DIFFUSION OF THE FISHERIES AND MARINE PRODUCTS COMMERCIAL SYSTEM INNOVATION BY PT. ARUNA JAYA NUSWANTARA (CASE STUDY OF TANJUNG BATU VILLAGE, BERAU DISTRICT)

Diah Agung Esfandari¹, B.A., M. Si School of Communication and Business, Telkom University, Indonesia esfandari@gmail.com

Triana Septiani²
School of Communication and Business, Telkom University, Indonesia, trianasptiani@gmail.com

Abstract

Work as a fisherman is not considered a high economic value of work, so the stereotype of poor society is generally inherent to the coastal communities in Indonesia. Poverty suffered by fishermen is influenced by various factors, one of which is a very long fishing trade chain. This condition makes the fishermen tend to be mocked through price pressures by the middlemen who provide capital. This situation is exploited by PT. ARUNA to provide a solution for less effective fisheries schemes. On the basis of the development of information and communication technology PT. Aruna seeks to provide distribution efficiency with technology utilization. The main purpose is to improve the prosperity of coastal communities. In this study, the researcher examines the innovation-decision process of the fishermen communities of Tanjung Batu Village, East Kalimantan as one of the areas in the development of PT. Aruna. This research uses qualitative research method with data retrieval process through interview and field observation. The results of this study aim to explain the fisherment communities process in making decision to adopt innovations.

Keywords: Diffusion of innovations, Fisheries Trading System, Coastal Communities, PT. Aruna Jaya Nuswantara

1. Introduction

Coastal people can be categorized as poor people. Asian Development Bank said they can just earn below Rp. 780,000 per month. Based on BPS data, per capita income of fishermen in public waters is Rp. 642,350 while sea fishermen earn Rp. 737,030. As coastal country with more than 81.000 kilometers of coastline stretched laterally from west to east (The second longest after Canada) it makes Indonesia have very abundant marine wealth. However, the marine wealth which belongs to Indonesia is not parallel with the condition of fishermen community in Indonesia.

Many issues faced by fishery sector in Indonesia are like poverty issue suffered by fising community and reducing the number of fishermen to 800,000 from 1,6 million Family Card based on the result of census in the last 10 years (detik.com). This issue is the background of the birth of PT. Aruna Jaya Nuswantara. A phenomenon of new business trend (Sociopreneurship) which utilizes technology as platform to raise social mission is utilized by PT. Aruna Jaya Nuswantara to develop digital product of e-commerce for welfare of fishermen. PT. Aruna Jaya Nuswantara provides efficient solution of distribution to the long chain of fishery trade to create fair and transparent trades.

Moreover, inovation given is this company focuses on fishery sector by directly giving accompaniment to fishermen in coastal village. The vision and mission of PT. Aruna Jaya Nuswantara to be able to create digital ecosystem in coastal society by clarifying each role. Presently, PT. Aruna Jaya Nuswantara which operates as a platform of e-commerce B2B has connected 1,700 fishermen to wholesalers and fishery exporter company.

Nowadays, PT. Aruna Jaya Nuswantara is still in the development phase both region and technology products. At this development phase PT. Aruna Jaya Nuswantara has already opened some miniplants at 7 coastal territories in Indonesia including; Berau, Sebatik, Lombok, Balikpapan, Kota Baru, Kendari, and Sorong. Each miniplant will be trained by field team. The training is an accompaniment to compile the result of fishermen's hauls to be distributed to wholesalers, and training to head of fishermen community to apply aruna fishermen application.

Each miniplant has different phenomena and challenge. Among 7 miniplants, only miniplant in Desa Tanjung Batu Kab. Berau is successfully connected directly to fishermen. The work system of fishermen's hauls in Desa Tanjung Batu Kab. Berau is still conventional by using fish net or trawl, and their life is still pre-prosperous. Many factors affect fishermen's condition which is still pre-prosperous. The factor of pre-prosperous lives of traditional fishermen society is influenced by low education, role of economic institution, fishermen's habit, alternative work, capital ownership, technology used (Haris Hamdani: 2013). Low education and lack of training to fishermen by government or institution causes fishermen or coastal society not really realize the huge market potential in every seafood commodity in the area.

In Desa Tanjung Batu Kab. Berau, in 2010 fishery production was 7,996 tons, or 7% from fishery production total in East Kalimantan. However, the fishery production used is only around 11,2% (Nur Ansari: 2014). It means potential in Kab. Berau has not been used optimally. Sea catch in Desa Tanjung Batu is sizeable enough, generally; reef fish, anchovy, and also crab (sea crab). However, only two wholesalers receive the result of hauls of "rajungan" crab due to the difficult handling, so that few fishermen seek "rajungan" crab since it is priced very cheaply by wholesalers.

"Rajungan" crab is marine biota which is high economic value. Unfortunately, in Desa Tanjung Batu Kab. Berau, it has no high price, only Rp. 15,000 – Rp. 20,000 per kilogram. This condition is due to the lack of knowledge of coastal community, especially wholesaler role about the potency of "rajungan" crab market because there is no access to a vast market for "rajungan" crab sales whereas "rajungan" crab is an export commodity with a huge demand from western countries. The presence of PT. Aruna Jaya Nuswantara to Kab. Berau has opened a vast market to "rajungan" crab hauls in that village. Through the innovative idea of e-commerce technology of pasarlaut.com, PT. Aruna Jaya Nuswantara found crab commodity businessman so that thay could directly link "rajungan" crab sales to large-scale buyers, espesially crab export factories.

According to Martono (in Muhamad Ngafifi: 2014) every technological development always promises change, ease, efficiency, and increased productivity. Now, very fast technological development has produced changes in society even if technology is applied to rural society, surely it will slowly break the barrier of conventional society towards modern society. According to Srinivas R. Melkote in modernization theories, the definition of a modern nation resembled western industrialized nations in all areas of society, including political and economic behavior and institutions, attitudes towards technology and science and cultural mores. The economic grounded modernization theory was the neoclassical approach that had served as the basis for western economies. Modernization theories provides the epitemoligical foundation for the initial theories in communication for development.

Everet M. Rogers, whose work has been central in this area, identified the following main elements in any analysis of an idea of innovation: (1) the innovation, (2) its communication through certain channels, (3) among members of a social system, (4) over time (Rogers, 1971). Diffusion of innovation then emphasized the nature and role of communication in facilitating further dissemination within local communities. Adoption was defined as the process through which the individual arrived at the decision to adopt or reject the innovation from the time he or she first became aware of it. The five stages were awareness, interest, evaluation, trial, and adoption. In sum, the diffusion of innovations research established the importance of communication in the modernization process at the local level.

2. Problem statement

From the various background descriptions that have been stated, PT. Aruna Jaya Nuswantara presents the solution of fishery commerce the fishermen community at Desa Tanjung Batu Kab. Berau. As a result, the statement problem of this research is: "How is diffusion process in implementing innovation in the fisheries trading system by PT. Aruna Jaya Nuswantara at Desa Tanjung Batu Kab. Berau".

3. Question research

1. How is diffusion process in implementing innovation in the fisheries trading system by PT. Aruna Jaya Nuswantara at Desa Tanjung Batu Kab. Berau?

4. Purpose of study

Present of innovation in fisheries trade system so the purpose of research is:

"to find out the diffusion process in implementing innovation in the fisheries trading system by PT. Aruna Jaya Nuswantara at Desa Tanjung Batu Kab. Berau

5. Method research

Researcher employed qualitative research method. The method used is case study. According to John W. Cresweell, case study is strategy of research that the researcher carefully investigates a program, event, activity, process or group of individuals. This research was employed in May – August 2018. The process of research was begun by observing the process of behavior changes for the entry of the innovation technology in the lifestyle of fisherment society in Desa Tanjung Batu Kab. Berau. Stage theory in behavior change of diffusion of innovation is awareness, interest, evaluation, trial, adoption. The researcher studies these symptoms through written material, both books and journals, and news related to this topic. The research is equipped with data collection technique through observation interviews and archival data as data triagulation.

6. Finding

6.1 Condition of Fishery Sector in Desa Tanjung Batu Kab. Berau

Tanjung Redep is the capital of Kab Berau, East Kalimantan. Based on the results of coordination with the government Kab. Berau, KPPN region in Tanjung Redep consists of five villages in Pulau Derawan sub-district with a total area of 3,858.96 Km2. KPPN center in Tanjung Redep is directed to urban area in Desa Tanjung Batu, appointed as local activity center (LAC), with development potency in form of developing aquaculture activity with a 77% area. (academia.edu: 2017).

Desa Tanjung Baru is a coastal village being the center of aquaculture and tourism development. This village is a crossing place to the tourism place of Pulau Derawan and Maratua. Being in a coastal area causes the life of society that depends on fishery sector. Their livelihoods in Desa Tanjung Batu are mostly fishermen. Fishermen is the characteristic of society living at the coastal area, fishermen who are defined as people undertaking fishing activities in the sea (in Muhammad Yasir: 2017).

Primary potency of KPPN in Tanjung Redeb is the haul of fishery and sea cultivation \pm 221.4 tons (60.6% of the total in Kab. Berau) with superior commodities of grouper, shrimp, anchovy, crab, etc. Yet, potency of sea catch in Desa Tanjung Batu has not been used optimally, one of them in "rajungan" crab commodity. Until the last 5 years, there are only two "rajungan" crab wholesalers in Desa Tanjung Batu, and it is priced very cheaply around Rp. 15,000 – Rp. 20,000/kg. This causes the lack of interest of fishermen to catch "rajungan" crab in this area. So that the optimization of marine resources in Desa Tanjung Batu has not been carried out optimally.

The phenomenon of the lack of crab collectors in this village is caused by various factors that the difficult handling process requires labors to strip and pack "rajungan" crab. Furthermore, there is no open a wider market access so that the competitiveness of fishery catch is not balanced and optimal. In accordance with KPPN in Tanjung Redeb, there are various issues of fishery hauls in coastal villages in Tanjung Redep and the sustainability of pontential impact, among them:

Table 6.1 Issues of Fisheries in Tanjung Batu Village

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No	Issue	Problem	Potential Impact	
Economic Aspect				
1.	the competitiveness of product of fishery catch is still low.	 Bisiness of catch fishery is not yet efficient. Continuity of production is not stable. 	 The provision of job opportunity will decrease. The income of society will decline. 	
2.	Lack of domestic market development to product of fishery catch and security of fish quality.	 Fish logistic system has not officially stamped well and efficiently. Purchasing power of most Indonesian is still weak. 	 Fishery business will depend on importing countries. The quality of society will decrease due to low level of fish consumption per capita. 	
Social Aspect				
1.	Most of fisheri quality is still low.	 Fishery profession includes an informal and unconditional employment. System of salary to labor fishermen is still daily by sharing the profit. 	 It is hard to realize fishing practices professionally and responsibly The welfare rate of fishermen is difficult to be increased due to not having good financial management skills. 	

- 2. Technology and production system of aquaculture and catch fishery
- The availability of seeds and high-quality catching tools is still limited.
- The access to technology is still limited
- Fishermen and cultivator are not free to improve business scale and to apply technology towards business efficiency

6.2 Socio-cultural condition of fishermen

Based on the result of observation, most fishermen in Desa Tanjung Batu work as fishermen used the catching tool of trawls, bagan, bubu, and fishing rods. Every activity of cathing fish has each challenge. The result of fishing in Desa Tanjung Batu is so diverse that many immirants venture to be fishermen in this area. The size of population in Tanjung Redeb KPPN in 2015 which was registered was 10,293 people. The highest population was in Desa Tanjung Batu with a total of 4,896 people.

In fish season, fishermen can get huge income every day, yet this cannot be a mesurment that fishermen can live well. It signifies that stereotype of poor people is not only influenced of low income. Based on field onservation and interview with social device in Desa Tanjung Batu, the poverty suffered by fishermen is influenced by internal factors of fishermen themselves, habit and behavior factors. Theoretically, there are two poverty theories that influence and explain poverty which structural theory and cultural theory are. In this case, poverty of fishermen is caused by culture, due to their own behavior (Syahrizal et al: 2011).

The behavior is influenced by various factors, one of which is psychological factors. The psychological factor includes motivation. Motivation is a behavior collection that provides a foundation to someone to act in a way directed to certain specific goals. Based on onservation and interview with one of wholesalers, it is said that fishermen in Desa Tanjung Batu do not have huge motivation. Motivation is the causes that encourage one's actions; motivation is influenced by subjective elements of those individual in which there are knowledge, feeling, belief, behavior, and character (Syahrizal, et al: 2011).

Fishermen society is categorized as people with low education. In research area the education of aruna fishermen partners is mostly elementary school graduation so that their low education cannot shape proper thinking of managing finances. According to Saria in the book "Pengantar Sosiologi Masyarakat Pesisir" he stated that fishermen society is familiar with uncertainty and high risk since it is influenced by seasonal climate and weather so that in this condition, fishermen society has hard character, tempered and wasteful. Because of this character, fishermen have consumptive behavior in accordance with their beliefs that money exists to be spent due to the perception of fishery resources" just taken" in the sea.

Fishermen in Desa Tanjung Batu are mostly not independent fishermen. Most of fishermen chaired by one wholesaler as a boss or a leader of fishermen society. The leader of fishermen society provides a capital to every member to make catching tool, purchase of ship engines and so on. The capital

provided is a loan that will be cut down from the results of fishing. However, not all fishermen can take advantages of capital loans to improve the standard of living.

Based on the interview it can be noticed that fishermen feel so dependent on the boss and the leader of the fishermen society to provide an assistance like capital, catching tools, and ship in continuity. This indicates that fishermen do not have good management finance to save and manage it till they can be independent fishermen. This situation is caused by lack of motivation to them to increase the standard of living by being independent fishermen, and there is no long-term thinking by fishermen to their life assurance in the future.

6.3 Diffusion of innovation process in Tanjung Batu Village

The use of technology in the fishery trade system can be an innovation that is applied to fishermen in coastal areas. According to Tornatzky and Fleischer (1990) every innovation will go through a process of diffusion. Diffusion is the process by which innovation is communicated through certain channels for a certain period, among members of the social system (Rogers;1995:5-6). Messages that are communicated contain ideas and practices that are new to the community. Rogers (1995) defines diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 1995, h. 5). According to Rogers (1995) the speed of diffusion of an innovation is influenced by four elements, namely (1) the characteristics of innovation; (2) communication channels used to communicate the benefits of innovation; (3) the time when innovation was introduced; and (4) the social system in which innovation diffused.

Diffusion of innovation is one of the important theories in understanding development communication. The concept of development communication is all efforts and methods, as well as techniques for delivering ideas and skills that come from parties that initiate development and are aimed to the wider society. The activity aims that the intended community can understand, accept, and participate in implementing development ideas.

Based on the condition of fishery in Desa Tanjung Batu and macro conditions in the fishery, innovation is presented to provide efficiency and effectiveness of trade system of the fishery product. The presence of PT. Aruna Jaya Nuswantara is the beginning of the process of innovation diffusion. Initially the decision process of innovation diffusion is explained in 5 stages, namely awareness, interest, evaluation, trial, and adoption. This process is known as the classic model in the process of decisions of innovation adoption.

But along with the development of Rogers and Schoemarkers knowledge, the second model was introduced in the innovation decision process. The second model is knowledge, persuasion, decision, implementation and confirmation as a follow-up to the adoption phase of the classical model.

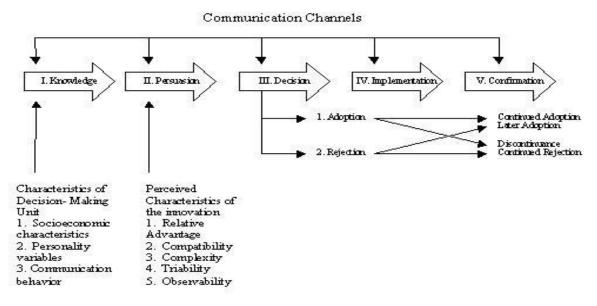


Figure 6.2 model process of innovation decision

Innovations in the fishery trade system are usually in contact with the head of the fishermen group or what is often known as collectors or wholesalers. In Desa Tanjung Batu, collectors have the duty to buy catches of fishermen members and distribute them to the market. The company began to establish a social approach to one of the collectors at the research location. Coastal communities are known as a realistic society so that the socioeconomic aspect becomes one of the most powerful triggers in influencing their cognitive.

The first stage is give the knowledge, the knowledge given is opportunistic, such as increasing price and icreasing demand for the next years. Then at that time three fishermen immediately wanted to join to become aruna fishermen because of the increase in crab commodity prices, 25% of the market price at that time. The increase in the selling price of the crab is due to sales not through intermediaries, so the price is adjusted from the factory price. It can be concluded that opportunistic matters will quickly influence the fishing community in making decisions.

The second stage is persuasion, this stage takes place when there is a positive influence from the perspective of fishermen who have adopted the innovation, which then forms a good attitude in other decision-making units, namely other fishermen who have not joined aruna fishermen. In the third stage, namely the decision, the decision-making units re-seek information to strengthen each decision. In this case the fisherman again asked his colleague to reassure himself in deciding to join or not become aruna fishermen.

The fourth stage is implementation, at this stage decision-making units have implemented the innovation and feel the benefits and added value. In this case the collectors feel the opening of a wider

market opportunity to the fisheries resources of Tanjung Batu Village, especially the crab commodity, which has so far been less exploited by the fishing community due to the crab market opportunity that is still little known by collectors. In addition, the benefits are also felt by fishermen, namely increasing the selling price of crabs because prices directly adjust to factory prices. This also increases the income of rajungan trawler fishermen. Then the fishermen also feel benefited by the existence of a point system that can be exchanged for other fishing facilities or facilities. Fishermen admit that this increases their motivation to go to sea to collect as many points as possible.

The last stage is the confirmation stage, this stage explains that fishing communities have become loyal to being aruna fishermen and it is difficult to move to other collectors because they feel the benefits that benefit fishermen and comfort in collaborating with Aruna for support.

As stated by Elvinaro (in Renia Karlina, 2011) that there are characteristics of innovation felt by members of a social system in determining the level of innovation adoption. In the process of innovation diffusion of PT. Aruna Jaya Nuswantara contains these characteristics, namely the existence of relative advantages, namely benefits and added value in the form of opening wider market opportunities and increasing selling prices of crabs, then compatibility of these innovations in accordance with the needs of the current fishing community, where the current condition of the fishermen community is faced with a very cheap selling price of the catch by a very far margin with the final buyer. So, for fishermen, this innovation is a solution. In terms of complexity, this innovation is easy to use. This innovation is likely to be tried (trialability), then this innovation can also be observed (observability), after getting a positive response from one of the collectors in Tanjung Batu Village and several fishermen, then socializing to other fishing communities also welcomed the innovation.

These innovations bring personal and environmental benefits. Personal benefits are increasing income of collectors and fishermen. The advantage of environment is the utilization of technology to fishery commerce activity has shown a change to fishery condition in Desa Tanjung Batu. In six months, after PT. Aruna Jaya Nuswantara opened miniplant in that location, it produced the resources of "rajungan" crab commodity becoming more competitive based on the data showing that there are five "rajungan" crab wholesalers that each has more than twenty "rajungan" crab fishermen.

The various processes of applying diffusion of innovation lead to increasing business results, the opening of new commodity potentials, and the efficiency of the sales system. Although collectors claim to accept the innovation process of diffusion but unlike fishermen, there are a few of them seemed to refuse and not being loyal to be aruna fishermen. This is influenced by the following factors: (1) limited commodities, currently PT. Aruna Jaya Nuswantara only receives "rajungan" crab commodities to be distributed, so that in certain seasons fishermen choose to look for other commodities and join other collectors. (2) the purchase price, there is a price competition between "rajungan" crab collectors to attract

the attention of fishermen. (3) capital, it is undeniable that conventional fishermen do not have large capital so that they depend on the boss or wholesalers.

Besides trying to improve the socioeconomy aspect PT. Aruna Jaya Nuswantara also upholds humanity by giving the innovation to change habits and behavior of fishermen. This company applies point system to their catch results which will later be integrated to application of aruna fishermen used by each leader of fishermen team. That application aims to income of catch results. The collected points can be used with various kinds of offers such as fishing gear, groceries, cash, and so on. Furthermore, every four-month aruan fishermen partner is given a reward awards in the form of certificates to fishermen who get the most catches.

Based on observation this way successfully provides motivation enhancement to aruna fishermen partner. That motivation appears from fishermen behavior which is more diligent to catch fish in order to ger more points and use them for new trawl or ship engine. Indirectly with the system of point, fishermen can save some money to add sailing equipment. The reward that was given also creates personal touch to fishermen whom they feel proud of their proffesion and their hard work all the time because previously fishermen never felt appreciated. This awakens fishermen motivation to work. Fishermen realize that the changes which occur so fast after a year being aruna fishermen partner get increased revenue because it is supported by additional equipments which make increase in catch quantity.

Table 6.3 The Process of Applying Innovation

Application Process	Indicator	
Trigger initial adoption	Open access to the "rajungan" crab market directly, potential	
	"rajungan" crab request, increasing the purchase price of	
	"rajungan" crabs, changes the habit and behavior of fishermen.	
Crisis period of before adoption	"Rajungan" crab commodities are abundant, but crab buyers are	
	very few, the purchase proce of the "rajungan" crab is low, and	
	attachment to middlemen in trade towards end buyers.	
Attitudes towards adoption	Receive the innovation of trading system & point system and some	
decision	refused because of the limitation of commodities, price	
	competition, and capital.	
Application process	1. innovation in the trading system of the "rajungan" crab seafood	
	to the factory directly, because all this time the trade is still through	
	several intermediaries because all this time the trade is still through	
	several intermediaries that cause the long flow of fisheries and	
	marine trade systems.	
	2. Innovation in the fishermen's work system through a point	
	system as a medium to teach them to save, because all this time	
	fishermen show consumptive behavior and cannot save money.	
Perceived changes after the	"Rajungan" crab commodities become more competitive,	
adoption of innovation	optimizing aquaculture of "rajungan" crab commodity, increased	
	purchase price of "rajungan" crabs, changes in socio-cultural of	
	fishermen.	

6.4 The Impact of Inovation on The Fisherment Community

This has had a social impact on changes of behavior that occur on aruna fishermen partner. The exchange with tools or other assistance has taught fishermen that fishermen can have equipments from their own effort. This indicates fishermen who used to be lazy feel more eager to go to sea in order to get the tools needed to improve catch results while increasing income. With increased income, fishermen feel more tranquil in facing famine season that is unable to go the sea.

However, behavior and thoughts of fishermen who are less educated make them find difficulty to manage the finances well in order to be independence and minimize dependence. This point of system can train aruna fishermen partner to be able to save their money. The system applied by PT. Aruna Jaya Nuswantara with its technology slowly brings changes to behavior and trust of fishermen. Motivation changes that are shown by daily behavior of aruna fishermen partner produce a value which is a creating independence and increasing productivity. Independence is characterized by a decrease of dependence of fishermen on wholesalers to borrow capital, and work productivity is illustrated by increasing the motivation of fishermen in going to sea of fishing.

7. Conclution

Some conclusions that can be drawn from the results of the study are fishing communities are a realistic society. The approach taken is to explain things that have a direct impact on them in the socioeconomy aspect, such as "rajungan" crab commodities that can be sold directly to end buyers, the future demand for crabs, and an increase in the purchase price of "rajungan" crabs. Judging from the conditions in the poverty field experienced by fishermen caused by consumptive behavior and their perception that fishery resources "live taken" at sea.

Previously there were many innovations that were present to break down problems in the fisheries sector but did not necessarily have an impact on fishermen. Based on observations in the field, such complex problems are caused by difficult human resources who still accept new things easily. It is recommended that innovation in the fisheries sector should be through direct guidance in the field in the process of implementing innovation and coupled with efforts to improve the quality of its human resources.

References

KPPN Tanjung Redeb. 2017.profil KPPN Tanjung Redeb Kabupaten Berau.

Melkote, Srinivas R., H. Leslie Steeves. 2008. Communication for Development in The Third World. California: Sage Publication.

Rogers, Everett M, 1995, Diffusion of Innovations. Fourth Edition. Frree Press. New York

Rogers, Everett M, 2003, Diffusion of Innovations. Fifth Edition. Frree Press. New York

Satria K.A, 2002. Introduction to Sociology of Coastal Communities. PT Pustaka Cidesindo

Tornatzky, L. G., Fleischer, M., & Chakrabarti, A. K. 1990. The processes of technological innovation. Lexington, MA: Lexington Books

Haris Hamdani (2013), "Poverty Factors for Traditional Fishermen" Student Scientific Research Article 2013

Muhammad Yasir (2017) "socio-economic conditions of fishermen in bagan in the town of Karang town, Lampung city", Journal of Universitas Lampung, Bandar Lampung.

Muhammad Ngafifi, (2014), "Advances in Technology and Human Lifestyles in a Socio-Cultural Perspective" Journal of Education Development: Fondation dan Application, Vol.2 No.1

Syahrizal, et al, (2011) "aspects of action and behavior in poverty: a study of fishing communities in the coastal districts of southern Sumatra", humanis. Vol. 10 No.1.



LETTER OF ACCEPTANCE

4th International Conference of Transformation in Communication (ICoTiC)

"Digital Life in Transformation Society: Mono-Multicultural World"

Telkom University, 4th-5th April 2019

Author(s): Triana Septiani, Diah Agung Esfandari

Paper Title: Diffusion of The Fisheries and Marine Products Commercial System Innovation

By PT. Aruna Jaya Nuswantara (Case Study of Tanjung Batu Village, Berau

District)

Dear Author(s),

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We look forward to welcoming you in the conference.

Sincerely Yours,

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