Developing a Transformational Leadership Training Strategy using Flex Blended Learning Technology for Local Leadership skills Enhancement

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Abstract - **This study is about transformational leadership training using Flex-blended instructional technology. The study was conducted in one of the growing slum areas in Jakarta, a representation of the developing societies using technology to train local leaders. In the effort to design the program, a model adopted and replicated was modified to suit the situation. In this context, the study used a new flex-blended training strategy with the Moodle 3.8 platform as its learning management system. A set of training materials was developed by the researcher, then evaluated by the experts and the headship of the local leaders. The results of the validation of the expert team concluded that the model met the feasibility of developing a training model that produces a syntax for flex-blended-based transformational leadership training. Based on the results of the feasibility test, a one-to-one evaluation was carried out with the headship of the local leaders, small group evaluation, and field trials. A total of 28 grassroots leader from two Kampung Melayu local neighborhood villages from East Jakarta participated in the study using a single group of pretest-posttest design. The mean of pretest and posttest was used to determine the effectiveness of the flex-blended model. Paired sample t-test showed that there was a statistically significant difference in the performance of the household head before treatment (pretest mean) = 76.07 and after treatment (posttest mean) = 93.21. Both are significantly different by 17.14 with p value less than alpha level (α) = 0.05 which indicates an increase due to the treatment of the training model. The results showed that the local leader heads were very happy and strongly agreed with holding this flex-blended-based training, although the use of the platform was sometimes considered a bit complicated by a small number of the local leader heads. Conclusively, it has been accepted that the strategy makes leaders competent and helps them to easily complete tasks during the training period because task can be handled anywhere and at any time. This increases the efficiency and performance of the local leadership.**

Index Terms - Blended learning, Flex blended, Leadership, Leadership competences, Online training, and Transformational leadership training.

INTRODUCTION

Perceptions on learning involving digital technology and transformational leadership training [1], have become crucial points of discussion today. The popularity of digitalized learning for instance, requires the use of online tools, virtual community, use of multimedia web-based learning and many other digital technology alternatives, which enable self-reliance in doing things [2], including performance by those in leadership positions. Digital learning technologies and leadership are two important points of discussion because they are vital in times of complexity and abrupt disruptions [3]. For instance, during the peak period of the Covid-19 pandemic, many sectors almost stopped functioning, except the most essential ones, this led to questions regarding the quality of the country's human resources, hence leading to digital or online innovations in relation to service delivery, more so in the developed and middle-income economies.

In the effort to overcome the many problems faced by the leadership, more so that at the grassroot of the national

management structure, there is need for competent managerial skills, which can help the existing leadership anticipate community problems. For improve conditions and being focused on development as a country, the W.K. Kellogg Foundation [4] emphasizes the importance of enhancing grassroot leadership skills and building individual competences as they are key to national growth and sustainable development.

With the varying challenges faced in Indonesia, especially challenges faced by leaders in Kampung Melayu in East Jakarta, efforts to establish the conditions of leadership and the extent to which local leadership learns to fulfill the requirement of self-capacity development for competence enhancement there was need for innovation the way skills could be enhanced. The researcher conducted a preliminary study on 34 local leader headships from RW 7 and RW 8 to understand their education level, and the competences possessed by each of them. Transformational leadership training is expected to help leaders learn to do things differently, and love what they do (, to ensure each and every person in the communities they are leading succeeds even during times of hardship. The present study, therefore, proposes flex blended transformational leadership training strategy as a digital learning approach that can be used for skills enhancement of the local leadership to ensure there is competence in management and service delivery.

It has become clear that countries which had decisive, competent and strong leadership, put in place appropriate initiatives and measures to stop the effects of Covid 19 Pandemic [5]. It is upon this background that the present paper sought to present an innovative approach in local leadership training through the use of blended learning technology as a requirement for skills enhance and competence building in community organizations and or community forums such as the local leader section in particular or social groups that exist formally or informally to be able to optimize the use of smartphones in the service delivery in relation to their duties and functions depending in the prevailing changes. Transformational leadership training is a type of leadership training that drives and inspires change among workers [6] more so during challenging times.

As Ham et al [7] points out, urban growth can be beneficial, both the government and its citizens, if it makes use of technological advancement solve both social and service delivery problems. The rate of development and change in technology and people's thinking is getting faster [8], impacting on the need for the use of online media in all walks of life 9], including local leadership training and skills enhancement. Therefore, several urban villages in Indonesia are also enthusiastic about presenting the use of various applications (i.e.: online features) as symbols of advanced technology for each individual [10].

Because within the current development atmosphere which has been heavily affected by the pandemic, there have been a direct increase in emergence demands which

have often turned out to be urgent needs requiring the development of new roles [11], more so for the local leadership in relation to services provided to the public. Hence, calling for the development of self-learning capacity of local leaders requiring a very strong strategy to instill in these leaders' transformation leadership competences. According to Fisher [12], enhancing competences can encourage the formation of transformational leadership ways of doing things, which is a direct and modern approach to leading people and change in grassroots communities.

It is widely known that for competences to be enhanced there should be learning [13]. This means that to develop the personal capacity for each local leader, each leadership unit, especially in East Jakarta are expected to participate in various learning activities. Since, as part of the national administration structure the leaders' learning activities may help them to optimally fulfill their duties, functions, and obligations. Thus, these learning activities are required in both urban villages and related agencies such as the health service, social service, forestry service, and several other partner agencies, through flex blended learning.

However, with today's rapidly changing society, city growth can benefit from ready to learn leaders at the grassroot, if it includes technological advantages [14]. The more rapid the development of technology and people's thinking [8], the higher the need for the use of online media at all levels of society becomes a necessity [15]. Therefore, several urban villages in Indonesia are also excited to present the use of various applications (online features) as a symbol of advanced technology for each individual in the current era [16]. Presently, the existing online applications in the public domain used by regional administration of Jakarta [17], especially by the local leadership heads for grassroot community service delivery, include: Jaki which is an abbreviation of Jakarta Kini, translated as Jakarta Now - is a platform used to know the daily needs of people and challenges they go through; Alpukat Betawi- is an online application meant to take care of citizens documents being processed mostly used by settlers in the country's capital city, including those staying in East Jakarta to ease in service delivery regarding documentation and document processing; Bapenda - is an online tool used to estimate taxes individuals and companies ought to pay, and there many more other digital tools developed, all are intended to facilitate and improve the quality-of-service delivery and simplify tasks and responsibilities of the local leadership administration [18].

These online application support tools are basically used to enhance leadership competences, which are highly needed locally. Since most of these online applications are needed to facilitate and improve the quality of service for the duties and responsibilities of most leaders.

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LITERATURE REVIEW

The purpose of this study was to develop a flex-blended-based transformational leadership training strategy for local leaders because grassroots leadership is the most efficient tool in handling grassroots community development [4]. Due to the importance of leadership in development, several studies which are popular on leadership models have emerged in the discussion of leadership development studies and human resource management. One of them can be adapted as the right choice for leadership training materials for local leadership competence enhancement, as stated by Raza and Sikandar [19]. The discussion about leadership is necessary because the grassroot leaders play the role of nurturing, initiating mutual cooperation, and other social values between the government and citizens. Some studies have revealed that transformational leadership model dominates and is superior, when compared with other leadership models [20-22].

Leadership is concerned with emotions, values, ethics, standards, and long-term goals, including assessing followers' motives, satisfying their needs, and treating them as humans [23]. The transformational leadership model is a cutting-edge model in leadership studies as a new leadership genre [24]. A transformational leader is one with charisma who has a central and strategic role; to achieve organizational goals [6]. According to Korejan and Shahbazi [25] transformational leadership is inspiring and encourages talent display at work.

Transformational leaders have four main characteristics, they include idealized influence, inspirational motivation, intellectual stimulation, and individual consideration [26], [27]. Transformational leadership occurs when grassroot leaders broaden and promote the interests of their citizens [28]. Transformational leaders need to set an example for the followers they serve to foster trust, admiration, loyalty, and respect for a change [29]. This of leadership motivates many people and tends to attract a large following [30]. This leadership can help followers go beyond self-interest, to move the needs of these followers to a higher level [31]. Siangchokyoo et al. [32] suggest that a systematic review of the empirical evidence regarding follower transformation as a conceptual foundation of transformational leadership theory. On the other hand, Khan and Qureshi [33] discoveries highlight the radical leap in the evolution of transformational leadership theory from a nascent phenomenon to a mature paradigm to become a more robust theory and a more actionable model of leadership.

Transformational Leadership Training

According to Hart and Waisman [34] leadership is a critical competence that can be taught. In other words, transformational leadership can be developed, taught and learned [35]. Bass and Riggio [36] revealed several attempts to understand how individuals become transformational leaders, by examining early life experiences, examining early leadership experiences and life experiences that affect leadership development later in life, to how leaders are trained and developed in their organizations. It shows clearly that each grassroots leader can learn to lead, to change, and become a leader of change.

Grassroots or local leaders are encouraged to learn using digital tools, because digitalization has entered all aspects of people's lives [37], especially the way people learn. In the era of digital technology, new learning methods have emerged by utilizing these digital advanced tools [38], such as: smartphones and computers with internet facilities and services that are currently relatively affordable for all, including grassroots or local leaders. The presence of several sophisticated applications for the local leaders is a testament to their closeness to today's digital technology. Local leaders have found themselves learning more with accessibility and availability of the online applications which are easily downloaded on their respective smartphones at any time.

Flex blended transformational leadership training contains two interrelated elements which are the information and communication technologies. According to Almenara and Gimeno [39] communication technological mastery by leaders is a systematic and critical approach to mastering self-directed learning. Because grassroots leaders who have mastered online technologies, prioritize the learning process [40] when its need arises and more so at a time, they want to master a new skill related to their tasks and functions. Therefore, it can be said that technological mastery is about software and hardware [41], software, among others, analyzes and designs sequences or learning steps based on the objectives to be achieved with a suitable presentation method and assessment of its success.

Since, it has been found that using online learning technologies in transformational leadership training is important, the training materials should much the mode of learning established and help to achieve the training targets [42]. This helps whoever, is implementing and delivering the material master the learning strategy well for its suitability in running the transformational leadership training [43]. Though, among the challenges faced by the grassroots heads from both RW 7 and RW 8 *Kampung Melayu*, is that of never having flexible training in terms of time and place, the researchers offered to integrate learning technologies into training, especially with the flex blended online technology. Blended learning is a solution that is considered appropriate to overcome human resource development challenges [44]. The flex-blended approach is part of blended learning, which is a combination of online learning as the backbone and face-to-face learning to enrich learners [45], so that learning is very flexible. Blended learning or training that includes online media and offline learning is an internet-based learning innovation providing flexibility in learning time and offers a rich learning resource for grassroots or local leaders.

In line with the concept of a smart city, where every citizen must have good digital capabilities, the grassroots leaders of

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East Jakarta are no exception. To improve the quality of their learning, they must have the basic digital literacy skills [46]. In turn, they can also take advantage of existing technology and information media for the quality of their leadership that leads to change. In an investigation about leadership and digitization, it has been found that leaders are key actors in the development of digital culture [47]. Shin, Junseok and Hongbum [48] revealed that there is a strong relationship between appropriate technology and innovation at the grassroots level. Their study on the use of technology appropriately at the grassroots level revealed principles of innovation that consider comprehensive social aspects for sustainable development or sustainable transformation for developing countries [48]. Several organizations dedicated to supporting mixed learning training account for 30–79% of learning delivered through technology [49] because of its importance in human resource improvement.

Based on this, in an effort towards developing a smart city where every citizen becomes technologically literate, the local leaders must have basic digital literacy skills. These skills serve to strengthen their competence in serving the citizens they lead and also help them to access digital services appropriately as a learning medium for innovations at the grassroots level. Through flex-blended learning, grassroots leaders can choose to learn based on their own pace and ability. In this class model, the facilitator provides assistance during discussion sessions, working on projects in groups, or individual tutoring. It is intended to help students who have learning problems.

Flex-Blended-based Training Concept

At first the flex-blended strategy was present and popular as an alternative online learning program that was interspersed with face-to-face and focused on students who needed course recovery or who had dropped out of school, but its application was later expanded in the workplace in the form of training. Determining the right flex model for training is tailored to users and organizations who have unique needs that must be considered. The flex-blended strategy is a model that gives trainees the flexibility to choose their own learning activities [50]. Being that flex-blended offers greater flexibility, both participants and facilitators can have more control over the use of their time [51]. Facilitators have time to work individually with participants as they are generally no longer standing in front of the class delivering content [2], meaning they can go through the learning material at their own pace. The facilitator provides support and training flexibly according to needs [52], while the trainees complete projects and carry out discussions to enrich and deepen their understanding about the training materials they need.

Online training is the backbone of flex-blended although there may be learning activities that are carried out offline [53]. Flex-blended or flex strategy is one of the four blended learning models classified by Horn and Staker [53] consisting of rotation model; flex models; a La Carte

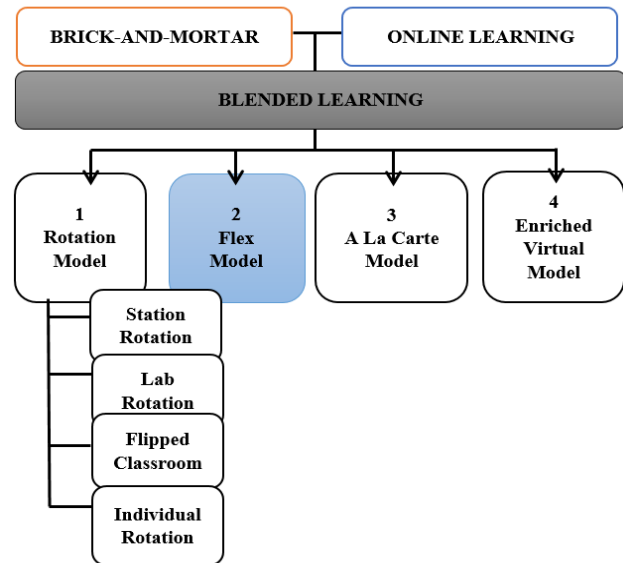models; and an enriched virtual model. The following figure 1 illustrates the classified models:

FIGURE 1
BLENDED LEARNING MODEL
(Source: Horn and Staker, 2015)

In this study, the blended learning adapted is the flex model because it provides flexibility to the trainees as adult learners who are considered capable of having control over their own learning settings and pace. In addition, there is adequate access to training with the role of online facilitator enriched by face-to-face training. The rotation model is considered incompatible with the transformational leadership training model for grassroots leaders because the rotation model focuses on strict regulation of the rotation of students' positions between conventional and online learning. This tight position arrangement can hinder the learning space of the grassroot leaders in interacting or having dialogue with fellow trainees. For instance, the La Carte model and the Enriched Virtual Model do not focus on classroom learning. This means that most of the training is online-based, thus it offers the opportunities for local leaders to explore their abilities in an environment with the guidance of a facilitator.

RESEARCH METHOD

This research was conducted in Kampung Melayu in East Jakarta using a research and development approach. The development stage process was carried out by adapting models which could be replicated and modified to suit the situation. The research was conducted in three stages or phases, as shown in table 1 below:

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TABLE 1
AN ILLUSTRATION OF THE THREE STAGES OF RESEARCH

Stages	Research Activities and Development	Implementation Period
I	Preliminary Study	November 2020
II	Research and Development	Dec 2020—Aug 2021
III	Testing Product Effectivity	Sept 2021—Oct 2021

As seen in table 1 above, the stages of research comprised of the preliminary study phase, which was basically about testing the research instruments and getting to know the real situation regarding grassroots leadership of Kampung Melayu. Because this training is intended for the head of the grassroots leadership units as adult participants, the training method used is adjusted to the characteristics of those who tend to require participatory learning. The methods in question, among others, were: a project-based training method centered on problem solving oriented to an empirical community environment with real actions (authentic activities); transformative training methods that integrate ideas as new information to add to their previous experiences; reflective and collaborative training methods with peers; and training methods that demonstrate individual concern, such as helping them to plan and achieve targets, requesting written input in training sessions or informally outside of training sessions, and paying attention to their interests.

This research used a research and development (R&D) method. According to Gall, Gall and Borg [54], research and development is an industry-based development model of research findings that is used to design new educational products and procedures which are then systematically tested, evaluated, and refined until they meet certain criteria in terms of effectiveness, quality, or similar standards. It is further stated that the most widely used educational research and development model is the systems approach model designed by Walter Dick, Lou Carey, and James Carey [54].
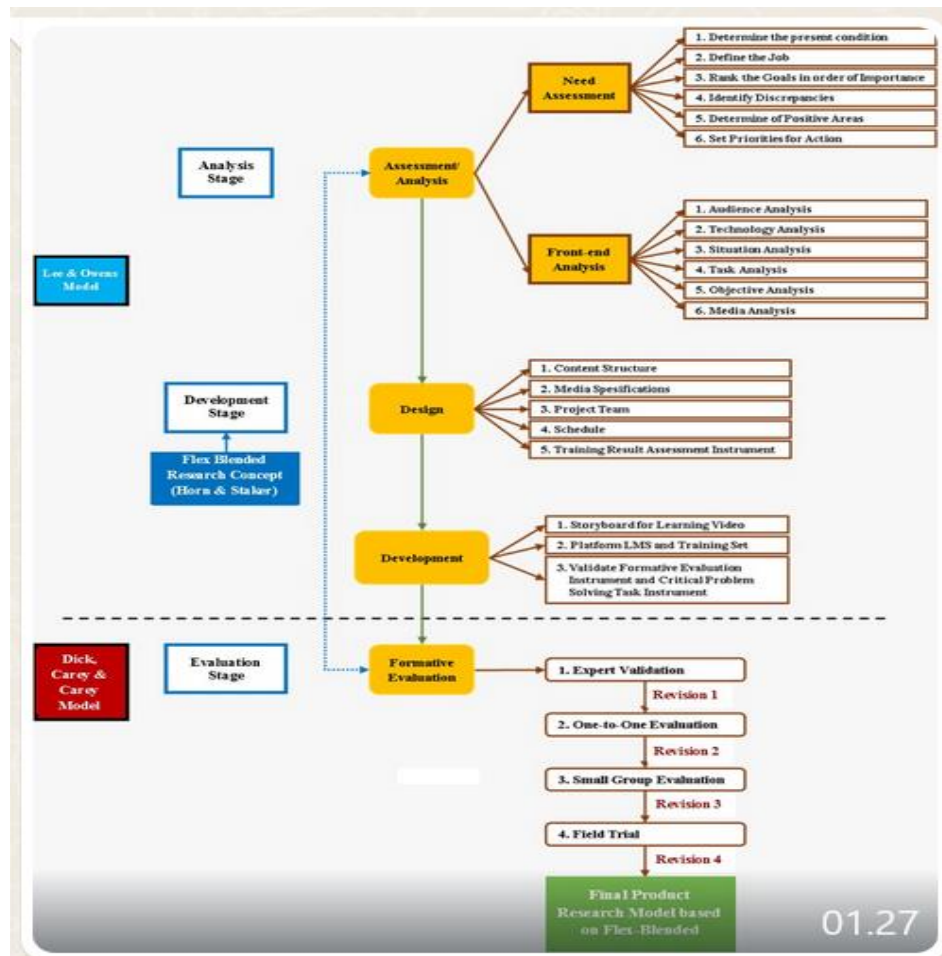

FIGURE 2
A DESIGN FOR THIS RESEARCH COMBINED WITH LEE & OWENS AND DICK, CAREY, & CAREY R&D RESEARCH MODEL AND THE FLEX-BLENDED HORN & STAKER APPROACH FOR IMPLEMENTATION

However, in principle there is no best model as Suparman [55] emphasized that if there are people who want to choose the best one and consider it a standard model for all types of instructional activities, such desire should be canceled

because each model is good and in accordance with certain conditions.

Therefore, the research and development used in the development of this flex-blended-based transformational leadership training strategy was adapted from the performance-based product development model oriented to blended solutions by Lee and Owens [56] combined with the Dick, Carey and Carey [57] model which incorporates elements of the flex-blended model by Horn and Staker [53] at each stage of the development of the two models. The research design for developing a flex-blended-based training model is illustrated in Figure 2.

The steps involved in a research and development (R&D) study may comprise of the following:

Analysis stage: researchers assess needs by starting with observations of the training environment, literature review, questionnaires, and interviews to obtain information about the gap between the desired (ideal) situation and the situation that is actually happening at this time as well as the types of skills issues needed. The steps in this need assessment stage are: determine the present condition; define the job; rank the goals in order of importance; identify discrepancies; determine positive areas; and set priorities for action. The researcher conducted a front-end analysis to close the gaps with the solutions offered through the training results. Front-end analysis includes participant analysis, technology analysis, situation analysis, task analysis, training objective analysis, and media analysis.

Development Stage: the researcher designs a flex-blended-based training specification which includes the steps or activities needed to produce a training specification document (a course design specification (abbreviated as CDS). The details of the activities in the CDS contained as a training structure include: detailing the structure of the material; designing media specifications; identify training human resources; develop a flex-blended-based training process outline; and designing a training outcome assessment.

Researchers develop training materials to implement CDS documents during development, namely by translating product specifications into physical form (learning management system (abbreviated as (LMS). The development phase of training materials, includes: making a storyboard that serves as a guide in inputting material and developing an interface design; developing the presentation of content presented in interactive multimedia, namely an LMS platform and a set of training materials; and designing and validating expert validation instruments and formative evaluation instruments as well as critical problem-solving task instruments as instruments for assessing training outcomes.

Evaluation Stage: researchers designed and carried out formative evaluations after completing all activities during needs assessment, front-end analysis, CDS development, and development of training materials to determine the quality of training [56]. In addition, researchers reviewed and revised the product of flex-blended-based training materials to become the final product. Slightly different from that, Gall, Gall and Borg [54] stated that formative evaluation was carried out when the program or product was being developed to support increasing the effectiveness of the developed training program.

Thus, formative evaluation is included in the development stage. Although there are differences of opinion, basically formative evaluation is intended to obtain data related to the strengths and weaknesses of the draft training materials that have been made. The results of the formative evaluation can be used as input to improve the draft of the training materials. There are four stages in the implementation of formative evaluation, namely: one-to-one validation with experts, one-to-one evaluation of the grassroot leadership heads, small group evaluation, and field trials.

Techniques for Data Collection

This study uses qualitative and quantitative data collection techniques. Thus, the research approach is a mixed method that combines qualitative and quantitative approaches [58]. The data collection was carried out through document analysis, interviews, field observations, distributing questionnaires, and administering tests.

Document analysis was used to answer questions regarding the current condition of the leadership of the grassroots heads, particularly in RW 7 and RW 8 in Kampung Melayu within East Jakarta; concepts related to flex-blended training and transformational leadership training; and previous research results related to flex-blended training, grassroots leadership, and transformational leadership.

Interviews with grassroots heads, that is RW heads, grassroots leadership officials, and experts were conducted to obtain information related to the training materials being developed. The interview aims to explore the advantages and disadvantages of the training materials being developed as input for the revision of the training materials. Interviews were also conducted during the preliminary research to obtain information about the condition of their leadership, particularly regarding environmental conditions and the residents concerned by involving the Secretary of the Village Head of Kampung Melayu in East Jakarta and other village administration staff as well as residents of the studied neighborhood villages withing Kampung Melayu.

Observations were made to obtain information about the condition of the settlement environment and the interaction of residents, especially in the neighborhood of RW 7 and RW 8 of Kampung Melayu in East Jakarta City. Field observations were also made to obtain data on how the training materials being developed were used or tested

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during the training. Tests are given to determine the effectiveness of the training materials. There are two tests given, namely the pretest (pretest) which is given before the training and the final test (posttest) which is given after the training.

RESULTS

The design of the Flex-Blended-Based Transformational Leadership Training strategy for grassroots leaders is a conceptual model built from the concepts in the literature review that have been described previously. The concepts are as follows.

Flex-blended training gives students great flexibility to start learning from any room, then move on to online or offline training throughout the course of the training. Most of the delivery of training materials is done online, supported by face-to-face meetings when needed. After participants determine the topic of interest, the facilitator can group participants into several project communities based on the classification of topics provided. Thus, the facilitator can provide learning facilitation support to participants, either individually or in groups according to their needs or when participants experience difficulties in completing the project. In addition, peer modeling learning is carried out, namely the RT head who is recognized as successful in his leadership to solve critical problems will tend to be imitated and adopted, both in his work, behavior, and leadership style.

This flex-blended-based transformational leadership training encourages innovation and change so that the environment becomes rich in collaborative potential and meaningful social construction. Participants learn through experiences gained during the training, both during independent and collaborative learning in the project community. Participants learn by experiencing various exercises and assignments, both in online meetings and in project or community settings. Participants will learn from various challenges and support critical problem solving in the field.

Transformational leadership training provides grassroots leaders with knowledge and skills about the four dimensions of values or behavior of transformative leaders, namely charisma, inspirational motivation, intellectual drive, and individual attention.

Thus, it can be concluded that flex-blended-based transformational leadership training is a training that prioritizes the flexibility of online training supported by face-to-face meetings [50]. In it, participants can learn independently or collaboratively with modeling learning about mastery of knowledge and abilities of the four dimensions of transformational leadership values as an effort to solve critical problems through project assignments to generate innovative ideas for change. This is illustrated in figure 2 form as follows:
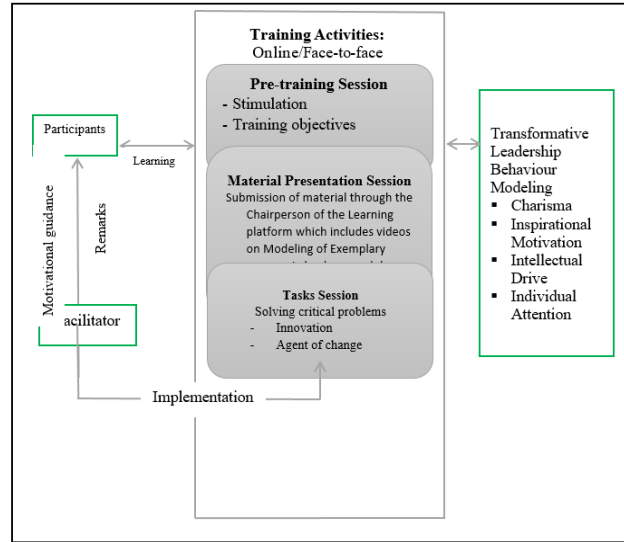

FIGURE 3
TRAINING ACTIVITIES AND LEARNING OUTCOMES IN FLEX-BLENDED-BASED TRAINING ACTIVITIES AND OUTCOMES OF THE GRASSROOTS LEADERS OF KAMPUNG MELAYU VILLAGE IN EAST JAKARTA

From the conceptual model above, it has been concluded that the components of the Flex-Blended-Based Transformational Leadership training for grassroots heads included a training guide, pre-training sessions, material presentation sessions, evaluation sessions, participation of the local leaders and facilitator guidance was provided.

The flex class model provides an alternative level of flexibility for the local leaders to complete the training assignments independently and collaboratively and to be involved in their project community laboratories. Thus, the steps for implementing this flex-blended-based training model consist of three learning rooms that should be passed by the trainees throughout to completion of the training program.

Designing Flex-Blended Based Training Specifications

The following are the steps or activities required to produce a training specification document (a Course Design Specification (CDS). The details of the activities in the CDS as set out as a training structure are as follows:

Designing Media Specifications

After going through a study of several transformational leadership training module literature, the researcher detailed the structure of the material by determining two topics as flex-blended-based transformational leadership training materials for grassroots heads. The materials for the two topics were: Basic Concepts of Transformational Leadership; and Transformational Leadership Role Models. The two materials were considered to represent the type of conceptual and factual content that can lead participants to have an understanding to the ability to apply transformational leadership behavior.

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The flex-blended-based training model was designed with specifications that of course must present interactive multimedia, such as with an LMS platform equipped with printed media. Moodle 3.8 as the choice of a web-based platform that is suitable for use in this training model because it can support an online training management system, so that every training activity, such as accessing material in the form of PDF and video modules, filling in attendance, conducting pre-test and post-test, uploading worksheets, downloading certificates, and providing feedback can be done via a web page using the help of a browser.

The printed media provided to enrich this flex-blended-based training consists of a program structure, modules, participant guides, and facilitator's guides that can be read directly by participants during offline meetings.

Developing Flex-Blended-Based Training Materials
At this stage of development activities in a CDS document were implemented, namely: translating product specifications into physical form (learning management system (abbreviated as LMS). The development of training materials consisted of the following stages:
Create a storyboard that serves as a guide in inputting material and developing interface designs. At this stage of development, the video development schedule is listed in Table 2 below:

TABLE 2
FLEX-BLENDED-BASED TRAINING VIDEO DEVELOPMENT SCHEDULE

TASK	ASSIGNED TO	DELIVERABLE FILE	START	END	Day
Learning Video Development					
Storyboarding	DICONIC	Storyboard (Power Point)	2/13/21	2/14/21	2
Approval Meeting (storyboard)	CLIENT, DICONIC	Approval Document (Word)	2/15/21	2/15/21	1
Asseting	DICONIC	Raw Video (mp4)	2/15/21	2/17/21	3
Animasi/shooting & Editing	DICONIC	Video (Mp4)	2/18/21	2/26/21	9
Video Review	CLIENT, DICONIC	Review Document (Word)	2/26/21	2/26/21	1
Revision	DICONIC	Video (Mp4)	2/27/21	2/28/21	2
Launching	CLIENT, DICONIC	SCORM/HTML 5	3/1/21	3/1/21	1
Total duration of work (in working days)					01.01

Developing the presentation of content presented in interactive multimedia, namely an LMS platform and a set of training materials. The training materials consisted of a training program structure presented to grassroots heads in the training platform, that is LMS https://ketuartlearning.com, which contains a training module in the form of a PDF file and two learning videos on the basic concepts of transformational leadership and transformational leadership role models.
In addition to presenting the concepts and practices of transformational leadership, the training materials also contain a participant manual and a facilitator's manual as well as three exercises that were carried out independently and collaboratively to a critical problem-solving task completed in a project community. The project community consisted of the grassroots heads, and management staff, and all potential citizens who are incorporated into a social project community to solve critical problems in their environment by applying the four dimensions of transformational leadership values, namely charisma,

inspirational motivation, intellectual drive, and individual attention.
Despite the position of blended learning as a learning strategy in training and as a medium of delivery, it has transformational potential when aligned with organizational initiatives. A number of organizations dedicated to supporting mixed learning training account for 30–79% of learning delivered through technology [50]. However, it is important to remember that the use of media remains only a means to achieve increased performance [59]. Mixed learning is also carried out with the best available delivery methodology for a particular purpose. This learning includes online learning, class-based learning (classroom-based instruction), electronic performance support, paper-based, and on-the-job solutions both formal and informal [60]. This is an advancement in harnessing the advantages of technology for learning innovation and learning in organizations at the grassroots level.
Evolution in leadership studies reflects real-world realities as technological progress and innovation changing at

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extreme speeds. Therefore, we have now entered a digital age where leadership itself has changed. Until now, studies from various scientific disciplines have contributed to further researching the understanding of leadership in the digital era that has to develop to makes leaders aware of new forms of leadership in the Industrial 4.0 [61]. It has been argued that perhaps previous knowledge will become obsolete and irrelevant in the digital era and Industry 4.0. For organizations to be financially and operationally resilient, they must embrace new technologies such as Mobile, social media, and others [62]. Industry 4.0 and the associated technological changes result in broad modifications impacting not only the organization but also the people within it. Thus, the neighborhood leaders play an important role when they can use digital technology in the Industrial 4.0 era appropriately in their learning activities as an effort towards a process of transformational leadership change at the grassroots organizational level.

The implications of this research are: grassroots neighborhood leaders need to apply transformational leadership that adapts to current advances in digital technology, and to increase their learning activities by utilizing existing digital technology appropriately so that they can improve their managerial skills. These two attitudes must go hand in hand because the learning activities in the digital technology era and the transformational leadership of the neighborhood leaders are two things that cannot be inseparable in one organization or community organization. Both are urgent factors for the creation of good quality services for the community.

The role of the neighborhood leaders in information technology literacy can drive the success of existing government programs as well as generate innovation at the grassroots level. It has been revealed that the strong relationship between grassroots innovation and the appropriate technology produced. They stated that the grassroots approach to technology development from the ground up was to pave the way for sustainable technology [63].

The demand for neighborhood leaders as transformational leaders to be able to study the various technologies and digital media available to them and decide which ones will provide the best benefit for citizens or their followers is a necessity. Digital transformation is not about technology but focuses on people. We can buy technology, but the ability to adapt to a more digital future is more important, which means to be skilled at using it. When neighborhood leaders think about investing in technology, they should think about investing in followers who can make the technology work. Iveroth & Hallencreutz reminded me of the challenges of digitalization, where digital services are getting closer while an interaction crisis occurs. They, therefore, suggest that people should stay involved when using technology. The consequence in this context requires the development of the strategy and skills of the neighborhood leaders as transformational leaders to deal with the complicated factors of digital change [64].

CONCLUSION

All figures and tables must fit either one or two-column width, 3.4" or 7" wide respectively. It is suggested that you use one-column whenever possible. If your table or figure will not fit into one-column, then insert a continuous section break before and after the table or figure, as described above and define it as one-column. To make the paper read easier you may want to position any table or figure that requires one-column either at the bottom of the page or the top of a

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