PROVEN TECHNOLOGY, NEW HORIZONS

By Eddie Andersson, May 2017

When the home market is considered to be more or less penetrated, many organisations seek to diversify. Diversification involves expansion through entering new product or market areas, usually to those related to the organisations existing business. There can be several different reasons for organisations to diversify. It should be noted that growth in itself is not beneficial as such, and diversification decisions should always be carefully considered as the growth must be profitable in order to create value for the organisation. Creating this added value is about finding synergy effects from having more than one business area, and an organisation that is looking into taking their first real step of diversification is Alfdex AB. Founded as late as in 2002 Alfdex AB is now the world leading company in the crankcase gas cleaning industry, with their efficient solutions for crankcase gas cleaning in diesel engines. The Alfdex solution is almost entirely maintenance-free and is predicted to satisfy the environmental requirements for quite some time. And now after 15 years of geographical growth it is time to expand by seeking out new applications for the ingenious Alfdex product. But how can Alfdex’s expertise best be channelled into further success?

Alfdex has this far been penetrating their home market, and focused on market development. As harsher legislation on crankcase gas cleaning has been introduced on new geographic markets Alfdex has been quick to react and thus the company has been growing steadily. Expansion has been going very well and Alfdex are now looking into new ways of expanding.

The Alfdex board has decided that Alfdex need to broaden their portfolio and diversify. As internal suggestions were brought forward to find new ways of using the expertise Alfdex had. To address this strategy of diversification a case project of both prototyping a new product and finding profitable markets for this new product was introduced.

Alfdex’s current products are oil mist separators that use Alfa Laval’s technology used in industry centrifugal separators, which has been adapted to crankcase gas cleaning for diesel engines. The separator is built around a stack of conical of discs that rotates to use the centrifugal force to separate oil and soot from the crankcase gas. An idea was that slight modification would allow an Alfdex product to separate not only liquids, but also solid particles, and this product development is currently being prototyped as part of the case project. This adaption of the technology would open up several new possibilities for expansion, but the question remains which way would be the most beneficial for Alfdex to go?

In order to find new markets the possible applications for an air and solid particle separator had to be mapped out. This was done by looking at Alfdex’s current customers filter needs, by using online publications by manufacturers of products which Alfdex could possibly substitute, and lastly when an understanding of the filter market was reached by just considering possible future filtration possibilities that aren’t being filtered today. The findings suggest that there are numerous markets for separation of air and solid particles, currently often solved by adding a cellulose filter. And in some cases this would be better than the Alfdex separator, as a cellulose filter works just as well with pressure deviating from normal atmospheric pressure and with the air flow being extremely high or low. Though there are still numerous applications where air flow and pressure are suitable for the Alfdex product, and on these markets the functionality of the separator would be at least on par with the filters. Alfdex would be having an edge in the long expected lifetime of the separator, compared to filters that often have to be replaced on a regular basis as they get filled up. So there are numerous markets that the Alfdex product can be profitable in, but how do they determine where they should start? Ideally Alfdex want to be able to utilise as many of their current strengths as possible to their advantage.

Alfdex currently have 15 years’ experience in the crankcase gas cleaning industry, and they are the world leading company in this home market. Staying as close as possible to their current product design, and having as many similarities as possible with their current product would let Alfdex make as much use as possible of their manufacturing experience. Their customers are mainly automotive manufacturers, who use Alfdex’s crankcase cleaners in their car’s engines. Being a trusted supplier is considered a major advantage in many industries, which makes it easier to sell to current customers than to find new ones.

One market that stood out as it would fulfil the similar design to the current product and that it is currently used by Alfdex’s customers is the intake air filter market. An intake air filter is used in most motorised vehicles to protect the engine from contaminations in the outside air. The most interesting segment for Alfdex would be medium and heavy-duty trucks, as these both are the main users of their current product, as well as having an air filter in similar shape and size as the current Alfdex separator.

Intake air filters are considered a commodity in the automotive business today, and very
little innovation is going on. The change from a filter to an Alfdex separator would be radical, and the manufacturers would have to be convinced to make this change. But if there is one company that could convince the industry, it would have to have the right experience, a proven product and the right contacts. It would have to be Alfdex.

These conclusions however assume that this new Alfdex product is on all non-mentioned accounts functioning exactly as the current market alternatives. If this isn’t the case, and the Alfdex separator would be more expensive or less energy-efficient, then the customers would have to be compensated by some other form of added value. Currently there is little room for improved performance with the Alfdex separator, as filters currently filter out about 99.9% of the solid particles. But the economic lifetime of the Alfdex separator is however expected to surpass the average filter by far, and even the expected economic lifetime of the entire truck, and thus will never have to be replaced. As the aftermarket is an important part for automotive manufacturers, and there is no apparent technical improvement that comes with an Alfdex separator, this idea can still be difficult to pitch to the automotive manufacturers directly. Instead it could be an idea to target the aftermarket, if the product could be designed to fit directly into the filter socket, as the user would have incentive to purchase a separator if the price would not vary too much from a replacement filter.

The intake air filter market is however just one of the possible places where a new Alfdex separator could be launched. And as most filter industry information was gathered through the online publications by industry organisations, which target current or possible customers, the impression could be biased. The industries might therefore seem more attractive than they actually are and the actual possible profitability of the markets would require more in-depth analysis to map out.

However the theoretical model combination used to evaluate the possible markets provide a framework to use when considering possible markets. The model funnels possible new markets through the three steps Needs, Feasibility and Profitability. This is a generic model that can effectively be applied in other cases of new product introduction. The model ensures that the product will have a place on the market, that the product can be produced by the investigating organisation and that the application with the most positive synergies with the current product portfolio is selected. The model with recommend the market that provides the most added value to the stakeholders.