Cover Letter

Dear Reviewers and Associate Editors,

We would like to thank all the reviewers for your constructive and valuable comments. We have tried our best to address all the issues pointed out by the reviewers and revised the paper accordingly.

Following the reviewers' suggestions, we have done the following changes in the revised draft:

- We have highlighted important information of Figure 10 by enlarging the title of each view to improve readability and changed the description of titles in Section 5.2.2 correspondingly.
- We have removed the highlights for the 6th and 7th rules.
- We have added more descriptions of Table 1 in Section 5.1 to ensure that readers can easily understand it.
- We have added a section of acknowledgement.

In the following pages, we elaborate on how we have addressed all the reviewers' concerns one by one in detail. The reviewers' concerns are highlighted in red, and our responses are highlighted in blue and quotes from the revised text are highlighted in *italic*. All the major changes are also highlighted in blue in the revised draft.

We appreciate the constructive and helpful comments provided by all the reviewers. We hope that this revision well addresses all the questions by the reviewers. Your assistance in reviewing this paper is deeply appreciated.

Sincerely,

Yanna Lin, Haotian Li, Aoyu Wu, Yong Wang, and Huamin Qu

Responses to Reviewer: 1

Question 1: Regarding the presentation of the paper, Figure 10 might be difficult for readers to observe, specifically if the paper was in a print-out form. If the authors would like to keep it as is, I suggest pointing out that we should focus on the arrangement of the views and not the content per se. If the manuscript is accepted, such minor changes could be requested from the TVCG editorial team during the camera-ready preparation stage.

Response 1: We have highlighted important information of Figure 10 by enlarging the title of each view to improve readability and changed the description of titles in Section 5.2.2 correspondingly. In addition, we have added high resolution versions of the three images (A, B, and C) of Figure 10 in the supplementary so that readers can view more details if needed.

"Compared with Figure 10 (A2) and (B1), the same view in the dashboard design recommended by our approach (Figure 10 (C2)) does not have enough space to show the heatmap."

"Also, a few participants pointed out that Figure 10 (C) placed the line chart showing the "Peak in Winter" above the line chart displaying the "Peak in Summer", which was contradictory to their expectation, i.e., the line chart for "Summer" should be positioned above that for "Winter"."

Question 2: - The paper's styling does not adhere to the TVCG Journal's standards. For example, the caption for the tables should be capitalized and without a punctuation mark at the end of the final sentence. However, in TVCG, the paper will be revised by the editorial team that will eventually reshape the manuscript after (and if) it gets accepted. **Response 2:** Thanks to the editorial team.

Question 3: - Only the 6th and 7th rules are in bold, while the rest remain unhighlighted. Also, a better connection between Table 1 and the newly added text in Section 5.1 would benefit potential readers' understanding.

Response 3: We have removed the highlights for the 6th and 7th rules. Following the reviewer's suggestion, we have added more descriptions about Table 1 in Section 5.1 to ensure that readers can easily understand it.

"We conducted a study with four dashboard design experts to gather their quantitative and qualitative feedback about the appropriateness of the extracted design rules. We presented the design rules extracted by our approach to the experts, and asked them to indicate the extent to which the extracted rules match their expert knowledge of dashboard designs. To demonstrate the effectiveness of our approach, we discussed the top 5 rules with the highest appropriateness scores in detail (Table 1) and summarized the feedback from the experts."