

## Application Absence Online Students: Solutions Reduce Wasted Time Vain

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### Article Info

Received: Feb 19, 2024

Revised: Feb 22, 2024

Accepted: Feb 25, 2024

Online Version: Feb 27, 2024

### Abstract

Objective study This is for designing something system for Google Workspace-based online attendance for streamline processes and record absenteeism. Study This uses Method ADDIE development (analysis, Design, Development, Implementation, evaluation) or R&D (Research and development) using data collection techniques (1) Observation, (2) Interview, (3) Questionnaire. Data analysis for know effectiveness absenteeism before and after use application online attendance. Subject study This is 20 students for the testing scale small and 50 remaining schoolgirls for the testing group big. As well as 50 students` pre-test and post-test questionnaire effectiveness system attendance at SMAN 1 Babakan before and after the use application. Research result This is (1) a product application online attendance at SMAN 1 Babakan based Google Workspace (2) Eligibility levels product This is known through evaluation validation two experts and earn results with category Very Appropriate / Very Worthy For aspect material and appearance. The product this is also through trial stage scale small and scale big and both get results evaluation with category very worthy. Thereby can concluded that the product on research development This appropriate for used, and (3) Based on the results questionnaire effectiveness system absenteeism before use application average of 51.28% and after use application SMAN 1 Babakan's online attendance average was 88.72%.

**Keywords:** Attendance, Efficient, Students



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Journal Homepage

<https://journal.ypidathu.or.id/index.php/ijeep> ISSN: (P: 3047-843X) - (E: 3047-8529)

How to cite:

Priyanto, S., Tabroni, I., Lesmanasari, N & Miharja, J. (2024). *Application Absence Online Students: Solutions Reduce Wasted Time Vain*. International Journal of Education Elementaria and Psychologia, 1(2), 70–88. <https://doi.org/10.70177/ijeep.v1i2.915>

Published by:

Yayasan Pendidikan Islam Daarut Thufulah

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## INTRODUCTION

System absenteeism very important in know presence participant educate in something institution education (Ding & Yu, 2024; Mageshvaran & Sowmya, 2024; Shree, Kaur, Mehra, Goel, & Goel, 2024). Development system absenteeism moment This Already develop with exists technology supporter like computers and gadgets. From the system absence of use paper, computer programs, finger prints, eye scans, and now Already many have switched using gadgets like Android. With the existence of Android smartphones nowadays This so many, possible a number of institution education renew the system using an Android smartphone Because it's more easy operation and cando absenteeism Where just so that time used No Lots wasted.

In matter the use of Android smartphones is very easy, almost layer public have an android smartphone (Q. Cao & Doma, 2024; Jansen & Kim Cavdar, 2024; Shantilal, Singh, & Gupta, 2025). From the economic one intermediate until above, from child small to adults have an android smartphone. Because android smartphones have Lots benefit if used for matter positive. Therefore Therefore, Android smartphones are in demand for make it easier affairs somebody. Likewise with system absenteeism, need great update good for participants educate can roll call with fast and not need queue for roll call. The best solution is with using an Android smartphone (Abdulmawjood, Zilany, & Sheet, 2024; Dhanasekaran dkk., 2024; Elizabeth Rani, Ashok, Keerthana, Krithika, & Sakthimohan, 2024). System absenteeism with method this can also be done maximizing time work in something institution education compared participant educate must queue for sign hand on the existing form provided or picket teacher around to every class for baseboard One one by one class. This matter very throw away time work.

Effectiveness in recording absenteeism very made easy, when Still use Manual attendance requires time is not A little for know presence a student in 1 month or 6 months for reporting in report results Study (Ren, Hao, Xu, Wu, & Ba, 2021). Which become matter important other is about efficiency cost. Naturally Already Lots device nor application that can support about this online attendance. however need hefty cost big For buy device absenteeism nor buy application online attendance.

SMAN 1 Babakan endeavor for develop A application based on Google Workspace. Google Workspace is A feature service Google 's for keep Lots application supporter productivity mutual work integrated between one and another. Main Core Services that can utilized in education including: Gmail, Google Calendar, Google Drive, Google Classroom, Google Meet, Google Jamboard, Google forms, Google Sites, Google Docs, Google Sheets, and Google Slides. In application online attendance at SMAN 1 Babakan use a number of Google Workspace services are (Edwards, 2024; Mangal, Pandey, Wagh, Gaonkar, & Bhanushali, 2024; Songhua, Zhangjie, Yang, & Xiuling, 2025): For attendance input using google forms, processing using Google Sheet, data storage using Google Drive, display output using google sites.

Superiority main from use application based on Google Workspace is No paid or free, and you can Accessible by Android users as well other. Because of that, for minimize time in recording and recording attendance data so we try for develop an online attendance system based on Google Workspace renewal system attendance at SMAN 1 Babakan.

## LITERATURE REVIEW

### a) Google Workspace

Google Workspace is one of them service Google 's present as *tools* developer productivity work . Like Microsoft Teams, Google Workspace is combining services a number of application supporter work (Chavda, Bhavsar, Undavia, Solanki, & Shukla, 2024; Rajesh, Kuchipudi, Dammalapati, & Surendran, 2024; Suryawanshi dkk., 2024). The emergence of Google Workspace did that Lots in demand, esp in system Work remotely. Application This Alone offer Lots advantages and features exclusive for its users (Hemavathi dkk., 2024; Salim dkk., 2024; Sunny, Krishnan, Taib, & Savita, 2024). Moreover, service This Can used When just with easy so that suitable For all circles. For more he explained understand What that's Google Workspace along with the advantages offered For support work become more efficient

#### Advantages of Google Workspace

- Google workspace creates everything become more practical . Various application start from application *chat* , documents , video calls and *email* are possible with easy integrated .
- With I see , you Can free collaborate various application This For support needs Work .
- Google workspace can accessed any time with easy . Moreover , Google Workspace services can accessed full of everyone *devices* for every its users with cost affordable .
- Can share information form document certain ones can spread to several people at a time . Moreover , service this also fits used For Work The same with team in a way *realtime* .
- Google workspace provides storage *cloud* in the form of Google Drive with Minimum capacity 15 GB. You Can enlarge its capacity This in accordance with need .
- More interesting Again , the data is stored in service This guaranteed its security .
- Presence support customer for 24 hours per day too help .

### b) Features Used in Application Absence

#### a. Inputs

feature for Online Attendance uses Google Form. Google Forms means possible services user with easy make survey, form online based with question, or survey that can adjusted by the manufacturer (Agrawal & Tripathi, 2024; Devi Priya, Kirupa, Rajasekaran, & Manoj Kumar, 2024; Dhanshika, Lahamage, Anupam, & Sawant, 2024). Service the give convenience for get responses and data from public or audience in a way direct fill in survey.

Because it's online and you can accessed by whom only those who want it, Google Forms is effective and convenient way For get information Specific. Make Google Forms is also great easy , and who only one understands method Work computers and the Internet can do it (dailysocial.id, 2024)

#### b. Process

The input result will be produces data in the form of a Google Spreadsheet. Google Sheets is A *software* or device soft web- based developed by Google , for make tables, calculations simple, or data processing (Y. Cao, 2024;

Venkatakrishnan dkk., 2024; Yi, Wang, & Yan, 2024). One thing is different from *software* kind like Microsoft Excel or Numbers from Apple is the convenience in do collaboration between users . (codingstudio.id, 2024)

There is various utility from Google Sheets that can You take advantage of, among other things is:

- 1) create tables
- 2) make chart
- 3) filter data
- 4) various other spreadsheet functions

**c. Outputs**

Presentation the process results are displayed in Google Sites feature . Google Sites is service personal *website* or professionals who don't pick up cost anything or free . Service This is services created by Google Company. User can utilize Google Sites because He easy created and managed by users layman (kumparan.com, 2024)

**d. Storage**

Data storage for Online Attendance uses Google Drive. service cloud -based Google file storage . For known , the cloud itself is a term referring to proprietary server technology A services on the internet. if only there are files saved via the cloud, that is means the file resides on an internet server, rather than in memory storage physical (hard drive, SSD, and the like ) on the computer or cell phone .

Like explanation previously , storing files on Google Drive was not placed in memory storage physique device , but rather a Google server on the internet. With Google Drive, users Can keep as well as access various files when Anywhere and anywhere, as long as own connected device with Internet connection . (tekno.kumparan.com, 2024)

**c) Effectiveness Online Attendance**

**a. Draft Effectiveness**

Effective word originate from Language English . In short , effective means success or something that works with Good (“Madrasah Accountability in Increasing the Interest of New Students in Continuing Education,” 2022). “effectiveness ”, the term used as connection because consequence. Validity can linked with variable other (Budiarto, Audiah, Astuti, Sanjaya, & Firli, 2024; Farhaan, Hasan, Ghani, & Mansoor, 2024; Sunantapot, Arunruerk, & Srikram, 2024). Efficiency means capable reach goals that have been specified , or in other words, the way action For reach objective the. According to Siagian in effectiveness is utilization source power, facilities and infrastructure in amount certain ones aware set previously For produce a number goods on service the activities he carries out . Effectiveness showing success from facet achieved or not targets that have been set (Azamar-Avilés, Granados-Reyes, Ambrosio-Bastián, & Zamudio-Beltrán, 2024; Bakic, Pakala, & Bose, 2024; Nidhya dkk., 2024). If results activity the more approach target, meaning increasingly tall its effectiveness. Effectiveness (results use) is connection between output with objective or a must goal achieved . Understanding effectiveness this is basically it relate with achievement objective or policy targets. Activity operational said

effective during the activity process the reach goals and objectives end policy (*spending wisely*).

According to Gibson, Donnely and Ivancevich concept effectiveness consists from two approach that is approach Goals and approaches System (Vasconcelos, 2020). Two approach the among others:

Approach objective For determine and evaluate effectiveness based on ideas that organization created as tool For reach objective. Whereas in theory system, organization seen as something element from a number mutual elements connected and mutual depends One each other. Current food (input) and output (output) are point reject in description organization . In other words more simple , organizational take source (input) of more system area ( environment ), processing source this and return it in existing form changed (output). (Gibson, Ivancevich, & Donnelly, 1987)

Agris (Tangkilian, 2005) opinion that effectiveness organization is balance or approach optimally in achieving goals , capabilities and utilization power man . According to Siagian inside (Irsan, Hassan, Hasan, & Lam, 2024; Kamalapur, Srikanth, Yadav, Yashwanth, & Duraivelu, 2024; Senthil G, Geerthik, Karthikeyan, & Keerthana, 2024) conclude that effectiveness is utilization source power, facilities and infrastructure in amount certain ones aware set previously For produce a number goods on service the activities he carries out. Effectiveness showing success from facet achieved or not targets that have been set (On behalf of the Mucositis Study Group of the Multinational Association of Supportive Care in Cancer/International Society for Oral Oncology (MASCC/ISOO) dkk., 2019). If results activity the more approach target , meaning the more tall its effectiveness . According to Sharma (Tangkilian, 2005) give criteria or size effectiveness organization which concerns internal organizational factors and factors external organization among others:

- 1) Productivity organization or output;
- 2) Effectiveness organization in form its success adapt self with changes inside and outside organization ;
- 3) No exists tension inside organization or obstacles conflict between parts organization .

Effectiveness according to several experts can interpreted that indicator effectiveness in meaning achieved goals and objectives that have been determined previously is A measurement Where a target has been achieved in accordance with what has planned (Hussain dkk., 2024; Raj, Srivastav, Shukla, & Gupta, 2024; Singh, Shahabaje, Shikare, & Dhuri, 2024). Exposure about effectiveness on can concluded that effectiveness is level how much Far balance something system social to achievement purpose and use power man.

#### **b. Indicator Effectiveness**

Indicator effectiveness according to Tangkilisan (2005:141), namely :

- 1) Target Achievement

Meaning from achieving targets here interpreted how far the target can be realized with Good . This matter can seen from the extent of

implementation objective organisation in achieving appropriate targets with goals that have been set.

2) Ability Adaptation ( Flexibility )

Success organization seen from extent of the organization can adapt self with the changes that occur Good from in organization and outside organization .

3) Satisfaction Work

Something conditions felt by all member capable organization give comfort and motivation for enhancement performance organization (Gayathri & Kavitha, 2024; Joshi, Savaliya, Patel, Shah, & Macwan, 2024; Komala, Kumar, Sathish, & Sagar, 2024). Focus element This is between work and suitability rewards or system implemented for member organizations that have achieved and have achieved doing work exceed burden existing work .

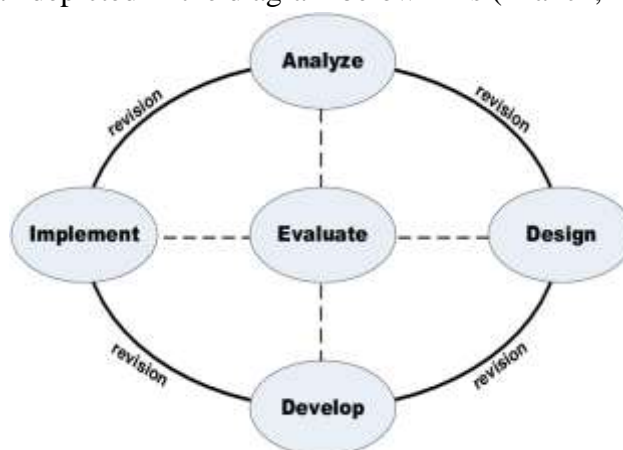
4) Responsibility

Organization can carry out not quite enough answer that has been carried in accordance with provisions that have been made before and can face as well as finish problems that occur with his job .

## RESEARCH METHOD

### 1. Development style

Study This using the ADDIE (*Analysis, Design, Development, Implementation, and Evaluation* ) development model (Amram, 2022). The ADDIE development model used can depicted in the diagram below This (Branch, 2009):



### 2. Procedure Development

Procedure in do development of learning media is with the ADDIE development model , namely (1) *Analysis* , (2) *Design* , (3) *Development* , (4) *Implementation* , and (5) *Evaluation*.

a. *Analysis*

Objective from stages analysis is For know need beginning in develop system this online attendance . In develop application This required analysis need namely : (1) Analysis Need User , (2) Analysis Content or Content, and (3) Analysis Need *Hardware and Software* .

b. *Design*



Stages second that is stage making design system online attendance will be developed. After that make *flowchart* that illustrates channel Work system online attendance (Adhoni & Narayan, 2024; Arya, Mahalakshmi, Rawat, & Thenmalar, 2024; Elkari dkk., 2024; Fernando & Athauda, 2024). Then designing *storyboard* that includes plan template design and also existing facilities . After making the storyboard then can made appearance interface or so -called with design *interfaces*.

c. *Development*

Development is activity manufacturing and testing product . With continue based media creation *storyboards* and designs that have been done made . Make appearance using google sites, creating input links with google forms, composing processing data with Google Sheets, and creating storage menus to in Google Drive.

After the product developed, necessary exists review from a number of expert For ensure suitability results product with design. As determination media and material quality needed evaluation from *expert judgment*, namely media experts and experts material. However before , the instrument will used must done validation moreover formerly. Testing done with use instrument study form questionnaire structured

d. *Implementation*

Once stated worthy of testing by media experts and experts material , at stage This media is tested and implemented to student SMAN 1 Babakan student . Testing aim For know response student to applications that have been developed, then can is known appropriateness system online attendance at SMAN 1 Babakan.

e. *Evaluation*

*Evaluation* is activity evaluate is every step activities and products created has in accordance with specifications . *Evaluation* aims For know quality product , good before and after implementation . Based on stage *implementation* or stage trials so will obtained assessment and results questionnaire from the students who took part stage implementation (Darshan, Kenny, Shreyas, Vinay, & Revathi, 2024; Shrivastava dkk., 2025; Wu & Wang, 2024). These results will analyzed and evaluated For know quality , value benefits , and feasibility to effectiveness time .

### **3. Trial Design Product**

a. Trial Design

Trials product done through 2 stages, namely testing scale small and trial scale big. Trials scale small can done against 4 or 5 respondents, ie can take from population or outside population that has characteristic features The same with population. After doing the test scale small so obtained bait return what you can used as reference revision. Trials furthermore is a trial scale big, that is can done against 15 to 50 respondents . In testing scale great learning media This addressed student students of SMAN 1 Babakan. Then the test results data scale big will analyzed For know feasibility and effectiveness system the online application .

b. Test Subjects

Subjects in research This is student SMAN 1 Babakan student .

#### 4. Collection and Questionnaire Process

##### a. Data Collection Process

For collect the necessary data , researchers use a number of method namely : Observations made is observation participative , where researcher do observation in a way go ahead and follow involved What is being done source data. Interview in study development This done to student picket students and teachers about obstacles experienced regarding effective and efficient attendance . Method questionnaire done For evaluate system Android- based online attendance that has been developed .

##### b. Questionnaire

Instruments used For collect data in testing to development product This is with use instrument non-test . Instrument made in form questionnaire structured . Prepared questionnaire shared to experts and students SMAN 1 Babakan student as respondents .

#### 5. Data analysis

Analysis of research data done after data collection is complete For know evaluation from products that have been developed . Research data obtained from questionnaire that has been filled by experts and students students of SMAN 1 Babakan.

Activities performed in step preparation covers check name and features identity filler , checking completeness of data, and also check type data entry . At stage tabulation , activities data analysis can form giving score for necessary items given score . On research development This is the instrument used arranged with Likert scale with an interval of 1 to 5. For obtain quantitative data so each alternative answer Then given score as following :

Table 1. Score Evaluation Answer

Alternative Answer	Score
Very Agree / Strongly Good	5
Agree / Okay	4
Undecided / Enough	3
No Agree / Less	2
Very No Agree / Strongly Not enough	1

After the score determined then the data is applied in calculation For evaluate appropriateness in form percentage .

$$NA = \frac{R}{RM} \times 100\%$$

Information :

NA : Final Value

R : Score Answer

RM : Score Maximum

Percentage eligibility obtained Then converted to in sentence For evaluate media suitability .

Table 2. Criteria Media Eligibility



Percentage Appropriateness	Interpretation
81-100%	Very Worth It
61-80%	Worthy
41-40%	Enough Worthy
21-40%	Not feasible
<21%	Totally Not Worth It

## RESULTS AND DISCUSSION

### 1. Development Results Product

Study This aim For develop system online attendance at SMAN 1 Babakan Android based so makes it easier students who will do absenteeism school attendance . Steps development study that is as following :

#### a. Potential and Problems

Good education is education that follows development era , for That an educational institution should start develop all service IT based . One of them that is in system absenteeism must switch from manual to application based technology . In manual attendance has constraint like need a long time and not enough energy A little For do absenteeism *door to door* to every class , weakness other is moment recap need quite a long time and no quick can known( *real time* )

Based problems above , required something system application online attendance that makes it easy students and teachers in carry out the process and results from absenteeism presence participant educate .

#### b. Collection Information

After researchers nish observation through observations , obtained conclusion that system Manual attendance can be done throw away Lots time and energy .

### 2. Design Product

#### a. Appearance beginning

Appearance beginning use Google sites which contains class menus and recapitulations .



#### b. Inputs

Input menu using google form for import Name students who don't present on the day That .

### c. Process

Processing data from Google Form input produces data in the form of a Google Sheet that can be used managed with various formula so that produce the desired data .

### d. Outputs

Data from the process results are presented in form a google sheet that can accessed with Clicking on the recap menu on the display beginning .

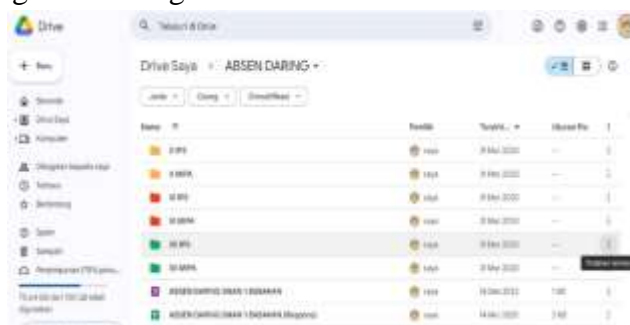
No	Tanggal	Relas	Hadir	Sakit	Izin	Alpa	Jumlah	% Hadir	% Relas
1	Senin, 25 Maret 2024	X.A	30	0	0	0	30	77.78	20.20
2	Senin, 25 Maret 2024	X.B	0	0	0	0	0	0.00	0.00
3	Senin, 25 Maret 2024	X.C	30	0	0	0	30	96.68	8.80
4	Senin, 25 Maret 2024	X.D	30	0	0	0	30	91.67	8.33
5	Senin, 25 Maret 2024	X.E	29	0	0	0	29	88.59	10.44
6	Senin, 25 Maret 2024	X.F	30	1	0	0	31	93.55	17.08
7	Senin, 25 Maret 2024	X.G	0	0	0	0	0	0.00	0.00
8	Senin, 25 Maret 2024	X.H	34	0	0	0	34	94.44	5.56
9	Senin, 25 Maret 2024	X.I	34	0	0	0	34	97.14	3.86
10	Senin, 25 Maret 2024	X.J	0	0	0	0	0	0.00	0.00
11	Senin, 25 Maret 2024	X.K	0	0	0	0	0	0.00	0.00

No	Tanggal	Relas	Hadir	Sakit	Izin	Alpa	Jumlah	% Hadir	% Relas
1	Senin, 25 Maret 2024	X.A	30	0	0	0	30	77.78	20.20
2	Senin, 25 Maret 2024	X.B	0	0	0	0	0	0.00	0.00
3	Senin, 25 Maret 2024	X.C	30	0	0	0	30	96.68	8.80
4	Senin, 25 Maret 2024	X.D	30	0	0	0	30	91.67	8.33
5	Senin, 25 Maret 2024	X.E	29	0	0	0	29	88.59	10.44
6	Senin, 25 Maret 2024	X.F	30	1	0	0	31	93.55	17.08
7	Senin, 25 Maret 2024	X.G	0	0	0	0	0	0.00	0.00
8	Senin, 25 Maret 2024	X.H	34	0	0	0	34	94.44	5.56
9	Senin, 25 Maret 2024	X.I	34	0	0	0	34	97.14	3.86
10	Senin, 25 Maret 2024	X.J	0	0	0	0	0	0.00	0.00
11	Senin, 25 Maret 2024	X.K	0	0	0	0	0	0.00	0.00

The screenshot shows a Google Sheet with columns for student ID, name, and attendance status for various subjects. The data is organized in a grid format with alternating green and white rows.

e. Storage

Data storage uses Google Drive



### 3. Validation Design

1) Validation expert

After the manufacturing process design and develop application , step next is do development applications that have been designed adapt application in accordance with goals and assess feasibility of the media being developed in matter appearance , layup, fonts, images and colors .

The result as following

**Table 3. Expert Validation Results**

Expert	Aspect	Score	Score	Percentage
		Acquisition	Maximum	
Expert 1	Material	48	50	96%
	Appearance	58	60	96.7%
Expert 2	Material	46	50	92%
	Appearance	54	60	90%
Average				93.7%

Validation results from expert 1 on aspects material as much as 96% with category very worthy , then on aspects appearance of 96.7% with category very worthy . Furthermore expert 2 provided assessment on aspects material with percentage of 92% with category very worthy , then on aspects appearance give evaluation with percentage of 90%, with category very worthy . With results the percentage average score of 93.7%, can concluded that experts on development application online attendance at SMAN 1 Babakan give evaluation with category very worthy For used .

2) Revision Design

Once done validation applications by validators, respectively line big application can next For developed , however there is input and suggestions from

validators, so that the application will be successful developed more well. and easy used by participants educate . Following input by validators:

a) Expert Validator 1

Based on validation expert 1 on the prototype , provided suggestions for add procedures / provisions charging absenteeism in appearance beginning .

b) Expert Validator 2

Based on validation expert 2 on the prototype, provided suggestions for feature recapitulation monthly and semester no opened For participant educate and give to teachers who need it just.



#### 4. Trials Product

a. Trials Small Group

Trials group small aim For know results product the beginning that has been validated by experts with subject in scale small . Trials scale small carried out by 20 respondents consisting of from students of SMAN 1 Babakan . Respondent will give evaluation application results revision from validation expert from aspect usability , information and appearance of the questionnaire that has been provided , which is then results the will repaired For tested try it on scale big . Following description results assessment on trials scale small :

**Table 4. Trial Results Small Group**

No	Intervals	Category	Frequency	Percentage
1.	81 - 100%	Very Agree	15	75%
2.	61 - 80%	Agree	5	25%
3.	41 - 40%	Enough Agree	0	0%
4.	21 - 40%	Not enough Agree	0	0%
5.	0 - 21%	Very No Agree	0	0%
<b>Total</b>	20	100%		
No	Intervals	Category	Frequency	Percentage
1.	81 - 100%	Very Agree	15	75%

From the test results group small as many as 15 students or 75 % said very agreed and as many as 5 students or 25 % stated agree. Based results the so application online attendance is feasible for developed and used as system absenteeism online SMAN 1 Babakan.

After testing with scale small so can is known assessment and input from respondents about application online attendance at SMAN 1 Babakan. On trial scale small there is input regarding the adar input form given a token/password each class so that others don't Can access class that is not the class . So done revised and then tested in scale big .



#### b. Trials Group Big

Trials scale big carried out by 50 respondents consisting of on students of SMAN 1 Babakan. Respondent will give evaluation application results revision from validation expert from aspect usability , information and appearance of the questionnaire that has been provided , which is then results the will tested try it For post-test was carried out . Following description results assessment on trials scale big :

**Table 5. Trial Results Group Big**

No	Intervals	Category	Frequency
1.	81 - 100%	Very Agree	37
2.	61 - 80%	Agree	13
3.	41 - 40%	Enough Agree	0
4.	21 - 40%	Not enough Agree	0
5.	0 - 21%	Very No Agree	0
<b>Total</b>	50	100%	

Based on test results scale big on applications online attendance at SMAN 1 Babakan carried out by 50 respondents state that 37 students or 74 % said very agreed and as many as 13 students or 26 % said agree . So , app online attendance at SMAN 1 Babakan worthy For developed and implemented . Based results response answer No There is Again necessary thing revised Again Results product end Can see the link below This :

<https://sites.google.com/view/absensismansaba/page-muka>

## 5. Discussion

Effectiveness aim For achieved goals and objectives that have been determined previously , is A measurement Where a target has been achieved in accordance with what has planned . There are 4 indicators main from effectiveness that is :

#### a. Target Achievement

Meaning from achieving targets here interpreted how far the target can be realized with Good . This matter can seen from extent of implementation objective organization in achieve appropriate targets with goals that have been set.

b. Ability Adaptation ( Flexibility )

Success organization seen from extent of the organization can adapt self with the changes that occur Good from in organization and outside organization .

c. Satisfaction Work

Something conditions felt by all member capable organization give comfort and motivation for enhancement performance organization . Focus element This is between work and suitability rewards or system implemented for member organizations that have achieved and have achieved doing work exceed burden existing work .

d. Responsibility

Organization can carry out not quite enough answer that has been carried in accordance with provisions that have been made before and can face as well as finish problems that occur with his job .

Study This aim For develop A system effective online attendance from facet time and energy . So , collect data in research This very required To use know is applications that have been developed can effective in support online attendance from facet time and energy . Effectiveness level be measured with questionnaire with Compile instrument items containing 4 indicators from effectiveness namely : target achievement , ability adaptation / flexibility , satisfaction work and take responsibility answer with amount 30 point question with range score 1 – 4, so will obtained The ideal score is between 30 – 120 points . Respondent A total of 50 students from SMAN 1 Babakan were given questionnaire pre test and post test . Following table results descriptive effectiveness test data in research This :

**Table 6. Pre test and post test results Application Online Attendance**

No	Intervals	Answer	Pre-test	%	PostTest	%
1.	98 – 120	Very Effective	29	58%	47	94%
2.	76 – 97	Effective	21	42%	3	6%
3.	53 – 75	No Effective	0	0%	0	0%
4.	30 – 52	Very No Effective	0	0%	0	0%
<b>Total</b>	<b>50</b>	<b>100%</b>	<b>50</b>	<b>100%</b>		

Based on table on known level of effectiveness system online attendance at SMAN 1 Babakan between before and after use application online attendance . Before use applications , the majority students feel very effective with percentage 62%, then with category effective with percentage 42%, no There is visitors who provide assessment in categories No satisfied even very No satisfied . After application SMAN 1 Babakan online attendance succeed developed with pass the validation process expert , try it out scale small and big so the same students give evaluation return to online attendance whole . As for results evaluation after use application online attendance , the majority give assessment in categories very effective with percentage



94% and category effective with percentage of 6%, and no someone gave it assessment in categories No satisfied and very No satisfied .

*Pre-test descriptive statistics* data and *post test* effectiveness used For know average value , value highest , value lowest , and standard deviation from results pre test and post test application online attendance at SMAN 1 Babakan.

Table 7, Description of Pre Test and Post Test Data

Statistics	Effectiveness Absence	Statistics
<b>Pre Test</b>		
Mean	103.6	Mean
elementary	10.15	elementary
school		school
Minimum	81	93
Maximum	117	120

From table on is known level effectiveness system absenteeism before use application is ; mean 103.6, standard deviation 10.15, minimum value 81 and value maximum 117. As for level level effectiveness system absenteeism after view and use application SMAN 1 Babakan online attendance: mean of 114.1, standard deviation of 7.2, minimum score of 93 and score maximum of 120.

Based on questionnaire effectiveness that has been done between before and after use application , there is difference effectiveness system attendance at SMAN 1 Babakan. Effectiveness level system absenteeism before use application average of 51.28% and after use application SMAN 1 Babakan's online attendance average was 88.72%. With increase in the average questionnaire effectiveness , yes interpreted that system absenteeism after use applications developed on research This experience enhancement.

## CONCLUSION

Products produced from study This is application Google Workspace based online attendance. Developed application has pass a number of stage making among them is prototyping, validation expert, try it out scale small and scale big as well as has through questionnaire effectiveness product. Validation results from expert 1 on aspects material by 96% with category very worthy, then on aspects appearance of 96.7% with category very worthy. Furthermore expert 2 provided assessment on aspects material with percentage of 92% with category very worthy, then on aspects appearance give evaluation with percentage of 90%, with category very worthy. With results the percentage average score of 93.7%, can concluded that experts on development application online attendance at SMAN 1 Babakan give evaluation with category very worthy for used.

Based test results group small as many as 15 students or 75 % said very agreed and as many as 5 students or 25 % stated agree. And test results scale big on applications online attendance at SMAN 1 Babakan carried out by 50 respondents state that 37 students or 74 % said very agreed and as many as 13 students or 26 % said agree. So, app online attendance at SMAN 1 Babakan worthy for developed and implemented. Based on questionnaire effectiveness that has been done between before and after use application, there is difference effectiveness system attendance at SMAN 1 Babakan. Effectiveness level system absenteeism before use application average of 51.28% and after use application SMAN 1 Babakan's online attendance average was 88.72%. With increase in the average questionnaire effectiveness, yes

interpreted that system absenteeism after use applications developed on research This experience enhancement.

Writer realize results from study This Far from perfection, therefore That writer give a number of shortcomings in the application that we developed so that it can perfected in the future coming, namely:

1. online attendance input process is still ongoing use a officer designated absences in each the class .
2. Sometimes officer forget For absent until limit time already set , so Still need business from the picket teacher For reminded in the Officer WA group absenteeism .
3. Recommendation Hopefully Can developed become more applications complex with scanner Photo each and the Maps location in the app can be downloaded on Play Store.

## AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

Author 4: Formal analysis; Methodology; Writing - original draft.

## CONFLICTS OF INTEREST

The author(s) declare no conflict of interest

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