# WORKSMART

A Jersey Business Programme

#### GEOMARINE CASE STUDY

Geomarine is a specialist civil engineering company which operates throughout the Channel Islands. In the application of geotechnical engineering, the company uses the principles of soil and rock mechanics to investigate sub-service conditions and materials; determine the relevant physical, mechanical and chemical properties of materials; evaluate the stability of natural slopes and man-made soil deposits; assess risks posed by site conditions; design earthworks and structure foundations; and monitor site conditions, earthwork and foundation construction.

#### **WORK SMART**

Engineering Geologists Martin Curd and Dani McIntosh participated in the Business Improvement Programme taking the opportunity to focus on the mobilisation of equipment to site. This process comprises of collecting all tools, plant and equipment and then distributing to site ready for ground investigation or drilling projects. On first inspection, there was a perception that this takes a long time and is inefficient. There are multiple trips across the island from the two yards, one workshop and various plant hire outlets. There are significant manual handling risks and a belief that things could be organised better at the Geotech yard at La Folie. In summary, we wanted to explore LEAN MOBILISATION.

#### ANALYSIS

The process was mapped out using a value stream map and engaging with the drilling team. Meetings were held on the various sites and we recorded times for each step of the mobilisation process, a clear real time work study. The mapping and work study exercises took in many guises, hand written sketches, brown paper mapping, post it note accumulation and spaghetti charts of movement around the island. This allowed the team to demonstrate what a typical ground investigation mobilisation looks like when broken down in to activity costings:

• 11 labour hours + vehicles and plant

Typical water well/ODEX pile mob:

• 17 labour hours + vehicles and plant

That's only to get to site – x2 to include demo. For 2018 estimated costs/time:

• 293 labour hours

"This has been more than just a course, it is a **driver for implementing change across Geomarine.**"

#### **IMPLEMENTING IMPROVEMENTS**

As the team developed better ways of working for the future, they considered the following:

- Single yard for all plant, equipment, materials
- Buy a bigger truck with a small crane to lift and carry more equipment to reduce number of trips / hire a bigger truck
- Tidy and sort La Folie yard to make loading / unloading easier
- Maintain La Folie once sorted



Option	Man Hours	Saving Man Hours	Savings Cost
Do Nothing	293	n/a	n/a
Buy a bigger truck	164	129	Circa +£10,000
Hire a bigger truck	164	129	Circa £5,000
Tidy and sort La Folie	Started and in progress		
Bigger yard	Big investment for the company and would affect all our operations. Something to consider as the company grows		

#### THE OPTIONS WERE SUMMARISED AS BELOW:

Using another truck would also have up-front costs associated with the purchase of materials handling equipment (pallets, crates, stillages, stacker truck, trollies for hammers etc.).



The overall project is now being discussed with the management team and the H&S team as we decide how to move forward strategically. In the meantime, the team have commenced eliminating unnecessary items from La Foile stores as part of the 5S process. Red tagging is in place under the "Sort" (1st S) activity to declutter and clear space for re-organisation as part of the mobilisation improvement programme. Under the "Straighten" criteria (2nd S) we are labelling spaces and hooks for improved management of equipment and materials. All team members are taking on responsibility for cleaning and tidiness under the 3rd S of "Shine". In addition, the full team are creating new standards as we implement the 4th S (Standardise) in our objective to create Sustainability (5th S).

## Get involved in a future programme contact us at **events@jerseybusiness.je**

### WORK SMART

WORKSMART supports established organisations to become more efficient and to deliver sustainable growth that will create market competitiveness and a solid operational platform for the future. It is managed by Jersey Business, funded by the Government of Jersey and delivered by Accelerate



info@jerseybusiness.je 01534 610300