



PULPEYE

Sweden www.pulpeye.com

A small high-tech company maintains vital know-how in the country after a large corporate delocalizes its production and benefits from a nationally funded research and innovation grant with technical consultants, research institutes and a graduate student to improve their main product line

Executive Summary

PulpEye is an innovative measurement technology company, focusing on online applications and services in the pulp and paper industry, with the whole world as its market. Its main products are PulpEye pulp analyzer and ScanChip chip analyzer. The company was started in 2002 when Metso Automation closed down their operations in Sweden and moved to Finland. Metso R&D Manager Öjvid Sundvall started Pulpeye as a response to this delocalization fearing that Sweden would lose critical knowledge.

CASE N°: SC36

SECTOR: MEASUREMENT

TECH INTENSITY: HIGH-TECH

LIFE CYCLE STAGE: ESTABLISHED

INNOVATION VECTORS: PRODUCT, PROCESS, SERVICE

OI PARTNERS: PSR, LARGE CORPORATION

KEYWORDS: Pulp and paper, measurement technology, analyzers

- BACKGROUND FRAMEWORK
- INNOVATION CHALLENGE & MARKET OPPORTUNITIES
- OI TRAJECTORY
- BUSINESS IMPACT
- LESSONS LEARNED



BACKGROUND

PulpEye was founded in 2002 by Öjvind Sundvall, an R&D Manager with Finish pulp and paper company Metso. When Metso closed down its Swedish operations, Öjvind was afraid Sweden would lose critical skills in a major national industry. As a result, he started PulpEye. Initially PulpEye offered consulting services, but in 2004 the company launched their own analyzer that allows customers to achieve lower energy consumption, more consistent quality and a more effective use of raw material.

Founded in Scandinavia where raw material is usually pine and spruce trees, the company may move into analyzing fibre from eucalyptus. Its future is bright, especially in Sweden, Germany and South America. PulpEye is also active in the Chinese market.

INNOVATION CHALLENGE & MARKET OPPORTUNITIES

From the inception of the company in 2002 until they launched their first analyzer, PulpEye's business was based on providing services for customers' existing analyzers. Around 2006/2007 the company realized they needed to develop an analyzer that could analyze thinner structures and thus expand their product portfolio.

The Swedish pulp and paper industry had expressed a need for technology that could improve the quality of the end-product and lower energy consumption. The PulpEye team was well-connected within the Swedish pulp and paper industry and had a good understanding of the problems and opportunities associated with online analyzers.

OPEN INNOVATION TRAJECTORY

Concept development

When the project was initiated the company had already developed a functioning analyzer. The new concept aimed at improving the precision of the

existing analyzer and thus build on prior R&D within the company. Vinnova, Sweden's innovation agency, supported the project as part of their Research and Grow programme.

The development process, IPR and competition strategy

PulpEye did most of the development work using internal resources, but they also relied on technical consultants, research institutes and a graduate student. The exterior of the analyzer, for example, was designed by the Umea School of Design. The main challenges were mechanical and optical design issues, which were eventually resolved by the technical consultants and the graduate student. PulpEye did not patent the solution.

The main selling points are the ability to save energy and improve the consistency of quality throughout the production process. The company pursues a niche market strategy providing solutions generally not available on the market. In the words of the CEO: "our analyzer is the Rolls-Royce of the pulp and paper industry".

Commercialization and follow-up

PulpEye is located in Mid-Sweden, specifically in an area where there are many small manufacturing companies. As a result, it was relatively easy to outsource production. At this point PulpEye is doing electrical and automation work in-house, but is considering to outsource these activities as well and thus be able to focus on product development and marketing. PulpEye acquired one license that is linked to this project. The SME also initiated a collaboration with a Canadian company that has developed a similar technology.

A high sales volume is generated though the excellent relationship the company has with the Swedish pulp and paper industry. Of course, these relationships are less lucrative when going abroad. Already in 2002 PulpEye established an office in Canada and later opened up an office in Germany. In many other regions PulpEye works through partners, for example in China, as it is extremely difficult to do business as a small firm when you do not understand the local culture and customs.

BUSINESS IMPACT

PulpEye has continued to improve their analyzers, for example in 2012 they launched their CrillEye.

LESSONS LEARNED

The case is interesting because it demonstrates how a small high-tech company can benefit from external collaborations and build a strong reputation in a major national industry made up of large corporate players.

Main lessons learned:

1. Patents are not always necessary, but understanding the world of IPR is. During its start-up phase, PulpEye did not have the time nor the resources to patent their technology and as a result they lost their rights to a competitor working on a similar solution. Today, PulpEye is more careful, and often tries to release solutions into the public domain to pre-empt competitor patenting.
2. Close collaboration with customers is critical, but that often requires a very good relationship. However, it is difficult to have a deep relationship with all customers, and thus the company needs to select carefully the right depth of interaction with different customers.