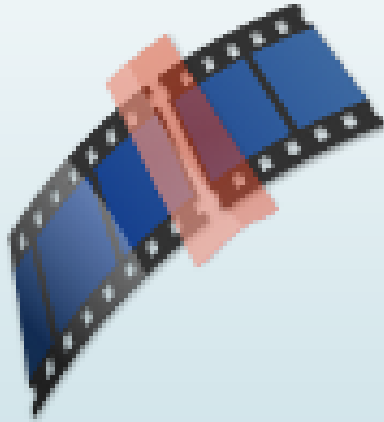


Usability testing on Kdenlive and OpenShot



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Motivation

- Multimedia is common area for information age
- Companies need employees with knowledge in video editing
- There are many different video editing tools
- Selection between video editing tools is HARD!



Purpose

- Aim of the study is usability of most popular open source video editing tools OpenShot and Kdenlive
- Reasons for choosing OpenShot and Kdenlive
 - Very popular
 - Large community
 - Free software

OpenShot

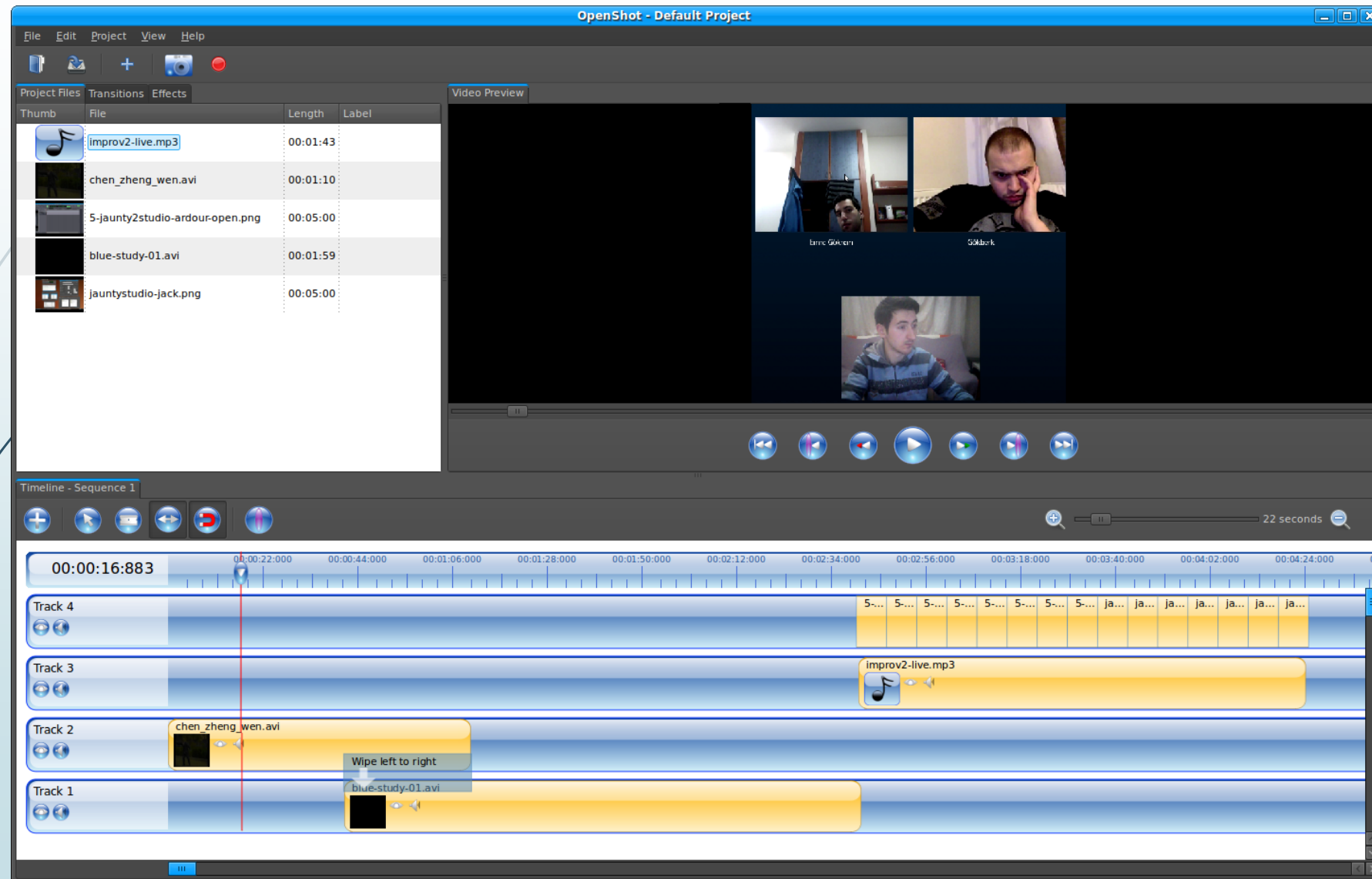


Figure 1: OpenShot Screenshot

Kdenlive

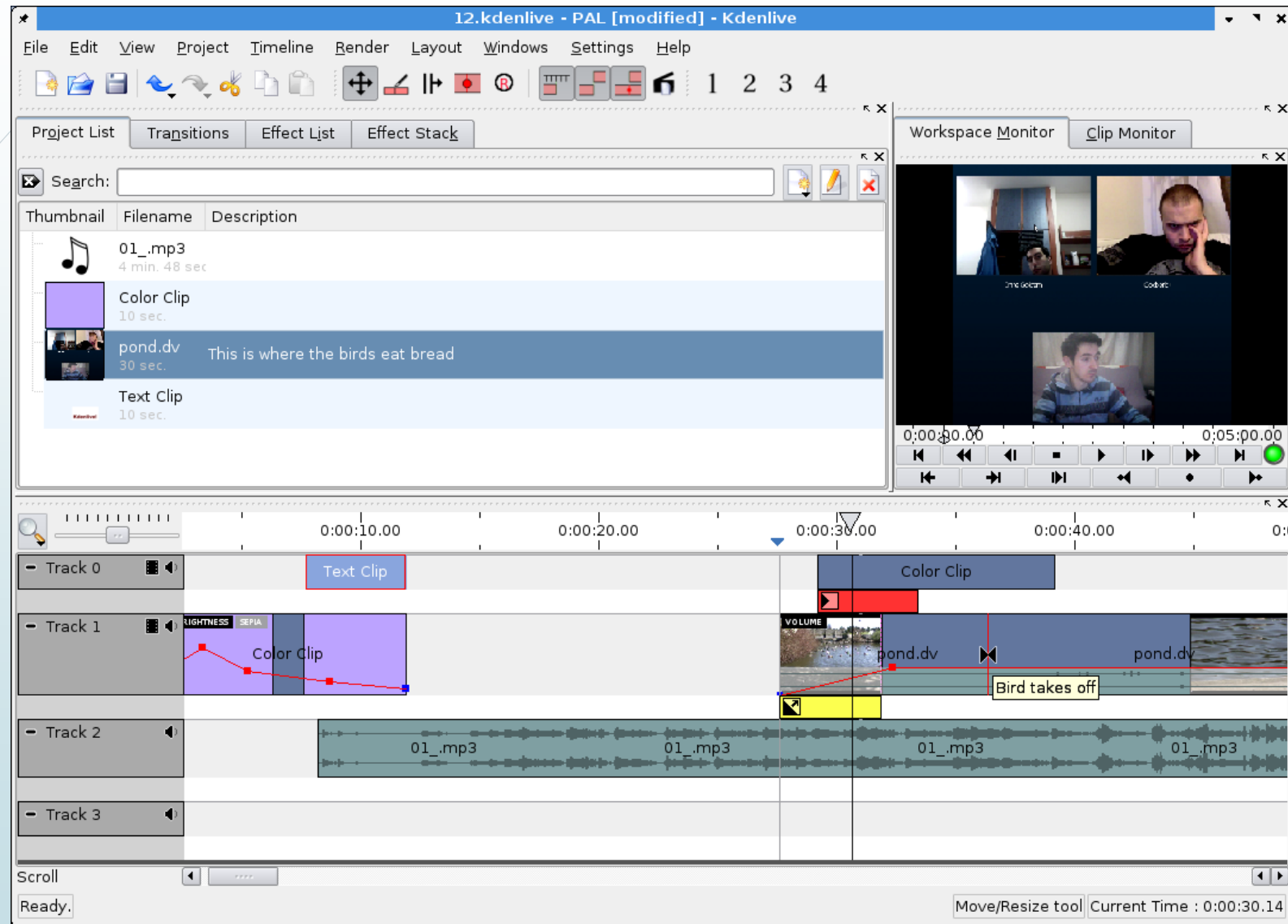
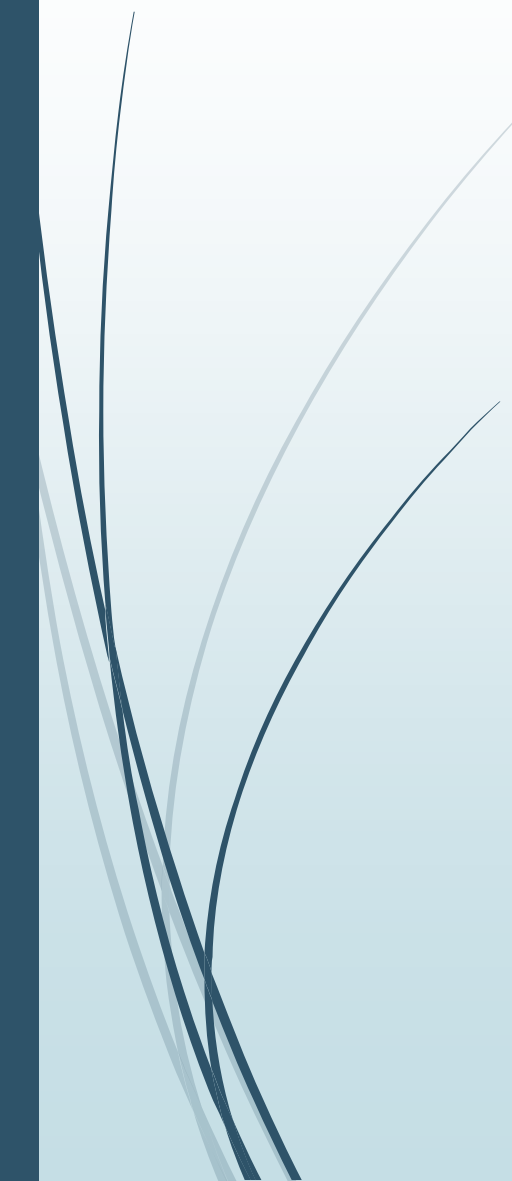


Figure 2: Kdenlive Screenshot



Tasks



| |
|---------------------------|
| Requirement analysis |
| Planning of processes |
| Selection of participants |
| Defining methods |
| Participant feedback |
| Task execution |
| Software survey |
| Progress report |
| Preparation of document |
| Presentation |
| Final report |



Methods

- Software survey
- Task execution
- Participant feedback



Software Survey

- 20 participant
- Participant criteria:
 - Experience with video editing
 - Expertise level
 - Used OpenShot or Kdenlive
 - Computer engineering student

Software Survey – Weights

Survey Activity Weights on Overall (%)

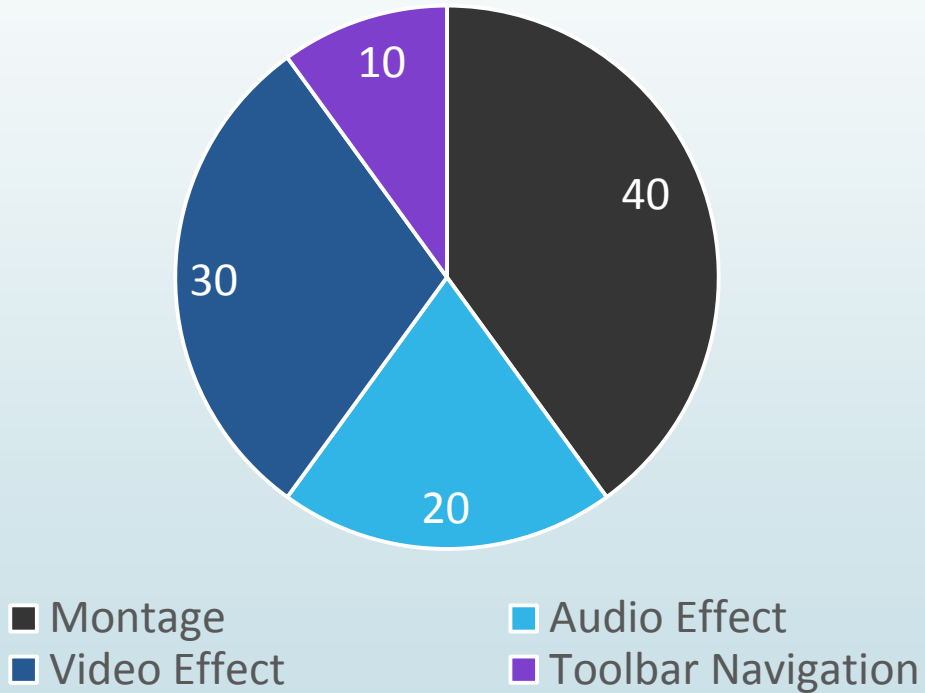


Figure 3: Survey Activity Weights

Software Survey – Prior Knowledge

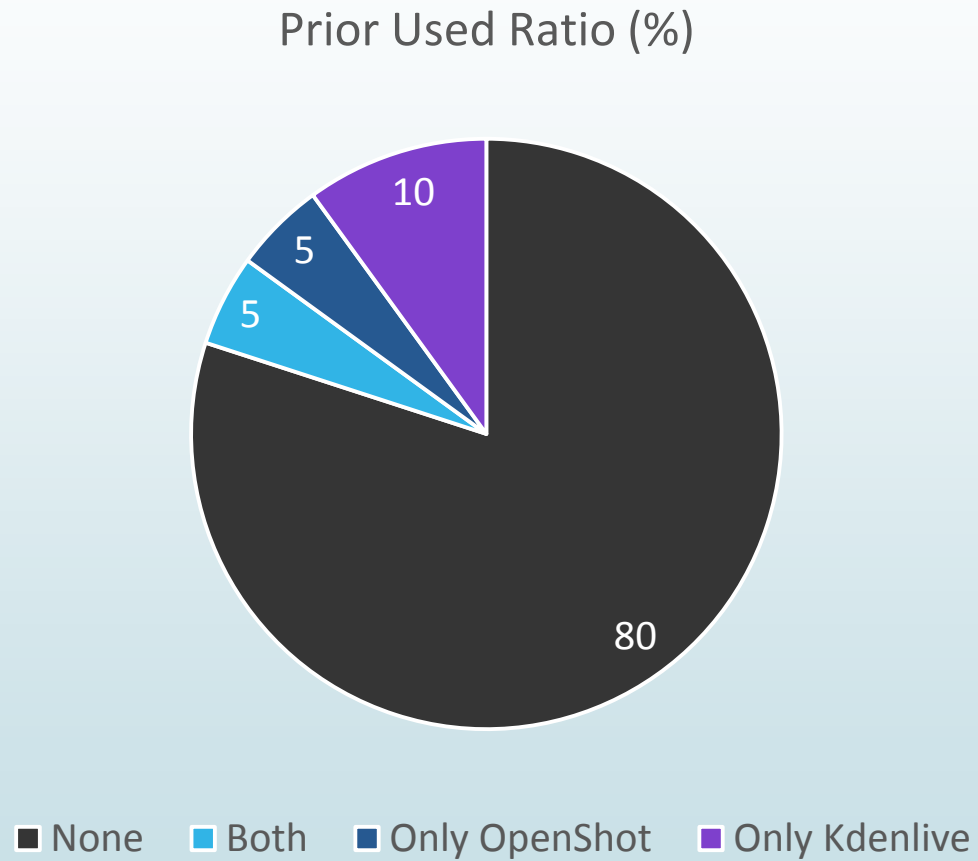


Figure 4: Prior Knowledge



Task Execution

- Quantitative time based effort analysis
- Considered criteria:
 - Montage (Cut, Copy, Paste)
 - Video Effect
 - Audio Effect
 - Toolbar Navigation

Task Execution – Montage

Montage actions: Cut, Copy, Paste

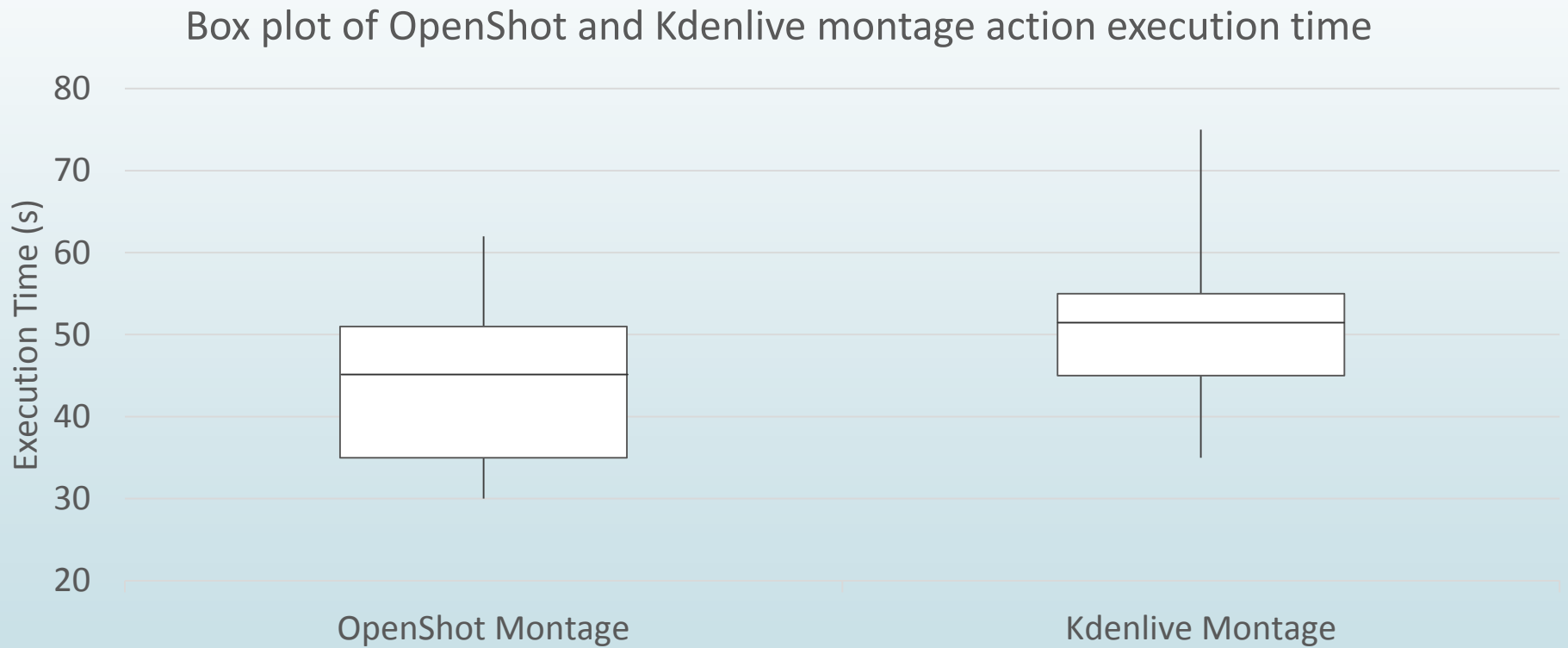


Figure 5: Box Plot of OpenShot and Kdenlive on Montage

Task Execution – Audio Effect

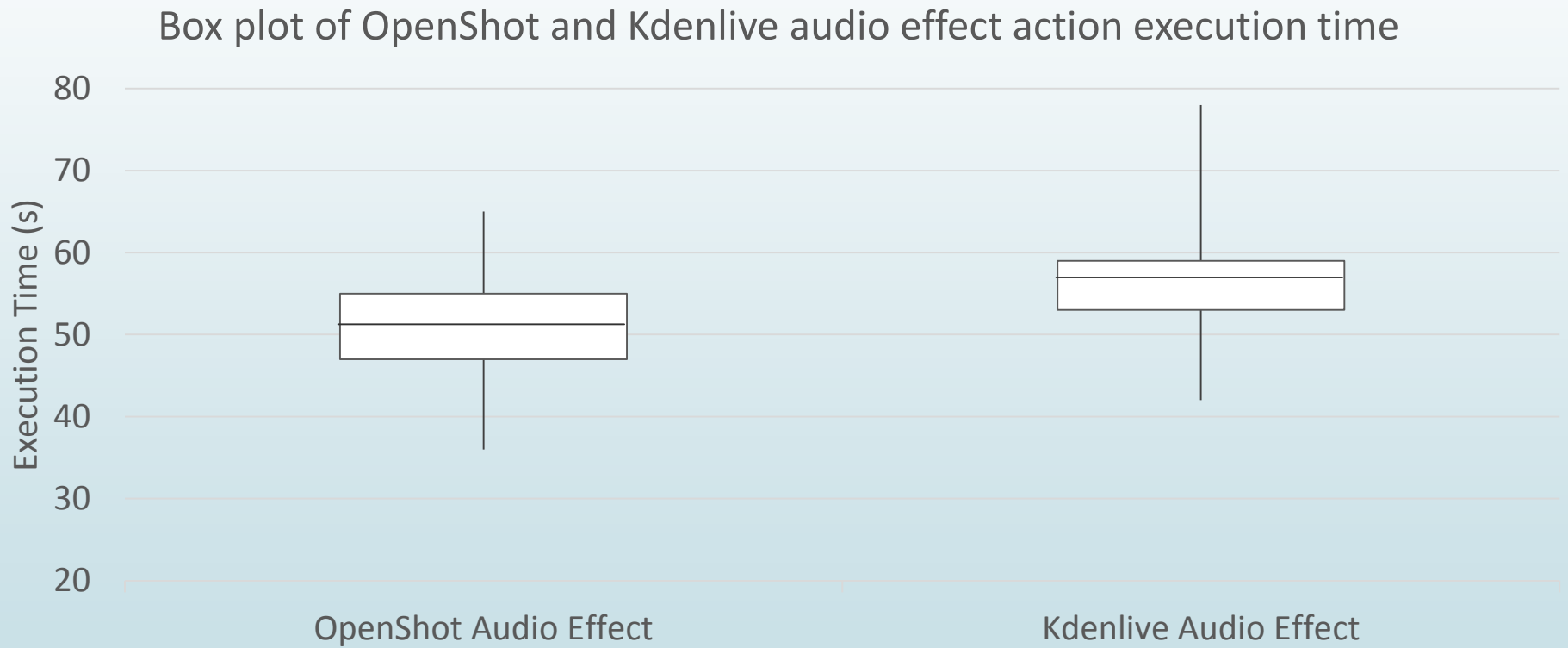


Figure 6: Box Plot of OpenShot and Kdenlive on Audio Effect

Task Execution – Video Effect

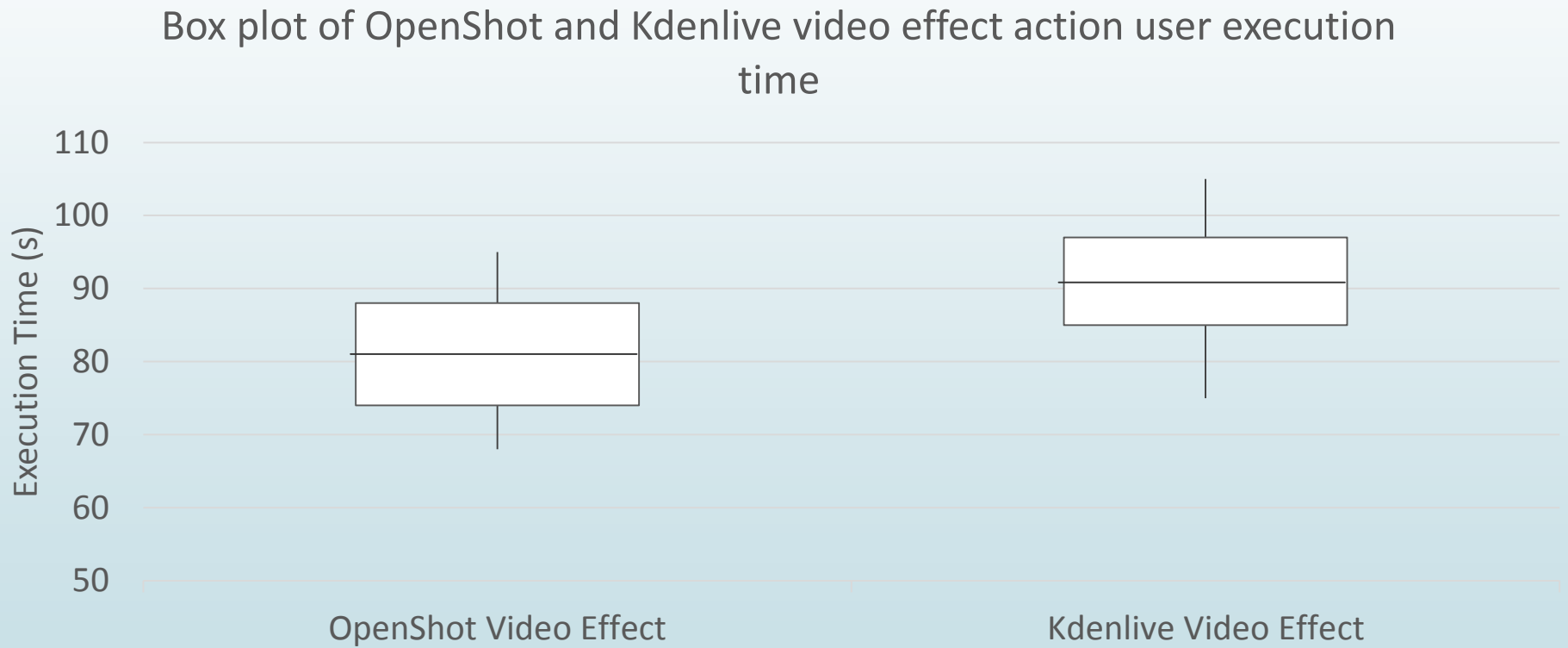


Figure 7: Box Plot of OpenShot and Kdenlive on Video Effect

Task Execution – Toolbar Navigation

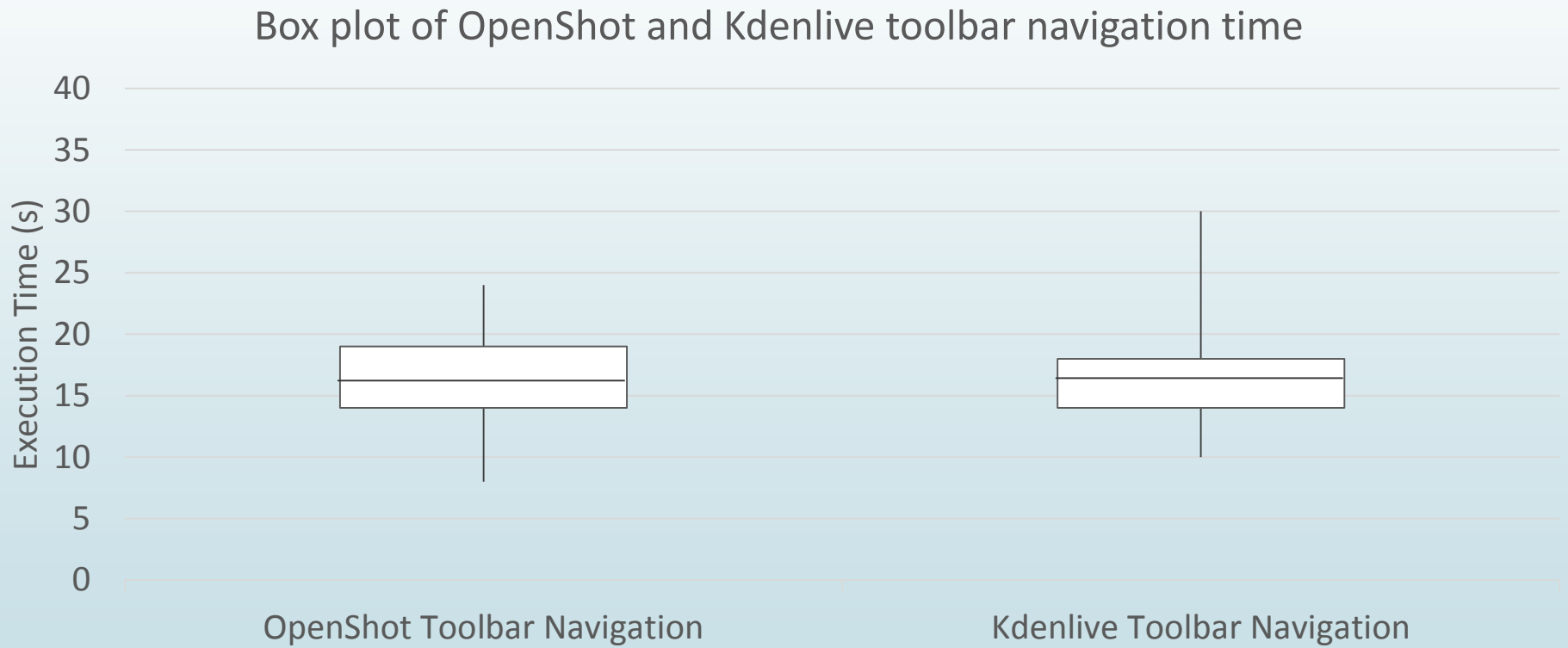


Figure 8: Box Plot of OpenShot and Kdenlive on Toolbar Navigaton



Participant Feedback

➤ Considered criteria:

- **Learnability**
- **Flexibility**
- **Overall**
- **Compatibility**
- **Consistency**
- **User guidance**

Participant Feedback - Learnability

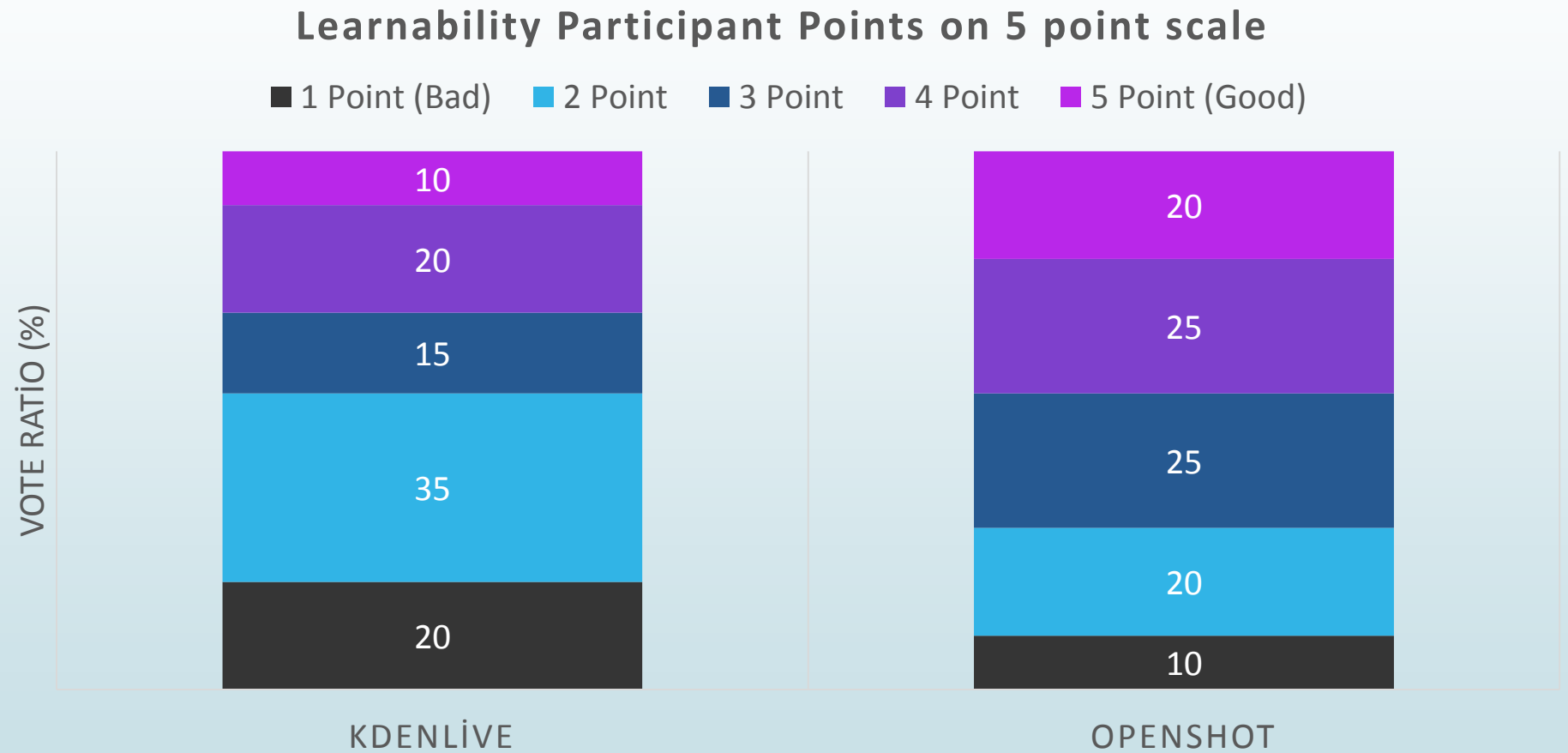


Figure 9: Participant Feedback Learnability

Participant Feedback - Flexibility

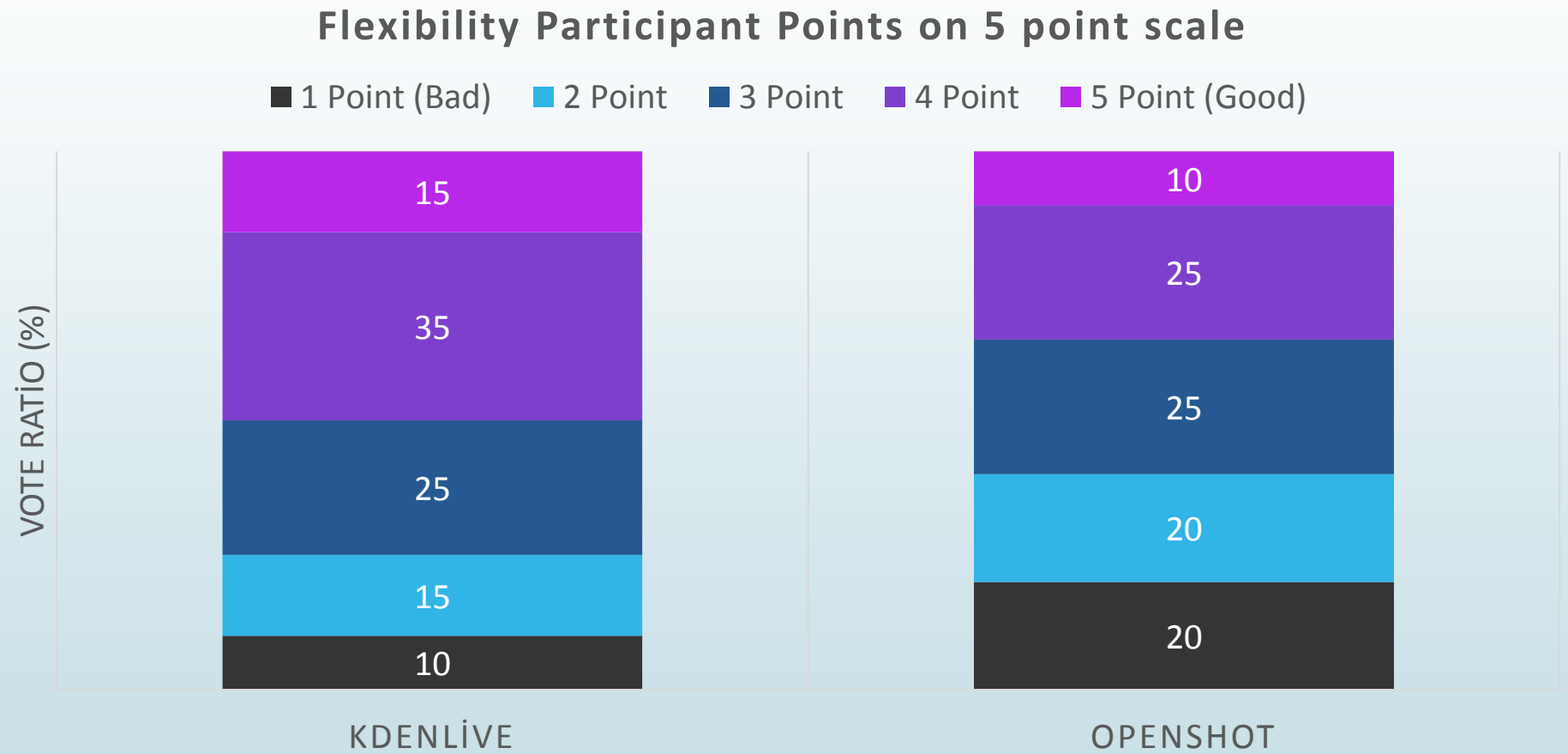


Figure 10: Participant Feedback Flexibility

Participant Feedback - Overall

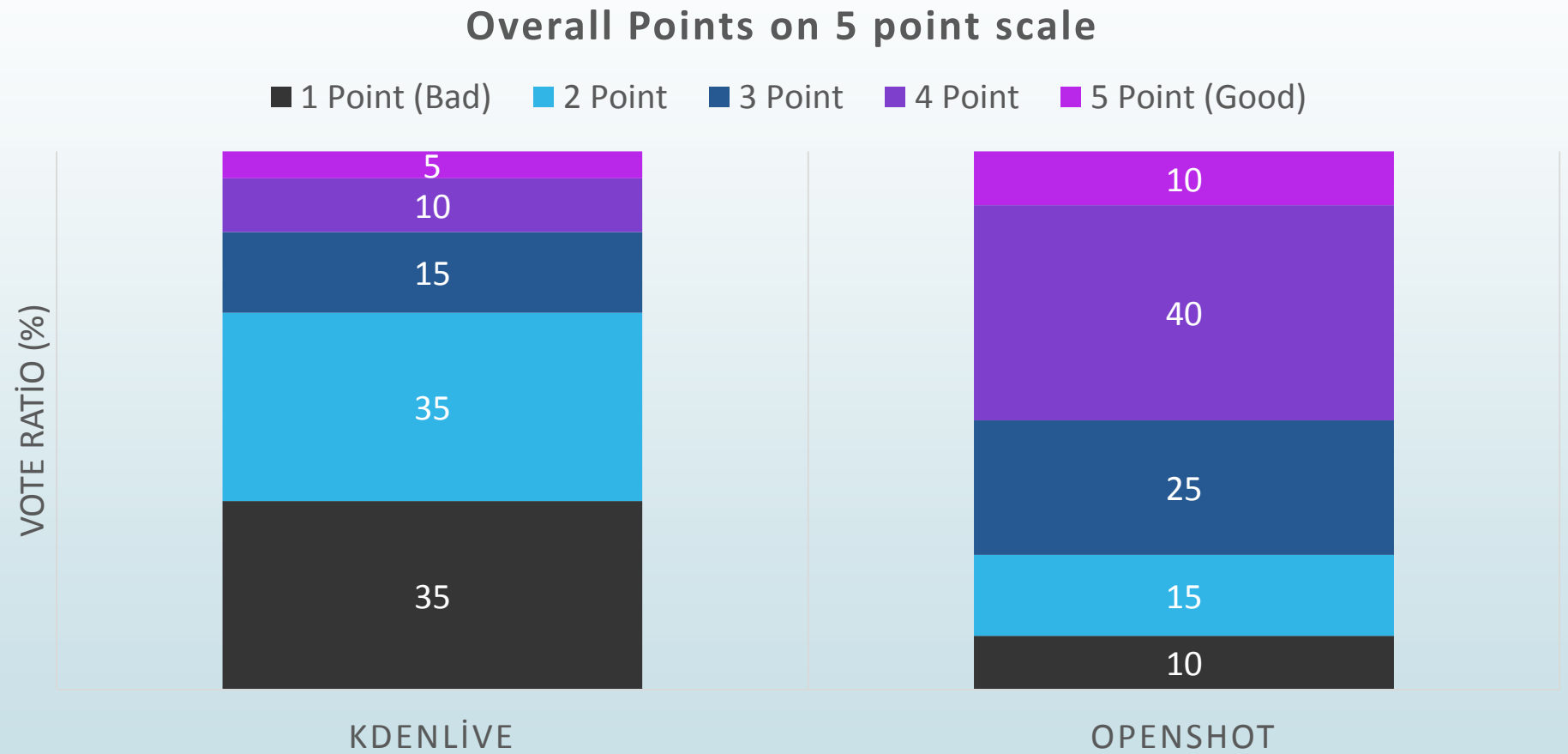
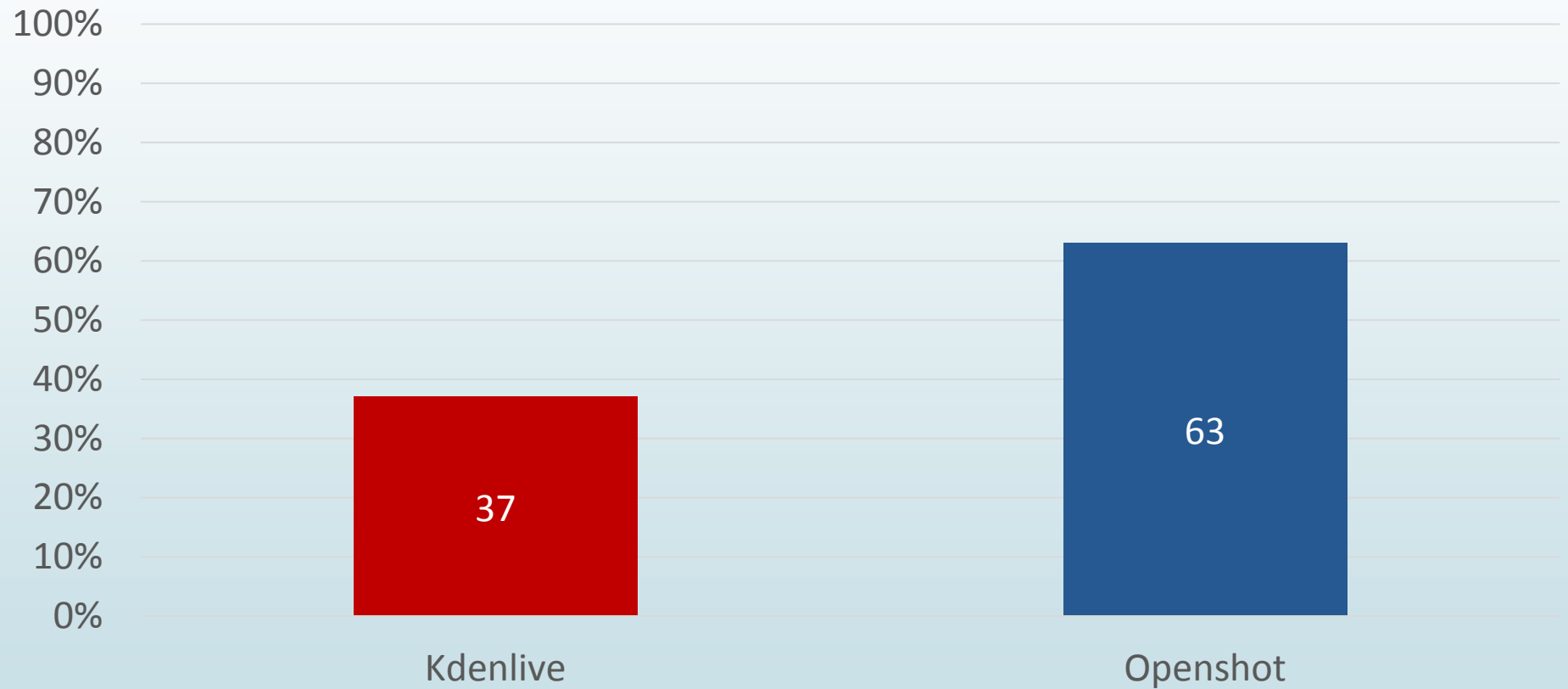


Figure 11: Participant Feedback Overall

Final Analysis & Results and Final Evaluation

Overall Participant Evaluation Results





Conclusion

- We have done software survey, task execution and participant feedback
- In task execution and participant feedback, OpenShot performed better overall
- Openshot has an easy to use, learnable but Kdenlive has flexible interface
- For easy and fast development, we recommend **Openshot!**



THANK YOU FOR LISTENING!

ANY QUESTIONS?



References

- H. R. Hartson, T. S. Andre, and R. C. Williges, “Criteria For Evaluating Usability Evaluation Methods,” Int. J. Hum.-Comput. Interact., vol. 13, no. 4, pp. 373–410, 2001
- OpenShot Features Web Page, OpenShot, <http://www.openshot.org/features/>
- Kdenlive Features Web Page, Kdenlive, <https://kdenlive.org/features>