

HIGH ROAD TO WORK ORGANISATION

CASE STUDY

Akzo Nobel



J.M. van de Bovenkamp
TNO Work and Employment
August 2001

Abstract

The salt production unit of a large multinational company had undergone some technical changes in the previous years. Since the positive effects of these changes were minimal the management decided to pay attention to organisational aspects as well. Result of this was a change process in which the organisational structure was renewed and semi autonomous work groups were implemented. This new way of working influenced both the quality of the organisation and the quality of the work in a positive way.

HI-RES Case Study: Akzo Nobel

Sector

Nace code CB.14, other mining and quarrying

Key Words

Change process; semi-autonomous work groups; quality of organisation; quality of work

Table of Contents

Abstract	1
HI-RES Case Study: Akzo Nobel	2
Sector	2
Key Words	2
1. Background Information	1
2. Drivers for Change	1
3. Characteristics and Process of Change	1
4. Obstacles to Change	2
5. Risk Analysis	2
6. Benefits of Change	2
Conclusions	3

1. Background Information

The salt production company is a production unit that is part of a large multi national company. The company produces and packs salt for different applications (consumption salt, industrial salt, agricultural salt). The company is part of a business unit that has production facilities in The Netherlands, Germany and Denmark. Besides these production units the business unit consists of some preparing and supporting services. These are the service units Technical Affairs & Services, Quality, Health, Safety & Environment, Control, Purchasing and Personnel. The location is a multi site in which the employees are part of the business units and service units. About 800 employees work at the location of which about 460 in the business units and 340 in the service units.

Contrary to many salt production companies that are process oriented, this unit is series oriented: it produces and packs salt in batches. This means that the process is more labour-intensive than processes in other production companies.

2. Drivers for Change

In 1992 a large renewal of the organisational structure was started because changes in the technical aspects of the factory had been made in the previous years without taking organisational aspects into consideration. So, the main reason for starting the change was the fact that technological improvements had been made in the factory without changing the organisational structure. Consequence of this was that the expected positive results of the technical changes were not realised. The realised situation was sub-optimal and required organisational changes. This led to a decreased net profit.

For the organisational change sociotechnical principles formed the basis.

3. Characteristics and Process of Change

Based on external advice management decided that the salt production company should be split up in three departments. In December 1992 it was decided to work in semi-autonomous work groups. For this an extensive project organisation was developed consisting of control and project groups. A steering group was initiated consisting of representatives of the local staff. Besides this, a project team consisting of all members of the management team of the salt production unit was formed. This team has led the change process and started up six work groups. These work groups consisted of the head operators. The external support was taken care of by consultants for the steering group and the project group and an organisation psychologist for the execution level.

In May 1993 the period of discussion and initial design was ended so that in June 1993 the semi-autonomous work groups formally started. In the second half of 1993 each semi-autonomous work group executed a task analysis. In this analysis it was determined for each function what the tasks, responsibilities and competencies are. Based on this analysis a plan was made for each work group in which the tasks (the star tasks) were determined that had to be transferred from the hierarchy or the supportive departments to the semi-autonomous work groups. A lot of attention was also paid to the reward- and salary system because of changing roles and functions.

The change process started at December 1992 and ended in the middle of 1996. It consisted of the following steps:

- The decision of the management to start working in semi-autonomous work groups.
- The design of the main production line.

- Positive advice of the work council and start of implementation semi-autonomous work groups.
- Detailed design of the tasks and the reward and salary system.
- Implementation of designed tasks.

Essential characteristics of the change process are the development of semi-autonomous work groups as well as balancing individual competence with organisational development, rethinking the role of middle and frontline managers and new reward systems.

At the moment the change process is ended and the changes have been implemented. The top management of the company recently initiated a plan to take the salt specialties away from the site that is described here and to place them in other sites in Denmark and Germany. This means that the activities at the Dutch production unit are stopped at the end of the year regarding the packing salt production. The activities for bulk salt (road salt, industrial salt) continue at this production unit and can even be increased. Because the bulk salt involves highly automated processes this means considerably loss of workplaces. The main reasons for this operation were:

- Reduction of costs by concentration of activities.
- The overhead costs at the plant described in this case are relatively high.

This decision is not final yet and there are still discussions between the management and the Union and the plan has nothing to do with the implementation of semi-autonomous work groups. The implementation of these groups has had positive effects on the process at the company.

4. Obstacles to Change

The initiators for the change and the development of semi-autonomous work groups were the production manager and the personnel manager. In 1995 both managers as well as two production chiefs left the company, so that the sponsors of the ideas for the change had left. This slowed down the change process because their roles had to be taken over by other managers.

The design of the reward system has also been one of the obstacles. The company proposed a new reward system, that would be developed in an experimental period of three years. The promise that all employees in the end would get a raise in salary group could not be fulfilled because of lack of financial means for this purpose. After the three years the unions were unwilling to cooperate further. The whole issue of the reward system slowed down the process.

A third obstacle was that the extra support and maintenance tasks that were transferred to the semi-autonomous work groups were not easy to choose. The support managers were not easily convinced that these tasks could be safely carried out by the operators. They had to be demonstrated that it was better to transfer the responsibility of some specific tasks to the operators.

5. Risk Analysis

The implementation of semi autonomous work groups required a change in the rewarding system. Regarding the rewarding system mainly the procedure was considered. The appraisal of the employees by the production manager turned out to be difficult because he had to coordinate five semi-autonomous work groups consisting of ten operators each. This problem was not foreseen and eventually a compromise was made in which the individual appraisal is done by the semi autonomous work group and the production manager judges the semi autonomous work groups.

6. Benefits of Change

The most important benefits of the change process for the organisation are:

- Improved flexibility
- Improved efficiency (the same work can be done with less people)
- Improved quality (decrease of complaints)
- Reduction of maintenance costs
- Better communication

Benefits of the change process for the employee are:

- Improved motivation and work satisfaction of employees
- Improved knowledge of employees (because of more training)

Conclusions

The concept of semi autonomous work groups was introduced and implemented at the salt production unit of a large multinational company. Because of the relatively labour intensive production a good personnel management is important. The work in semi autonomous work groups made this possible. Not only the quality of work improved but also the efficiency of the production increased. Because of this, and because of developments in the market, the company decided at the end of 1995 to work with three shifts instead of five. Two work groups were split up and spread over the other three shifts. Working with the new organisational structure improved in this way the quality of the organisation and therefore the competitiveness as well. In spite of these positive effects, plans on a higher level in the organisation are being made to reduce the number of activities at this production unit to be able to reduce overhead costs.

Publication Details

Published by: Jan de Leede

Publication date: 1997

Journal: Jan de Leede, Innoveren van onderop
(bottom up innovation; on the contribution
of semi-autonomous work groups to product
and process innovation.

URL: -

Revised: 31-08-2001

Notes: -

© 2001 TNO. All rights reserved.