Does online marketing help in promoting fish? case study on fish companies in Aceh, Indonesia

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Abstract. This paper aims to analyze the usage of online marketing as a complement to existing offline marketing practices, with the intent to attenuate financial losses in the fishery industry. The current fish marketing business in Aceh still relies heavily on traditional methods, which, with their limited outreach, cause businesses to incur losses in the form of unsold and degrading fish due to longer waiting times between purchases. Unlike other types of commodities, the shelf life of fresh fish is very short. The longer the fish are kept by the fishermen or traders, the more damaged the products will be. However, the availability of consumers willing to buy the fish at any time is uncertain. This problem can be solved if the products are offered to a wider audience by using online marketing. This research uses descriptive qualitative research that produces descriptive data from respondents or observed behavior. Data were collected through interviews and observations in 3 fish export companies in Banda Aceh. The sampling technique used was purposive sampling, based on certain objectives and considerations. The findings suggest that by adding online communication marketing channels to promote fish products, such as Google Ads, as well as joining online marketplace platforms, the risk of suffering losses is reduced.

1. Introduction
The fisheries sector in Indonesia demonstrates a high level of economic growth, outpacing the national economic growth. The province of Aceh is one of the provinces with a robust fishery industry, with its contribution to the national gross domestic product (GDP) of the fisheries sector consistently increasing year-on-year. GDP is the market value of all goods and services produced by a country over a certain period. Thus, the GDP of the fisheries sector is the market value of all fishery-related goods and services
produced by a country in a certain period. The value of goods and services in the fishery sector are procured, among others, from the fishing, cultivation, processing, and trade processes.

During the 2015 – 2019 period, the economic growth in the fisheries sector was consistently higher than the national economic growth. The GDP of the fisheries sector in 2019 reached IDR 420 trillion, or 2.65% of the national GDP, which stood at IDR 15,834 trillion. This total is higher than in 2018, when it was 2.6% of GDP, as well as in 2015, when it only amounted to 2.5% [1]. The same trend has also been observed in Aceh, a province located on Indonesia’s western tip, which possesses one of the nation’s most robust fisheries sectors. The GDRP of Aceh’s fisheries sector has shown a significant increase over the 2015 – 2019 period, with an average annual increase of 9% from IDR 6,333 billion in 2015 to IDR 8,578 billion in 2019 [1].

Although its contribution to the national GDP and GDRP continues to increase, the practice of fish marketing in Aceh, Indonesia still predominantly relies on traditional methods, which incur losses due to longer wait times between purchases. These long wait times have become a large obstacle to the industry’s profitability, as they exacerbate the continuously decreasing value of the fish being sold [2]. This is further worsened by the fact that unlike other types of commodities, the shelf life of fresh fish is very short [3 – 5]. The longer it is in the hands of fishermen or traders, the more fish will degrade in quality and depreciate in value [6]. The results of the cited studies show that the fish caught by fishermen experienced a decrease in the organoleptic value of as much as 27.8%, 17.2% of which occur on boats, 4% at TPI / PPI and distribution, and 6.6% in the fish processing unit. This high degree of shrinkage in fish value encourages producers or traders of fresh fish to sell fish as soon as possible or preserve it, with the aim of extending its useful life [7]. The decline in fish quality and the shrinkage that occurs while the fish is still on the supplier’s side has to do with the industry’s marketing aspect. Most of the fish processing companies in Aceh sell their fish to buyers in Medan, North Sumatra (B to B). Currently, Medan represents virtually the entirety of their market, and acts as an intermediary between Aceh’s fisheries and the national as well as export markets. Prior to being exported, the fish are usually processed in the form of loins.

Because of the high degree of dependence on buyers in Medan, fishermen or fish traders in Aceh do not have the freedom to determine the selling price, as this is set by the buyer in Medan [8 – 11]. The same is true for assessments made to the product’s quality, which is unilaterally set by the Medanese buyers (buyers from Medan). This is of critical importance, as a higher-grade fish will sell at a higher price than a lower-grade one. However, traders in Aceh often find that fish they assess to be Grade A are instead classified as Grade B by buyers in Medan. These are the problems that underlie this research on online fish marketing. It is expected that by utilizing this approach, sellers will be able to overcome the losses they regularly incur due to their dependence on Medanese buyers.

Previous studies on fish online marketing have been widely conducted. For example, [12] discussed how implementing concepts such as Keyword Strategy, Search Engine Optimization, and Pay per Click (PPC) have become cornerstones of the online marketing strategy carried out by fish marketers in Kerala, India. A study conducted by [13] shows that online shopping has certain advantages over physical shopping. However, this study found that consumer attitudes do not support the idea of buying fish online. Other researchers [14] found that 31% of online fish trading companies in the district of Ernakulam, India, believe that customers choose their services because they can save time, although only 0.52% of the total marketed fish can be attributed to online companies.

In contrast to previous studies that have only focused on the retail market, the current study focuses on the business market. In addition, this study also examines the possibility of solving problems in the supply chain [15 – 17] to prevent a decline in the quality of fish along the supply chain before it reaches consumers. As far as the author is aware, there have been few studies that have considered aspects of online marketing in fishing companies, especially in developing countries such as Indonesia. It is expected that the findings of this research can serve as a point of reference for other future researchers regarding the possibility of online marketing in fisheries.
2. Methods
This case study research uses a qualitative approach that emphasizes exploratory descriptive analysis. This approach is comprised of theoretical sources and data collection techniques, as well as data sources and analysis [18 – 20]. Data collection was conducted through in-depth interview techniques with sources. In-depth interviewing is a qualitative research technique that involves conducting intensive individual interviews with a small number of respondents to explore their perspectives on a particular idea, program, or situation [31]. There were several respondents who were interviewed, the main ones being fish entrepreneurs in Aceh. Other parties selected as respondents included fishermen and government officials. In total, 5 export fish entrepreneurs, 3 fishermen, and 2 government officials were interviewed. Purposive sampling was used to determine the interviewees. Purposive sampling, also known as judgmental, selective, or subjective sampling, is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their study [21]. This research focuses more on how to apply IT to market fishery products to reach a wider market, including opportunities to use digital marketing platforms specifically designed for fisheries such as Aruna. The research was conducted from April to September 2020 in Banda Aceh, Indonesia.

3. Results and Discussion

3.1. Current Marketing Practice
The current marketing system still relies on toke bangku (middlemen) and Medanese buyers as the center of its activities. Among the supply-side actors are fish entrepreneurs who possess cold storage facilities; however, the storage capacity is relatively limited and generally unable to accommodate the fishermen’s catch. Due to the long delay between purchases, the turnover of cold storage usage at the fish entrepreneur level is also relatively low. Consequently, many fishery products are brought to Medan, as continued storage in Aceh frequently leads to spoilage.

All the fish caught by fishermen are sold to toke bangku (100%). The toke bangku will then sell the fish to local markets, which will absorb around 35% of the volume. The rest are sold to wholesalers as well as buyers in Medan, with both combined accounting for the remaining 65%. Buyers in Medan then sell their purchases to national as well as foreign markets, with the former absorbing 25% of the goods and the latter 40% [22]. Fresh fish, such as tuna in Aceh, will also be directly sold to the international market by wholesalers. However, there are still numerous obstacles faced by fish exporters in this region. Firstly, there is limited access to potential buyers overseas. Most of the existing buyers are obtained through word-of-mouth, making them very limited in number. UD Nagata Tuna, for example, is a wholesaler who struggles to find buyers capable of offering a fair price for its goods, as there is no way to make contact with such buyers.

Another obstacle that exists is the reduction in cargo airlines facilities. At the outbreak of COVID-19, Air Asia stopped all of its flights to Aceh, which, prior to the pandemic, would run 14 times a week. As such, the only air cargo facility currently available is Garuda Indonesia aircrafts, which does not have direct flights to the company’s largest buyers, situated in Kuala Lumpur, Malaysia. Consequently,
the price of cargo per kg that must be paid is much higher, because the exported fish transits first in Jakarta for 1 night before being sent back to Kuala Lumpur. The cargo fees charged by Air Asia to transport to KL are IDR 11,000/kg. In comparison, Garuda charges IDR 23,000/kg for the same destination. This represents a significant increase in logistical costs, not to mention the losses incurred due to value degradation and the deterioration of fish quality due to lengthy travel times. If the goods sent from Aceh arrive late to the recipient abroad, the products will undergo weighing and regarding to better reflect their current condition. Of a total amount of 100 kg, it is possible that only 80% may be recognized as meeting the standard of purchase, whereas the remaining 20% will not be paid for, as it do not meet the requested fish specifications.

Almost all promotional and marketing activities carried out by fish exporting companies in Banda Aceh still use conventional marketing strategies, which rely on the strength of offline networks and word-of-mouth [23]. Although these firms often make use of Facebook to promote their business, they generally utilize personal Facebook accounts instead of a business account. The former method’s lack of features designed to signal-boost one’s business and increase market outreach makes it ill-suited for achieving the firms’ goals.

### 3.2. Online Marketing Opportunities in the Fishery Industry in Aceh

In addition to general marketplaces such as Tokopedia, Bukalapak, JD.id, Shopee, and Blibli.com—all of which have successfully assisted in the sale of fish in retail markets in Indonesia—digital business platforms specializing in fisheries have also begun to grow. Companies such as Aruna, FishON, and FisTx, for example, fall under this category. Aruna, the pioneering firm in this field, is an IT company that actively engages with the marine and fisheries sector. Its stated mission is to create a sustainable and fair trade ecosystem for fish and marine products for all actors involved. Unfortunately, no fish entrepreneurs and fishermen in Aceh have joined this platform [24].

Fig. 2. Strategy to Increase the size of Captive Market

In response to recent developments, such as the penetration of digital technology and changes in consumer behavior in shopping, fishery companies in Aceh can take advantage of digital marketing to reach both the end-user segment (B to C) as well as the business segment (B to B) [25]. The end-user segment can be catered to by utilizing general marketplaces, such as those outlined above [26, 27]. Meanwhile, to reach the business segment, a dedicated fishery marketing platform such as Aruna is required. It is expected that the traditional marketing practices that exist today will gradually transition to a predominantly online-based marketing strategy [27, 28]. Therefore, the first required task is to conduct market research and demographic profiling, such that businesses are able to properly identify and target their customer base.

For the B to B market, the dream customer is the current buyer profile, namely fish importers from Korea, Japan, and Singapore. They react positively to the quality of fish exported from Aceh, because the local seawater is relatively uncontaminated and removed from major sources of pollution. Furthermore, the fishing methods utilized in Aceh are largely still traditional and environmentally friendly, which means they do not risk overfishing. Customers who fit this profile have already been
identified by wholesalers in Aceh as their dream customer. What is required, therefore, is for this segment to be duplicated and reached through online exhibitions and email marketing. Methods such as providing free sample products or lighter payment terms could be employed to increase market penetration [29].

It is also necessary to understand the value ladder concept [30]. The higher the benefits offered to customers, the higher the price of the product. With this in mind, Nagata Tuna must produce and market goods that can be sold at a higher price. This has yet to be achieved in the status quo, as the goods sold by the firm largely consist of tuna loins, fresh and frozen. These products are still sold in bulk, meaning that it has been unable to reach retail customers. For the product to also reach household consumers in Aceh, it is necessary for the firm to offer its products in smaller packages, such as a 1 kg package of tuna loin.

The next step is website setup. In building an effective B2B website, it is necessary for business owners to utilize tools that can track website visitor feedback. The optimization of website user experience (UX) allows firms to analyze user traffic and behaviors; this data can later be utilized as the basis for developing marketing content on the website, especially when supported by analytical tools such as Funnels and Google Analytics. As websites are useless without traffic, the traffic itself must also be managed. Traffic development programs make use of multiple channels to boost the website’s visit and engagement rates, from email marketing to the use of social media accounts such as Facebook, Instagram, Twitter, blogs, and YouTube. For the business to grow, the final step is to integrate the online store website with a payment gateway such as Xendit, such that purchases can be resolved directly on the website. With a payment gateway in place, all online transactions will run automatically without the need for manual confirmation.

4. Conclusion
The success of implementing online marketing will provide benefits for fish businessmen in Aceh, such as higher turnover ratios of products, higher market penetration, and the minimization of quality degradation. By employing online marketing as part of their business strategy, fish entrepreneurs in Aceh will also be able to sell their products directly to buyers abroad without having to use an intermediary who would take a significant cut out of their profits. Because this study is a preliminary one, further research is required to properly calculate the benefits that these firms stand to gain, i.e., the increase in monetary value obtained when comparing profits before and after the implementation of this strategy.

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