

CASE STUDY

Putting vital information at work for improved optimization and efficiency

INTRODUCTION

Commercial fishing plays a vital role in the fishing industry with the livelihood of millions of people worldwide being directly or indirectly dependent on it. While there is a wide variety of fishing methods used for commercial fishing, over 50% of which is done via trawling due to the massive amounts of fish brought in per catch.

However, fisheries are being threatened by a host of challenges affecting their earnings and profitability. With the growth of awareness in sustainable fishing and environmental protection, authorities have stepped up and introduced measures such as catch limits and zoning systems to maintain the health of the ocean. The perpetual rise in energy prices further deteriorates their fishing viability and fish trawlers find themselves competing with more efficient operators, vying for a limited and finite resource.



PROPOSAL

To sustain their profitability, many fisheries began seeking ways to optimize efficiency and reduce costs. This however, is a norm across the maritime industry. Vessel operators are often on the lookout for the most cost effective solutions in optimizing their daily operations.



In such instances, Ascenz recommends the installation of our Shipulse Dashboard and Flowpulse Coriolis Mass Flow Meters for fuel consumption monitoring and measurements. To fully optimize the system's capabilities, customers can choose to add on the subscription of our Shipulse Online Portal which allows remote monitoring, weather forecasting, and performance analysis of each vessel's operations.

CUSTOMER'S EXPERIENCE

Ascenz was approached by a commercial vessel operator seeking for an effective cost control solution. The company agreed for a full system package to be installed onto one of its vessel.

To ensure that realistic operational baselines were established, the vessel was monitored over a period of 3 months while it continued its regular daily operations. Further observations were carried out while varying its conditions (in this case, the speed of travel) in intervals of 6 months.

Over time, the data collected was used to perform trend analyses, subsequently determining the optimal speed of travel which allowed for the lowest amount of fuel to be consumed while still achieving its desired objectives.

“By merely reducing their speed by 1 knot/hour, each vessel was able to save approximately 300 L of fuels per day. Assuming that the price of fuel was at USD 390 per 1,000 L, it would equate to USD 117 per vessel per day!”

The dollar savings per day may seem insignificant at first glance, but can translate to huge savings in the long run. Moreover, the total cost savings are further multiplied and can eventually help save up to millions of dollars when more vessels are supported with the systems.

With confidence in achieving in substantial cost savings, the company further installed Ascenz' fuel monitoring systems to all their vessels.

APPLICATION

Similarly, this can be applied to those of the fishing industry. Our Shipulse Solutions transforms vital shipboard information such as fuel consumption, speed, weather, and location into meaningful data.

Fleet managers will be able to visualize their entire fleet on the world map for vessel tracking, complete with overlays of important information such as significant wave height, peak wave period, surface current and more. The system's weather forecasting and wind analysis capabilities also allows voyages to be planned in advanced.

Accurate fuel consumption monitoring allows fishing vessels to have more control over their fuels costs. A sudden spike in fuel consumption could mean that a certain component requires servicing. In a way, it also serves as a reminder for regular maintenances or the need to adopt more fuel efficient measures.

With the right analytical tools, fishing companies are now presented with a better visualization of their cost savings. By analysing their operations and performances, the right adjustments can be made for the best efficiency.

CONCLUSION

Our solutions offerings enable customers to work smarter and more intelligently. It provides an excellent opportunity to control cost and improve profitability. Companies are also able to monitor the progress and monetize their savings.

Monitor – Operators are presented with real time updates on their key performance indicators, effectively increasing their visibility.

Control – With the right knowledge of their vessels on hand, companies are then able to compare performances with established baselines, and take corrective actions to fine tune their operations.

Manage – Collated data can then be further analyzed to spot trends and pinpoint issues that may be hindering performance, allowing for more effective management planning.

The implementation of these systems greatly reduces the amount of human intervention and manual data collections involved. This not only improves the precision, but the efficiency of the team. While the benefits of using fuel consumption monitoring systems are widely known, many companies are often deterred due to its high initial investment cost.

• However, based on past experience, a single vessel was able to recover the purchase cost within 5 months! All subsequent cost savings would therefore benefit the company directly, proving it to be a worthwhile long term investment after all. •