



Lean Case Study: Lean on the Atlantic – The Clamming Industry

Change the thinking and the processes will look after themselves ... if it can work on a clam boat, it can work anywhere!

*Taken from the HPM Weekly Update as written by Dave Hogg
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The clamming industry may never be quite the same again.

How it all started: Last year several sailors from Clearwater Seafood's Ltd. attended an introductory session to Lean Principles - and the sailors themselves will tell you that "The lights came on." They saw the relevance to one piece flow, to plant layout, to Value Stream Mapping (VSM) and more. The discussion on flow and VSM really got them thinking about how it could apply to their industry.

The Project:

Value Stream Map the clam harvesting process ... Convinced that there was a better way, Clearwater's Gene King and Paul Norris talked to HPS's Bob Kerr about applying Value Stream Mapping to their 'factory' – and remember, their factory is just under 200 feet long and continuously rolls 5-10 degrees back and forth, back and forth – I suspect you get the picture. That simple fact alone means that everything they do and every piece of equipment and every process must be adapted to that environment in the same way a chicken or furniture processor/producer must adapt his/her world. Clearwater's factory is a boat that has three focus factories within its hull – one for harvesting, one for processing, and one for freezing the clams (in less than 1 hour after harvesting) and packaging the clams right into the containers that will take them all over the world immediately upon docking.

The Process:

Day one was a day that Bob will not forget as he was constantly reminded not to lie down but to keep walking until he got his 'sea legs' – and his food to stay down. "Toast and I became good friends for the first two days," Bob comments.

The Steps:

Step 1: Once stabilized – you begin as you would any VSM, any Kaizen startup, or any PDCA initiative. You begin by going to the Gemba (where the rubber hits the road) – it's where the action occurs which is where you watch, listen and ask many questions.

Step 2: Carefully map every single step in the value stream with direct input from those doing the job.

Step 3: Look at every step and ask the question 'would the customer pay for what is happening in this step?' The answer to that question determines whether the step was non-value-adding or value-adding.



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Step 4: Armed with all the new knowledge, put this 'Current State Map' together and share it with the folks who understand the process and listen to what they say, now that the value stream is visible.

Step 5: Develop the Future State Map in conjunction with the process owners within the map.

Step 6: Implement the Future State Map by involving the process owners and their ideas.

Step 7: Continuously improve

The Results?

SPECTACULAR. We will not provide the numbers because they are proprietary. But here are some of the realities: In the clam business it is reasonable to say that a high percentage of the meat that is harvested is lost during the process – a number that is not that unusual when you look at the total enterprise and all wastes therein. Keep in mind that some 55% of all books printed in North America are shredded, which is one heck of a lot of trees. As it turns out the entire project had the company looking for a 50% reduction in wasted clam meat and a huge increase in the product brought back to the dock.

The Gemba Thinking: The biggest benefit and impact upon everyone was the change in thinking that occurred. The change was simple & profound – here's a little of it:

Questions/Answers:

Q: Is everyone on the same page in the process?

A: No, but they'd like to be, because it is awfully difficult to be proud of what you do when there is mass confusion

Q: Does everyone think the same about what they're to do?

A: Heck NO! So let's test it and see---

Q: "Why does the boat go to sea?"

A: To harvest clams. NO, that's Wrong Thinking as it does not focus on the highest value activities.

The boat goes to sea to bring back the largest quantity of product – not just to harvest clams. When you focus on fishing, or sales, or clamming, with all your might - and bonus your folks accordingly, it is the same as providing incentives for folks to keep machines running even when there is no customer for the product. The result is accumulated materials that are often sold at fire sales - if sold at all. But if the focus was on bringing back the maximum amount of product, they would look at the entire flow and think about where the bottlenecks were.

In this case, the focus for years has been on harvesting the clams. But upon careful inspection of what was really going on, the internal processes in the floating factory (the boat) could not handle the peaks which caused clam meat to overflow and be expelled by the bilge pumps and thus completely lost. By slowing the rate of harvesting (A shocking mindset change), far less was



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wasted. At the end of the trip, a lot more product was available for sale in the same amount of time at no more expense for fuel.

“And that was a tremendously hard habit for us to break,” commented a Sr. Clearwater Seafoods leader.

The Result:

The VSM exercise has opened eyes. It enabled people, who have fished all their lives, for the first time, to actually see the flow of the value stream. And once visible, they needed little further help from that point on. For this reason, the U.S. is training many people to Value Stream Map manufacturing operations - just to make the value streams clear that common sense can take over. Our congratulations go out to Clearwater for having the vision, the courage – and the follow-through to deliver increased capabilities to their people and to their company that will enhance their already world-leading competence. Their thinking is one reason why they are the world leaders right now when it comes to clam fishing.

As for Bob, he is not unhappy that the land he now walks upon no longer rolls beneath his feet.