



## Developing a Hair Styling Flipbook in the Television Industry for West Jakarta R Hairdressers

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### ARTICLE INFO

#### Article history:

Received  
Received in revised form  
Accepted  
Available online

### ABSTRACT

The research aimed to 1) develop a hairdressing flipbook in the television industry for hairdressers in the West Jakarta area, and 2) develop a hairdressing flipbook that is appropriate for use by hairdressers in the television industry in the West Jakarta area. The method used was Research and Development (R&D) with the 4D development model: define, design, develop, and disseminate. The product dissemination employed qualitative and quantitative descriptive analysis. The research findings are elaborated as follows. (1) The design used in developing the flipbook shows talent hair styling in the television industry such as hair styling materials and equipment, hair styling for male and female talents, and hair care, the hair styling flipbook which can be accessed via the file link: <https://online.flipbuilder.com/xnfly/axem/> (2) know the level of feasibility of developing this flipbook, the user test calculation validation assessment is 91%. The conclusion is that the "development of a Hairdressing Flipbook in the Television Industry for Hairdressers in West Jakarta " is highly feasible.

#### Keywords:

hairstyling; hairdresser; flipbook;  
Television Industry

Tujuan penelitian flipbook penataan rambut: 1) menghasilkan pengembangan flipbook penata rambut di industri pertelevisian bagi hairdresser daerah Jakarta Barat; 2) menghasilkan pengembangan flipbook penata rambut yang layak digunakan oleh hairdresser di industri pertelevisian daerah Jakarta Barat; Metode yang digunakan Research and Development (R&D) dengan model pengembangan 4D, yaitu: tahap define (pendefinisian), design (perancangan), tahap develop (pengembangan), tahap disseminate (penyebaran). Penyebarluasan produk menggunakan analisis deskriptif kualitatif dan kuantitatif. Hasil penelitian flipbook penataan rambut: (1) rancangan design yang digunakan dalam pengembangan flipbook, menampilkan penataan rambut talent yang ada di industri petelevisian seperti: materi dan alat-alat penataan rambut, penataan rambut untuk talent laki-laki dan perempuan dan perawatan rambut, terciptanya hasil flipbook penataan rambut yang dapat diakses melalui file link: <https://online.flipbuilder.com/xnfly/axem/> (2) mengetahui tingkat kelayakan terhadap pengembangan flipbook ini, perolehan penilaian validasi perhitungan uji pengguna yaitu 91%. Kesimpulan "Pengembangan Flipbook Penataan Rambut di Industri Pertelevisian untuk Hairdresser di daerah Jakarta Barat" sangat layak.

## 1. Introduction

In the industrial world, there are company activities, namely the creative industry which focuses on discovery and innovation. A series of economic activities related to the development or utilization of knowledge and information are classified as creative industries. According to Huda, there are many kinds of digital books, such as PDF (Portable Document Format), KF8 (Amazon Kindle Fire Format), and so on [1]. Of the many types of digital books, they are usually written in the form of electronic books.

Digital books nowadays are increasingly sophisticated with the development of media in the form of 3D-based electronic e-books or what can be called flipbooks. According to Adilia, a flipbook or folding book is a book that contains a series of images that change from page to page, and the pages can be turned quickly, the images look animated with simulated movements or other movements[2]. By using the flipbook application device, the media display will be more varied, not only text, images, and video, but also audio can also be inserted into this media so that the learning process will be more interesting [3].

Today's digital world, especially in the industrial world, relies heavily on all communication media using digital access, including digital use using smartphone communication tools. According to Anwar & Aprillia [4], hair styling combines two types, more or bun shapes in one styling model. The key to being a good hairdresser is not only training in styling techniques but also communication skills and loyal customer service; they must understand the desk the client expects and then provide it. According to Sari, hair styling is the action of tying, bunning, and adding various innovations and hair accessories, either individually or together, to make hair more attractive and beautiful [5]. The definition of a hairdo is the treatment carried out by a professional person providing beauty services who specializes in handling hair creation and care. The person who handles hairdos or hair styling is usually called a hairdresser, while the result of styling hair with various styling results and hairstyles is hairstyle. Basically, the hairstyle process is already widely known by hairdressers who are usually self-taught via social media, but its application is less applicable to the hairdo styling process.

When researchers conducted observations at several backstage make-up artists and hairdressers during the Industrial Practice process at PT Star Media Nusantara and RCTI+ (MNC GROUP), they often saw hairdressers looking for sources on how to make hairdos impromptu and it is less efficient because many hairdressers read descriptions of photoshoots, music videos, television talk shows on MNC Group and RCTI+. Besides, according to the researchers' observations, hairdressers read books in the form of textbooks, which are large and thick, often making hairdressers and beginners idle to read and study them.

This flipbook development innovation was created for hairdressers to do their work and can easily learn about hairdos after or before hairdressing work. Many hairdressing or hairdo books on the market are still rarely used or studied by hairdressers in creating or innovating hair styling, many hairdressers rely more on video tutorials, but video tutorials are difficult to find and difficult to adapt to the theme of the description of the project, making hairdressers and beginner hairdressers have difficulties and waste time learning hair styling. Therefore, the researchers are interested in conducting the research titled "Development of Hairdressing Flipbooks in the West Jakarta Television Industry".

Based on the background, the limitation of identifying the problem is regarding the development of an innovative product "Development of a hairdressing flipbook in the West Jakarta Television Industry" where hairdressers use textbooks as a reference for styling hair in digital form, where the book contains hair styling for talents in the television industry who have become Masters of Ceremonies for talk shows, Miss Indonesia selection events, KDI pop or dangdut singer stage shows, choirs, and they make hair styling for music videos for several Indonesian artists.

The research on making this flipbook is R&D (Research and Development), referring to Abadi, steps: define, design, develop, and disseminate [6]. At the data collection stage, it was used to develop a hair styling flipbook as a learning medium. R&D (Research and Development) is often known as product development, to create new goods through the development process. After validating the learning media by material expert validators and media experts, the researcher will submit a questionnaire to answer questions about hair styling at the end of the research. 1. Research Location. The development research of this flipbook started with a search for data and content

sources for flipbook materials which was carried out in Wates, Kulonprogo, DIY. 2. Research Time. This research was conducted from February 2023 to July 2023 by starting to look for ideas, problem analysis, reference product analysis, and design creation, and continued with product creation, product validation, product acceptability testing, data processing, and report completion. The materials and tools in the research were divided into two groups, namely materials and tools for the product manufacturing process and materials and tools for the flipbook product manufacturing process. A more detailed explanation is as follows: 1. The application product creation tools used to create flipbooks include Canva, Ms. Word 2019, Photoshop, and Flip PDF Professional. 2. Hair Styling Materials and Tools. The tools used are included in the equipment category, for flipbook trials.

The following are details of the tools used to make the flipbook product. The qualitative and quantitative analysis in developing this hair styling flipbook requires data collection, namely grouping it into qualitative and quantitative data: a. In qualitative research, the main tools and instruments for data collection are observation sheets and questionnaires. The data collection was carried out through observation, distribution of questionnaires, and interviews. The data were collected to create a product through several stages and processes. b. In quantitative research, the tools and instruments used were closed questionnaires and expert validation sheets. Procedure and Methods.

The following is a description and explanation related to the procedure and methods used in developing the hair styling flipbook: a. Analyze and describe the product that will be developed in the form of a hair styling flipbook with advantage values, namely creating a special hair styling book as a reference for hairdressers in learning hair styling easily and usefully for the readers. b. Carry out flipbook analysis or literacy that will be developed from various references. c. Create a design/draft on a hairdressing flipbook that will be developed as material specifically for hairdressers for hairdressing in the television industry in the West Jakarta area. d. Produce photos/images/videos for material in the flipbook such as hair styling steps and hair styling which are often used in the television industry based on the researcher's observations. e. Select, determine, and design presentation techniques according to the product being developed. f. Expert validation and test of acceptability and usefulness of flipbook involving research supervisor, lecturers who teach hair styling courses, and Cosmetology students.

### 1.1. Dissemination Stage

The product dissemination was carried out to determine the acceptability of the hairdo flipbook product according to the wider community. In the design of the flipbook acceptability test, the distribution stage is the final stage in the research, where the product is subjected to a favorability test to determine whether the research product is accepted or not accepted by the community.

#### 1.1.1 Favourability Test

The favorability test or hedonic test of the product "Developing a Hairdresser flipbook in the West Jakarta Television Industry" was carried out through product try-out and distribution of questionnaires or product assessment instruments directly to 35 panelists who were not trained as hairdressers with the results of product development prototypes. The results of the questionnaire were analyzed and interpreted the feasibility score in the calculation of the Likert scale method:

**Table 1.** Product Testing Data Source

NO	Category	Score
1	Strongly Agree	4
2	Agree	3
3	Fairly Agree	2
4	Strongly Disagree	1

(Source: Sugiyono, 2009)

Product Feasibility Calculation

Description:

KP = Product Feasibility

X = Obtained Score

x1 = The total number of ideal scores in one item

$$KP = \frac{x}{x^1} \times 100\%$$

Next, the percentage results are used to provide answers to the feasibility of the aspects studied for feasibility. According to Arikunto, there are four categories of feasibility[8]:

**Table 2.** Product Testing Data Source

No	Percentage of Average Score	Feasibility Category
1	81% - 100%	Highly Feasible
2	61%-80%	Feasible
3	41%-60%	Fairly Feasible
4	21% - 40%	Not Feasible

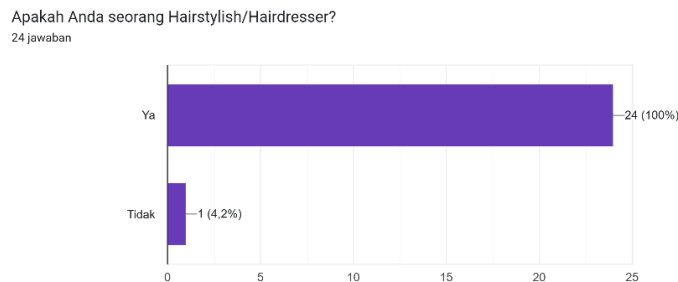
(Source: Arikunto, 2009)

**2. Results and Discussion**

**2.1. Results**

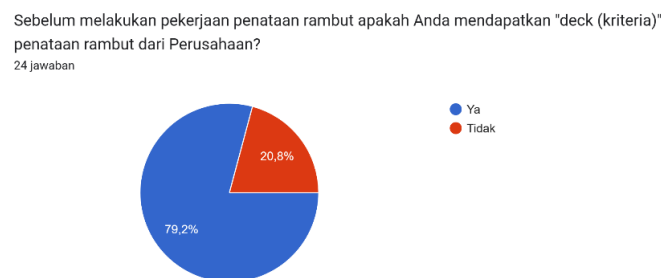
**2.1.1 Define**

- Problem analysis is carried out through the author's observation survey. The following are the results of a survey from respondents regarding a questionnaire that was distributed to find out the problems and needs of hairdressers while carrying out hair styling in the television industry in West Jakarta as follows:



**Fig 1.** Result of Questionnaire

The interviews were conducted by researchers to look for problems that occur in the television industry experienced by hairdressers in the television industry by looking for existing problems through questionnaires distributed by researchers who do a lot of hair styling work in the television industry in the West Jakarta area.



**Fig 2.** Result of Questionnaire

Hairdressers who often do hair styling work in the television industry receive a "deck" or hair styling criteria from the company before doing hair styling for talents, showing 79.2% of the results of the interview data questionnaire distribution.

Apakah dengan adanya "deck" tanpa sumber yang jelas dan waktu terbatas, membuat Anda kesulitan mencari referensi penataan rambut?  
23 jawaban

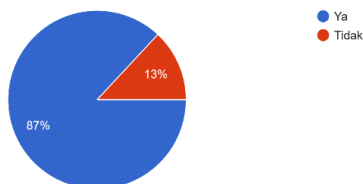


Fig 3. Result of Questionnaire

Of the 24 hairdressers, 87% had a "deck" in preparation for a hairdo, requiring lots of references for styling hair.

Jika buku pedoman penataan rambut dibuat berbentuk buku digital berbentuk "flipbook (buku digital 3D)" apakah Anda setuju, dengan kemudahan mengakses dan penggunaannya?  
24 jawaban

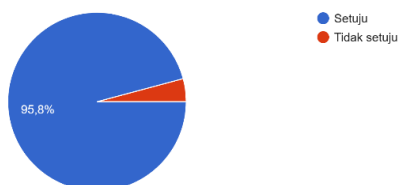


Fig 4. Result of Questionnaire

The hair styling manual was created to be hair styling references, which hairdressers need to shorten the limited time when looking for hair styling references, and the hairdressers agreed that the researchers created a 3D digital hair styling flipbook, providing many conveniences, and making it easier to use to find sources of information. Of the 24 people, 95.8% agreed with the researchers to create a hair styling reference.

Apakah menurut Anda adanya pembelajaran penataan rambut melalui (Buku digital flipbook 3D) dapat memudahkan Hairdresser untuk belajar dan ...kan penataan rambut dimana saja dan kapan saja?  
24 jawaban

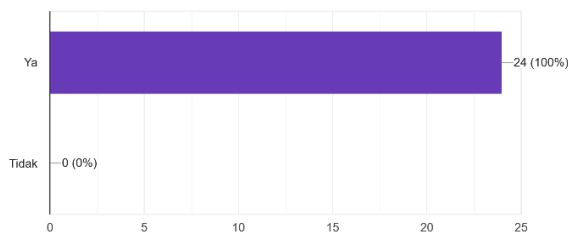


Fig 5. Result of Questionnaire

A Hair Styling Book was developed to help make it easier for hairdressers to learn and look for hair styling references. Of the 24 hairdressers who answered the questionnaire, they support the development of a hair styling book in the form of a flipbook for easy access and this book is approved and supported by hairdressers to make their work easier.

- The needs analysis of hairdressers in developing hairdressing flipbooks is based on the ease of finding hairdressing resources from textbooks to flipbooks with lots of easy access.
- A literature study was conducted to determine the type, characteristics, and availability of products selected from 3 existing reference products to become 3 designs that would later be selected as 1 reference flipbook cover design.
- The material analysis was obtained to fill out hair styling flipbook research, look for reading literature sources from various hairdo material flipbooks that had been published previously, and information outside of interviews with hairdressers who always used hair styling references using textbooks.

### 2.1.2 Design

The results of the hair styling cover and layout were used as a reference for the selected hair styling and layout flipbook, the selected layout and cover arrangement has the following reasons:

**Storyboard** : The presentation presented in each chapter is completed with material, as well as the systematics of bookmaking in general, which are available in this storyboard design.

**Cover** : The cover attracts the reader's attention to know that the book is a hair-styling material and is attractive in terms of the colour of the cover presented.

**Layout** : The chosen layout has a reason and aims to make it easier for readers to read with a justified, left, and right layout.

**Form** : digital flipbook, A5 (21cm x 14.8 cm)

### 2.1.3 Develop

The development of the hair styling flipbook resulted in a product that was validated by 2 media experts and 1 material expert named Mrs. Asi Tritanti, M. Pd, and the second media expert validation was carried out by validator Mrs. Warda Indadiyahati, M. Pd. The following are the results of validation from media expert validators:

**Table 3.** Media Validator Percentage Results

No	Aspect	Obtained Score	Max. Score	Percentage	Category
1	Display	40	48	83%	Highly Feasible
2	Technical Quality	28	32	88%	Highly Feasible
3	Visual Media Element	14	16	88%	Highly Feasible
<b>Total</b>		<b>82</b>	<b>96</b>	<b>85%</b>	<b>Highly Feasible</b>

The following are the results of the validation of distributing questionnaires to Mrs. Mause Agrevinna, M.Pd. validation to the supervising lecturer for validation of material experts obtained results from aspects of suitability and accuracy of the material that received a score of 37 with a percentage of 93% with a highly feasible category. The material accuracy aspect obtained a score of 11 with a percentage of 92% in a highly feasible category, and finally, the linguistic aspect obtained a score of 15 with a percentage of 94% in a highly feasible category. Research on the development of flipbooks for hairdressers in the television industry from validation by media experts obtained a highly feasible category measured using a percentage approach according to Arikunto's (2009) category of 81% - 100%.

**Table 4.** Material Validator Percentage Results

No	Aspect	Score	Max. Score	Percentage	Category
1	Material Suitability and Appropriateness	37	40	93%	Highly feasible
2	Material Accuracy	11	12	92%	Highly feasible
3	Language	15	16	94%	Highly feasible
	<b>Total</b>	<b>63</b>	<b>68</b>	<b>93%</b>	<b>Highly feasible</b>

The following are the results of the validation of distributing questionnaires to Mrs. Mausa Agrevinna, M.Pd. validation to the supervising lecturer for validation of material experts obtained results from aspects of suitability and accuracy of the material that received a score of 37 with a percentage of 93% in a highly feasible category. The material accuracy aspect obtained a score of 11 with a percentage of 92% in a highly feasible category, and finally, the linguistic aspect obtained a score of 15 with a percentage of 94% in a highly feasible category.

The flipbook for hairdressers in the television industry from validation by media experts obtained a highly feasible category measured using a percentage approach according to Arikunto, category 81% - 100%[8].

**Table 5.**User Panelist Validation Percentage Results

No	Aspect	Score	Max. Score	Percentage	Category
1	Display	637	700	91%	Highly Feasible
2	Visual Media	510	560	91%	Highly Feasible
3	Linguistic element	381	420	91%	Highly Feasible
4	Material Suitability	252	280	90%	Highly Feasible
	<b>Total</b>	<b>1780</b>	<b>1960</b>	<b>91%</b>	<b>Highly Feasible</b>

The following are the results of the validation of distributing questionnaires to 35 trained hairdresser panelists who have many jobs in the television industry. In the display aspect, the score was 637 with a percentage of 91% and was categorized as a highly feasible category. The visual media element aspect received a score of 510 with a percentage of 91% and was categorized as a highly feasible category. In the linguistic aspect, they got a score of 381 with a percentage of 91% and were categorized as highly feasible, finally, in the material suitability aspect, they obtained a score of 252 with a percentage of 90% and were categorized as a highly feasible category. From the percentage calculations in the table above, the total score obtained is 1780 with a feasibility percentage of 91% and obtaining a very feasible qualification, obtaining a category measured in percentages in the 81% - 100% category which is claimed to be highly feasible[8].

## 2.2. Discussion

### 2.2.1 Define

The analysis of defining through the stages of several reference books. As many as three reference products to be used as selected flipbook literacy and taking the differences from the 3 reference flipbooks because the product that the author will develop is the one which provides information and learning media for beginner hairdressers or hairdressers in the television industry in the West Jakarta with final design and final flipbook results developed as the final results of validation tests.

### 2.2.2 Design

Selection of hair styling flipbook media. This selection process is adjusted to prepare applications for making flipbooks, such as Flip PDF Professional flipbook maker, video scribe, FLV

converter, flash video encoder, and Microsoft Word 2019. This flipbook uses a one-column writing system to make readers easier and understand the content of the material maximally in the reading book. Below are the front and back covers as well as the one-column layout of the hair styling flipbook. According to Tondreau, one column is usually used for long texts, essays, textbooks, or reports[9]. The most appropriate thing is that the structure in the visual narrative is dynamic so that the reader continues to read page after page. Then, it was implemented in the Flip PDF Professional Flipbook maker software.

### 2.2.3 Develop

After going through the prototype development, the hair styling flipbook underwent validation tests with two 2 media experts and 1 material expert.

- Media Expert Validation

The media expert validation test on technical quality aspects and visual media element composition aspects produced the highest percentage score of 28, a percentage of 88%. This is in line with the technical quality aspect of research by Kartini & Putra (2020) "Student Responses to the Development of Android-Based Interactive Learning Media" which has a technical quality aspect of 88%[10].

The aspect of visual media elements which has a score of 14 percent is 88%. This is in line with aspects of visual media elements in research by Sintya Devi & Wira Bayu (2020) "Critical Thinking and Science Learning Outcomes Through Problem-Based Learning Assisted by Visual Media" which has 88% similarities in aspects of visual media elements[11].

The display aspect has a percentage of 83% and has a score of 40. This is in line with the display aspect in the research by Anjarsari et al., (2020) "Development of Powtoon Audiovisual Media in Mathematics Learning for Elementary School Students" which has a display aspect similarity of 83% and produces the same qualification, namely "very feasible"[12]. The following are the results of the revised validation from media expert validators:

- Media Expert Validation Revision

The material validation assessment with revisions is in the form of suggestions and input. The suggestions and input obtained from the media experts with revision of validator I by Mrs. Asi Tritanti, M.Pd. are elaborated as follows:

There is an overall flipbook display that still looks "dense", it is better to summarize or remove ornaments that are not important and do not support the content of the book, the list of images is updated according to the content, with good and correct writing, and the writing font is changed to be more proportional.

The suggestions and input obtained from the media experts with the revision of validator II by Mrs. Warda Indadihayati, M.Pd. are mentioned below:

"Figures on tables should be enhanced in aesthetics, words with foreign languages should be italics, foreign languages should be minimized and translated into standard Indonesian, book font sizes are adjusted, tables are updated or kept unified, and the video links should be connected to YouTube when clicked."

- Material Expert Validation

The material expert validation test on the linguistic aspect produced the highest percentage score of 15, a percentage of 94%. This is in line with the aspects of suitability and accuracy of the material in the research by Wibowo & Pratiwi, "Development of Teaching Materials Using the Kvisoft Flipbook Maker Application Material Collection" which has the same aspect of material suitability and accuracy as 94%[13]. Aspects of suitability and accuracy of the material, namely getting a score of 37 and a percentage result of 93%. This is in line with the aspects of suitability



and accuracy of the material in research by Hapsari et al., (2018) "Development of Augmented Reality Video as a Supplement to the Sign Language Module" which has the same aspect of suitability and accuracy of the material as 93% [14].

The accuracy aspect of the material has a score of 11 percentages of 92%. This is in line with the aspect of material accuracy in the research Octaviani & Rahmawati (2019) "The Accuracy of Anecdotal Text Material in High School Indonesian Language Textbooks" which has a material accuracy of 93%. After being presented as a percentage, flipbooks are measured using a range of product quality criteria using percentages[8]. Based on the assessment of media experts, flipbook learning media has a highly good category with a percentage of 92% "very feasible" and requires revision. Based on the assessment of material experts, the flipbook learning media has a highly good category with a percentage of 85% and based on the material expert's assessment, the flipbook media has a percentage of 93%.

This flipbook can be used for revisions according to suggestions from the validator. So based on the research above, the material expert research is said to be highly feasible according to the criteria of Likert scale calculation results[8]. The following are the results of the revised validation from the material expert validator:

#### 1) Revision of Material Expert Validation

Material expert validation assessment with revisions in the form of suggestions and input by Mrs. Mausa Agrevinna, M.Pd. is elaborated as follows:

- a. Suggestions and input obtained from the material expert with revisions were "for the layout of the figures/hair material, it is better to present the final results first rather than presenting the steps.

- Limited Scale Test Validation

Before the digital-based hair styling flipbook in the television industry was distributed widely, this product was tested for its effectiveness on hairdressers either through a limited-scale test or a small-scale test on a teammate of the 2019 UNY Cosmetology and Beauty writing team. At this stage, the testing was carried out on June 16 2023 to 10 panelists.

Based on the test data, the results of distributing questionnaires to 10 panelists gave an average score of 435 with a percentage result of 91% and obtained a highly feasible category based on measuring feasibility[8]. The results of research on the development of flipbooks are also in line with the research by Muzakkir et al., (2022) "Effectiveness of Smartphone-Based Interactive Multimedia for Limited Face-to-Face Mathematics Learning", testing a limited scale with limited panelists with a qualifying result of 91% which is highly feasible[16].

#### 2.2.4 Disseminate

In the dissemination phase taken place from July 16, 2023, until completion, questionnaires were distributed to hairdressers in the television industrial area of West Jakarta, with 30 panelists. The percentage results are used to provide answers to the feasibility of the aspects studied. The feasibility of hair styling flipbook users is from the percentage of display aspect. The score obtained from hair styling flipbook users is 637 and the percentage of 91% is categorized as highly feasible. The users prefer the design. The hair styling flipbook learning media has an attractive design, and the sound effects that are heard are exactly in line with the movement of the figure. This is in line with the display aspect in research by Suryani et al., (2018) "Multimedia Development in English Vocabulary Learning in Elementary Schools" which has a similarity in display aspects of 91% and produces the same category, namely "highly feasible".

In the aspect of visual media elements, the score obtained was 510 with a percentage result of 91%. The content of the hair styling flipbook learning video uses a clear narrative. Place the figure

or content correctly so that readers can find it quickly. The flipbook learning media is easy to operate smoothly. This is in line with the appearance aspect of research by Vandayo & Hilmi (2020) "Implementation of the Use of Visual Media for Speaking Skills in Arabic Language Learning" which has 91% similarities in aspects of visual media elements and produces the same category, namely "highly feasible"[17].

In the linguistic aspect, the score obtained was 381 with a percentage of 91% and received a highly feasible category. It is highly feasible for the category of instructions for using hair styling flipbook learning media that are clear and easy to understand. Hair styling flipbook learning media is presented simply and interestingly. The learning media in the hairdressing flipbook has illustrative quality (text, narration, images, videos, and animations). Sound effects in flipbook media can attract attention and do not interrupt the user's concentration. This is in line with the display aspect of research by Septiana et al., (2020) "Linguistic Aspects of Digital Media in Early Childhood Learning during the COVID-19 Pandemic" which has 91% similarity in linguistic aspects and produces the same category, namely "highly feasible"[18].

The aspect of suitability of the score material obtained from the calculation, namely 252 overall displays (typology, color, illustrations, icons, layout) is interesting and the final percentage of the 30 panelists is 90% and the data are qualified as highly feasible. After being calculated, the flipbook is measured using a range of product quality criteria using percentages[8]. This is in line with the display aspect of research by Asri & Dwiningsih (2022) "Validity of Interactive E-Modules as Learning Media for Training Visual-Spatial Intelligence on Covalent Bond Material" which has similarities in the material suitability aspect of 90% and produces the same category, namely "highly feasible"[19].

Based on this, according to user tests on the product, the product "Hair Styling Flipbook in the Television Industry" is highly suitable to be used as a hair styling learning book product in the television industry in digital form, namely "flipbook" with the test results of trained and untrained panelists in West Jakarta area as well as limited favorite panelists from members of the Cosmetology and Beauty department, has an overall percentage of users of 91% who fall into the highly appropriate category according to the modified percentage of Arikunto[8].

This study is in line with research by Rahmah & Susilowibowo (2021) and Wibowo & Pratiwi (2018), this flipbook electronic teaching material can improve learning outcomes in terms of digital media, which is consistent, and the use of electronic teaching materials can improve learning outcomes and visual, oral, listening, writing and emotional activities. Besides, this research confirms research findings of K. W. B. Putra et al., (2017) that school students prefer studying with E-Modules to studying using conventional books[20].

### 3. Conclusions

Based on the results of the problem formula, the conclusion of this research is the development process carried out by the authors to produce hair styling flipbook media. The following are the concepts and percentage feasibility results from the experts.

To create a research design for hair styling flipbook media development employed the R&D method with the 4D model, namely (define, design, develop, disseminate), namely: Define, problem analysis process, needs analysis, material analysis and literature study related to hair styling flipbooks carried out by hairdressers. Design, designing the presentation of the display, content, and development materials for the hair styling flipbook. Develop, in the form of a media and material expert validation process, and a small-scale test of the development of a hair styling flipbook. Disseminate, in the form of spreading the product regarding the acceptability and usefulness of the product by the panelists.

Hair styling flipbook helps make it easier for hairdressers to do hairdos, hair styling flipbooks can be accessed via a "link" file which can be downloaded and accessed on computers and cellphones. To determine the acceptability of flipbook development, a validation or feasibility test was carried out on the effectiveness of the hair styling flipbook developed using the method (Research and Development) through validation accuracy seen from the validation results of the feasibility assessment instrument for material experts, media experts, small scale tests and feasibility tests on user "hairdresser". Based on the results of the percentage of questionnaires distributed to media experts, the percentage was 85%, material expert validation was 93%, the limited scale test was 91%, and the user test calculation was 91%. The percentage results obtained are claimed to have the categories to be highly suitable for use and dissemination to the general public.

### Suggestions

After researching a hair styling flipbook development in the television industry in the West Jakarta area, the researchers suggested that for further research to develop this hair styling book to contain more hair styling steps and innovate it even better in line with developments in hair styling at that time and current trends.

The flipbook developed still has few supporting figures/photos in the material, so it is hoped that the next writer or developer can come up with more supporting images/photos. If you have optimized the development of the book, it is better to start publishing or selling the flipbook, such as on the Google Playbooks digital book platform.

The limitations experienced by the author are the lack of time to study the many hairstyles that exist in the television industry and to cover a lot of hair styling material in the "development of a hair styling flipbook in the television industry for hairdressers in the West Jakarta area." The next research is expected to be able to add steps in hair styling tutorials in the next flipbook development.

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