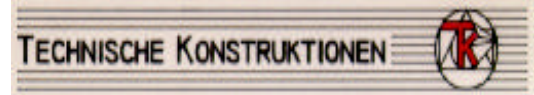


Technische Konstruktionen Pollozek: SME case 01

Technische Konstruktionen Pollozek



This case illustrates an example of what can be described as “new self employment”. A formerly employed woman moved location for different reasons, therefore had to terminate her job and started a new carrier as a freelancer from her home-base on a farm in a very remote area without any other job opportunities. In the meantime she runs a rather successful own one-person company which occasionally also uses subcontractors for specific tasks and has developed a solid customer base.

1. Name of Company

Technische Konstruktionen Pollozek

2. Function of Company, i.e. what business are they in?

Roswitha Pollozek is running her own design office from her home where she produces CAD designs for a number of well-known industrial enterprises. Customers include, amongst others, Dynamit Nobel (supplier to the car industry), Krauss (specialist mechanical engineering), MAN (machine tools), Siemens (electric motors), Sielaff (slotmachine), Wohlhaupter (specialist tools) and Komet (specialist tools). These customers are located 6 - 200 km away from her office and most of them can be called regular customers. In the meantime, constructions designed by Mrs. Pollozek are used world wide, e.g., in the car manufacturing industry by Volkswagen, BMW, Mercedes, Ford, Chrysler, General Motors, Honda, Rover and other automobile-companies.

3. Distinctiveness of the Case, i.e. why was this case selected?

This example can be described as “new self employment”. A formerly employed woman moved location for different reasons, therefore had to terminate her job and started a new carrier as a freelancer from her home-base on a farm in a very remote area without any other job opportunities. In the meantime she runs a rather successful own one-person company which occasionally also uses subcontractors for specific tasks and has developed a solid customer base.

4. Description of the initiative

Roswitha Pollozek is the founder and owner of the company. She was employed as a designer by the Carl Zeiss group starting 1979. Afterwards she worked as a freelance designer for several customers. In this context she has thoroughly familiarised herself with computer aided design technologies. After her marriage to a farmer living near Ansbach she initially helped with the farming before deciding to work as a designer again. The development of a business idea which allowed her to continue with the previously performed highly qualified work while utilising existing contacts was therefore self evident.

Because of her many years experience as both a self-employed and employed designer Mrs Pollozek was, from the beginning, aware of the importance of computer aided design methods for home-based order completion. On her own initiative she therefore began to qualify herself in this field by attending a training course on a PC-based CAD system (AUTOCAD) which she financed herself. By renewing existing contacts and relying on her experience she started by completing design orders for a number of customers by using the traditional drawing board as well as the PC. Remote data transfer was not involved at this point in time.

In 1992, a support programme of the Bavarian Ministry of Agriculture, which was aimed primarily at supplying Bavarian farmers with an additional source of income through telework, offered Mrs Pollozek the opportunity to substantially enlarge her existing range of services. Within the framework of a pilot project she took part in a training course on a workstation based CAD system (CATIA). In the course of this project she invested in her own CATIA equipment and facilities to allow for data transfer via ISDN.

In the meantime experience led to the pursuit of a business strategy which aims at providing a comprehensive service from initial conception to finished product. In this context the following services are being offered:

- Advice
- Development and design in both 2D and 3D with CATIA and AUTOCAD

- NC-Programming and advice
- Stereolithography in model construction
- Archiving of drawings with a scanner
- Project support in CATIA and AUTOCAD application
- Data exchange via VDAFS, IGES and DXF
- Data transfer via ISDN.

She utilises the most up-to-date computer technologies and is able to access her clients' data online.

The main share of order acquisitions comes from existing clients' recommendations. Through the constant growth of both her expertise and the technological foundation for her work Mrs Pollozek has, in the meantime, distinguished herself as an expert in specific and high quality design tasks with a number of her clients coming back again and again. Against this background it can be seen that the quality of the work produced as well as the smooth co-operation during order processing are of great importance. Mrs Pollozek sees a high quality and professionally delivered range of services as an important factor of success. For most businesses it is not primarily cost advantages but rather the proven expertise offered by the design office which leads to the placing of orders.

5. Changes: what changes, if any have taken place since the scheme started?

In the meantime the farm house was extended now offering 120 square metres office space instead of the formerly 18 square metres. The average annual turnover went up from 100,000 DM (approx. 50,000 Euro) five years ago to 200,000 DM today.

6. Innovative aspects of the initiative

This example illustrates the way of a qualified but – due to a move - unemployed CAD designer, who started her own business from a home base in a rural region serving customers in other regions of Germany and gradually developing her business to a point where she will now start to employ another CAD expert.

7. Benefits of the initiative

To Roswitha Pollozek teleworking as self employed was the only chance to continue to work and earn an income. In the meantime she has managed to establish herself as a successful business employing two other individuals part-time as freelancers and in the near future one full-time staff member thereby generating employment and job opportunities.

8. Barriers to the initiative

Still many businesses, (i.e. potential customers) do not have the technological and organisational requirements necessary to fully utilise the potential of telework as offered by Mrs Pollozek such as direct data transfer via telecommunication networks. This is seen as a constraining factor although there have been recognisable improvement in this area in the past years.

Another barrier is seen in the very high investment costs for CAD hardware and software which she had to bear to be able to start the business. Finally, she mentions the lack of qualified CAD/CAM people in the market as a further constraint for business development and expansion.

9. Impact(s) of the Initiative

Mrs Pollozek views the effects of telework very positively, especially with regard to the productivity achieved. As a result of the concentrated working which is possible on the farm as well as the responsibility which falls to her as a self-employed designer, she estimates her own productivity as many times higher when compared to that of business's in-house designers. Additionally, the time otherwise spent on daily commuting to work can be avoided and where required used for design work. Furthermore, the existence of the teleworkplace brings an enrichment to the community because, apart from generating local financial income it also achieves the integration of rural work and living space, which for Mrs Pollozek, was a pre-cursor in setting up the home based design office.

10. Lessons learned from the Case Study

The lessons learned are as follows:

- Initial investment costs in CAD hardware and software are very high and a significant constraint in the starting years of a one-person business;
- The varying order situation results in times of very high work peaks and those with very little work, a balanced situation is an exception;
- Project / order acquisition is a task which requires a lot of experience.

11. Expectations and future plans

In the near future a moderate increase in order and turnover volume is anticipated. The future expansion of her business is planned.

Against the above mentioned background of businesses still lacking communication technological infrastructure Mrs Pollozek is hoping that at some time in the future an information technology "re-armament" on the clients' side will lead to a strengthening of her own market position.

Mrs. Pollozek believes that feasible and acceptable models for sickness benefits for self-employed teleworkers need to be developed and implemented to better support this emerging and increasing form of work organisation of "new" self-employed (tele)workers.

12. Contact Information:

<i>Name of lead organisation:</i>	Technische Konstruktionen
<i>Contact name:</i>	Roswitha Pollozek
<i>Address (street, zip code, City, country):</i>	Häuslingen 8, 91632 Wieseth, Germany
<i>Telephone:</i>	+49-9825-5315
<i>Fax:</i>	+49-9825-4789
<i>Email:</i>	pollozek.tk@t-online.de
<i>Website URL:</i>	-