SUMMER DESIGN OFFICE
- AN OPPORTUNITY AND CHALLENGE FOR STUDENTS AND SMALL ENTERPRISES

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ABSTRACT
The summer design office project was arranged for the first time in Norway in 2006. The project included two design offices consisting of four and five master students of design engineering who served a total of 15 smaller local businesses. The goal of the project was to give students practical experience, and to provide smaller enterprises with an opportunity to utilize design competence for a relatively low cost. The students lived nearby their customers during the seven week duration of the project. The assignments ranged from standard product design development to graphic design and city planning. At the end of the summer, the feedback from both students and enterprises was very positive. The students reported increased skills in customer interaction and business management. As a result of both local and national attention, the project organizers were approached early by interested companies for next year’s project.

Keywords: Industrial design, practical experience, students, small enterprises

1 INTRODUCTION
Preparing design students for practical customer interaction might be a challenge in a world where the design market is at times quite tight. In Norway, where the industry is largely based on natural resources, and the demand for design competence is still quite limited, internship opportunities during training are almost impossible to come by. Concern for the country’s dependence on non-renewable resources has however initiated a stronger focus on design as a tool for innovation. A survey conducted by the Norwegian Design Council in 2006 showed that Norwegian enterprises were positive to design competence, but few had trained designers on staff [1]. The study also revealed some confusion regarding designer competence and skills. As a way to both increase the understanding for design skills in Norwegian industry as well as giving students practical experience, Bedriftsforbundet, the Norwegian Association of Small and Medium sized Enterprises (NASME), initiated the Summer Design Office project in 2006. The project teamed up design students from the Department of Product Design at the Norwegian University of Science and Technology (NTNU) with 15 small enterprises with little or no previous use of design competence. This paper explores the execution and result of this project.

2 THE PROJECT
The Summer Design Office project was carried out for the first time in the summer of
2006. NASME had initiated the project the previous fall with two main goals: making Norwegian enterprises more conscious of design as a source of increased innovation and value, and giving students relevant practical experience with real customers. In a long-term perspective, the aim would be to create more opportunities for designers in Norwegian industry, and consequently strengthen the country's innovation output. The project became a collaboration, between NASME, Innovation Norway (Innovasjon Norge) and the NTNU. Innovation Norway, the state owned agency promoting innovation and entrepreneurship in Norway, assisted financially while the university provided students for the project. The project idea was based on the Swedish Industrial Design Foundation's (SVID) Summer Design Office program which has been running since 1997[2].

It was decided to establish two offices in the small villages of Oppdal and Jørpeland. Each office was staffed by 4 and 5 students and serve 7 and 8 smaller local businesses, respectively. The project was to run from the 12th of June to the 7th of July, and from 24th of July to the 11th of August, about seven working weeks all together.

The students were from the master program of product design engineering at NTNU. In addition to product design courses, the five-year program consists of technological subjects like maths and physics, as well as mechanics, human factors, usability and design strategy. The aim is to educate product designers with a complete understanding of the entire product development process. As this was the first time the project was carried out, the organizers limited the participation to one school only.

Five students were selected for the Oppdal office, and four to the Jørpeland office. At Oppdal, there were two 4th year students and three 3rd year students. At Jørpeland, there were one 4th year student and four 3rd year students. At each office, one 4th year student was appointed office manager. One second year student was also hired to design graphic material for the project. This included a project logo (Figure 1), t-shirts, posters, etc. The design office students were provided with housing in the vicinity of the businesses. The offices were open from 0830 to 1600 Monday to Friday, and several of the businesses came by during opening hours throughout the summer. The students got about 110 NOK hourly pay (about 14 EUR) plus holiday allowance and free housing.

![Figure 1 Project logo](image)

The business-participants were smaller local enterprises with little or no previous experience with designers. The project aimed at giving businesses which normally would not engage designers an opportunity to work with a design office for a small program fee – 14,000 NOK, or about 1,700 EUR. Despite the initial goal of 20 businesses, only 15 signed up for the project (8 at Oppdal, 7 at Jørpeland). The businesses included ten product manufacturers, two fruit producers, a bakery, a computer software company and a local city planning group. Most of the final results were on a conceptual level, while some included detailed drawings for production of test samples (see Table 1).

### 2.1 The student experience

The official opening of both offices was June 12th. The students spent the first week
visiting all the participating enterprises. Some of the projects included well prepared design briefs from the clients, while others required more work before the actual design project would start. Even though this uncertainty did spark some frustration within the project groups, the students also saw this as useful customer relation experience. According to the students, the projects where the businesses demonstrated positive interest and commitment to the project achieved the best results in the end. The students teamed up in small groups of two and three for each assignment, making each of them work with about three clients during the project period. Even though the number of businesses was lower than first anticipated, the students advised against increasing the number as they were all actively occupied throughout the summer. Keeping the number low would also make it easier to satisfy the involved businesses. The students at Oppdal visited the businesses about three times during the summer, while the Jørpeland office met their customers a bit more frequently. The students wished to visit more often, but did not feel they had the time. [3]

The two office managers spent quite a lot of time on administrative tasks, especially in the beginning. Managing a staff and dealing with customers without any external guidance were valuable experiences. Also, working on a time schedule with real products provided new insight for all participants. Detailed work plans and schedules were important parts throughout the period. The students also kept time sheets for balancing the time spent on each project. [4]

Some of the tasks presented new challenges for the students. One assignment, given by a sheltered workshop with disabled employees, involved making a labour-intensive product – a specification quite different from what the students were used to at the university. Some other tasks brushing into areas other than strict product design, including graphic work (logos, etc.) and city planning. Despite these somewhat unfamiliar fields, the students thought the assignments were quite interesting, and did not experience significant problems in the processes.

As for the practical conditions, some lack of proper computer software and printers made the students at times feel somewhat limited in their work. During the seven week period, the students set up, administered and closed down the offices. The feeling of project completion for satisfied customers was a great reward at the end of the summer. The students reported increased knowledge about customer relations, time planning and design management. [5]

### 2.2 The customer experience

The involved businesses participated mainly because they saw it as an opportunity to work with designers for a relatively low price. Many had wanted to involve designers previously, but had not due to the expense. All the companies except one (answered 'no answer') described themselves as 'satisfied' or 'very satisfied' in a survey after the project. Several of the businesses expressed surprise regarding the benefit of the student help. This was especially evident for the ones which had no previous experience with designers. A number of the businesses would have liked more interaction with the students, and some also found the seven week time period too short. Six of the businesses expressed an increased positive attitude towards design competence, and three stated they would involve designers in the future as a consequence of the project. [6]

### 3 RESULTS

At the end of the summer, both offices held local exhibitions of the finished results. All
clients plus other local businesses were invited. Banners were designed for each project, and these were also used later at exhibitions at the project collaborators. Table 1 shows final deliverables of each project.

**Table 1  Project results per client**

<table>
<thead>
<tr>
<th>Company</th>
<th>Industry</th>
<th>Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPPDAL</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SensAqua AS</td>
<td>Pollution surveillance</td>
<td>Restructuring components in surveillance unit, designing cabinet</td>
</tr>
<tr>
<td>Frank Smed AS</td>
<td>Blacksmith</td>
<td>Collection of interior products for cabins, packaging</td>
</tr>
<tr>
<td>Minera Norge AS</td>
<td>Stone products (slate)</td>
<td>Analysing new areas of utilisation for slate</td>
</tr>
<tr>
<td>Rennbu Snekkeri AS</td>
<td>Furniture</td>
<td>Designing a kitchen unit</td>
</tr>
<tr>
<td>Vekst Melhus AS</td>
<td>Furniture</td>
<td>Conceptual ideas: table, dog bed</td>
</tr>
<tr>
<td>Aksjonsgruppe “Penere Lundamo”</td>
<td>Local city planning</td>
<td>Preliminary work, short- and long term scenarios for the area</td>
</tr>
<tr>
<td>Terrengen AS</td>
<td>Technical aids for</td>
<td>Redesigning an off-road wheel chair</td>
</tr>
<tr>
<td></td>
<td>disabled</td>
<td></td>
</tr>
<tr>
<td>Fuelconsult AS</td>
<td>Alternative energy</td>
<td>Analysing areas of utilisation, scenario work</td>
</tr>
<tr>
<td><strong>JØRPELAND</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bjørn Hansen AS</td>
<td>Concrete elements</td>
<td>Designing and visualizing a new pumping house</td>
</tr>
<tr>
<td>Duplo Data AS</td>
<td>Computer software for</td>
<td>Analysis of current solution, developing new user interface</td>
</tr>
<tr>
<td></td>
<td>priests</td>
<td></td>
</tr>
<tr>
<td>Jørpeland Bakeri</td>
<td>Bakery</td>
<td>Packaging and logo</td>
</tr>
<tr>
<td>Time Dør og Vindu AS</td>
<td>Lining walls</td>
<td>Aesthetics</td>
</tr>
<tr>
<td>Jørpeland Sag og Høvleri</td>
<td>Sawmill, furniture</td>
<td>Analysing new areas of utilisation, conceptual ideas</td>
</tr>
<tr>
<td>Ryfylke Frukt</td>
<td>Fruit farmers co-</td>
<td>Packaging, logistics, store display</td>
</tr>
<tr>
<td></td>
<td>operation</td>
<td></td>
</tr>
<tr>
<td>Finnøy Produkter</td>
<td>Farmers co-operation</td>
<td>Logo, identity work</td>
</tr>
</tbody>
</table>
4 LESSONS LEARNED

Because of the positive feedback from both students and companies, a decision was made to continue the project the following year. As a result of noteworthy press coverage, word-of-mouth and even a mention in a speech by the Norwegian minister of commerce [7], the project quickly received several inquiries from interested companies for the 2007 project. The 2007 project will consist of three offices and also include design students from the Oslo School of Architecture and Design [8].

The project wishes to involve the local councils to a greater extent. Such collaboration is seen as important in order to secure satisfaction conditions for both students and companies. The project hopes to improve the students' access to computer programs and printers next year. A special license agreement with Autodesk has been established.

The fact that the students did not have any external guidance throughout the project did not seem to be a significant problem. The students used each other and their customers as discussion partners – just like in an ordinary design office. The organising group of the project wishes however to provide some guidance, and will try to include designers to fill the role as office mentors for 2007.

All in all, the project seems to have been very successful for all participants. The companies' positive testimonies seem promising for the first project goal of increasing design understanding in Norwegian enterprises. As for the students, the project complemented the regular teachings throughout the year. The result was valuable practical experience of design management, customer-relations and practical product development.

ACKNOWLEDGEMENT

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REFERENCES

[4] Ibid.
[5] Ibid.


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