

# **ÖHLINS RACING**

#### Sweden www.ohlins.com

The number 1 suspension manufacturer of suspension for motorcycle and cars became involved in an innovation project with lead users and customers to develop a new electronically controlled suspension system geared especially to smaller customers

#### **Executive Summary**

Ohl ins Racing develops suspension systems for the automotive, mountain bike and motorsport industries. Founded in 1976, the company has a strong presence in various forms of motorsport, such as Formula One and Mato GP. Its key customers are Volkswagen, Mercedes, BMW, Volvo and Ford.

CASE N°: SC105

SECTOR: AUTOMOTIVE

TECH INTENSITY: HIGH-TECH

LIFE CYCLE STAGE: RENEWAL

INNOVATION VECTORS: PRODUCT, PROCESS

01 PARTNERS: PSR, LEAD USERS/CUSTOMERS

KEYWORDS: Automotive, suspension systems

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



### BACKGROUND

The company was founded in 1976 by Kenth Ohlin who had been working in his fathers's workshop building exhaust pipes, engines and shock absorbers. In 1984 Ohlins secured their first continuously controlled electronic system patent. In 1986 Yamaha Motor Company acquired a minority stake in the company and in 2007 the founder acquired control of 95% of Ohlins stock.

The company plans to continue focusing on its mechatronic product for the motorcycle market as well as the development of continuously controlled electronic systems for the automotive and motorcycle market.

### **INNOVATION CHALLENGE** & MARKET OPPORTUNITIES

The strategic challenge was to improve Ohlins' position in the growing mechatronic segment, especially within intelligent vehicle suspension systems. Various forms of these technologies had been in existence since the 1980s and it was very clear to Ohlins that a market opportunity existed to pursue their further development.

### OPEN INNOVATION TRAJECTORY

#### Concept development

When the project was initiated the company had already been working with similar technologies. The new concept supported by the Swedish Innovation Agency (Vinnova) aimed at developing an electronically controlled suspension system that could be used by smaller customers as well.

## The development process, IPR and competition strategy

Ohlins did most of the development work themselves and was very careful not to become dependent on external consultants. Customers, i.e. automotive firms, were the most important partners during the development phase, especially when it came to collaboration on the racing track. One important feature of the project was to ensure collaboration with as many different racing teams. Research institutes, such as SP Technical Research Institute of Sweden, were also involved in the testing phase. All in all, the company found it challenging to introduce more advanced mechatronic skills into its core team.

The company makes a point of patenting its inventions.

Ohlins works in a premium niche market where it sells to extremely demanding users who only ask for the very best. Their competition strategy is therefore based on offering the very best products.

#### Commercialization and follow-up

Further downstream in the commercialization path Ohlins also develops production equipment which is tailored to their own production line.

The company realized during their open innovation project that it was not necessarily worthwhile to have certain skills in-house, such as environmental testing and impact testing. Such competences can always be acquired from external research institutes. Ohlins works closely with almost 200 suppliers to craft the optimal suspension components. Not surprisingly the company has experienced challenges with assembling their parts in low-cost countries.

Ohlins has subsidiaries in the US, Germany and Thailand and works with a network of distributors for the rest of the world. It is currently moving towards putting more focus on aftermarket sales support. The company is always striving to make continuous improvements.

### **BUSINESS IMPACT**

Ohlins learned that it is extremely important to define what different partners should deliver in collaborative projects. It is quite challenging to work with small companies (smaller than Ohlins) because they are largely event-driven and therefore it can be difficult to stick to agreed development plans.

It is hard to link sales to individual projects but overall the company has developed very well with a ten percent annual growth rate over a ten-year period. 97% of all sales are export-related.

### **LESSONS LEARNED**

This case is valuable because it demonstrates the importance of working closely with extremely demanding customers.

#### Main lessons learned:

- The exact nature of collaboration matters a lot; for Ohlins that means they have to be present on the racing track because that is where their products are tested under severe conditions by customers. In this way, they can get fast and unfiltered information directly from the most demanding and knowledgeable users. The case illustrates nicely the importance of differentiating between customers and users during product development.
- 2. It can be very difficult for a larger SME to collaborate with a smaller firm. Smaller firms have only small buffers and less specialized staff. As a result, they become event-driven where even small changes can affect their planning and staffing, and therefore have an impact on the relationship with partners.