



Training Music Sequencer at the Pare String Ensemble Community

Harpang Yudha Karyawanto^(✉), Raden Roro Maha Kalyana Mitta Anggoro, Heri Murbiyantoro, Autar Abdillah, Noordiana Noordiana, and Senyum Sadhana

Faculty of Language and Art, Universitas Negeri Surabaya, Surabaya, Indonesia
harpangkaryawanto@unesa.ac.id

Abstract. Realm of entertainment music develops along with technological developments, one of which is the use of music sequencers in musical performances. This article discusses the results of developing music production skills through music sequencer training in the Pare String ensemble community. The research data in this training took 40 participants ($n = 40$) from members of the community. The training was carried out in five meetings. The results of the research show that the development of training achievement reaches 90% which consists of 4 elements of training material, namely DAW theory, DAW operational, recording theory, sequencer music design. The results of this training can be an investment for this community by increasing the skills and knowledge of its members, so as to increase the credibility of the community in their careers.

Keywords: Music Sequencer · Training Music · Pare String Ensemble

1 Introduction

The creative industry is not a new industry, and has been around for a while. The important thing is that it can have a positive impact on the country's economy, which is something new and exciting. Especially in Indonesia, the economic value of this industry needs to be optimized due to the potential of Indonesia's cultural diversity as well as its natural diverse human resources. Based on the 2025 Indonesian Creative Economy Development Data compiled by the Ministry of Commerce, 14 industries are identified as creative industries: (1) architecture, (2) design, (3) crafts, (4) computer and software servants, (5) fashion, (6) music, (7) art and antiques market, (8) publishing and printing, (9) advertising, (10) interactive games, (11) research and development, (12) art, (13) television and radio, also (14) video, film and photograph [1] There are many different actors involved in the creative industry, including intellectuals such as humanists, artists, educators, researchers, writers, and pioneers in cultural studios. Businesses, such as business actors who transform creativity into products of economic value, play an important role as well, and the government can also be a catalyst and advocate, regulator, consumer, investor, and entrepreneur. Arts and culture are still a major force in efforts to improve the creative industry economy. The performing arts, such as orchestral music, have always been seen as a performance for the high-end people. There are

not many opportunities for the lower middle class to enjoy orchestral music. Be that as it may, alongside the improvement of the music craftsmanship in Indonesia, both in different cities and urban ranges, numerous dependable musicians who graduated from residential and remote colleges have begun to seem, who have set up music communities, one of which is within the Kediri district, East Java. In a roundabout way, it impelled the consideration of individuals from different circles to be inquisitive about joining the community. The music community alluded to in this article is the Pare String Ensemble.

Pare String Ensemble could be a music community locked in in instrumental music, particularly string ensemble. This community has members from different circles; from scholastics and non-academics. The members, who are for the most part youthful, are committed to construct a wellknown symphonic music community, indeed in spite of the fact that a few of them don't have fundamental abilities in music. This community is driven by Itot Bian Rahardjo, S.Pd., M.M who moreover serves as the player facilitator. Since its initiation in 2017, the Pare String Ensemble music community has had very a number of individuals, and has been running for roughly 5 years. The uniqueness of this community is their interest in seeking after instrumental music ability indeed with negligible studio. This can be what impelled the Universitas Negeri Surabaya Community Services Team to care almost the presence of the Pare String Ensemble community and the presence of the music gather itself.

In way of, life music plays an vital part. It impacts individuals enthusiastic by nature, makes individuals feel upbeat or pitiful, irate or loose [2]. In their day by day exercises, this community has moreover performed exhibitions, extending from coincidental exercises that are non-profit in nature in arrange to excite social occasions or arranging exercises in schools. Based on the comes about of starting perceptions of the presence of the Pare String Ensemble community, it can be concluded that, by looking at the fellowship soul of the individuals, it is exceptionally conceivable to energize this community to develop towards a proficient, money-oriented, or imaginative economy. On this premise, *Sendratasik* Department, Faculty of Language and Arts, Universitas Negeri Surabaya Community Service Team, was tapped to supply direction and strengthening to the Pare String Ensemble community, to be specific through preparing on music generation sequencer within the frame of Logic Pro X computer program. Numerous interactive media examination calculations depend on likelihood disseminations that characterize sound or picture highlights as by and large tall measurements [3], one of which is Logic Pro X. As it said that music can be regarded as a temporal sequence of mixed sounds, so selective attention should explain music perception in some aspects, and psychological experiments [4]. Then, community Services Team looks for to optimize the capacity of community people to utilize Digital Audio Workstations (DAW), since it is irrefutable that parties who are committed to the domain of music must too have qualified computerized proficiency aptitudes, as one of their qualities. Competitiveness in today's excitement world advertised. Hallam (in [5]) stated that music participation has a positive effect on the personal and social development of young people. Refers to that statement, Community Activity exercises that will be carried out within the Pare String Ensemble too point to move forward abilities in making compositions, abilities in making instrumental pop tune courses of action, and aptitudes in playing symphonic

music. The comes about of the preparing are anticipated to energize the birth of imaginative industry openings for the Pare String Ensemble community, particularly within the pop music class, can donate birth to modern shapes and styles of instrumental pop music that are more well known, particularly those that are worthy to youthful individuals, and can compete to meet the advertise within the excitement industry, and advanced music.

The Pare String Ensemble community is the as it were bunch locked in within the string symphony class. In any case, it is verifiable that there are a few impediments or issues in this community, counting: (1) Need of information and aptitudes in working DAW; (2) The need of point by point abilities in terms of playing symphonic organize music. In reality, the playing melodic expertise will back the conveyance of feelings from the melodies that are sung, as expressed by [6] who said that music could be a department of craftsmanship that communicates feelings. This is often moreover in line with the thought of [7] that music as an emotion-loaded shape is respected as a common entrainment asset in lifestyle as well as a portion of the mental work of the person. Hence, person aptitudes in playing melodic instruments got to be created; (3) Insufficient offices to create this community; and (4) community administration which is still less organized, so it tends to be troublesome to enter the excitement industry. Seeing these conditions, the Community Services Team needs to supply uncommon preparing within the domain of music generation and improvement of string instrument playing aptitudes to construct this community, so that it can gotten to be a proficient and profitable community within the music industry. This Community Services Activity may be a frame of benefit that applies the craftsmanship of music, particularly within the domain of music generation, which is claimed by the Community Services Team by participating with accomplices, specifically the Pare String Ensemble Community. The members who got to be the target of the preparing were those who were propelled and fascinated by progressing computerized education abilities within the realm of music. The yield or result is an increase within the authority and aptitudes skills abilities aptitudes of the members within the creativity of cutting edge pop instrumental music utilizing DAW. In truth, the yield that will be created is within the shape of program items that can be utilized freely by each person community in creating each fabric or collection to be advertised to the entertainment industry advertise. As a long-term target, the objectives and comes about of this movement are anticipated to create a present day symphony gather that's solid and based on creative businesses.

2 Research Methods

For the well usage of this Community Services action, it is vital to plan an orderly and viable issue understanding system. The issue tackling system in address is as takes after: (a) Preparatory ponder of the target gathering of people, to be specific to take note the things required by the preparing members related to the execution of the music sequencer preparing; (b) Materials arrangement. After distinguishing the condition of the target group of onlookers, the following step is to create preparing materials. Typically done to facilitate the division of assignments for each part of the Community Services Team, to watch specifically when the community conducts preparing exercises, and to hold talks with the community facilitator. All of this is often done to guarantee that the material

arranged is appropriate, with the trust that the material taught is worthy and valuable to the target group of onlookers; (c) Deciding the plan and put for the implementation of the preparing exercises: talking about the precise schedule between the two parties. In this case, what is implied isn't interferometer with the exercises between the implementer and the target group of onlookers. From the comes about of dialogs with the Pare String Ensemble community facilitator, it was concurred that preparing exercises will be carried out from May-October 2022. The exercises are carried out agreeing to the concurred plan, which is each Friday or Saturday evening, from 3.00–5.00 pm. The materials used within the exercises in understanding with the preparing targets incorporate the taking after: (a) Give material on understanding the generation of music sequencers utilizing DAW; (b) Give material on abilities in working a DAW; (c) Directing the community to begin move forward the Pare String Ensemble community to ended up a beneficial and proficient community; (d) Helping learners in composing a modern style prevalent melody concept based on the creative industry; and (e) Since the mid 1990 s the music (and other content) industries have undergone significant change due to economic, social and technological factors related to the widespread availability of high-speed internet technologies and mobile devices [8], so that this community activity is about to direct the administration of excitement in understanding with entertainment needs.

In an exertion to attain the target of preparing victory, a few strategies are required to be implemented, counting: (a) Introduction, within the shape of showing material clarifications to members with respect to music generation and tune course of action. In expansion, it gives understanding on how to oversee this community towards a profitable amusement entertainment industry; (b) Exhibit, the Community Services Team gives illustrations of the operation of DAW, and melodic courses of action both exclusively and in coordinates bunches. Hoppe, Sadakata, and [9] recommend that within the classical strategy of educating music, the educator gives informational and criticism on the execution of the understudy; this is often too what the Community Services Team did in this preparing; (c) Exercise/Simulation, where members attempt to do works out in compiling compositions/arrangements of wellknown melodies, beginning with the arrangement of the concept of composition and/or course of action of advanced pop genre, practicing free style, gatherings, and composing methods. As expressed by [10] where music composition has been human's most wellknown hobby since a long time prior, composition is additionally a preparing material for this community. During the execution of the movement, the preparing members as preparing members who were dynamic in retaining the information of music scoring, as well as the craftsmanship of symphonic music given by the Community Services Team.

3 Result and Discussion

Logic Pro could be a modern, completely included sound and MIDI application that provides all the instruments that are required to make professional-quality music preparations. This computer program permits to record and alter both sound and MIDI, add high-quality impacts, and blend the music in stereo or encompass. The ultimate blend can be sent out to one or more standard sound records, or burned to an sound CD or DVD that can be played on any computer, domestic stereo, or imported into other applications and gadgets. These are things those can be done with Logic Pro: (a) Record

MIDI data through associated MIDI input gadgets, such as consoles, and play back this data through any associated MIDI gadget (such as a synthesizer console or module) or the coordinates Logic Pro computer program disobedient; (b) Make, orchestrate, and alter MIDI ventures, make utilize of the capable Score-Editor, at that point print melodic documentation by means of a printer associated to the computer; (c) Alter the timing of sound records — Flex time altering — by shortening or extending the remove between drifters within the sound; (d) Carefully record acoustic and electric instrument or vocal exhibitions into the ventures, and prepare these sound recordings with a gigantic cluster of built-in real-time impacts; (e) Make utilize of the coordinates computer program, counting Form, Ultra-beat, ES1, ES2, EVP88, EVB3, EVD6, EXS24, over a dozen high-quality GarageBand software, or third-party Sound Units disobedient; (f) Stack ventures or channel strips from GarageBand, and improve them with the extra handling and altering conceivable outcomes managed by Rationale Master; (g) Blend MIDI and sound tracks, counting impacts and program instrument settings, through a modern add up to review blend mechanization framework. Logic Pro incorporates high-quality impacts that can be utilized in ventures. Client can too introduce and utilize third-party Sound Units impacts and disobedient; (h) Bounce (mixdown) all sound information, counting disobedient, impacts and blend computerization settings, to stereo or numerous Encompass organize records for acing or assist preparing; (i) Work in genuine time: client can work on Logic Pro ventures in genuine time, including to, and altering sound and MIDI parts whereas the venture is playing, and hearing the comes about of user's changes quickly; (j) Utilize existing circle libraries: Logic Pro straightforwardly bolsters Apple Circles records, and is consistent with a wide assortment of existing sound record sorts, counting those made in Reuse; (k) Find and see records effortlessly: the Media zone, portion of the Logic Pro interface, gives effective record browsing and look highlights, making it simple to find sound records and other upheld record types.

Logic Pro can be utilized in an assortment of ways, extending from the straightforward to the unimaginably complex. The taking after segment diagrams a common workflow case that numerous ventures follow to: (a) Making a Venture: Client start working in Logic Pro by making a unused venture, or opening an existing one. A extend record contains MIDI information recordings also data approximately the sound and other records utilized, counting pointers to these records; (b) Making and Bringing in User's Melodic Fabric: Getting melodic fabric into Logic Pro can fundamentally be broken down into two strategies: (a) Making unused sound or MIDI information recordings (the last mentioned can be played back through either outside MIDI synthesizers or program disobedient); or (b) Bringing in existing sound recordings (sound records, tests, circles) or MIDI (and other record information) into user's ventures. Client can moment existing sound recordings by essentially dragging them from the Media zone, appeared at the proper of the Orchestrate window; (c) Organizing and Altering: Once user's melodic material has been imported or recorded into Logic Pro, client will by and large organize it into a "project structure." Typically worn out the most Logic Pro window, called the Orchestrate window; (d) Blending, Robotizing, and Utilizing Plug-ins: Taking after the creation of user's course of action and any alters that will have been required, client would commonly move on to the blending stage of their extend; (e) Sending out and Bouncing: The ultimate step of the Logic Pro music creation prepare is trading user's

Table 1. Training Experience (n = 40)

Variable	Training meeting/percent				
	1	2	3	4	5
DAW Theory	72%	81%	86%	88%	92%
DAW Operational	50%	60%	78%	84%	90%
Recording theory	64%	70%	79%	85%	93%
Sequencer music design	–	–	55%	73%	88%

Source: Author, 2022

last item. Logic Pro permits client to deliver a stereo record of their completed blend in a assortment of sound record designs (<https://www.apple.com/logic-pro/>).

This Community Service Activity is a form of service aimed at helping Pare String Ensemble community in developing insight into music sequencers to improve their competence in music. The participants of this training are all members of Pare String Ensemble with a total of 40 active members. This training is a manifestation of the Faculty of Language and Arts Community Service Team’s concern for the community that wants to develop.

Table 1 shows the data of trainees experiencing an increase in musical experience. In the DAW theory material, the participants’ understanding development shows the improvement from the 1st meeting to the 5th meeting shows the percentage number (70%–92%). At the DAW operational material meeting, participants were still a lot confused, because it was constrained by the existing equipment. The data shows a drastic growth in the 2nd point material, growth (50%–90%). Meanwhile, in recording theory, participants found it easier to understand the material, progressing from (64%–93%). Especially for the practice material for sequencer music design starting at the 3rd meeting, because participants must have a theoretical basis before practicing making music designs. At the 3rd meeting it still showed data (55%), growing at the 4th and 5th meetings which reached (88%). In designing this music, it is necessary to be creative in drawing the desired music, so that further processes are needed in its application.

Table 2 presents data of the training participants’ experience on the Community Service activities carried out. Experience with the presentation of DAW theory (3.6%) was very interesting, (10%) was interesting, and the highest (16%) visitors stated it was quite interesting, and (0.3%) was not. The experience of the DAW operational session (4.5%) is very interesting, (16.1%) is interesting, (9.4%) is quite interesting, (0.3%) is not. Next, the participant’s experience data on the explanation of recording theory; the data shows (2.4%) very attractive, (16.9%) interesting, (10.6%) quite interesting, (0.3%) not interesting. The results of the response to the sequencer music design materials presentation (1.8%) were very interesting, (13%) were interesting, (14.8%) were quite interesting, (0.6%) were not.

Table 2. Training Participants' Experience on the Training Activities Process (n = 40)

Variable	Participants' responses to the training process			
	Very Interesting (%)	Interesting (%)	Quite Interesting (%)	Not Interesting (%)
Presentation of DAW theory	3,6%	10%	16,4	0,3%
DAW operational session	4,5%	16,1	9,4%	0,3%
Explanation of recording theory	2,4%	16,9%	10,6%	0,3%
Sequencer music design materials presentation	1,8%	13%	14,8%	0,6%

Source: Author, 2022

4 Conclusion

Based on data from research results in sequencer music training activities in the Pare String ensemble Community in Kediri Regency, it shows a significant development of knowledge and skills for participants. The theoretical knowledge includes; DAW theory, recording theory, and for skills namely DAW operation and music sequencer design. The progress of the five training meetings shows the achievement data of up to 90% of the total 40 participants. In accordance with the purpose of this activity, in improving the competence of the PSE group in making sequencer music. This training received a positive response by enthusiastic participants, it is possible that this activity can be carried out on an ongoing basis to increase and strengthen musical abilities and knowledge in the future. In addition, it can be an investment for this community by increasing the skills and knowledge of its members, so as to increase the credibility of the community.

Acknowledgment. This research is fully supported by Universitas Negeri Surabaya Research Grant.

Authors' Contributions. In this article all authors contribute to concepting manuscript. Harpang contribute to writing. RR, HR, AA, NN and SS collecting data and soirces in library.

References

1. <https://www.kemendag.go.id/id/about-us/strategic-planning/master-plan-2011-2025-1>
2. You, M., Liu, J., Li, G. Z., & Chen, Y. (2012). Embedded feature selection for multi-label classification of music emotions. *International Journal of Computational Intelligence Systems*, 5(4), 668–678.
3. Er, M. B., & Aydilek, I. B. (2019). Music emotion recognition by using chroma spectrogram and deep visual features. *International Journal of Computational*

4. Sun, J., & Wang, H. (2015). A Cognitive Method for Musicology Based Melody Transcription. *International Journal of Computational Intelligence Systems*, 8(6), 1165–1177.
5. Lee, L., & Ho, H. J. (2018). Exploring young children's communication development through the Soundbeam trigger modes in the 'Holistic music educational approach for young children' programme. *Malaysian Journal of Music*, 7, 1–19.
6. Qin, J., Zheng, Q., Tian, F., & Zheng, D. (2014). An emotion-oriented music recommendation algorithm fusing rating and trust. *International Journal of Computational Intelligence Systems*, 7(2), 371–381.
7. Jin, C., Wang, J., Wei, J., Tan, L., Liu, S., Zhao, W., ... & Lv, X. (2020). Multimedia analysis and fusion via Wasserstein Barycenter. *International Journal of Networked and Distributed Computing*, 8(2), 58–66. *Intelligence Systems*, 12(2), 1622–1634.
8. Carter, D. (2014). Sketching the Lao Music Industries. *Malaysian Journal of Music*, 3(1), 32–47.
9. Tanaka, H., & Ueda, K. (2018). Comparison of Off-line Visual and Verbal Feedback Instructions for Keeping Tempo in Music. *Journal of Robotics, Networking and Artificial Life*, 5(3), 208–211.
10. Gunawan, A. A. S., Iman, A. P., & Suhartono, D. (2020). Automatic music generator using recurrent neural network. *International Journal of Computational Intelligence Systems*, 13(1), 645–654.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

