



## OI INSPIRATIONAL CASES



### OPEN INNOVATION IS NOT ONLY ABOUT SECURING NEW IP

The world's largest fish vaccine delivery company, with headquarters at a university innovation park in Scotland and offices in Norway and Portugal, undertook an open innovation collaboration with a specialized research institute and a large company to develop and test a new technology which helped the SME create a novel service for customers and in the process increased its reputation and revenues.

- Aqualife Services started as a family-run company in 1996 with two brothers and a friend vaccinating farmed salmon against bacterial infections.
- Aqualife has expanded from being a small Scottish business to operating in other countries, particularly Norway, organizing teams of vaccination staff to visit salmon farms. Aqualife vaccinates 100 million salmon per year, mainly still by hand.
- The company is located on Stirling University's campus, which is also home to the Institute of Aquaculture.
- In addition to its Norwegian office, which was opened in 2018, Aqualife also expanded its operations to Portugal to provide vaccination services to the sea bass and sea bream fish farms in the Atlantic.

#### The Origin of the Open Innovation Collaboration

A growing business challenge for Aqualife has been the rise in the use of machines to perform vaccinations. Due to the large size and cost of the machine, this solution is only currently cost-effective for larger companies vaccinating 500 million young salmon per year. The company



therefore looked for further business opportunities in aquaculture systems around the world, in addition to automation. A lot of fish production today is still to be found in low-margin operations compared to the high-value products produced by salmon farms. In consequence, these are not currently an attractive proposition for vaccination services. On the other hand, Aqualife did detect a potential new business line in the vaccination of sea lice.

Sea lice represent a parasite threat to salmon as they attack their flesh and can even cause the fish to die. As such, they represent a major threat to the salmon farming industry and their revenues. However, the effects of sea lice are difficult to treat with medication. One alternative solution is the use of "cleaner" fish, such as wrass and lumpfish, which eat the sea lice and in the process clean the salmon. As wrass and lumpfish can also suffer from infections, Aqualife saw



## Impact of the OI Collaboration

An early benefit of rolling out some of the initial outcomes of the project was that Aqualife vaccinated all the lumpfish in the UK. The company used the experience of their collaborative project as part of their UK marketing efforts, while their relationship with the funder SAIC yielded further press coverage relating to the project and its benefits for the fishing industry. The project is now being used as part of a marketing campaign in Norway to target companies with lumpfish vaccination requirements. Aqualife was also expecting to undertake a follow-on open innovation project with a university partner to look at further automation of the fish vaccination processes.

The OI collaboration was therefore beneficial to Aqualife on a number of levels: first it led to a better understanding of how to vaccinate lumpfish, including the development of a better process and new specialist equipment. This, in combination with the project's dissemination activities, resulted in the creation of a new line of business vaccinating lumpfish in the UK and in Norway. The company also gained insights into how it wishes to develop its business and what further work is needed to achieve this. This relates in particular to developing the improved service to access a new market segment and reach new customers.

The company was not able to provide figures that could be directly related to the project, but it believes that it has led to a year-on-year increase in business in Norway. As the salmon vaccination business becomes more seasonal, the cleaner fish business is turning out to be a batch production process throughout the year. This allows the company to give work to its key vaccination staff and to keep them with the business, rather than losing them to other employers. The cleaner fish vaccination service is currently offering a better margin per fish than salmon.

According to Aqualife's management, they have had a very positive experience of OI projects and have also been well supported by Scottish Enterprise in their provision of advice, direct grants and introductions to other organizations. Their positive experience of collaborative projects and the relationships created as a result, have helped to encourage them to undertake more projects. The true value of this OI project, where the development of IPR was not their main goal, has been to raise the company's profile so that they are seen as an industry leader. This in turn has been shown to lead to increased business and new niche service offerings.

## IP NOT ALWAYS THE DRIVER OF OPEN INNOVATION

OI projects may be seen by the SME as a method to raise its profile leading to new business rather than as a means to create new or improved products, services or processes alone.

## LEADING BY EXAMPLE

Providing SMEs access to other SMEs that have already undertaken OI projects for advice, may encourage and help first-time OI SME partners undertake their own projects.

## INNOVATION CENTRES AS OI FACILITATORS

Innovation Centres can be key in helping to form collaborations, provide funding and project monitoring to allow OI projects to reach completion.

## BOTTOM-UP PROCESS

Listen to your staff working 'on-the-ground' for ideas or options for undertaking innovation projects.



## CONTACT DETAILS

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