



Digital Worksheet for Students to Increase Learning Motivation of Class XI Students Concentration Of Retail Business Expertise in Business Communication Elements

Camelia Dwi Yuliana Putri¹ and Ika Zutiasari² 

^{1,2}Universitas Negeri Malang, Jl. Semarang No. 5, Kota Malang 65145, Jawa Timur, Indonesia

ika.zutiasari.fe@um.ac.id

Abstract. Research and Development of Digital LKPD provides convenience for teachers and students in the teaching and learning process in the classroom. The purpose of this study is to create a Digital Student Worksheet (LKPD Digital) product because it is not only able to increase student interest but also be able to increase student learning motivation. This Research and Development uses the ADDIE development model. The test subjects consisted of students of class XI BR SMK Islam 1 Durenan. Data were collected by observation guidelines, interviews, documentation and questionnaires. This study used data analysis techniques in the form of percentages. The result of this research and development is ALKALI (Digital LKPD Application) which has been declared very feasible and received a positive response and was able to increase student learning motivation in business communication elements. Further research is expected to design a Digital LKPD that is not limited to one element and can be downloaded via Play Store or App Store.

Keywords: Research and Development, Digital Worksheet, Learning Motivation.

1 **Introduction**

Technology has an impact on the world of education around the world. It can be seen from the average learning process using technology. The use and utilization of Information and Communication Technology (ICT) in this day and age is not unfamiliar. The development of Information and Communication Technology (ICT) affects developments in the field of education for the teaching and learning process [1]. In the world of education, to achieve the targets and ideals of students need motivation to learn. Learning motivation is an interest that is possessed in students that triggers the desire to learn, which ensures consistency in the process of learning activities and which provides guidance from the learning process, so that the desired intention can be realized. Learning motivation is a supporting element in the success of the learning process because learning motivation arises from interest, enthusiasm and activity to follow the learning process [2]. Learning motivation is an encouragement that arises both from within and from outside students, which is able to generate enthusiasm and enthusiasm for learning and provide direction to learning activities so that the desired goals can be achieved [3]. In line with this, the learning process will achieve success if students have a good willingness to learn motivation [4]. If student learning motivation is high and good, learning outcomes will be optimal and while if student learning motivation is low and lazy, learning outcomes will be less than optimal.

Based on observations made with teachers at SMK Islam 1 Durenan class XI, especially the Retail Business Expertise Concentration, the Learning Motivation of grade XI students The Retail Business Expertise Concentration is still low so special handling is needed in the learning process. When students are given assignments and work individually, only 25% of students do. 75% of students do not do assignments and prefer to play on their smartphones. This is not in accordance with the indicators of learning motivation, namely, perseverance in following learning, never giving up in the face of difficulties, interest and sharpness of attention in learning, achievement in learning, and independence in learning. Learning media is a tool, way, or tip used to direct messages that can attract students' care, interest, thoughts, and feelings, in highlighting learning materials, so as to increase interest and motivation in the teaching and learning process [5]. The function of learning media is to generate interest, motivation, and stimulation in the learning process [6]. Other observations of LKPD Digital have never been used there before, only ever used Microsoft Powerpoint, teachers have not optimized the use of online or digital learning media in carrying out teaching and learning activities. In his book entitled "Teacher's Handbook on E-Assessment" states that Digital LKPD is an electronic assessment starting from storage, delivery of assessment assignments, student value responses involving the use of digital devices [7]. LKPD (student worksheet) as a teacher facilitator in learning activities and can be adjusted according to the environment of students [8]. Evaluation with a digital system makes evaluation more efficient in terms of time, funds and goal achievement [9]. Interactive media includes various elements, namely there are images, sounds, videos, text, animations, simulations, and photos that are combined interactively [10]. This is supported by the results, that the learning process using interactive-based learning media is useful as an alternative learning activity to be more effective, so researchers developed Interactive e-LKPD as a form of implementing digital learning media with various features [11]. It can be concluded that the form of digital student worksheets (LKPD Digital) is more practical and effective because it contains more concise and specific learning material content and also plays a role in making Digital LKPD a teaching material that is more favored by students than printed books or conventional books. Interactive Learning Applications can form an atmosphere to be more attractive, comfortable, and conducive because it can raise the enthusiasm of students to be more active in participating in learning process activities. Using the visual learning application can take advantage of Thinkable's Android-based Digital LKPD. In addition, with the Digital LKPD, it is hoped that the learning process can be carried out comfortably and interestingly. The existence of creative and innovative Digital LKPD is able to improve the quality of student learning, besides that it can encourage students to develop concepts, abilities and skills in the learning process. According to Digital LKPD as a learning resource can be developed by teachers as providers in learning process activities [12]. Digital LKPD that is created can be designed and disseminated in line with the learning environment of students [13], [14]. Based on these problems, researchers aim to develop Digital LKPD to Increase Learning Motivation of Class XI Students at SMK Islam 1 Durenan Concentration of Retail Business Expertise Communication

Elements that can be used by teachers or students so as to facilitate learning activities.

2. **Metods**

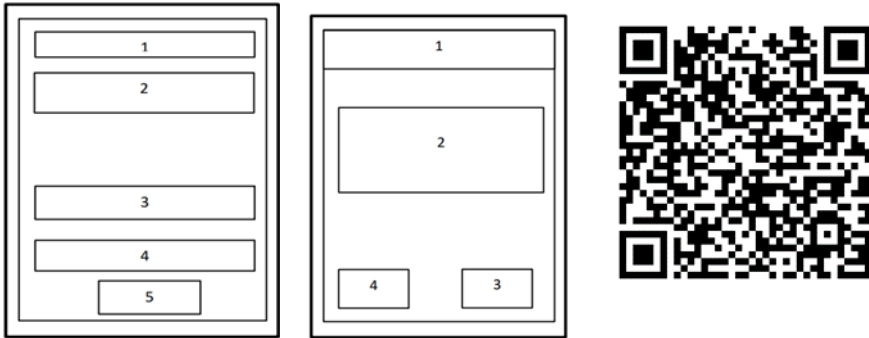
This Android-based Digital LKPD Application development model uses Research and Development. In this study, researchers will develop Android-based Digital LKPD products so that an appropriate research model is needed so that the work on Digital LKPD is easier. The research and development model uses the ADDIE model (*Analysis, Design, Develop, Implement, Evaluate*)[15]. This model is more suitable for developing this Digital LKPD product and also the ADDIE model has interrelated stages [16]. The ADDIE model is a generic model and one of its functions is as a guideline in compiling effective learning tools and infrastructure, and can support the implementation of learning itself in line with opinions[17]. The first stage, determining the goals and needs in the implementation of product development by conducting user needs analysis, media content and analysis of software, hardware. The second stage, designing the media design to be developed looks at the previous analysis. The third stage, the development stage or making a product after going through the design stage by making a storyboard. The fourth stage is to run the Digital LKPD (Alkali) application which is validated first by material experts and media experts to ensure product feasibility. The fifth stage, the evaluation stage of the Digital LKPD (Alkali) application developed, is also a revision of the product with a revision note from the validator.

Analysis of research data used using quantitative data in the form of questionnaire assessments that have been filled in by validators, namely media experts, material experts, and user trials (small groups), then student learning motivation questionnaires before and after using the Digital LKPD (Alkali) application. Qualitative data, taken from suggestions and comments from media expert validators, material experts, and user trials (small group). Data validators of media experts, material experts, small group trials and student learning motivation questionnaires before and after using the Digital LKPD (Alkali) application were measured by percentage data analysis techniques. Learning motivation data is measured by standard criteria and aspects which include, persevering in following learning, never giving up in the face of difficulties, interest and sharpness of attention in learning, achievement in learning and independence in learning.

3. **Result and Discussions**

Presentation of trial data steps used by researchers, the initial stage of this research begins with an analysis of goals and needs in carrying out product development. Three things need to be considered in analyzing namely, user analysis, media content analysis, software and hardware analysis. The second stage is to design a design made by making

a storyboard so that it is more directed and easy. LKPD Digital Storyboard can be seen in the design below, scan the barcode to see a more complete Storyboard display:



Gambar 1. Storyboard Alkali (Aplikasi LKPD Digital)

The third stage is the stage of developing or making a product after going through the design stage by making a storyboard. Display of Digital LKPD content content whether images, videos or writing is made with the help of thinkable software. This Digital LKPD is equipped with a homepage feature, an opening display feature, a hint feature, a material feature, a question practice feature, a collection of learning motivation videos, and a developer profile. The main purpose of making this application is the Student Worksheet or called Android-based LKPD or ALKALI (Digital LKPD Application), therefore more emphasis is placed on practice questions. This is to support students and teachers in carrying out the teaching and learning process in class, to intensify student participation in participating in a series of learning. Various options are available in the practice question feature, there are Competency Test 1, Competency Test 2 which includes multiple choice practice questions and essay questions, HOTS Competency Test, Group Assignments, Project Assignments and Quizzes. Not only that, in the material menu there is a display of short-duration videos and images as support so that students do not feel bored. Animation, images, videos, sounds and text are materials to attract student learning motivation in research [18]. The use of several media components such as visual and audio in teaching materials can increase student learning motivation and student understanding of the material in line with [19]. The display of the Digital LKPD Application (ALKALI) can be seen in the following picture, scan the barcode to see a more complete view of the Digital LKPD Application (ALKALI):

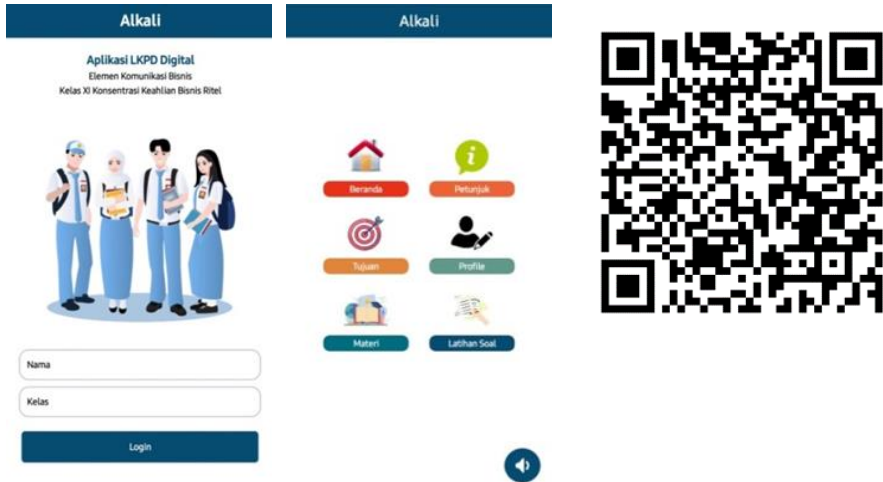


Figure 2. Digital LKPD Application Products (ALKALI)
 Source: processed by researchers, (2024)

To determine the level of validity of the product that has been developed, validation is held by media experts, material experts, and small group trials (users). Based on product validity according to eligibility criteria guidelines in percentage,[20] The whole is presented in the following table:

Table 1. Validation Results of Media Experts, Material Experts and Users.

No	Validation	Presents	Criteria
1.	Media Expert Validation	98,75%	Very Decent & Positive
2.	Material Expert Validation	91,25%	Very Decent & Positive
3.	Small Group Expert Validation	89,5 %	Very Decent & Positive
Average Validation Results		93,16%	Very Decent & Positive

Source : Media Expert Validation Questionnaire, Material Expert and User (processed by researchers, 2024)

Previous research has suggested expert validation of media, materials and small group trials to determine how viable the product is [21] . Based on Table 1. The validation results of media experts, material experts and users obtained media expert validation results of 98.75% with Very Feasible and Positive criteria, while the material expert validation results of 91.25% with Very Feasible and Positive criteria, and small group validation results (users) of 89.5% were very feasible and positive. Based on the description of the validation results, an average validation result of 93.16% was obtained with very feasible and positive criteria. This shows that the Digital LKPD

Application on the business communication element concentrates on expertise The retail business developed by researchers is very suitable for students and teachers to use.

Table 2. Results of Questionnaire Calculation Before and After Student Learning Motivation

	Total	Total Average	Total Percentage	Information
Before	1269	42,3	53%	Very Little
After	2171	72,4	90%	Very Good

Source: Results of Questionnaires Before and After Student Learning Motivation (processed by researchers, 2024)

From the results of Table 2. Above it was concluded that most of the students' responses to the existence of Android-based Digital LKPD received positive responses and increased in having student motivation to learn. It can be seen before using the Digital LKPD the total student motivation was still at a total of 1269 with an average total score of 42.3, a percentage of 53% and less information, this indicates that the motivation to study at SMK Islam 1 Durenan is still lacking, after using the Digital LKPD the total student motivation increased to a total of 2171 with an average total score of 72.4 and a percentage of 90% and very good information. From the comparison of the average number of total scores, percentages, and information contained in the table above, it can be concluded that there is an increase of 67% in student learning motivation due to the use of this android-based Digital LKPD, because students can use this android-based Digital LKPD with just one hand, namely through a smartphone. An educator must be creative in creating updates to teaching and learning activities so that learning activities are more optimal [22]. This research and development makes products in the form of Android-based Digital LKPD. The purpose of making this android-based Digital LKPD is to make it easier for students to explore and follow the subject matter and practice questions, increase student mastery of the material through assignments, train student independence, launch the task of educators in delivering assignments to students [23]. In addition, this research and development also aims to determine the students' response to android-based Digital LKPD on class XI business communication elements, the concentration of retail business expertise of SMK Islam 1 Durenan. In practice, this android-based Digital LKPD makes it easier for students to use it without space and time limits. With the different conditions of each student and teacher, it is hoped that this android-based Digital LKPD is helpful and useful and can encourage student participation in following learning. This android-based Digital LKPD is helpful and useful and can increase student participation in participating in learning. Android-based student worksheets are categorized as good and can improve student response [24]. This android-based LKPD can improve the quality of the educational learning process, the learning process and outcomes achieved will be good [25]. Because this Android-based Digital LKPD can be accessed on smartphones. In his research, Android-based evaluation tools are feasible to be applied as an alternative to learning [26]. Before the Android-based Digital LKPD Application (ALKALI) is used for the learning process, there needs to be validation from media experts and material experts

to determine the level of product feasibility [27], [28], declared worthy and received a positive response. Based on the media feasibility test and material feasibility, it is known that the quality results of the percentage of material experts were obtained at 89.5% and the results of the percentage of media experts at 98.75% so that based on these results, this android-based Digital LKPD can be said to be suitable for use at SMK Islam 1 Durenan. Then a small trial (user) was carried out, the results of a small trial of student response to Alkali (Digital LKPD Application) obtained a value of 90.25% so that it can be concluded that student response to Alkali (Digital LKPD Application) based on Android is very feasible and positive to be used as an alternative to learning and can be accessed easily by revision in accordance with qualitative data in the form of criticism and suggestions on validation questionnaires. Suggests that motivation encourages students to carry out a behavior, including encouragement to learn [29]. Students move to obtain good learning outcomes if they have a strong learning motivation, so motivation has an important role to make students obtain good learning outcomes. In order for learning motivation to grow in students, stimulus is needed, one of which is a creative teacher. Teacher creativity in learning can be applied in two ways, namely in learning management in the classroom and in the use of learning media [30].

This android-based Digital LKPD was developed by researchers with the following advantages: 1) Android-based Digital LKPD on business communication elements makes it easy for students to learn independently with android smartphones. 2) Android-based Digital LKPD is presented with more complete features, consisting of materials, musical instruments, videos, images, practice questions, instructions for use, and developer profiles. So that students can maximize learning in one application that is packaged attractively and easily in operation. 3) The display on LKPD Digital named Alkali has a blue and semi-pastel color theme that aims to increase students' concentration in learning and make the display more attractive. 4) This Android-based Digital LKPD only requires a capacity of 10 MB, so it is not difficult and objectionable to access it. 5) This Digital LKPD in the practice questions complete the calculation of scores that will increase student learning participation. Besides having advantages, this Android-based Digital LKPD also has weaknesses, namely as follows. 1) The Digital LKPD application can only be accessed through the Android version but does not support use through the iOS version. 2) This application is not yet available on playstore so this application can only be shared via WhatsApp. 3) In this application, logging into the application is only recorded locally to display the username on the next page.

4. Conclusions

Research and development of this android-based Digital LKPD product has produced an android-based learning application called Alkali (Digital LKPD Application) which contains content related to business communication elements for class XI Retail Business Expertise Concentration. This product specification can be used with a minimum version of Android 4.4 and a capacity of 10 Megabytes (MB). This product is also equipped with various complete features including instructions, learning objectives CP (Learning Outcomes), TP (Learning Objectives), and ATP (Learning Objectives Flow), materials, profiles developers, practice questions, and audio and

video. This media has been validated by material experts by getting a worthy predicate because it has met the material criteria on business communication elements in accordance with learning outcomes. Likewise, the results of media expert validation get a very worthy title because the features provided are complete, easy to operate and interesting to use in the learning process. Android-based Alkali Products (Digital LKPD Applications) on business communication elements have been tested to students and it can be concluded that student responses to this product are very feasible and positive so that they can be used as an alternative to learning easily and attract students' interest.

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