



## BerkeleyHaas Case Series

### Webasto: Co-Creating Innovation with Lead Users

#### Case

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## Abstract

In the book, *Open Services Innovation*, the concept of co-creation with one's customers is touted as a best practice for companies. This is also the prescription offered by the Lead User methodology built on the work of Eric von Hippel. There are a number of companies that have benefited from embracing the idea of co-creating with customers. And business school cases in general tend to discuss successful examples of various proffered concepts.

This case is different. It is, in fact, a failure case, where a company faithfully followed a "best practice", and ended up with nothing to show for it. As such, it can be a powerful antidote to the usual success cases that comprise much of our syllabi.

The Webasto case study provides students with an example of a company that focused on product innovation by incorporating a lead user method. Alexander Lang, director of marketing, created an elaborate open innovation process in order to help Webasto not only create innovative products, but also to differentiate itself as an innovative company. There are a number of interesting innovation, organizational, strategy, change management, and leadership issues this case brings up, all likely to generate a lively class discussion. As it happens, some of these issues prove fatal to the initiative.

## Case

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**Keywords:** Corporate strategy, entrepreneurship, innovation, leadership, organizational change

The late 2000s were challenging times for automotive suppliers. In rare cases, automotive suppliers did manage to carve out considerable market power for themselves or to diversify into the consumer market, as in the case of Bosch. However, for many decades, the big car manufacturers (OEMs or Original Equipment Manufacturers) had been squeezing every last cent out of their suppliers. The enormous fixed costs and escalating R&D investments required by the OEMs had been eating away at supplier margins. It was standard practice to pass these cost pressures on to the independent suppliers by demanding material and component cost cuts. OEMs exploited their market power to the point where suppliers operated in a near perfectly-competitive market. However, this also meant that the suppliers were extremely vulnerable to adverse market developments such as the financial crisis in the late 2000s where automotive suppliers were the first to feel the negative effects.

Webasto AG, a world-leading automotive supplier, tried to avoid this trend by diversifying into end-customer markets and by building up considerable market power themselves. Webasto, a medium-sized German automotive supplier, tried to capitalize on the manufacturers' dependence on suppliers for innovation by coupling its value proposition with services in innovation and marketing in a highly networked way, as well as opening up its innovation process to incorporate innovation impulses from "lead users" or leading buyers who are the early adopters of new methods, products, or technologies.

## Automotive Suppliers: the Industry's Shock Absorbers

Traditionally, the multi-tiered automotive supplier field was categorized into different levels of value-add, with the OEM acting as the upstream final systems integrator (**Exhibit 1**). Essentially, the task division between OEM and the different tiers of suppliers represented a decrease in complexity. Third-tier suppliers provided fairly standardized parts which required low manufacturing and development know-how. Further on in the value

chain, the second tier suppliers integrated parts and components into more complex systems, a task which required a high-level of technical competence but little manufacturing know-how. The first tier module supplier again needed less technical know-how but a higher degree of assembly know-how to ensure that the integrated modules were compatible. At the top of the supplier pyramid, directly facing the OEM, the sub-system integrator combined a high level of technical competence and manufacturing know-how, effectively providing a large amount of development work for the OEM.<sup>1</sup> **Exhibit 2** illustrates how, over the years, OEMs have been passing increasing chunks of the value chain on to their suppliers:

Since suppliers provided the lion's share of value created in the car industry, they were also the main source of innovation for the OEMs. Often, suppliers invested in much higher investment in R&D compared to the OEMs. In order to earn a return on their R&D investment, suppliers were quick to sell innovations to multiple customers whenever possible. This was one of the reasons why innovation in the industry diffused so rapidly from one OEM to the other. However, such a task split also increased development risk on the part of the suppliers, since they needed to provide warranties to the OEMs for the components and subsystems they created.

In addition to the significant warranty costs they had to bear, suppliers were weighed down by the demand for yearly cost reductions by the OEMs. In order to meet these demands, they were expected to continuously optimize production processes of existing products. Also, suppliers were required to set up a global presence in order to follow the OEMs to their global manufacturing plants. Not surprisingly, the pressure exerted by the OEMs resulted in significant consolidation. In 2000, only 5,600 automotive suppliers were left from 30,000 in 1988. By 2015, that number was expected to further decrease to around 2,800.<sup>2</sup> A prominent case of acquisition was Continental's acquisition of VDO (an international supplier of automotive electronics and mechatronics) from Siemens in 2007, amounting to €11.4bn (\$16.9 billion U.S.). **Exhibit 3** illustrates the consolidation of automotive suppliers and OEMs between 1900 and 2015:

## Company Overview

Founded in 1901 as "Wire and Iron Factory Wilhelm Baier" in the south of Germany by the mechanical engineer Wilhelm Baier, Webasto originally manufactured goods made of cut and bent metal. In 1932, Wilhelm Baier developed the first folding car roof which could be easily opened and folded manually—a first step towards becoming an automotive supplier. In 1935, Baier designed a "fresh-air heating system" for water-cooled machines. Throughout its history, the company has continued to introduce innovations such as the first steel sliding roof, the first glass sliding roof, and the first five-piece retractable hard-top.<sup>3</sup>

Still independently owned and controlled by the founding family, in the mid-to-late 2000s, Webasto was the global market leader in two segments, with a 50 percent global market share in both roof systems and temperature management systems. Overall, Webasto drew on a production network of 26 production plants. In addition, it boasted 43 subsidiaries worldwide. In 2006, turnover reached €1.6bn, while R&D investment amounted to €133 m, representing 8.3 percent of sales.<sup>4</sup> Year-on-year growth in turnover was 8.5 percent from 2004 to 2005, 8.1 percent from 2005 to 2006 and 15.2 percent 2006 from to 2007. Webasto's high R&D to sales ratio reflected the company's strategy of innovation leadership in its respective markets. "Some competitors operate with an R&D to sales ratio of around one percent—we purposely retain high R&D investments in order to be able to sustain our competitive edge."<sup>5</sup> High R&D investment, among other things, enabled Webasto to develop sophisticated show cars used to demonstrate new ideas at the major automotive exhibitions and events. As an additional indicator of its R&D productivity, Webasto filed 900 patents between 2004 and 2007.

With a presence in 56 countries, Webasto's 6,286 employees were based mainly in the three factories in Germany, the production facilities in the UK, the Netherlands, Italy, Portugal, Turkey as well as China, Japan, Korea, and the United States. Thirteen percent of the company's overall workforce was made up of engineers.<sup>7</sup>

Webasto: Co-Creating Innovation with Lead Users

Webasto's core product range consisted of complete roof systems, heating systems for personal cars, and cooling and air conditioning systems for trucks, travel vehicles, and boats. Webasto's history of engineering excellence and its track record of numerous successful product innovations, underlined by its prominent market position in both roof systems and temperature management systems, have created a strong engineering-driven culture accustomed to success achieved through mainly technical problem-solving capability. Alexander Lang, director of marketing said: "We had five engineers working on a lamella roof for the Mercedes-Benz A-class for seven years, they even worked from home. They were completely convinced of their idea and simply couldn't be stopped, although their solution didn't make any sense from a commercial perspective."

Traditionally, market demand had played a minor role in the company's process and culture, especially with its B2B focus and a strong reliance for new leads from sales. The spirit instilled by its founder Wilhelm Baier was still part of Webasto by the late 2000s, manifested in a staunch engineering culture and pride, according to Lang: "Our engineers claim that we have the best project management process and that we make roofs. It's difficult to convince them of the need to start developing entirely new products." He also said: "It is this culture which needs to be changed first in order to be able to change the mindset to one which is centered on market demand." <sup>8</sup>

## New Leadership and Culture Change

In 1999, the second externally appointed CEO in Webasto's history, Franz-Josef Kortüm, masterminded and initiated Webasto's transformation from supplier of modules and components to what he referred to as a "Total Process Partner". Kortüm had been ousted as the CEO of Audi by Ferdinand Piëch, before joining Webasto as a member of the board in 1994. <sup>9</sup> Before Kortüm's appointment, Webasto had been successfully led by the great-grandson of the founder, Werner Baier. Baier who had taken over the helm in 1970, had steered the company's fortunes as CEO for 20 years. At the beginning of the 1990s, Rudi Noppen assumed the CEO position and Baier became a member of the supervisory board. Noppen had previously been the head of production at Porsche. <sup>10</sup> In 1999, Kortüm succeeded Noppen as the CEO of Webasto. <sup>11</sup>

Kortüm was a quintessential car guy who had risen through the ranks of several German car companies. He was fully aware of the predominant mentality within the OEMs, in particular how their supply chain specialists liked to bully and squeeze the suppliers. In the long run, he had realized that Webasto's competitive advantage could only be sustained by integrating forward into services and marketing. His vision was to augment Webasto's engineering know-how and technology base with value steps normally carried out by automotive OEMs. <sup>12</sup> Although for the time being, Webasto enjoyed steady growth and had a solid reputation on which its firm relationship with its customer was based, Kortüm knew that the development which had led to such massive consolidation within the automotive supplier base was not over yet. In only 10 years, between 1988 and 1998, the global number of automotive suppliers had shrunk from 30,000 to 8,000 with the wave of consolidation aimed at creating synergy effects set to continue. <sup>13</sup>

With Kortüm bringing in a perspective shaped by years of experience working for automotive OEMs, marketing and the search for new, longer-term sources of growth received his immediate attention. He appointed Alexander Lang, a former management consultant, as the new director of marketing and innovation in 2002. One of the main objectives of Lang's appointment was to re-focus market research in order to identify new areas of growth. Lang would eventually mastermind a new marketing strategy and the integration of "lead users". This was not an easy task, since Webasto didn't have access to end users and only had limited scope to identify new growth potential, let alone validate early concepts with OEMs.

## A Different Strategy

Traditionally, the business model of automotive suppliers such as Webasto was characterized by sheltered incremental development of existing products, as well as occasional innovations driven by particularly dedicated engineers or “Champions”. Once incremental or novel developments had reached prototype stage, they were presented to automotive OEMs, often directly through personal contacts by Webasto engineers or sales representatives. Market signals had played a minor role for the R&D organization, apart from the leads identified by the sales department.

Development required a high degree of secrecy—loss of ideas or concepts at early stages of development to an OEM or competitor could dramatically erode the marginal competitive advantage achieved by being ahead in terms of lead time. Thus, the pressures for efficiency and competitive advantage based on cost leadership led Webasto to pursue a differentiation strategy achieved by augmented product and service offerings. At the same time, Webasto tapped directly into the end user market which enabled it to identify new market trends directly rather than through the intermediary OEMs and to validate internal developments from an end customer perspective early on. Thereby, market risks would decrease, lead times improved and sales could use the “market tried and tested” label as an additional sales argument.

Alexander Lang held a Master’s degree in Chemistry from the Technical University Munich. Before joining Webasto, Lang worked as a researcher at Siemens, where he formed part of a laser technology team. He subsequently held positions at Ernst & Young and at Droege & Company AG as a management consultant in restructuring as well as sales and marketing. Lang was involved in various industry network associations mainly revolving around the exchange of best-practice innovation management process knowledge. His affiliations comprised:

- “Future Automotive Industry Structure (FAST) 2015” by Mercer Management Consulting, the Fraunhofer Society for Production Technology and Automation (IPA) and the Fraunhofer Society for Materials Management and Logistics (IML).
- The Network of Automotive Excellence (NoAE), was an industry-wide network of automotive OEMs and suppliers aimed at strengthening the European automotive competitive advantage.
- “Bayern Innovativ” was a federally-sponsored agency facilitating technology collaboration in Bavaria by providing public funding for special technology focus areas.
- “Innovation Interest Group”, consisting of innovation managers from various industries. The group’s aim was to jointly optimize innovation processes.
- The development of the lead user method has been conducted in close collaboration with several universities. For example, Humboldt University in Berlin has supported Webasto with the development of statistical methods for lead user identification. The University of Munich supplied know-how concerning innovation processes, the Technical University Aachen (RWTH) provided more insights on how to battle the Not-Invented-Here syndrome. And lastly, Professor Eric von Hippel’s Innovation Lab at MIT helped optimize the lead user method and provided benchmarks from other companies applying the method.
- The “Discontinuous Innovation Lab” headed by Prof. John Bessant from Imperial College London and Professor Kathrin Möslein from University of Erlangen-Nürnberg provided complementary input on how to anchor discontinuous innovation processes in organizations.
- ‘Munich Network’ was a Munich-based business network concerned with entrepreneurship, growth, and value creation for technology companies in the Munich region.

In addition, Lang lectured at several German universities, such as Zeppelin University in Friedrichshafen. His know-how of lead user involvement was featured in several publications within the innovation management and marketing related fields.

A talented networker, Lang maintained and furthered his external network from day one of his appointment at Webasto. Only by leveraging complementary competences, especially universities and professional networks, was he able to build up his marketing and innovation department in a relatively short period of time and with an optimal allocation of resources.

As opposed to the wide external network, Lang considered the degree of the marketing department's internal network as "poor". Lang blamed this sub-optimal internal connection on the fact that the prophet's teachings were not always appreciated by his peers. Secondly, in his opinion, the R&D organization was inflicted with a strong "not-invented-here" syndrome.

Marketing seemed to have a generally weak recognition and indistinct reputation in the rest of the organization due to the fact that the sales function had traditionally commanded a monopoly on customer contact and lead generation. Since the innovation management function was located within marketing, it faced some considerable opposition from the mainly engineering-driven organization. According to Lang:

We are a B2B company. This means that the sales department is much more powerful than marketing. It is the sales people who generate new leads; they are in close contact with the customers and identify new ideas. Being a supplier, we are dependent on the input provided by the OEMs. Secondly, we are buffering enormous cost pressures which jeopardizes innovation even more.

Lang was aware early on that his new position entailed a comprehensive cultural change to address these "soft" issues, although initially, Lang admitted that he had regarded his mission as primarily concerned with creating the tools for a new innovation process. Gradually, however, he realized that rather than creating a completely new set of processes and tools, he would have to work on fundamentally changing the company's culture. Some of his early change initiatives tried to address this challenge.

## Creating an Environment for Creativity and Innovation

One of the first things Lang set out to do was to foster a company culture that would be conducive to creativity and innovation. He said: "What struck me were all these old posters of cars or parts which had obviously been adorning the walls since the early 1980s." Lang addressed this problem by offering employees customizable calendars featuring inspiring, modern imagery. Employees were able to choose from a number of pictures that would make up their calendar, and they could also personalize other aspects of the calendars. The idea was received enthusiastically by all staff and has continued to be popular over time.

Lang also envisioned a creative space, a room decorated in such a way that it would provide an inspiring environment. The task of designing this space was assigned to several master thesis students in the final year of their architectural program. However, the project was abandoned as part of a cost reduction effort.

Moreover, in preparation of the Frankfurt motor show in 2005, an idea competition was set up among all Webasto employees where 180 ideas were generated, and the winning idea was implemented in a show car. The idea consisted of an alternative to the sun visor. The sun visor was replaced by inductive foil, which could adapt its shading through touch to prevent blinding from sun rays.

In a similar vein, as the 15 per cent rule championed by 3 M, Lang further enabled employees to allocate a fraction of their time to exploring new ideas (brainstorming and green-light thinking). However, this slack time was also abolished in a drive to more efficiency. Unfortunately, Lang noted that his efforts to improve and inspire a creative atmosphere often collided with measures aimed at improving the efficiency in the company.

## From Market Research to Lead User Integration

Another change Lang was driving pertained to the market research methods employed. As a B2B supplier, Webasto depended on OEMs' inputs, which in turn derived their decisions for new modules from their own innovation strategies that had been mostly determined by the OEMs' marketing and sales channels. When proposing innovations which had been developed without a concrete demand from an OEM, Webasto placed a risky bet every time it presented a prototype to an OEM. Thus sufficiently developed prototypes were necessary since earlier revealing could erode any lead time advantage attained from having the idea first. Too early revealing could mean a loss of a non-protectable idea to the OEM or to a competitor who might have more favorable cost structures.

However, in order to improve R&D effectiveness, reduce failure rates, and offer a more compelling value proposition to OEMs, Webasto couldn't rely on internal idea generation alone. Lang's vision, therefore, was: "Rather than being a solely OEM-oriented supplier, Webasto should become an organization which develops and produces innovations geared towards end-users."<sup>14</sup> To this end, Lang set out to create a comprehensive database of end customers who were using Webasto systems in their cars. For instance, Webasto had supplied the four piece retractable hard top for the new Volvo C70 and would thus try and get data on Volvo C70 drivers. In addition to purchasing customer databases, Lang used several direct mail campaigns. In collaboration with the University of Berlin, he then created marketing research tools, primarily statistical tools to be able to provide, based on their customer sample, projections about the take-up rates expected for future Webasto products integrated into cars. Take-up rates are a metric used by the car industry for the percentage of customers ordering a particular optional extra in the car.

After having created a substantial end-customer database and the marketing research tools to mine this database, Lang still wasn't entirely satisfied. He felt that classical Marketing Research offered little in terms of truly radical innovation. Rather than developing innovation to satisfy the customer mean, Lang wanted to come up with game-changers, entirely new applications of existing resources and competences, and future-oriented products. In 2002, Lang partnered with the Lead User specialist Eric von Hippel in order to apply von Hippel's lead user methods at Webasto. Research on the sources of innovation and the role of lead users suggested that the methods used for identifying customer requirements through ordinary market research failed to reveal truly radical innovation since the majority of users had developed a functional fixedness towards products caused by repetitive use.<sup>15</sup> Conversely, lead users, according to Eric von Hippel (1986), were at the cutting edge of trends in new products or process needs while they expected to obtain a high benefit from innovations addressing those needs.

Lang hoped that by involving users of Webasto products in the early development phase he could generate new concepts and products which could lead to new areas for organic growth. Eventually, Lang's initiative would lead to one of the most well-known applications of the lead user method in Germany. However, in contrast to von Hippel's methods, Lang stressed, Webasto "only uses 'real' users, not experts from other industries", which meant that Webasto's definition of lead users related to actual private users of Webasto systems in other products (e.g. users of a Webasto roof systems in a Volvo C70, Mini Convertible or a VW Eos).

## Webasto Lead User Process

Webasto divided its lead user process into seven steps. These steps consisted of: (1) Identification of Search Areas, (2) Lead User Workshop, (3), Concept Creation, (4) Evaluation Survey, (5) Product Clinic, (6) Prototyping, and (7), Exhibition of Prototype (**Exhibit 5**).



## ***(1) Identification of Search Areas***

Identification of Search Areas focused on the analysis of corporate strategy, matching it with the expectations of Webasto's top management in terms of timing, costs, customer or technology orientation, segments for innovation, focus on EBIT or growth, and whether radical or incremental innovations were sought. This strategic alignment was then compared to general customer, societal, technological trends, coupled with market segmentation and surveys among relevant customers.

Subsequently, all services and technologies available to the company were surveyed and collated. These inputs were entered into a matrix which was sent to 30 to 50 decision makers in the company. Where different factors aligned, these nodes were marked as a priority. This could be, for example, battery storage technology for mobile phones. The resulting search areas were clustered according to priority. Finally, the clusters were again verified through a survey and finally formulated as calls for actions, such as "Empower the Move". Calls for action were formulated in such a way that they conveyed a multi-faceted topic, ideally consisting of several interrelated problems and technologies.

## ***(2) Lead User Workshops***

In the course of five years, Webasto succeeded in creating a database of 10,000 end customers; i.e. customers who were using Webasto systems in their cars or commercial vehicles. The benefit of using a proprietary customer database, rather than purchasing one from third parties, was that it provided Webasto with a source of fresh contacts which were ideally suited to Webasto's requirements, as Gero Schling, manager of market research at Webasto stated. It also eliminated the risk of the database being "exhausted" in case it was sold to several companies.

From this database, Webasto was then able to select customers who had a matching profile for the specific requirements of the different lead user workshops. These users were identified employing a model which measured knowledge about the product as well as social competence. Webasto called this process "customer's esthesia to innovate", or CE2I®. CE2I®, developed in partnership with the Humboldt University in Berlin. It measured cognitive complexity, team competence, general knowledge, and ability for knowledge transfer.

From the customers who matched the lead user criteria, around 25 were invited to take part in a lead user workshop held in a hotel in the German Alps. According to Lang, up until 2008, no one had turned down an invitation to one of the workshops, which was noteworthy considering that apart from receiving free accommodation and food, the only remuneration participants received were two gas station vouchers valued at €20 each. Thus, participants, who had to waive all rights to any of the ideas they generated during the workshop, displayed very high levels of intrinsic motivation. Participants were also asked to create models or drawings of ideas they might have already thought of and bring them into the workshop. This ensured that the participants were all equally prepared. None of the Webasto engineers were involved in the lead user workshop, mainly because workshops were conducted at weekends outside of working hours. In addition, Lang said:

When we tried including our engineers in lead user sessions, they gave the users stage fright since they were not participating but watching very intently and being overly critical of sometimes wild ideas. It didn't exactly improve the creative atmosphere. In addition, the ideas coming out of the interviews are very fragmented, the knowledge of the users can't be transferred one-to-one; it needs to be filtered.

In order to facilitate the workshops, a creativity coach led participants through different exercises and group sessions. Ideas, which sprouted during the workshops, helped by various creativity-enhancing games and techniques, could be captured on site by a designer who produced scribbles and more advanced artwork of any idea the participants came up with. At the end of the workshop, the 100 ideas generated on average were all prepared by designers to a high standard, and were edited into a leather-bound book. In addition, they were transferred into the internal idea management system.

### ***(3) Concept Creation***

A maximum number of five Webasto internal experts selected the most promising ideas generated in the lead user workshop and developed them further. In so doing, the ideas were turned into a standard format which could then be further disseminated into Webasto's innovation processes. The concept creation entailed more concrete drawings and more detailed description of the idea, with a focus on Webasto's product portfolio and customer base. This stage was critical since ideas were in danger of facing immediate rejection if they failed to convey a certain sense of professionalism, according to Lang:

It is crucial that external ideas are of the same quality as internal ideas. Only then can they be processed in the regular way. At Webasto, external ideas are prepared accordingly and then included in the regular process. Ideas, which have come out of lead user workshops will be bound with a leather cover and circulated in a professional-looking book within the company. In addition, we generally enhance visually by creating technical drawings and scribbles. In this way, they are of equal quality as internal ideas, if not superior. You can't tell whether ideas have been submitted externally; they follow the same process as internal ideas.

### ***(4) Evaluation Survey***

Before ideas that have passed the concept creation stage proceeded, they were entered into the digital idea management system in order to encourage feedback from the internal users of the system. Then, a total sample of 400 customers was approached and sent a written evaluation request to validate the ideas. After that, the responses were entered into the internal idea management system. In addition, the best ideas from lead user workshops were circulated in leather bound books. However, despite attempts to match externally generated ideas with internal ideas, Lang admitted that marketing could be identified as the submitter of the idea. The high quality of the leather-bound books also highlighted the difference to some of the internally generated ideas; thus, adverse reactions due to a "not-invented-here" syndrome were not entirely eliminated.

The ideas within the digital idea management system could be rated on a scale of one (excellent) to six (poor), by select experts of the corresponding field. From an initial pool of 1,000 ideas, including internal as well as lead user ideas, the 30 best ideas proceeded to the second stage. An expert steering group assessed those 30 ideas and again rated them on a scale of one to six, which created several matrices of the dimensions ranked. This second filter left three ideas, which were presented to the IMS Board of Innovators. Each of the three ideas received a small amount of seed capital of around €1,000. If there wasn't an engineer actively driving the idea already at this point, it was assigned to a development engineer with the required competence. The seed capital attached to the idea was intended for him or her to conduct competitor analysis, market research, or feasibility studies.

## ***(5) Prototyping***

An idea generated through a lead user workshop which passed the stage gates of the innovation process successfully was then turned into hardware for a first, fully functional prototype that could be presented to end users or OEMs.

## ***(6) Product Clinic***

The first prototype of the solution was then presented to a panel of lead users, again recruited out of the customer database, and discussed on-site together with development engineers. Functionalities were tested and another round of ranking confirmed the viability of the prototype.

## ***(7) Exhibition of Prototype***

Finally, the fully functional prototype was presented to OEMs at the major industry trade shows, such as the Frankfurt or Detroit Motor Show. Sometimes, prototypes were integrated into the show cars Webasto created specifically for the major automotive events, strengthening its positioning as an innovation leader.

Until August 2008, Webasto had conducted 12 lead user workshops, in turn generating around 100 ideas each. To provide some examples, the workshops treated “light and shadow” or how lighting systems could be integrated into roof systems to play with the lighting ambience in the car. A further workshop in the summer of 2006 was aimed at creating ideas for new concepts for novel tailgate systems.

## **Spinning the Lead User Process Out into a New Service**

After having refined the lead user process to a considerable degree of sophistication, Lang even started to package the “Webasto Lead User Process” into a product. As a sideline to his regular activities, Lang created “Webasto Open House”, a service that enabled companies from all kinds of industries, to learn about Webasto’s methods and apply it within their organizations.

Participants mainly came from large industrial companies, but some also came from completely unrelated businesses. As Lang recalled, one of the participants in the Open House workshops ran his own bakery and subsequently applied the lead user method to improving the quality and appeal of his bakery products. Lang also offered a customizable packaged software version of the internal idea management system as part of his Open House concept. In the first year of running Webasto Open House, Lang generated around €60,000, certainly not an enormous sum, but noteworthy at such a stage, and just about sufficient to cover Eric von Hippel’s yearly fees. Not only did Lang thereby open a new, growing source of revenue, but he positioned Webasto as an industry leader in innovation management processes. Webasto’s excellence in the lead user process was unrivalled among suppliers, and even attracted the attention of many innovation managers from automotive OEMs.

In 2008, Webasto was awarded the first place in the category Innovation Marketing at the “Top 100” industry award, an award honoring best practice among SMEs (Subject Matter Experts). Numerous articles in the industry and trade press lauded Webasto’s process, generating free PR worth tens of thousands of Euros. In March 2008, Lang said: “Now we only need a success story, a product coming out of our lead user process.”

Lang depended dearly on a successful product or service coming out of his many internally held lead user workshops. Despite his efforts, he felt he was fighting a losing battle to really get a new approach off the ground. Some of his attempts at introducing new environments for creativity had been thwarted, and he felt he still lacked the initially higher resources to really manage the change. Budget cuts at all ends were de rigueur, and marketing, which was valued as considerably less core than other functions in the organizations, certainly wasn't spared. Although Lang had the support of CEO, Kortüm, other members of the board and the supervisory board remained highly skeptical of his initiatives. However, in 2008, finally an idea made it from lead user workshop to a joint pre-development project with an OEM.

## Success at Last? The Multi-Purpose Tailgate

In early 2006, a Webasto engineer approached Lang and asked him whether he could find him some ideas dealing with the functionality of the tailgate. The engineer was desperately trying to come up with something truly novel, but had so far not been able to come up with any suitable ideas. Lang took the suggestion on board and crafted a search area around it. In alignment with strategy and the internal requirements mentioned, a call for action was formulated which was intended to convey the desire to find new, holistic solutions for transportation (Step 1 in the Lead User Process at Webasto). The call for action was labeled "Cargo Management System". This search area was entered into the idea management system in order to stimulate ideas from internal employees. Then, a lead user workshop was organized in the summer of 2006 to elicit novel ideas from innovative customers. Like other workshops, the summer workshop in 2006 generated around 100 ideas. What became evident during the workshop were the widely diverging demands that the lead users voiced (Step 2 in the process). These included:

- No storage on the roof.
- No storage inside the car.
- No restriction of boot space.
- No additional parts which might have to be stored in the garage.
- Modular tailgate comprising several opening functions.
- Opening and closing with electrical support—ideally remotely.
- Opening function of the tailgate in fully loaded condition.

For the subsequent concept workshop, Webasto teamed up with material specialist ThyssenKrupp. The collaboration with ThyssenKrupp provided a good match of complementary competences. Webasto provided sound know-how in system integration and specialist knowledge in doors, roofs and latches, while ThyssenKrupp provided the required know-how in metallurgy necessitated by the sophisticated functionalities that the concept demanded. <sup>16</sup> Together, Webasto engineers and ThyssenKrupp specialists jointly refined and filtered the ideas. Twenty ideas remained after this stage (Step 3 in the process). ThyssenKrupp remained closely involved throughout the remainder of the process. Following the concept workshop, the 20 ideas were presented to 300 people from the customer database (Step 4 in the process). Three ideas were favored, and one idea was finally approved by the innovation review team.

The final idea consisted of a multi-purpose tailgate (MPT), a tailgate catering to the diverse needs that the lead users had expressed, while retaining the comfort and ease-of-use users were accustomed to from ordinary tailgates. The MPT featured an opening rear window, a fold-out bike-rack, and automatic full opening function of the trunk, even when loaded. As a next step, the final idea was jointly developed into a fully functional prototype, built into a VW Passat car (Step 5 in the process). As **(Exhibit 7)** shows, the space required for the hatch was the same that would be required for the ordinary tailgate. Hooks and straps to fixate cargo were integrated in the solution. Again, a sample of customers was recruited into a product clinic. Webasto

and ThyssenKrupp's joint effort was demonstrated alongside competitors' products (Step 6 in the process). Customer feedback proved to be highly enthusiastic once more, and it was decided to finally present the solution to the wider public.

The Multi-Purpose-Tailgate (MPT) was presented at the international car exhibition IAA in Frankfurt in 2007. And, as Lang recalled, the MPT attracted significantly more attention from representatives of the OEMs as well as the general public than the Ferrari Superamerica displayed nearby. Thanks to the exhibition of the MPT at the Frankfurt Motor Show, a large, premium German OEM signaled interest in the solution. During the course of early 2008, negotiations started and a joint pre-development effort commenced.

The customer requirement for the functionality to be able to open the tailgate even when fully loaded (automatically) had severe consequences for the stiffness of the car body. This meant that in order to provide the full functionality, the OEM would have to create either a new body structure for all models with the tailgate, or to develop a second car body structure just for the customer ordering the optional tailgate. This wouldn't make sense from an economic perspective. Thus, the OEM continued to search for viable solutions.

## Notes

1. Helmut Becker, Auf Crashkurs: Automobilindustrie im globalen Verdrängungswettbewerb (New York: Springer, 2007, 2<sup>nd</sup> edition), p. 168.
2. [http://www.oliverwyman.com/ow/pdf\\_files/9\\_en\\_PR\\_Charts\\_Future\\_automotive\\_industry\\_structure - FAST\\_study.pdf](http://www.oliverwyman.com/ow/pdf_files/9_en_PR_Charts_Future_automotive_industry_structure_FAST_study.pdf).
3. [www.webasto.de](http://www.webasto.de).
4. [www.webasto.de](http://www.webasto.de).
5. Presentation, Alexander Lang, director of marketing and innovation, July 31, 2009.
6. Company brochure, 2008.
7. Presentation, Alexander Lang, director of marketing and innovation, July 18, 2006 and July 31, 2008.
8. Presentation, Alexander Lang, director of marketing and innovation, July 31, 2008.
9. K. Langer, Dem Himmel so nah. Retrieved September 12, 2008, from <http://www.manager-magazin.de/koepfe/unternehmerarchiv/0,2828,25811-2,00.html>.
10. At Porsche, Noppen was succeeded by Wendelin Wiedeking, who has later been credited with the re-markable recovery of the car maker, which, at the time of his appointment, was teetering on the brink of bank-ruptcy.
11. K. Langer, Dem Himmel so nah. Retrieved September 12, 2008, from <http://www.manager-magazin.de/koepfe/unternehmerarchiv/0,2828,25811-2,00.html>.
12. Presentation, Alexander Lang, director of marketing and innovation, July 31, 2008.
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14. Presentation, Alexander Lang, director of marketing and innovation, July 18, 2006.

15. Chr. Lettl and C. Herstatt, "Learning from Users for Radical Innovation," Arbeitspapier NR. 27, Technische Universität Hamburg-Harburg, 2004.

16. R. Sünkel, "Multi Purpose Tailgate MPT," 2008. [http://www.thyssenkrupp.de/documents/Publikationen/Techforum/techforum\\_1\\_2008\\_de.pdf](http://www.thyssenkrupp.de/documents/Publikationen/Techforum/techforum_1_2008_de.pdf).

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