

Odense Waste Management Company: Employee participation and sustainable business

What does this case study demonstrate?

The story of Odense Waste Management Company is one of employee participation in developing healthy work organisation and securing sustainability for the company. They have met changing customer demands by developing new instruments, systems and work organisation in processes that are influenced by employees.

Workplace innovation elements: supporting employee initiative; integration of technology; partnerships with employees and unions.

Context: Safety at work and business sustainability

The featured company is a waste management company with 170 employees. It manages and collects waste from a large Danish municipality. The company is a financial success and is focused on renewals that make work safer for its employees. The company likes to share its innovations with other companies and participates in many forums for the exchange of experiences. The company has a long tradition of employee participation and employees have been members of the executive board since 1994.

The main challenge for the company is to create work organisation solutions that support safety at work and at the same time make the business sustainable as customer demands are always changing. The management of the company stresses the importance of involving employees in order to make successful innovations. It is important to get the employees' take on renewals, as they are the ones that **"know about their jobs"** (Manager).

Most of the innovation practices were initiated by the management but the development and implementation process was heavily influenced by employees. An important motive for the management was to promote the company as an attractive employer that is 'ahead' when it comes to innovations. Workplace innovation practices demonstrate that the company is at the 'cutting edge' of the development of both ICT, utilisation of resources and technical solutions. Furthermore, all actors are pointing to the fact that workplace innovation is an important part of securing a safe work environment.

Workplace Innovation practices: a participatory design-oriented approach

The company is working with workplace innovation in two ways. A design-oriented approach where employees, managers and union representatives are working together in developing new ways of organising work and technical solutions that make work safer and easier for employees.

The company has developed two new trucks: a new truck to handle toxic waste and a 'Molok suction truck'. The employees have been involved in developing the new trucks and union representatives have been participating in the process as well. The main point of the new trucks is to make work safer and easier for employees in order to prevent accidents and increase performance. It becomes easier for the citizens in the municipality as well. The trucks are developed and implemented in cooperation with external suppliers – for example the producers of the Moloks (large garbage cans in housing associations that are placed below earth surface). It improves the employees' (as well as the housing associations' janitors') work environment, because they avoid dragging the garbage cans around. The use of Molok

suction means that the workers do not have to deal with the waste manually. They just arrive with a truck, insert a tube and suck up all the waste.

Another innovative approach is to benefit from the employees' talents and reflections on their daily work. This is a more ad hoc process than the design-oriented approach and forms an example of the company's ability to embrace new ideas that are initiated by employees.

The company has worked with gas extraction of shredder waste – an idea that was initiated by employees. Shredder waste is what you have left when you have crushed a car and extracted all of the metal. It began when the employees at the site wanted to measure the temperature in the waste repository. They drilled some holes in the waste, wherein they placed some temperature tubes. In one of the holes they chose to put a filtering air tube and extract some air, just out of curiosity. It turned out that there was quite a lot of methane gas produced in the shredder waste. It was unknown that this type of waste produced any gas in the repositories, but the employees discovered that it did, almost by accident. The company began developing a way of extracting and using this gas initiated by the employees. The extraction of the gas forms an important part of a sustainable business plan for the company, as it makes profit on this innovation that evens out increasing costs in other departments.

How did they do it? Employee involvement in the innovation process

The general method of the company's innovation processes (especially in relation to the technical and work organisation innovations) was to involve employees by conducting meetings to discuss innovations. The gas extraction innovation process was more ad hoc. In the development of both trucks, the employees participated in meetings with external suppliers and even went on a field trip abroad to meet the developers. The purpose was for them to understand the development process and to enable them to make suggestions to the people that were manufacturing the new technology. The union representatives and the employees stressed that the truck development firm was a great partner in the innovation project and listened to the employees' suggestions.

The overall implementation method could be described by these four steps:

- 1) Preparation: Meetings were conducted with internal agents (employees, management and representatives).
- 2) Assessment: Meetings were conducted with both internal and external agents focusing on requirements.
- 3) Development: Tenders were given by suppliers and one was chosen. A group of employees, management representatives and employees attended meetings with the suppliers and were making suggestions based on their 'workday-knowledge'.
- 4) Implementation: The ICT system and trucks were implemented and adjustments were made.

So who benefits?

An employee saw a direct link between employee reflection and the ability to secure future revenue for the company:

"Clearly, in the project with the gas, the money and the revenue that could come out of it are not insignificant. There will be revenue of it and even though we are self-reliant, these revenues will probably be used for paying our future expenses (...) If we had to pay for cleaning the water that seeps from the repository for the next 30 years, such revenue is very welcome".

Employee engagement, longer term sustainability for the organisation and improved efficiency are important outcomes of workplace innovation practices in Odense Waste Management Company. The management sees a link between innovation processes with a high level of employee participation and that the new trucks and systems are functioning well and that employees are able to take ownership of the changes. This leads to fewer accidents as the new technical solutions are adopted and used by employees as they were intended. Another outcome has been the strengthening of the company profile in relation to

environmental issues. The employees see a link between the participative method and the ability to create good work, as “it is fun to develop new solutions and it makes work easier”.

Prognosis

Odense Waste Management Company is very focused on employee participation. For this company product development and work organisation are very intertwined as the trucks and systems are determining the way work is performed. The case of gas extraction shows an enabling culture that will benefit the company in the future. The emphasis on employee participation is powerful and the company's motto seems to be that:

“You can take the company from one level to another by joining your efforts”. (Manager)