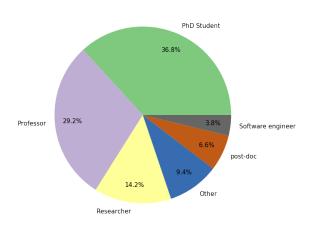
3 Survey Results

In this section, we present the findings from the survey through a set of fifteen facts, in response to the five groups of questions from Section 2.

3.1 Participant Characteristics

(1) ADBIS, TPDL and EDA 2020 mostly attracted academic attendants. The conferences mainly attracted PhD students (36.8%) and university professors (29.2%), as illustrated in Figure 1. PhD student attendance is quite high compared to physical conferences (possibily due to early PhD, rejected paper or supervisor traveling

to the conference). Hence, it seems that virtualization offers a good and cheap opportunity for PhD student to attend conferences. Moreover, 78.3% of attendants were either doctors or about to achieve a PhD (Figure 2). Yet, considering that software engineers and "others" in Figure 1 amount to about 13% of the population, it leaves 10% of professors and researchers without a PhD. Although some PhD students may have answered "No" instead of "Someday soon" by mistake, this figure is surprisingly high.



49.1%

29.2%

No

Someday soon

Figure 1: What is your current occupation? (106 responses)

Figure 2: Do you have a PhD? (106 responses)

(2) 77.4% of attendants came from Europe. ADBIS, TPDL and EDA 2020 reached a majority of European researchers (Figure 3), presumably because ADBIS (which is explicitly a European conference) and TPDL are perceived as European conferences. However, we could have expected a wider diversity of participants with virtualization. This was not the case, probably because the choice to go online was made after paper submissions. The timezone issue may also have had an impact, with participants from Asia and the Americas being able to attend only a few sessions. Actually, participants who attended to few sessions for any reason may not have wanted to take the survey.

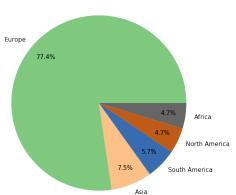


Figure 3: On what continent were you during the conference? (106 responses)

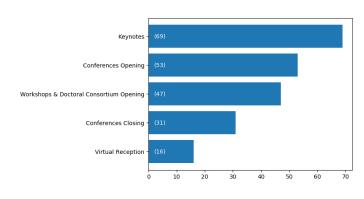


Figure 4: To what plenary sessions did you attend? (95 responses)

3.2 Session Attendance

First, let us remind that this survey was answered by 106 participants, which amounts to 20.9% of registered attendants.

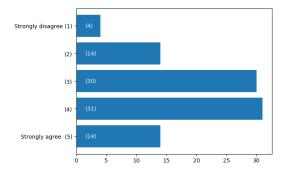
(3) Keynotes were very attractive. 69 out of 95 respondents (72.6%) attended to ADBIS, TDPL and EDA keynotes (Figure 4), which confirms what we observed during online sessions, all keynotes but one reaching over 65

attendants. This shows keynote speakers were attractive and that their talks interested the three ADBIS, TPDL and EDA communities.

- (4) Satellite events were of particular importance. We note that the workshops and doctoral consortium opening attracted almost as many attendants as the conferences opening (Figure 4). We can thus consider that such satellite events were important aside the main conferences. It is therefore desirable that they are perpetuated in future editions.
- (5) ADBIS was the most attended conference. With 61 out of 95 respondents (64.2%), ADBIS sessions were the most attended. Next are TPDL sessions with 45 of 95 respondents (47.4%). Yet, this does not mean than ADBIS was more attractive than TPDL, as these figures are actually proportional to the number of sessions for each international conference (5 for ADBIS vs. 3 for TPDL; see also Table 3 for actual attendance).

3.3 Participant Experience

(6) The adopted videoconferencing infrastructure was quite acceptable. A relative majority of respondents thought the videoconferencing infrastructure was adequate to support all conferences' sessions (Figure 5). However, we also note that a significant part of respondents was not fully satisfied. Reasons are mixed: some were related to the participant's configuration, i.e., proxies for firewalls not allowing to connect to our platform (especially on the first day); while others were caused by BBB's limitations (e.g., video broadcasting works best with Firefox and may be limited with other browsers), as well as misconfigurations that had to be fixed almost on the fly by an engineer from the University of Lyon 2, who was a much welcome resource in the organizing committee.



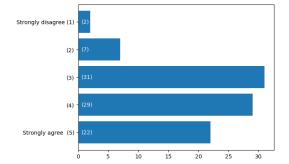
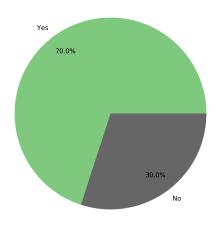


Figure 5: Was the videoconferencing infrastructure adequate for supporting the conferences? (93 responses)

Figure 6: Did the conferences need more social interactions? (91 responses)

(7) There was a lack of social interactions during the conferences. As expected, attendants widely agreed that the virtual nature of the conferences induced a lack of social interactions (Figure 6). We did anticipate this issue by proposing a virtual reception session. Although it was reached by few attendants (30/106 respondents), presumably due to the late time (17:45-19:00 CET), we note that 70% of the participants found it useful (Figure 7). Moreover, one of the participants told us that the virtual social session allowed him to realize the changes to be made in his thesis work. This illustrates a need for more meeting/discussion time, as was highlighted in several comments. We introduced a virtual coffee room on the last day of the conferences, but it was little attended.



Much worse (1) -(2)
(2) -(13)
(3) -(50)
(4) -(22)

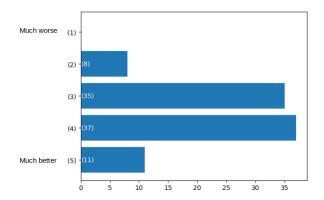
Much better (5) -(4)
0 10 20 30 40 50

Figure 7: Did you like the virtual reception? (30 responses)

Figure 8: Were ADBIS, TPDL and EDA 2020 better or worse than a typical edition? (91 responses)

(8) ADBIS, TPDL and EDA 2020 were neither better nor worse than a typical edition. Attendants globally thought the conferences' organization were neither better nor worse than previous editions (Figure 8). This could be interpreted as a positive appreciation, since it was twice challenging to organize *joint* conferences during a worldwide *crisis* context.

(9) ADBIS, TPDL and EDA 2020 were better than what participants expected. Respondents mostly thought ADBIS, TPDL and EDA 2020 were better than they expected (Figures 9 and 10), confirming that we quite took up the double challenge of organizing a virtual joint conference.



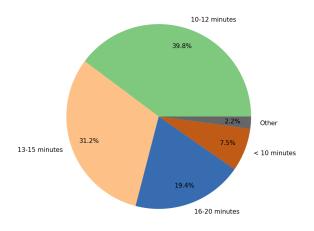
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Figure 9: Were ADBIS, TPDL and EDA 2020 better or worse than what you expected a virtual conference would be? (91 responses)

Figure 10: Were ADBIS, TPDL and EDA 2020 better or worse than what you expected from three joint conferences? (91 responses)

3.4 Participant Preferences for Future Editions

(10) Attendants have no clear preference on online research talk length. The survey did not show any widely preferred length for online research talks. However, we note that the most shared opinion (39.8% of the respondents) is that talks should take between 10 and 12 minutes (Figure 11).



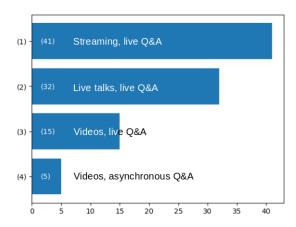


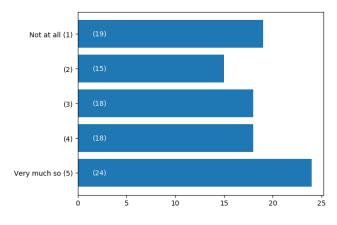
Figure 11: What is the ideal length of a research talk at an online conference? (93 responses)

Figure 12: As an attendant, what kind of model do you prefer for research talks? (93 responses)

- (11) Participants prefer talks broadcast in streaming, live Q&A sessions and having the videos available after the conference. 58.2% of the respondents thought the ideal format for research talks was streaming, live Q&A and having the videos available after the conference (option 1 in Figure 12), which confirms our choice. Other options were:
 - 2. live talks, live Q&A session and having recorded talks available after the conference;
 - 3. videos of the talks available beforehand and live Q&A session;
 - 4. videos of the talks available beforehand and asynchronous Q&A session.

3.5 Virtualization

(12) Attendants have no clear preference between virtual and physical sessions. We obtained no conclusive result on whether respondents would attend more sessions if the conference was held physically (Figure 13). This could be explained by the fact that the disadvantages of virtual sessions, e.g., distractions or technical issues, are balanced by advantages such as easy switching among sessions.



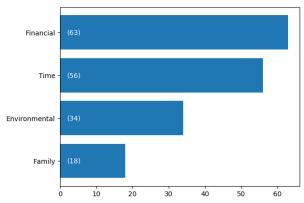
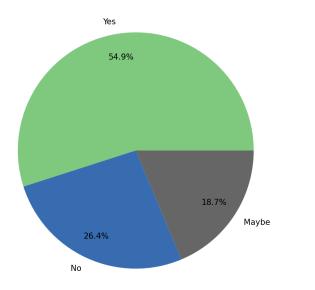


Figure 13: Would you have attended more sessions if the conference had been physical? (94 responses)

Figure 14: For what reasons would you consider to attend a hybrid conference virtually? (91 responses)

(13) Participants thought that the benefits of attending conferences virtually are mainly "saving money" and "saving time". 63 out of 91 respondents (69.2%) estimate that saving money could make them attend a conference virtually if applicable (Figure 14). Another well shared benefit of virtual conference participation is time saving (61.5% of the respondents).

(14) Participants agree with the idea of alternating physical and virtual conferences to reduce CO2 emissions. With climate change increasing, reducing CO2 emissions is an important issue that should be considered when organizing conferences. A first solution for reducing the environmental impact of conferences is to alternate between physical and virtual editions. 54.9% of the respondents support this idea (Figure 15).



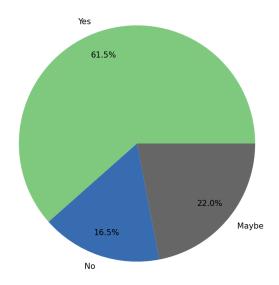


Figure 15: Would you support the idea of alternating physical meetings with purely virtual conferences for reducing CO2 emissions? (91 responses)

Figure 16: Would you support the idea of having hybrid conferences for reducing CO2 emissions? (91 responses)

(15) Participants agree with the idea of hybrid conferences to reduce CO2 emissions. Another solution for reducing the environmental impact of conferences is hybrid organization, i.e., participants can attend virtually or physically, as they prefer. This solution seems the most shared by the respondents (61.5%; Figure 16).

4 Conclusion

In short, we note that ADBIS, TDPL and EDA 2020 were successfully organized according to the attendants. The organizing committee was able to remedy most of the challenges that arose, although some choices had to be made quite in a hurry and were not fully satisfactory. We hope that the lessons learned from this first virtual and joint organization will be useful for future editions.

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