# 'The Golden Bay' Project

# **Gonny Hoekstra**

Hoekstra Ergonomics, Netherlands

#### **SUMMARY**

With an increase of the average age of their employees, a cargo division of an airline company redesigned a part of the operation into "The Golden Bay'. A workplace where the older employee can work in a healthy way and be of added value until retirement.

# **KEYWORDS**

Ageing, Participatory Ergonomics, Workplace Design

#### **Problem**

The senior warehouse employees of an airline cargo operation could not keep up with the required work rate for loading pallets with boxes and mailbags. Resulting in the pallets not being properly stacked which posed a risk when transporting them to the plane. The employees experienced the (physical) work, the working environment and the working conditions (for example the night shift) physically and mentally strenuous. They asserted that they require more recovery time than in their younger years and suffer from physical complaints (knees, back, shoulders).

## Context

The department's workforce consists of 99% men with an average age of 56. The employees work in alternating shifts of 8 hours (3 shifts per day, 7 days a week). Their tasks consist of building pallets by carrying and lifting boxes or bags on to the pallet (mostly by hand) and administration on pc or handheld (standing or sitting in a forklift). The operation floor is divided in ten areas (called bays). Approximately 4-6 employees work in a designated area assigned to a specific task. This implies that, for instance, all the cargo destined for New York is consistently assembled on pallets within that same area.

#### **Actions**

Upon reading an article from Loch et. al. (2010) detailing BMW's approach to the effects of an ageing workforce, the division manager tasked a small project team consisting of four employees, a planner, a team lead and an ergonomist to initiate 'The Golden Bay' project. My role was that of an expert (ergonomist) and a facilitator (Participatory Ergonomics).

During the first session, the project team determined the goal; 'How can we design a work area and working conditions within an airline cargo division where employees can work safely, healthily, enjoyably and feeling respected until retirement. At the same time the cargo needs to be stacked safely and transported in time. The project team analyzed the problem and gained information about the older employee in relation to (physical) work. They created a list of topics (workplace, way of working and the employee) along with their bottlenecks and requirements. Choosing one are to become 'The Golden Bay', the team selected an area they thought was the most optimal due to its central location and more challenging work package. 'Maybe we are older, but we are experienced and want to be of added value.' The following sessions involved finding solutions through creative

problem-solving, task allocation and sharing progress of implementations. Along with the series of sessions, 'The Golden Bay' was redesigned directly.

## **Outcomes**

Initially, the employees in the project team faced resistance. "We are not old; we don't want to be tucked away in a corner for the elderly." Additionally negative comments from colleagues (including team leads) emerged. However, by collectively defining the project goal and acknowledging concerns and feelings, especially by the manager, their resistance gradually subsided. The project ceased to be solely the manager's plan; it became a project they believed in. Visible changes in the workplace positively influenced colleagues' attitudes, fostering curiosity and a desire to join 'The Golden Bay' team. Unfortunately, not all the team leads fully supported 'The Golden Bay'.

Key changes in the workplace included a newly painted floor, new computer desks with larger screens, improved lightning and new adjustable chairs in the forklifts. Regarding work organisation, 'The Golden Bay' employees no longer worked night shifts, started the early shift an hour later. They operated in dedicated teams with a predictable yet more complex work package (flight destinations with complex cargo load to build). Despite the small pilot team in 'The Golden Bay' area. Decreased absenteeism and higher productivity were observed.

#### Discussion

After four months, an evaluation took place. Employees, no longer working night shifts and starting the early shift later, reported feeling less tired and sleeping better. Despite this positive experience, not all employees wanted to remain in 'The Golden Bay'. They preferring financial incentives for working night shifts over health considerations.

Working in dedicated teams made the employees feel more appreciated and responsible, as they collaborated in tasks instead of arriving at work unaware of which area, what type of tasks and with whom they had to work that shift. An added benefit was the establishment of a daily clean and tidy workplace.

The project's success, aside from winning the company innovation award, can be attributed to the active involvement of the manager and team lead. Their consistent presence, attentive listening and encouragement made employees feel acknowledged and taken seriously. Reflecting on the project, the team underwent significant changes, with most solutions being swiftly implemented. Despite this, the physical workload in the bay (area) remains high. A reduction of the physical workload is only feasible through a drastic redesign of the workplace and work organization involving automation or robots.

#### Conclusion

It would be worthwhile for other departments or organizations to start a similar project, using the positive findings and learning from the experiences of 'The Golden Bay' project.

# References

Loch, C.H., Sting, F.J., Bauer, N. and Mauerman, H. (2010). How BMW is defusing the demographic time bomb. Harvard business review 88(3):99-102.