DEVELOPMENT OF E-MODULES ASSISTED BY FLIPBOOK APPLICATIONS IN MARKETING SUBJECTS IN VOCATIONAL SCHOOLS

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Abstract
Learning media can contribute to improving learning outcomes. By using the right media, learners can help students learn more productively, interactively, and according to their characteristics. This research was conducted to produce media, using the Borg and Gall development model. The activity begins with the analysis of learner needs, followed by the identification of components and the design of products that are ready to be tested and revised so that they can be optimally utilized. This development research produces Flipbook-Based e-book Learning Media using Canva and Flipbook Maker Software, which can be used in Basic Marketing Subjects, professional field worker training programs, or for prospective entrepreneurs in the marketing field. Product trials were carried out in three stages, through expert testing, small group testing, and field testing stages following the education calendar in vocational schools. At the end of each testing stage, evaluation and revision activities are carried out, so that the final product can reach the ready-to-use level and has the feasibility to be utilized.

Keywords: Learning media, e-book; information technology, digital marketing, vocational school

INTRODUCTION
Today, the education system has also developed with the industrial revolution 4.0 and social revolution 5.0. This is evidenced by the formation of several systems to support the progress of education in shaping quality human resources. In the process of shaping the creation of superior human resources from the world of education, there are often obstacles. Supported by changes in people's behavior from the impact of the covid 19 pandemic that occurred throughout the world, the education system and learning culture have also changed. The utilization of technology is expected to be maximized in learning activities. The formation of quality human resources can achieve success in learning. One way to form quality and effective human resources is to use learning media. Technological advances today can be applied in the field of education as a facility to facilitate a more innovative and creative learning process.

Following Law Number 14/2015 concerning teachers and lecturers, it is explained that educators are required to be able to utilize technology in the current era for the benefit of educational development activities. One of the uses of technology in the learning process is the use of learning media. Learning media acts as a technology to carry information that can be used in the learning process. Media with a well-systemized device can facilitate students in the learning process. Teaching materials that are adapted to the character of students can be more interesting teaching materials. With technological advances in the current era, educators are required to adopt technology such as learning media. According to Suharsono (2019), learning
media is one of the important components in achieving learning targets in the field of business and entrepreneurship. This media can improve learning outcomes in the field of business if theoretical and application learning experiences are integrated into each learning event that is scheduled as a unit.

The use of learning media is based on four aspects: philosophical, psychological, technological, and empirical (Jennah, 2009). Teachers as facilitators must be able to apply technology-based learning media. One of the learning media that is suitable for students to use in the classroom and independent learning process is E-book. Digital books or often called E-Books are books or teaching materials that are developed. The E-Book is one of the solutions to develop the learning process. This condition is also evidenced by studies that state that in developed countries the use of e-books has reached 80% (Acer Education, 2021). Considering the practicality aspect through search and annotation features, the use of e-books is considered an effective learning media. Students do not need to search one by one for the context or theme they want, but simply type in the context.

E-Books were chosen to be developed because one of the obstacles that often occurs in schools is that learning has limited student handbooks and the material contained is difficult to implement according to the results of interviews with SMK PGRI 3 Malang teachers. The interview found that the Fundamentals of Marketing subject in phase Em has 9 elements that must be achieved, one of which is element 3 Job profile and business opportunities in the marketing field. The absence of a student handbook has an impact on the lack of enthusiasm and motivation to learn (Nawawi, 2020). According to Widodo, (2017), a lack of learning motivation can influence the activeness of students in learning activities which results in less than optimal student learning outcomes.

As described by Priyanto, (2013) that the paradigm of education and learning in schools demands that teachers can act as facilitators and students as learning subjects, in learning media as teaching materials that can support student-centered learning (SCL) programs are realized. The advantage of using e-books is that they can be used by anyone, anywhere, anytime. E-books can be accessed online or offline by readers.

In practice, the E-Book design that is in great demand is a flipbook. Flipbook pages can be opened like reading a book on a monitor screen (Riyanto et al., 2013). The choice of flipbook itself is based on ease of manufacture and aesthetics. Coupled with the use of flipbooks that do not take up space or memory because they are in the form of links, this is considered an important point. The capacity of mobile phones that students generally use for entertainment purposes is further alleviated by the existence of flipbooks because students do not need to download and only click on the flipbook link. One software that can be used to present references or books on the electronic display is the flipbook maker. Flipbook Maker is software that has the use of file pages such as opening a physical book but on a monitor. Software or software is used to provide a more varied media display, not only displaying text, this media can also be inserted images, videos, and audio so that it can provide a more interesting learning experience (Sugianto, et al, 2013). Books as learning media can be a source of information that students can use as the main reference containing subject matter.
One of the education systems implemented in Indonesia is the Merdeka Curriculum (Aditomo, 2022). The purpose of establishing a Vocational High School is to create students who have the output to become a workforce that can adapt, develop themselves, and have skills according to the needs of the business / industrial world (Ministry of Education and Culture, 2018). To achieve the objectives of the establishment of vocational schools, research on the development of learning media for vocational students is deemed necessary.

The design of this study refers to research conducted by Wahyuni (2021) which provides a conclusion on the results of the study which states that the feasibility of getting criteria is feasible. With an average score of 94.08% based on the presentation, content, and language components. Theoretically and empirically with an average score of 98.37% teacher response and 98.68% student response, it is very feasible to use.

Based on the information and data obtained, the researcher raised the issue in his thesis entitled "Development of E-Book Learning Media Based on Flipbook for Class X BDP Students of SMK PGRI 3 Malang" In writing this thesis, it is hoped that this research can be useful to be one that can be chosen for teachers as a supporter of teaching and learning activities so that the objectives of learning are achieved.

Learning Media

Learning media is anything that can be used as a medium to channel messages from an educator to students who can stimulate the thoughts, feelings, attention, and interests and attention of students so that the learning process occurs (Nurdyansyah, 2019). Likewise, "learning media is a tool that can assist teaching and learning activities so that the meaning of the messages conveyed becomes clearer and the objectives of education or learning can be achieved effectively and efficiently" (Nuritta, 2018). The existence of learning media can be used as a material or tool by educators to students in delivering material easily.

E-Books

E-books are book publications available in digital form, consisting of text, images, or both, readable on a flat-screen computer screen or other electronic device. E-Books function as learning media that can increase learning productivity and as a tool for educators in making learning time effective and efficient. As stated (Fatah, 2015) some of the functions of E-Books as learning media are that they can increase learning productivity. The learning process cannot be separated from learning resources in the form of books that are published offline or online.

Concerning the process of building entrepreneurial character in marketing, Liguori and Winkler (2020) have identified Challenges and Opportunities for Entrepreneurship and Pedagogy along with a description of how to structure scientific content and learning activity scenarios to achieve competency standards optimally. As Boldureanu et.al (2020) synthesized that academically, what Higher Education should do is build a conceptual framework and learning process based on the phasing of certain theoretical models or 'life-cycle theory' according to their needs. Thus, each educational institution should be able to determine learning approaches and strategies that are simultaneous between instilling value teachings, mastering the content of basic scientific materials, understanding the phenomena of life in the field, and
building the ability to take smart actions in the process of forming the identity of vocational school graduates who are prospective independent entrepreneurs.

**Marketing Content Review**

Academically, marketing is one of the areas of expertise programs that learn about the job profile of the professional management profession and business opportunities in the field of marketing, jobs or professions in the field of marketing in the present and future, as well as entrepreneurship in the field of marketing that can read market and business opportunities, to build vision and passion, and to conduct real project-based learning as a simulation of entrepreneurial projects. In line with the development of digital technology in the fields of production, finance, and marketing, the content of academic studies in marketing has also undergone significant changes in the last five years.

**METHOD**

This research uses the Research and Development (R&D) approach. The development model used is Borg and Gall with the final target of producing products, namely e-book learning media. Following the stages and steps described, at the beginning of the development activities, an analysis of the needs of students and educators was carried out. This leads to the decision to design a prototype product that has the opportunity to be developed and utilized properly according to future needs. The following is the flow of development research that needs to be carried out in the research and development process activities by Borg and Gall (2002), is that:

![Figure 1. Steps of using the Research and Development Method (Adapted from Borg & Gall: 1978, 2002)](image)

The first step is to identify the potential and problems of doing this research because there is a problem and potential is an ability from within that can be developed. After that, the activity continues with the collection of data and
information to plan a material into the expected product so that it can be a solution to a problem. Next, a new product design is made with product specifications. At the stage of designing a product, it is necessary to realize it using pictures and charts to become a guide in making and assessing products. The product design is in the form of a prototype which is then validated by material experts, media experts, and instructional development experts, as well as suggestions for improvement.

From the results of the validation test and the recommendations of experts in their fields, product design revisions are then carried out. The development hypothesis can be formulated as follows: If the product design has been validated by experts, then the shortcomings of the product can be known. If the shortcomings are known, then the developer can carry out a process of improvement or revision of the components that need to be improved, as well as preparation for the next stage, namely testing to potential users of the developed product.

Product Trial, Furthermore, if the product has been improved, it is tested on a limited group of users. The purpose of the trial is to obtain information on whether or not the learning media is suitable for use and what revision actions can be taken by the research-development team to improve learning media based on criticism and suggestions by students as potential users. These criticisms and suggestions will be very helpful in improving the e-book developed. After the product is improved, the next step is to test the implementation of use in the field according to real conditions in a wider scope. In this usage trial, the shortcomings of the learning media are still assessed for further improvement, including the addition of an operational manual on how to use it by users to get optimal learning results.

This research obtained 2 types of data results, namely quantitative and qualitative. Quantitative data was obtained from the results of the percentage analysis technique on questionnaires that have been distributed and filled in by media experts, material experts, and field trials after implementing learning media. Qualitative data is obtained from questionnaires in the form of responses, criticisms, and suggestions from media experts, material experts, students, and subject teachers. The results of the analysis of these data as a basis and consideration for making revisions and final products, using the following table as a basis for validation;
Table 1. Content Validity Levels and Product Revisions

<table>
<thead>
<tr>
<th>No</th>
<th>Percentage</th>
<th>Validity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>81.00% - 100%</td>
<td>Very feasible or can be used without revision</td>
</tr>
<tr>
<td>2</td>
<td>61.00% - 80.00%</td>
<td>Feasible or usable with minor revisions</td>
</tr>
<tr>
<td>3</td>
<td>41.00% - 60.00%</td>
<td>Not suitable, recommended not to be used because it needs a lot of revisions</td>
</tr>
<tr>
<td>4</td>
<td>21.00% - 40.00%</td>
<td>Not suitable, or should not be used, needs major revision</td>
</tr>
<tr>
<td>5</td>
<td>00.00% - 20.00%</td>
<td>Extremely inappropriate, should not be used</td>
</tr>
</tbody>
</table>

The e-book-based learning media product developed is declared valid if it has reached a percentage of 61.00% or at least reaches the valid category. If the results achieved have not reached the valid category or with a percentage of <60.00%, the product is not yet suitable for application and improvements must be made.

RESULTS AND DISCUSSION

Development Product Overview

In the introduction section, it has been explained that the product offered as an alternative solution to learning and learning problems in vocational schools is the availability of flipbook-based e-book teaching materials to support the learning process of Marketing Basics, especially in element three job profiles and business opportunities in the marketing field. The existing problems regarding the supply of teaching materials or independent handbook modules that are by the independent curriculum are still very limited so they can hinder students in carrying out the learning process.

After recognizing the problem from the information provided and observations made by researchers, product design was then carried out. The process of designing product designs using the Canva application with the design results in Figure 2 as follows;

Figure 2. Overall Product Design
The e-book design uses the Canva application. The overall design appearance of the e-book is arranged so that the learning media can have a more attractive appearance, a more complete content mapping, can be illustrated the relationship between components, and the structure and texture of the e-book is atomized. The following is the initial appearance of the resulting e-book;

![E-book Home View](image)

Figure 3. E-book Home View

The first display of flipbook-based e-book learning media was developed by researchers. This initial display shows the subjects and elements discussed in the e-book.

![Table of Contents of the E-Book](image)

Figure 4. Table of Contents of the E-Book

On the display of the next sheet, the table of contents contains a list of contents in the learning media flipbook. The table of contents displays the discussion page as well as two chapters on the elements discussed.
Figure 5. E-Book Material Display

The material displayed in the flipbook-based e-book developed has images so that users can more easily describe the content of the material with visual media contained in the learning media.

**Design Validation**

To determine the feasibility of the product, validation is carried out by experts following the results of validation conducted by material experts, media experts, and students as users. The results of the product in the form of a Marketing Basics e-book have been validated by experts from the media design and substance segments. The expert validators are as follows: after being analyzed based on quantitative data from the results of media expert validators, resulting in percentages in the following Table 2:

<table>
<thead>
<tr>
<th>Media Expert</th>
<th>Total Score Empirical (se)</th>
<th>Total Expectation Score (sh)</th>
<th>Percentage (%)</th>
<th>Category of Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eka Pramono Adi</td>
<td>58</td>
<td>60</td>
<td>96.67%</td>
<td>Very Feasible</td>
</tr>
</tbody>
</table>

Source: data processed (2023)

Data analysis by material expert validators is based on quantitative data which results in the following presentation in Table 3:

<table>
<thead>
<tr>
<th>Media Expert</th>
<th>Total Score Empirical (se)</th>
<th>Total Expectation Score (sh)</th>
<th>Percentage (%)</th>
<th>Category of Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yuli Rahmawati Arfiani</td>
<td>54</td>
<td>60</td>
<td>90%</td>
<td>Very Feasible</td>
</tr>
</tbody>
</table>

Source: data processed (2023)

The results of the validation of media experts and material experts based on the table above obtained a percentage of 96.67% by media experts and material expert validation of 90%. According to the results of these percentages obtaining a percentage > 81%, is said to be very feasible. Criticism and suggestions from experts can be used as input and material for consideration of learning media revisions before being applied in learning activities.

**Design Revision**
After validation by experts, an overall evaluation of the design and material in the e-book is carried out. Based on the analysis conducted by the experts who guided the development of the product for the sake of media feasibility before the initial trial of the small group.

Figure 6. Display of E-Book Material

Figure 6 is the design and material display after revision. Before the e-book was revised, the visual layout of the image size, the addition of footers on the table of contents, as well as the list of references and glossary. They also made additions to the revision of the material expert, namely the addition of reference video links from each example in the content of the material.

Product Testing

After revising the design with criticisms and suggestions from media experts and material experts, the research continued to the fifth stage, namely the Product Trial. At this stage, it was carried out on 6 students in class X Online Business and Marketing. The final results of the product trial on small groups will be input to improve the Flipbook-Based E-Book learning media in the Basics of Marketing subject developed. The percentage results of product trials on small-group observers are in the following table.

<table>
<thead>
<tr>
<th>Large Group</th>
<th>Total Score Empirical (se)</th>
<th>Total Expectation Score (sh)</th>
<th>Percentage (%)</th>
<th>Category of Feasibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class X₁</td>
<td>1195</td>
<td>1450</td>
<td>82.4 %</td>
<td>Valid and Feasible to implement</td>
</tr>
<tr>
<td>BDP (X₂)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: data processed by researchers (2023)

Based on Table 4, the percentage result is 86.3%, which means that the Flipbook-based E-Book learning media gets very feasible results so that learning media can be used in learning activities effectively.

Discussion

Flipbook-based E-book Learning Media Using Canva and flipbook maker software

This development research produces Flipbook-based Ebook learning media using Canva and Flipbook Maker software, which has been tested and successful in Marketing Basics Subjects in Class X Online Business and Marketing Study Program element 3 professional job profiles and business opportunities in the marketing field.
In general, the e-book on Profession Job Profiles and Business Opportunities in the Marketing Field consists of material, daily assessment questions, a glossary, and a bibliography, each of which is very substantial in the learning process. Through the attractive e-book design and its form which is a link, students find it easier not to need to bring printed books to school and not fulfill the storage on smartphones. This research product is in line with international trends in the field of e-books (Kumbhar, 2018) where the utilization of e-book media from children to adults continues to increase.

Given the importance of technology integration in these learning activities, flip books are considered to be a model that suits the student learning model (Meidita & Susilowibowo, 2021). In practice, the selection of flipbook-based e-books is also supported by the results of previous studies that are in line with the results of the selected learning media development. Assessment of suitability with facts or information, learning concepts, and procedures is also an important point before the e-book is applied. Through the results of feedback from small and large groups of students, it can also be seen that e-books give a good impression of teaching and learning activities, especially in terms of appearance and practicality. This then highlights research (Venice & Marwan, 2021), which states that the experience students feel in the learning process is crucial.

**Valid and Feasible Flipbook-Based E-Book Learning Media**

In developing this media, a trial use of the media has been carried out to determine whether the media developed is feasible to be implemented in general vocational schools. Through this media, students are directed to follow the stages of each learning activity. Before using the learning media, this Flipbook-Based Ebook Learning Media is further validated by material experts and media experts so that the learning media is feasible and can be used in classroom learning activities. Proper learning media must be produced and contain complete component content to achieve maximum learning objectives.

Flipbook-based Ebook learning media get the results of material expert validation with "very valid" criteria. In line with research conducted by (Warisman, 2008) that if data is said to be feasible to get validation results ≥ 61%. In this study, the learning media was declared valid because it was following the criteria in the validation questionnaire, namely the content of the material following the Basics of Marketing subject, and the instructional and functional quality of the learning media could support students' independent learning. This is in line with Sudama's research, (2015) which found that the content of the material is adjusted to the characteristics of students and the content of the Learning Media uses multimedia elements such as images, audio, and video.

Furthermore, based on the validation of media experts, the e-book developed by researchers received a score of 96.7%, which means that by design, the e-book is very feasible to use in the learning process of X BDP students of SMK PGRI 3 Malang City. The overall feasibility of the material and media will ultimately improve students' experience in learning and stimulate critical thinking and reduce students' passive behavior (Venice & Marwan, 2021). This is also in line with the statement that the more interesting the learning media, the more it will change the pattern of student
learning in the teaching and learning process independently (Rahayu et al., 2021). Thus, both teachers and students are more facilitated and technologically included in the field of education in a digital era.

**Effectiveness of Student Learning in Flipbook-Based E-Book Learning Media**

In line with the high validity value of the media developed by researchers and good feedback from students, it indirectly illustrates the feasibility as well as the effectiveness of learning by using flipbook-based e-books. The achievement of learning indicators is the main basis for the use of the e-book. Through the high value of material validation, the learning elements needed in learning Marketing Fundamentals will be achieved through the application of e-books. Aspects of learning independence, technological inclusion, and also practicality are once again indicators of the effectiveness of the flipbook-based e-book implementation. In line with research conducted by Venice & Marwan, (2021) stated that the decline in student interest in the library to borrow books and also the feeling of heaviness that arises from carrying too many books.

E-books that are more materially specific, make it easier for students to understand marketing basics material and also complement students' digital abilities in learning. The good quality offered by the learning media developed by researchers is also evidenced in terms of audio and visual clarity contained in the learning media. Material expert validators such as Basics of Marketing subject teachers in schools, marketing lecturers, and or marketing entrepreneurship professors need to be asked for further recommendations or suggestions regarding learning media that can reach multi-purpose users. This indicates that so far, the flipbook-based e-book developed can support learning activities well and certainly more effectively. As discussed in the discussion of Luo, et.al. (2021), the student's e-book reading intention will be able to increase if the components in it are arranged and integrated as prescribed by the Theory of planned behavior and Flipbook Maker technology model referred to in this study.

**CONCLUSION**

From the results of the needs analysis, product prototype design, a series of trials and revisions at the end of each series of tests conducted, it can be concluded that this research and development (R&D) has produced a Flipbook-Based E-book learning media using Canva and Flipbook Maker Software. This media can be used repeatedly with the aim that learners can easily use it anywhere and effectively provide the necessary materials that make them give more interest and attention to understanding the material and mastering the competencies learned. The results of this development can be a learning media for subjects in vocational schools and entrepreneurial professions in the field of marketing.

Based on the results of the validation carried out, the product developed received the category "valid and feasible for implementation" based on the percentage of the feasibility of learning media obtained from media validation experts and material experts. Thus, it can be concluded that this learning media has the feasibility and effectiveness of being used as an alternative strategy for integrated learning with teachers in the classroom and for self-study. Therefore, this research and development responds to the problems and also the potential that exists in vocational schools by
presenting an effective learning media for education in learning activities with the application of media as a form of participation and the responsibility of educators to involve media in addition to conventional learning and use the best possible facilities in the school according to the development of the existing era.

The e-book learning media developed can increase the effectiveness of student learning independently and get a good response from students in the object of research. In practice, all forms of harmony cannot be separated from the process of identifying appropriate problems and formulating targeted solutions so that Flipbook-Based Ebook learning media Using Canva & Flipbook Maker Software can be used in the learning process.

However, this research has limitations in its implementation. Some of them are, the trial process is carried out in limited class hours, and the wifi network is sometimes problematic so that technical problems occur. Based on this, it is hoped that future researchers will be able to conduct product trials in several meetings and ensure that there are no technical problems during the process. It is hoped that flipbook-based e-book learning media will be useful so that it helps teachers during interactive learning activities so that learning in the classroom is more interesting and varied in delivering material on Profession Job Profiles and Business Opportunities in the Marketing Sector. Suggestions Utilisation for students is expected to facilitate students to be more active in learning activities and can learn to cooperate with fellow friends, schools, and the world of business and industry (DUDI) on how to take advantage of the digital market to sell the products of goods and services they are trying to sell.

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