

INDONESIAN TRADITIONAL MUSIC PRESERVATION STRATEGY THROUGH A MUSIC ECOSYSTEM APPROACH IN THE INDUSTRIAL REVOLUTION ERA 4.0

Eli Irawati ¹, Tri Septiana Kurniati ² and Sujud Puji Nur Rahmat ³

¹ Ethnomusicology Study Program, Faculty of Performing Arts, Institut Seni Indonesia Yogyakarta, Parangtritis Street KM. 6.5 Sewon Bantul, Yogyakarta, Indonesia. Email: eliirawati3@gmail.com

² Fine Arts Department, Institut Seni Indonesia Yogyakarta, Parangtritis Street KM. 6.5 Sewon Bantul, Yogyakarta, Indonesia. Email: triseptianakurniati@gmail.com

³ Ethnomusicology Study Program, Faculty of Performing Arts, Institut Kesenian Jakarta, Cikini Raya Street No. 73, RT.8/RW.2 Cikini, Kec. Menteng, Kota Jakarta Pusat, Indonesia. Email: sujud_pnr@yahoo.com

DOI: [10.5281/zenodo.10622775](https://doi.org/10.5281/zenodo.10622775)

Abstract

Traditional music as one of Indonesia's national assets needs immediate preservation measures, considering that the era of the Fourth Industrial Revolution demands all parties to quickly adapt to the current situation. Therefore, this research aims to formulate a strategy for preserving traditional music in Indonesia using an ecosystem approach. This research utilizes qualitative methods, and data collection is done through field observations, interviews, literature reviews, and documentation. The collected data is then analyzed through the perspective of the music ecosystem. The research results show that the preservation strategy for traditional music needs to involve various elements within the music ecosystem. Firstly, in the realm of music education, traditional music needs to be included in formal education curricula and the scope of traditional music learning should be expanded. Secondly, involving musicians and communities/society is key to maintaining traditional music. Government support and cultural institutions, such as facilitating events, are greatly needed. Thirdly, a deep understanding of the context and constructs of traditional music is crucial. Studies on the history, meaning, and techniques of traditional music, as well as comprehensive documentation of the various types of traditional music, need to be conducted promptly. Fourthly, supportive regulations and infrastructure also need to be established. Legal protection of traditional music copyrights, fiscal incentives for traditional music practitioners, and the establishment of centers for documenting and archiving traditional music are necessary. Fifthly, media and the music industry, such as the use of mass media and digital platforms for promoting and distributing traditional music, as well as the support of the music industry in the production, marketing, and distribution of traditional music recordings, can help expand the reach and influence of traditional music. By maintaining the music ecosystem, the sustainability of traditional music can be preserved.

Keywords: Preservation; Traditional Music; Indonesia; Music Ecosystem; Revolution Industry 4.0.

INTRODUCTION

Continuity of musical practice (in this case, music that is seen as traditional, part of a tradition, and it is an opposition to the modern) in particular and culture in general, become issues that seem endlessly discussed. Those who pay attention to the efforts to maintain traditional cultural practices are often considered as a conservative group by those who are more oriented towards practices that are considered more 'modern'. Nevertheless, the existence of circles that have more attention to traditional cultural practices is not without reason. In addition, it is not mean that these circles reject the inevitability of change. Continuity is a concept that is difficult to avoid nowadays (Titon, 2015).

Talking about ecosystems, especially the continuity of music practice, is closely related to the problem of preservation, namely a step of preservation, maintenance, care, and protection (KBBI.web.id). The connection with traditional music is a step that we take to maintain the continuity and ecosystem of regulation, and rescue our tangible assets, namely traditional music so that we can continue to survive in this era of globalization. Especially in the era of the industrial revolution 4.0, many interactions between humans use the internet or the internet of things and everything is connected to computers so we can know problems or news quickly whenever and wherever. The pattern of communication has changed many influences on the existence of our traditional music in the middle of the onslaught of modernity.

Technological developments around the 1990s, especially computers, growing quickly and significantly, change ways and interactions between humans. Bertrand Russell mentions that technology is like a double-edged sword. If it is not used wisely, it will lead to tyranny and war, but if it is done wisely, it will cause good things from the perspective of benefits (Russel, 1992). Technology has allowed humans to know and do various things. As in the field of music, it does not escape from the scope of technological advances (Koskoff, 2005), especially in music production and transmission. It is interesting to know more about the strategy and preservation steps conducted to keep the music ecosystem, especially traditional music can compromise in the digital era like now.

METHOD

Qualitative research methods, Bogdan and Taylor in Ambo Upe and Damsid (2010) define that as a research procedure that produces descriptive data in the form of written/oral words from people and behavior that can be observed. Field studies and literature are used in this study to obtain data for supporting the analysis of the phenomenon that is happening. The data collection data is conducted through field observations, interviews, literature, and documentation (Soedarsono, 2001). Then, the data is analyzed using the perspective of the music ecosystem (Schippers, 2015).

RESULT AND DISCUSSION

Traditional Music

Traditional music is a "tradition" that can be interpreted as "music social habits existing in a community or ethnic group and passed down from one generation to the next generation through the learning process. Tradition is a guide about values and morals in people's lives because of various things, right and wrong things that are contained in it, namely morality. Worldview related to belief about the problems of life, death, natural events, and their creatures is a traditional concept. Therefore, traditional music is very closely related to the community context of the owners.

Its presence can become religiously sacred, for example, it is used for a series of certain ritual ceremonies but it can also become profane when it is used as a means of entertainment. In addition, music is also used as an aesthetic expression. Almost all Indonesian traditional music is still used as a means of religious ceremonies and other traditional ceremonies until now. As we know that Sampek in the Dayak Benuaq tribe is used as a means of Kwangkay ceremonies and Belian ceremonies (Irawati, 2019). Its existence sometimes blends with other arts, such as dance accompaniment, wayang, and traditional arts in the form of stories such as ketoprak in Java and others.

However, it cannot be denied that music can also exist independently (Supanggah, 1995).

Music used in various religious ritual ceremonies or other ceremonies is a symbol and actualization of human respect for the Creator to support and form a religious atmosphere in the ceremonial procession. The music can be in the form of vocal incantations, instrumental, or a combination of both. The shape and processing are based on the taste of the people who own it. The Dayak tribe has certain values or norms, such as philosophical values as a view of life, ethical values, and other values that express the culture of their environment.

The Necessity to Understand the Music Ecosystem

The idea of a "musical ecosystem" was probably first put forward through writing by William Kay Archer in 1964 in his article entitled "On the Ecology of Music" (Archer, 1964). It is developed by Huib Schippers. A music ecosystem is a unit consisting of elements of actors (from producers to consumers of music or from the creators, musicians, to the audience), the environment where the performers and the music created and lived (both physical and non-physical environments), the factors that encourage musicians to keep their activities, and the factors that maintain and sustain the environment in which music lives and thrives.

Until now, the writings that discuss ecosystems or music ecology try to peel about the continuity of musical cultures. Schippers suggests five domains interrelating and playing a role in the continuity of music are the music learning system, musicians and community/society, context and construct, regulation and infrastructure, and the media and music industry (Schippers, 2015). From these domains, it can be seen that the continuity of music is supported by an ecosystem whose elements synergize with each other, from upstream to downstream. Principally, it is difficult to determine which point is upstream and which point is downstream in the life cycle of a musical genre or musical culture because the elements in it give each other continuous feedback as Merriam expresses in his classic model. Nevertheless, generally, the beginning of a cycle is determined starting from the appearance of the observed object. In the case of a music ecosystem, the beginning or upstream of a cycle can refer to when it appears (born, created, presented) and the downstream is when the music is consumed. In cases of spontaneous composition (composition made directly during the performance and it is called *in the course of performance* by (Bruno Nettl, 2015) where the upstream and the downstream can occur almost or indeed at the same time. Furthermore, Eli Irawati's writing about the music ecosystem relates to the role of ethnomusicologists in the development of cultural villages in Yogyakarta (Irawati, 2020).

In a music ecosystem, the chain from upstream to downstream involves many elements. For local-traditional music, the elements include musicians, a place for learning and transmitting music, a community of music owners, measures of aesthetics (about how "should" a piece of music be presented), the activities that become the context of the music (eg rituals, because it must be admitted that most music in the Archipelago is music "within the framework"), the shamans/figures who lead ceremonies, offerings, and others. For popular-modern music genres, elements in the ecosystem include musicians, agencies or labels of records, fans, distributors, learning institutions (formal or non-formal), broadcasting institutions, retail stores (although they are now very rare), the regulation regarding copyrights, recording

studios, providers of recording hardware and software, social networking, and websites.

Traditional Music Preservation with a Music Ecosystem Approach

Traditional music preservation domains with a music ecosystem approach cannot be separated from the involvement of all elements related to regulation from the continuity of traditional music from stakeholders, who make the cycle wheel continue to move, or from various creators involved in the upstream and downstream music. The framework for understanding sustainability, in this case, is the preservation step that we do use the music ecosystem approach as follows.

1. Music Learning System

The process of learning music or the transmission of learning is important for the sustainability and preservation of traditional music, both in formal and non-formal education. The government at least has a high art education institution with undergraduate, postgraduate, or even doctoral in art creation and study, especially for traditional music such as Institut Seni Indonesia Yogyakarta, Institut Seni dan Budaya Bandung, Institut Seni Indonesia Surakarta, Institut Seni Indonesia Padang Panjang, Institut Seni Indonesia Denpasar, Institut Kesenian Jakarta, and others. These institutions have study programs such as Karawitan and Ethnomusicology studying various traditional music in Indonesia.

Generally, these institutions produce prospective drafters, creators, musicians, and intellectuals to be equipped with knowledge so that they have a qualified quality. Formal art education generally does not play a role in offering a choice of music works in various forms of musical content production for music connoisseurs, the general public. The works produced by academics tend to be enjoyed by certain circles only. Therefore, formal educational institutions must expose themselves and this opportunity to publish various artworks especially music to a wide audience.

Meanwhile, non-formal music education is studied by the general public music in "context" and music that is deliberately learned through institutions such as associations, studios, and virtual content such as YouTube and others. The emergence of learning content such as e-learning for students and Ruangguru for students, eases the general public to learn, especially how very interactive and themed learning is in every content they create. As with other sciences, traditional music is a field that can't escape the reach of digital technology. Study tutorials such as introductions of letters or traditional letters in Indonesia or the form of games have started to be introduced in schools (Firdaus, 2022; Andrew and Muladi, 2021). It can be the trigger for traditional music to be made in such a way so it can be accessed on social media. This is very good for the preservation of Indonesian traditional music. Unfortunately, it is not well organized, so the content doesn't seem professional yet as well as Ruang Guru and e-learning for subjects of sciences and other humanities sciences. We need to introduce traditional music from early childhood for children of Early Childhood Education and Kindergarten by using digital applications such as creating drawing books with traditional music themes which can be accessed on Android or other media.

2. Musicians and Community/Society

Mastery of knowledge and qualified quality in terms of creative work in the field of music performed by traditional music musicians is a must. This domain shows a role, position, interaction, and communication between traditional musicians. The daily activities of musicians in the roles as media for conveying messages or building an atmosphere in traditional music performances (Rahmat, 2018). Generally, traditional musicians don't consider that playing music in a context is not a permanent job yet and they consider that it is a must that must be done by us as good successors to continue the existing tradition.

There is a facilitation policy from the government through the Ministry of Culture shows that there is a positive step for the preservation of musicians and the community to obtain proper rights such as the recording of the profiles of artists especially traditional musicians, programs of a teaching artist, and certification of performers traditional music to get the same rights as popular music musicians. In addition, the community or society that has a place to teach and learn is given a registration number or art identity number as a form of data collection towards traditional art groups, especially traditional music in various regions that will be given facilitation funds to organize events and festivals of traditional music.

3. Context and Construct

This domain contains values and norms in the social and cultural context space of traditional music. It examines both musical practice settings and basic values or attitudes (constructs). Discussion of context and construct includes aesthetics, cosmology, identity, music taste, gender issues, and prestige (perception), which are constructed individually and socially, all of which are the determinants in the continuity of traditional music.

Continuity of musical practice (in this case, music in general seen as traditional, part of a tradition, and opposition from modern) in particular and culture, in general, becomes an issue that seems endlessly discussed. Those who pay attention to the efforts to maintain practices of traditional culture are often considered as a class conservative by those who are more oriented towards practices considered more 'modern'. Nevertheless, the existence of circles that have more attentive to traditional cultural practices is certainly not without reason. It doesn't mean that these circles reject the inevitability of change. According to Jeff Titon (2015), sustainability is a concept that is hard to escape nowadays.

For example, the presentation of kelentangan is conducted by *Penu'ung* to preserve the practice to persist among the Benuaq. Meanwhile, the context for the presentation of kelentangan is provided by the community, in this case, the audience in particular (audiences are those who perform rituals including kelentangan). Activities involving kelentangan, which are most often organized by the Dayak Benuaq community are rituals, such as *bélian bawo*, *bélian sentiu*, and *kwangkay*. Meanwhile, one of the figures who is most important for the implementation of these rituals is *Pêmêliatn*, the ritual leader. The interaction between three actors involved in the practice of kelentangan, namely *penu'ung*, *pêngampir*, and *pêmêliatn* makes the transmission process of the music can go on.

The concept of an ecosystem can be used to see how kelentangan practices can survive until now and the transmission is one of the elements that exist in the traditional music ecosystem (Irawati, 2021). Maintaining the continuity of traditional music in the Benuaq Dayak community can't only stop the intensification of the transmission, but also must pay attention to the context of performance which becomes the main space for the transmission. Traditional music is partly integrated from various kinds of transmission elements, one of which is through the existence of music in society (Irawati, 2019). It means that the continuity of music practice is supported by good context and construct, which at least includes actors of the practice of music itself, the society that owns it, and understanding and awareness of the community to continue preserving aural-oral cultural practices in sacred ritual and profane activities.

4. Regulation and Infrastructure

This domain is related to the means and management of complex systems according to the rules and trends that exist at this time. Matters related to traditional music in this contest are about the place to make, perform, practice, and learn, all of which are essential for music to survive, as well as virtual spaces for creation, collaboration, learning, archiving, and dissemination. Another aspect included in this domain is the availability and existence of instruments production and other tangible resources. There is some kind of patronage or regulation about various things such as copyright law, artists' rights, spaces for expression, etc.

To get a more realistic description of how the stakeholders play a role in a music ecosystem or a cultural ecosystem, in particular, the authors describe examples of efforts to develop cultural villages in the Special Region of Yogyakarta, because the authors participate directly. Therefore, they have first-hand experience and information. One of the programs rolling within the framework of DIY's privileges is the development of a cultural village. This program has legal protection, namely a Government Regulation in DIY Number 36 of 2014 regarding cultural villages/urban villages and now 56 cultural villages/urban villages have been determined in DIY (Data from Department of Culture in DIY). This program is carried out with the main objective to improve the quality and cultural work activities in villages/urban villages that have the status of Cultural Villages with activities such as building coordination between the village government and the local government, collecting data on the potential of cultural villages/urban villages, establishing of cultural village management organizations which is the image of the village government in efforts to develop cultures in the village concerned, making cultural village programs, reporting and evaluating cultural village activities, as well as dynamizing actualization activities, development, and conservation of cultural potential. Until now, quite a lot of human resources with art education backgrounds have participated in this program and focused on the music culture that exists in cultural villages or urban villages.

Work done by those who have a deep ethnomusicology background, in this program does not only focus on musical activities, but they must think about how a musical practice or a musical group can survive and develop. In the early years of the program, it must be recognized that most of the work is directed at how to provide additional technical skills to musicians in the villages targeted by the program. However, this method has risks: from an ethical perspective, it steps over local human resources who have more knowledge about their musical practice and the context of their lives. Besides that, a lot of people think that this method threatens the livelihoods of local-

traditional musicians (many of them earn from teaching in local music groups, becoming gamelan teachers, *Jathilan* music teachers, dance teachers, etc). In addition, these groups still do not have enough space for expressing themselves and barely received support from other stakeholders.

The current development based on evaluation results, work is more directed on how to build relationships between the art actors in the villages/urban villages with the villages/urban villages government, and it connects the village with other stakeholders, in this case with *kaprajan*, campuses, and palaces. The relationship with palaces is vaguer because a palace is a "reference" or cultural patron. The point is that the palace becomes a cultural center. However, there is also a space provided by the palace for facilitating art groups (eg karawitan groups) from the village to fill regular performances at the palace. In terms of relations with the government, cultural village managers are encouraged to be able to observe programs from various agencies so that they can mix and match to obtain support from related agencies. For example, many programs belong to the local government (both provincial and regency levels) and they are currently being executed in culture villages/urban villages.

On the other hand, now local governments are often involving actors of cultural villages/urban villages in planning and executing their programs, for example in drafting a regional regulation on values and discussing development planning. At the village level, cultural actors who are organized in cultural village managers are also now starting to be involved in the arrangement of medium-term development plans (assisting the service section in charge of cultural affairs). Another activity carried out by the government in collaboration with cultural villages is data collection. Now, local governments find information easier because of the managers of cultural villages/urban villages who are specifically in charge of cultural affairs and become village government partners. In terms of regulations, local governments issue governor regulations and other decisions that support the existence of the culture villages/urban villages and divide the responsibilities in the management of cultural villages/urban villages (under the provincial government) and the pioneers of cultural village/ urban villages (under the district government).

Furthermore, cultural village actors are also encouraged to build relationships with higher educational institutions in Yogyakarta. For example, the form of the relationship that has already been implemented is a collaboration between the cultural village with the center for cultural studies and the Institute of Research and Community Service (LPPM) to conduct training in the arrangement of activity programs and master plans for cultural village managers, training and technical guidance from the students who are dispatched to conduct the development and coaching of art areas for arts/cultural actors in the cultural villages/urban villages (such as training and mentoring in music, dance, crafts, packaging, etc). This increase in knowledge and skills is also carried out by ethnomusicologists by sharing knowledge and insights with art/cultural actors, providing references that are related, providing motivation to the actors, and providing suggestions if it's requested.

Relationships also continue to be built between cultural villages and private parties, for example by making an offer to the hotel or restaurant in the cultural village/urban villages to be a display place for the artistic/cultural potential in the village, both performing arts and crafts. Art groups from cultural villages/urban villages are expected to become performers at these places regularly and the results of local crafts

also have a place to be promoted and marketed to the visitors. Hopefully, in the end, this effort can provide benefits for increasing the economy of art/cultural actors in cultural villages/ urban villages.

The essence of this program is to encourage art/cultural actors in the cultural villages/urban villages to be the main potential in their villages/urban villages. The relationships built with stakeholders aim to improve their capacity to manage their cultural potential. Next, these relationships are built on the awareness of the importance of accessing everything that supports the cultural ecosystem cycle, from upstream to downstream.

When going out into the field together with the village government and local cultural actors, it is required to carry out data collection, mapping, and action plans (programs) for increasing the activity of actualizing music practices in particular and culture in general, in the community where they work. The program arranged is certainly capable to build relationships with palaces, *kaprajan*, and campuses to get results as maximum as possible with the minimum fund. From the results of brief research that was carried out (for example about village history, local concepts, historic sites, etc), ethnomusicologists encourage musicians to give a new touch to their works and activities (eg making village history as a concept or local instrument as a source of creative ideas). In addition, it must think about how the group that is become a partner, can get space for expression, obtain support from the government, and can be touched by educational institutions to obtain guidance and training to improve their abilities.

5. Media and Music Industry

This domain contains various media, both related to production aspects for producing traditional musical instruments and works, distribution, publication, promotion, and connoisseurs. Music distribution increasingly involves electronic media, such as radio, television, and recently via the internet such as Popcast, iTunes, Youtube, etc. It also applies to the sustainability of traditional music.

Now, the production of musical instruments in the life of local-traditional music in the archipelago has been no standardization yet, one of which is in terms of adjusting the musical instruments. Therefore, for one type of instrument or ensemble, we can find various fundamental tones not the intervals between sounds of blade, pencon, wire, or teba (range). The situation is not a mistake or an embarrassing situation. The difference in the adjustment of this instrument can be seen as one way to adapt to the surrounding conditions, for example, compatibility with vowels (if it uses vocals) or other types of instruments. Therefore, it's not an urgent or coercive thing to create a convention or agreement in terms of the standardization of tuning of archipelago musical instruments.

Besides that, the lack of standardization of tuning musical instruments, other conditions which are commonly found in the life of local-traditional music in Indonesia is very minimal records that perpetuate information about the instrument music, especially regarding the sounds produced. It is the produced pitch by an instrument. The lack of information like this (i.e. information about the resulting sound in certain circumstances becomes an obstacle when you want to do a reconstruction of a musical instrument that no longer has examples or samples. For example sculptures in the form of musical instruments are often found in reliefs from temples, such as instruments shaped like a saron or xylophone. However, how the pitch that the

instrument produced and what timbre is, cannot be ascertained. Archaeologists can only guess based on the comparisons with the current situation.

The lack of records or information about the sounds of instruments in the past is partly caused by the lack of limited recording methods or the creation of information that can 'perpetuate' sound in a real way, namely that sound itself is not a representation of sound in the other forms such as verbal description, notes about intervals, etc. Therefore, it is difficult to bring back a 'sound' or 'sound event' in real and precise terms. Nevertheless, these difficulties are not obstacles in the present era. The easier sound recording technology is very helpful in making documentation about the sounds of musical instruments.

The first sound recording in the world was made by Frenchman Leon Scott, using the tool he created in 1855-1856, namely the phonograph. After two decades around 1874, Alexander Graham Bell invented a device known as the graphophone. In 1877, Thomas Alfa Edison, who also invented the light bulb, made the phonograph. This first recording device has also become one of the tools for ethnomusicologists in their work for collecting data in the field. Until now, it is generally believed that the first person who recorded non-Western music was Jesse Walter Fewkes, who recorded Zuni Indians and Passamaquoddy songs using cylinders made by Edison in 1889-1890 (**Nettl, 1964**). After that, music recording became one of the jobs of ethnomusicologists. With sound recording technology, ethnomusicologists have the opportunity to analyze the music they study more accurately in the laboratory. In addition, recording technology can also become a vehicle to perpetuate music or sound events in the most ideal form, namely sound and not in the form of verbal descriptive notes, notations, relief sculptures, or others.

At least since 2010, sound recording and even audio-visual recording become something very easy. Now, anyone can have a visual, audio, and audio-visual recording device, namely in the form of smartphones that have high mobility. The data storage capability is also increasingly easy and it has a large capacity. In the 2000s, storage generally still used diskettes that still **had** a capacity of kilobyte (KB). Now, with a memory card or internal memory of a smartphone device, a person can store data until a capacity of a gigabyte (GB). This kind of technology can be used to reproduce simple sounds from the instruments in the ensemble of kelentangan. When it is desired more perfect sound quality that is near to the real sound from the instruments, it is possible to record using more professional devices and good quality.

Every knob (*pencu*) from kelentang, genikng, sulikng dewa even gimar instruments is necessary to be recorded as sound archives for perpetuating the pitch in instruments and tone colors. The recorded instruments certainly exist and are used now which are still considered 'original' in Dayak Benuaq community. Eventually, this kind of sound archives can be used as *babon* when it will be done the creation of similar instruments. Therefore, if the kelentangan instruments are made especially outside the territory of the Benuaq Dayak tribe, it is expected can resemble the adjustment of similar instruments used by the Dayak Benuaq community.

The sound recording of kelentangan instruments like this is conducted with the aim of digital sampling to be used in the manufacture of compositions sound using digital devices, for example creating works of music using software on the computer. Digital sampling is the result of computer synthesis converting sound or voice into data whereas these data contain instructions to reconstruct the encoded sound c If these

samples are used and arranged, they can form a sound composition or music that is expected by the composer.

Furthermore, recording can also be directed to achieve the repertoires of kelentangan not only the sounds of the instruments. Sound recording will be much better if audio-visual recordings can be made with good quality. Therefore, it will be very useful in the future regarding the transmission and dissemination of kelentangan. Moreover, by utilizing the online available channels, kelentangan documentation can be uploaded on sites such as www.youtube.com so it can be accessible to anyone from anywhere in the world. Therefore, kelentangan transmission is expected can penetrate the boundaries of space and time. Kelentangan is not only become the consumption of the Benuaq Dayak community which physically lives and inhabits in geographic areas, but can also touch individuals in the world without being hindered by geographical, time, and cultural boundaries. In turn, based on these circumstances, kelentangan doesn't belong to the Benuaq Dayak but belongs to the world.

Based on the explanation above, two things can be done with technology to kelentangan. The first is recording the sound of the instruments. It has two benefits, namely to preserve sound samples that can be used as a reference in instrument reproduction and can be material in making computer software-based musical works. The second is doing audio or audio-visual recordings of the kelentangan repertoires as documentation and materials for transmitting kelentangan by using the ease of access to the internet now.

The emergence of Digital Audio Workstation or DAW technology is one of the ways for producing music, which this device works to replace the functions of various recording studio sets. The existence of a mixing console can set the volume, send, receive, and add audio effects more effectively and efficiently. DAW continues to update according to these current technological advances. One of the technological advances is the emergence of the Virtual Studio Technology Instrument (VSTi) which the sound recording results are almost indistinguishable from the original music sound or instrument.

Related to publication in the present case as promotion is an important form and concept in the project of capitalism. This concept can be used positively. Traditional music continues to promote its existence through various promotion devices such as television and social media, which expose it to mass culture. Another side that is no less important is a political policy, in this case, government policies (goodwill) toward the sustainability of traditional music itself, especially in terms of facilities and infrastructure. Organizing musical events should be planned and implemented in a structured manner by involving the participation of all groups of people not only partial or fragmental ones. The dialogical process does not refer to synthesis in the integration meaning but it refers to an entirely new goal namely the reconciliation that includes renewal, strengthening, and peace.

Interesting packaging, for example in festival performances and recordings Kendang Kempul Banyuwangi is different from the original "ecosystem", combining traditions and modern technology so that the look seems glamorous and contemporary. It is seen in the processing of musical and non-musical content where traditional instruments are combined with Electronic Dance Music (EDM) technology resulting in the exploration of various musical genres with stomping beats but some parts of the musical composition are still seen using the typical rhythm of Kendang Kempul

Banyuwangi. Besides that, the elements processing of dance or typical Banyuwangi movements is processed with the chain pattern, the artists of the Kendang Kempul Banyuwangi art also need to present an atmosphere that supports the show, such as the use of lighting, sound system, and multimedia technology. The packaging of the show that still interprets the essence of the uniqueness of traditional art certainly cannot be separated from reliable human resources who have high creativity without eliminating traditional elements.

The music industry today is inseparable from the role of the internet and everyone and creative groups are free to create and inspire their work through social media. Many figures and traditional music groups exist through social media, for example, YouTuber Uyau Moris from Malinau, North Kalimantan, known with the sape game namely string instruments like a guitar from Kalimantan, created a YouTube channel on April 28, 2015, and now he has 188 thousand subscribers (**YouTube source on 1st August 2022**). The figure of Uyau Moris is known to be very productive and creative in uploading sampek traditional music works both original songs from the Kenyah tribe or popular songs with traditional musical instruments in which each game is inserted the traditional patterns of sampek music such as datun julud, urau, sape leto, etc. It makes him one of the new idols in the traditional music scene for the millennial generation in Kalimantan and all connoisseurs of his work on YouTube. Moris also always uses traditional knick-knacks of the Dayak Kenyah tribe in his uploads and it also becomes a special attraction for everyone who watches his YouTube channel. Hopefully, in the future, another Uyau Moris will appear in Indonesia who elevate traditional music to the global realm without eliminating the characteristics of each region through the use of technologies connected via the internet.

CONCLUSIONS

In the preservation of traditional music, all parties should involve and be responsible so that the next generation still knows and be proud of what the nation has. The changes and developments of information technology, which are quick and massive, erode the cultural roots of the nation that has noble values. Therefore, it is necessary to carry out preservation steps in a comprehensive way to the domains of the music ecosystem by reconciling the heritages of traditional music practices and the advances of technology.

Understanding and implementing preservation by synergizing the domains of the music ecosystem is very important so the regulation of traditional music continuity can be maintained from upstream to downstream. Understanding traditional music is required to master not only technical skills but also knowledge of values, norms, aesthetics, rituals, and customs that surround the practice of music.

Preservation with a music ecosystem approach consists of several domains, namely music learning system, musicians and community/society, context and construct, regulation and infrastructure, as well as the media and music industry. Therefore, we should start to think about opening new containers in the domains in that ecosystem to maintain and even strengthen the chain and it is hoped that it can consolidate with the advanced era.

References

- 1) Andre and Muladi, Edy. (2021). Tinjauan Board Game Edukatif & Non Edukatif. *Jurnal Desain Narada*, volume 8 (1), 125-135. DOI: <http://dx.doi.org/10.22441/narada.2021.v8.i1.010>
- 2) Ambo Upe and Damsid. (2010). *Asas-asas Multiple Researches*. Yogyakarta: Tiara Wacana.
- 3) Archer, William Kay. (1964). On the Ecology of Music. *Ethnomusicology*, volume 8, No.1 (28-33). <https://doi.org/10.2307/849769>.<https://www.jstor.org/stable/849769>.
- 4) Safitri, Sarah Hastawati and Firdaus, Rizki Alfiansyah. (2022). Perancangan kampanye Sebagai Media Pembelajaran Aksara Sunda di Kalangan Remaja SMP Kota Sukabumi. *Jurnal Desain Narada*, volume 9 (1), 1-20. DOI: <http://dx.doi.org/10.22441/narada.2022.v9.i1.001>
- 5) Humas DIY, "Kraton-Kaprajan-Kampus-Kampung untuk Saling Menguatkan", published on www.jogjaprovo.go.id, accessed on 1 Agustus 2019.
- 6) <https://kbbi.web.id/preservasi>, diakses tanggal 2 Januari 2020.
- 7) <https://youtu.be/vwIXLig59QU>, Uyau Moris, accessed on 15 Mei 2022.
- 8) Irawati, Eli. (2019). *Kelentangan dalam Belian Sentiu Suku Dayak Benuaq di Kalimantan Timur*. Yogyakarta: Badan Penerbit ISI Yogyakarta.
- 9) Irawati, Eli. (2019). Transmission of Kêlêntangan Music among the Dayak Benuaq of East Kalimantan in Indonesia. *Malaysian Journal of Music*, volume 8 (108-121). <https://doi.org/10.37134/mjm.vol8.7.2019>
- 10) Irawati, Eli. 2020. *Ethnomusicology and Music Ecosystem*, in Proceedings of the 1st International Conference on Interdisciplinary Arts and Humanities (ICONARTIES 2019), Scitepress 88-94.
- 11) Irawati, Eli. (2021). *Transmisi, Kesinambungan & Ekosistem Kunci 'Musik Tradisi'*. Yogyakarta: Art Music Today.
- 12) Katz, Mark. (2004). *Capturing Sound: How Technology has Changed Music*. Berkeley: University of California Press.
- 13) Government Regulation in DIY Number 262/Kep/2016 regarding establishment of cultural villages/urban villages.
- 14) Koskoff, E. (2005). *Musical Cultures in the United States: An Introduction*. New York: Routledge.
- 15) Nettl, Bruno. (2015). *The Study of Ethnomusicology: Thirty-three Discussions*. Urbana: University of Illinois Press.
- 16) Nettl, Bruno. (1964). *Theory and Method in Ethnomusicology*. New York: Free Press.
- 17) Rahmat, Sujud Puji Nur et al. "Internet Dan Musik: Media Sosial Sebagai Wahana Publikasi the Upstairs Dan Death Flames." *SELONDING*, vol. 13, no. 13, 2018, pp. 1879-1891, doi:<https://doi.org/10.24821/selonding.v13i13.2913>.
- 18) Russel, Bertrand. (1992). *Dampak Ilmu Pengetahuan atas Masyarakat*, (Terj. Irwanto). Jakarta: Gramedia Pustaka Utama.
- 19) Supanggah, Rahayu, (ed.). (1995). *Etnomusikologi*. Yogyakarta: Yayasan Bentang Budaya.
- 20) Soedarsono. (2001). *Metodologi Penelitian Seni pertunjukan dan Seni Rupa*, Bandung: Masyarakat Seni Pertunjukan Indonesia.
- 21) Schippers, Huib. (2015). "Applied Ethnomusicology and Intangible Cultural Heritage: Understanding "Ecosystems of Music" as a Tool for Sustainability", dalam Svanibor Pettan & Jeff Todd Titon, eds. *The Oxford Handbook of Applied Ethnomusicology*. Oxford: Oxford University Press.
- 22) Titon, Jeff Todd. (2015). "Sustainability, Resilience, and Adaptive Management for Applied Ethnomusicology". Dalam Svanibor Pettan & Jeff Todd Titon, eds. *The Oxford Handbook of Applied Ethnomusicology*. Oxford: Oxford University Press.