



Origins of Waste (updated 2006)

Where does waste come from? Often it is from mistakes, errors and defects. These result in time lost, resources badly deployed or overflowing waste bins. But why do we make these mistakes, errors and defects? People don't like getting things wrong and we all go to some considerable length to make sure we avoid getting things wrong, so what's going on? Are we all clueless?

Why? because...

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We can use a familiar tool to help us get to the bottom (or the root cause) of waste. We ask "Why?" and every "because" answer results in another "Why?". After several rounds, we get to the root cause.

We found that most of the clearly visible wastes came from process errors and these are sometimes known as the hidden wastes.

Hidden wastes are everyday activities that do not add value. You know exactly what we mean: the hanging around we all seem to do - waiting for information, materials and resources so that we can get on with our work; the over-ordering because we can save on bulk-buy, except the stuff will spoil before we use it all; the loops and hurdles we have to go through to get approval; unwieldy working practices that makes no sense... do we need to go on?

Why do we do all these unnecessary activities? It would take a while to list all of the unnecessary stuff in an organisation, luckily for us, someone has already done this and categorised the eight main categories of hidden wastes.

These eight categories are things we do everyday but we do not always notice them because they are, like the furniture, a part of the fabric at work.

By now, you are thinking, how did the bright vision of our organisation ended up in a hidden, shadow organisation that sucks away our resources, efforts and motivation? Well, let's go ask "Why?" again.

We found that the Hidden Wastes are usually caused by:

- Poor Training;
- Poor Communications; and



- Poor Design.

How does training lead to waste? Inappropriate training, the wrong sort of training and irrelevant training all contribute to wastes. The waste can come from the cost of training and the inability to realise the expected values thereafter.

A more nasty sort of waste is the potential problems that can be caused by having the wrong methodology, skills, knowledge, or approach towards the work. This is how a lot of newspaper headlines come about!

Design is a rather different issue. We have all heard of well-designed products that customers declined - just think of all the exciting new products you only catch once in shops and supermarkets and never see again. People make mistakes and it's no different whether it is product design or process design. With product design you get to start again pretty quickly (unless the company went under). However, process design are a bit more "sticky", good designs do not always deliver results immediately and poor designs are often not spotted for a while either.

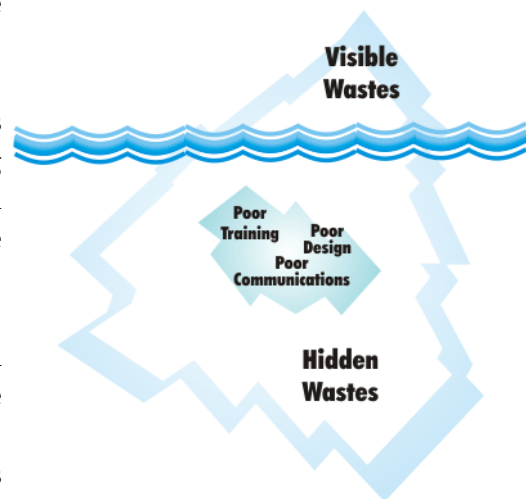
Poor process design can also result in choosing a less effective training programme - not that the training itself is poor, but rather training people well but still working in a poorly designed system. This is not quite optimal business practices.

What contributes to poor design? Often it is an assumption that "we" the designers know best. The lean improvement crowd has a bit of jargon for this: "*Gemba*" - this is a Japanese word and more or less means "go to where it is happening". The moral of *Gemba* is that sitting in one's office dreaming up "ever better" designs may not be the best way forward. "Go" to where the design is to be used - find out from customers and users what the situation is. Then design something that can be used or deployed effectively.

Communications is a different problem altogether, we all know that our audience may not be "hearing" the same message that we are giving. (Of course, politicians rely on this!). These simple misunderstandings in business, coupled with poor training and design, can mean that the needs, requirements and demands can be jumbled and misinterpreted. In globalised businesses, poor communications is an even greater risk.

The situation of waste is like an iceberg. What we can see, the visible wastes, are caused by the hidden wastes and at the heart of the hidden wastes are the three linked root causes - poor training, poor design and poor communications.

One solution out of this mess of waste is to deploy a "lean" approach towards the operations of an organisation. Lean thinking focusses on satisfying customer needs and reducing wastes.



These two objectives address the issues of training, design and communications and can form a basis for a operational transformation.

However, a “lean” transformation is not an instant affair, it takes leadership, resources and a lot of commitment to make it happen and keep it happening. In these days of quick returns and management fads, it looks like waste is going to be with us for some time yet. But if reducing costs by 10-30% is appealing then the heavy commitment is likely to be worthwhile.