

Responses to Reviewer Comments

Thank you for good reviews. It was not difficult to agree with the points raised, and fixing them contributed much to improving this chapter.

Meta Review

The quality of presentation needs to be improved, e.g. some repetitive messages, non-formal expressions, better figures (please, not hand-drawn figures, it is a requirement by Springer), etc.

We have gone through the text, removed some repetitive messages and non-formal expressions. Figures are digital.

The structure of the chapter needs to be revised, including a section with an overview of the model (its functional components, connections, diagrams, etc.) (see comments by Reviewer 1).

We have introduced two new sections in the beginning of the paper. The first identifies common use-cases for media sync on the Web, and the other defines the model, as requested by reviewers.

Authors must revise the inclusion and format of references, as well as of footnotes.

Check.

Figures must be numbered and referenced in the text.

Check.

An evaluation section is necessary, especially taken into account that the proposed solutions have been evaluated in other works by the authors.

A new section on evaluation is added towards the end of the chapter

It would be extremely useful for the chapter and the book if the sections dealing with works-in-progress (e.g. standardization efforts or components being developed) are updated by addressing the advances in the last few months.

We have updated. Unfortunately there has not been much progress over this period.

Some concepts and technologies need to be introduced to help non-expert readers to better understand the chapter and its contributions.

Terminology section now includes definitions for certain Web-specific concepts such as user agent and browsing context. A list of abbreviations has also been compiled and added to the chapter to address this. In addition, we have tried to emphasize and explain words when they are first introduced.

The usage of the multi-device media concept breaks common usage of this concept, as it generally used to refer to the synchronization across devices and not between processes within the same device. The Editors suggest adhering to this common usage, but if authors prefer to keep this usage, they should make it clear every time the concept is used for the two use cases (although already mentioned in the text).

This term has been removed from terms, as it was not strictly needed. The term now has the common usage.

Reviewer 1

6. Please, provide some specific comments and suggestions to the authors about how to improve the chapter.

The structure of the manuscript should be improved. At this point, it reads like a few project deliverables or reports (from different authors) merged together. There is a lack of a dedicated section that introduces the model. A functional diagram would greatly improve the readability of the manuscript and help readers to understand why the detailed designs were made and how they interact with each other. I'd also suggest adding an "evaluation" section to demonstrate how the design requirements are met (qualitatively and subjectively). I see the point of Section 9 Developer guidelines but it is disconnected from the rest of the manuscript. There is also a lot of repetitive messages so a general revision is necessary.

We now have added a dedicated section that introduces the model. This includes the functional diagrams that is the key to our work. Evaluation section is added. We gone through the paper and removed repetitive messages. Restructuring has also helped in this regard. Section 9 has been removed from the manuscript.

7. List of typos, grammatical errors and/or concrete suggestions to improve presentation

Regarding the presentation, one of the big issues of this manuscript is the references. There aren't many to begin with and most of them are very dated. The citation format also seems arbitrary. In the manuscript, most of the citation points are still left as "[REF]". This made the reviewing very difficult.

We apologize for this. References are now formatted correctly, and there are more references now. Many of them refer to Web standards documents.

8. In your opinion, are there any missing aspects that should be provided in the chapter?

Two aspect are missing: 1) A dedicated section that gives an overview of the model (functional components, connections, framework view, etc.); 2) Evaluation of the work is quite crucial for a web-based design but its missing.

Check, check.

Reviewer 2

6. Please, provide some specific comments and suggestions to the authors about how to improve the chapter.

It is not possible to link between the references number and ids and the ones in the reference section. It has made difficult the reviewer's task, and must be corrected in the final version. Authors must revise the inclusion and format of references

We apologize for this. This has been corrected now.

Section 3: Please note that this section is written mid2016. -> It would be very helpful for the book if this section is reviewed by considering the latest relevant advances in the last year.

We have updated to early 2017.

It would be helpful if the specific web-related concepts, such as elements and properties (e.g. iframed, div, INS and DEL, media controller...), are briefly defined. Not all the readers will be experts or familiar with the Web terminology. It would be also useful to add them in italics.

Yes, the terminology section includes some important concepts, and the rest should be introduced in the text and highlighted.

“Things are not so rosy...”, “first class citizen”, “full of twists and turns”, “will just sit there until its turn comes”, “under the hoods”, “it is somewhat ironic”, “powerful ally” -> IMHO, these kinds of expressions should not be used in a formal document, like a book chapter. I would suggest replacing them.

These are all replaced.

Multi-device media vs Online Multi-Device Media: In the definition of the former, you indicate “as well as Web agents distributed across the Internet”, this is part of the definition of the latter, right? If so, please correct or clarify it.

These definitions have been removed.

Could you add a brief intro to section 2?

We’ve added a short intro to the terminology section (2).

Read-only -> could you briefly indicate what means? As for read-write.

Removed these terms from terminology section. Used and explained in State of the Web section.

Back-to-back intervals -> could you briefly define the concept?

Removed.

SMIL is the main topic of Chapter [XX] -> Please, add this in another color, so the Editors can indicate it in the final version of the chapter.

Removed reference.

More details and an update of the status of the High Resolution Time would be very helpful

Don’t think we had any updates there.

WebRTC Section: The acronym must be defined. It would be also helpful to at least mention the standardization efforts within the IETF, the intended use cases of WebRTC and also the potential/applicability of the DataChannel for MediaSync (e.g., to exchange time-related info)

Acronym is added. WebRTC does not have any particular primitives for timing, we have made this more clear.

(see Chapter [XX]) -> Add it in color, so the Editor can identify the Chapter, if it is finally included in the book.

Removed.

Notes on page 11: Use a different format for the notes (footnotes), such as super-indexes.

Fixed.

The concept user agent should be explained.

Added in terminology

Add figures numbers and reference them in the text. It would be also nice if authors could provider higher-quality figures (not hand-drawn).

Check.

7. List of typos, grammatical errors and/or concrete suggestions to improve presentation

Authors should also revise the writing of the document

All the typos and text issues mentioned are fixed.

This section barely talks about evaluation and accuracy of shared motion, but I strongly encourage adding a section about evaluation, as authors have already published articles and documents about it.

This is added.

“Timingsrc [TSRC] is a JavaScript implementation of this programming model.” -> Could you add more details about it? Also, the sentence is rather sort.

This reference has been moved to new section on standardization, where it is clarified a bit more.

Section 8, Timing Provider sub-section: Could you briefly explain (again) what timing provider is?

Removed.

small JavaScript MediaSync library -> Could you add more details and a ref? Also for the sequencer object, please.

More details are added.

A figure for the sequencer object would be helpful.

Figure is added.

Discrete timed data sub-section: Up to 4 consecutive sentences begin with "The sequencer...". Please, re-phrase.

This text has been improved.

The sequencer is proposed for standardization -> Please, specify.

This text is removed. But covered by new section on Standardization.

in-app comments -> Could you clarify what is it?

Removed this term

For example, a play button should change to a pause button if the timing object reports a nonzero speed, it should not check the state of a video element -> Could you re-phrase?

This text has been removed.

Page 28: In many parts, please clarify what "motion" is, a Timing Object?

We have clarified this in the model now. Motions are online objects and timing objects provide access to motions locally. This has been done consistently through the chapter.

Conclusions -> I would suggest to at least also mention the MediaSync library and sequencer object in that section.

These are useful tools, but we don't regard them as important enough to be mentioned in the conclusion. Note also that we have removed the statement that the sequencer is proposed for standardization.

Please, add a comma before "etc" all over the text. Authors should also re-place the use of ":", by " ." in many parts of the text.

This is fixed.

8. In your opinion, are there any missing aspects that should be provided in the chapter?

I would strongly encourage adding an evaluation section, maybe including link to demo videos, screen captures of demos, evaluation scenarios and results, etc. It would be a pity not to include such contributions, especially considering that authors have published related articles and documents before. This would make the contributions of the chapter much stronger.

Link to demos is included. New section on evaluation is provided, and more detailed descriptions of mediasync library and sequencer is provided.