v0 15 March 2005

HC online

7, 8 or 9 types of wastes

Texte disponible en Français

The industrial community owes Taiichi Ohno the 7 types of waste he identified in the workshops.

Those wastes are:

1. Unneeded overproduction
2. Waiting time
3. Transportation
4. Excess inventories
5. Useless operations in production process
6. Human movements
7. Defective parts

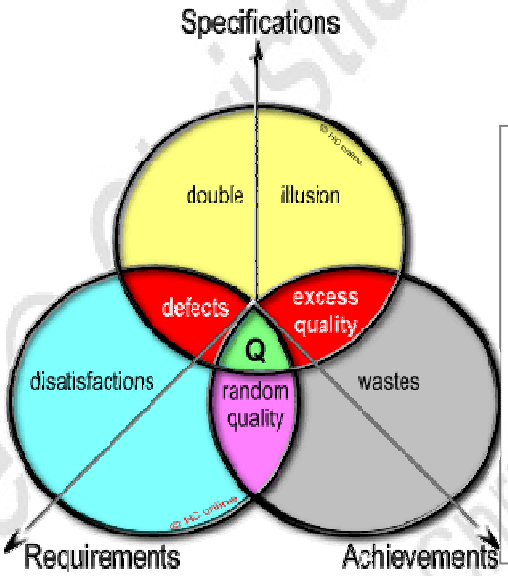
The fight against these wastes are basics of *lean thinking* and starting point for many performance improvement programs.

The 7 types of waste, found in the workshops, can be adapted into any kind of activities, including services.

The seventh type will no longer point a physical non-conformity or a defective product, but a non-conformity regarding a client requirement or expectation.

The total quality management (TQM) defined quality in terms of conformity to client's requirements or expectations.

The figure hereafter reminds that quality is a triple match of client's needs or expectations, specifications to define the product or service and what was finally achieved.



The combination of both (Ohno & TQM) approaches defines the 8th type of waste as development of products or services nobody wants, mainly because they do not respond to customer's needs or expectations.

The author, **Chris HOHMANN**, is manager and consultant in an international consulting firm.

He advises and trains about lean thinking and techniques, industrial & Supply Chain performance.

Beyond these commonly admitted 8 types of wastes (described as **7+1**), a 9th exists, the waste of opportunities.

In the Lean approach, any effort not meeting a customer need or expectation is qualified a waste.

The exception is probably what marketing call Kano's "delighting *surprise*", a function, feature or a service not expected by clients, but which discovery gives them "*super satisfaction*".
Conversely, the lack of this "surprise" does no harm, as there is no expectation.

Not grasping opportunities is the ninth type of waste

HC online

Waste of opportunities

First example

Imagine a firm's purchasing manager, proud of having kept the purchasing prices unchanged, "while *prices raise regularly".*

A quick check on the market prices reveals a global drop of prices due to severe competition.

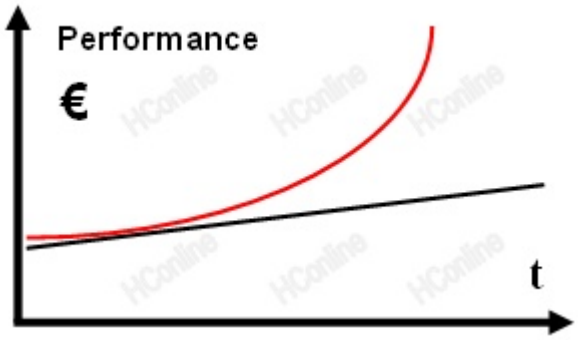
The purchasing manager wasted an opportunity of gain by choosing a general defensive strategy, while the right process would have been:

1. Get information, stay tuned to market reality,
2. Demand suppliers to align their prices to market level,
3. Negotiate an additional effort

Second example

Imagine a firm's sales manager proud of the regular progress of sales.

A quick check on the market reveals a global competitors have boosted their sales exponentially.



The sales manager wasted an opportunity of gain by sticking to the illusion of satisfying performance. The performance is real compared relatively to company's previous achievements, yet far behind competitors.

Replace purchasing manager by production manager or Supply Chain manager and the price stability by the cycle time or delivery time steadiness.

Imagine competitors have achieved drastic cycle time / delivery time reduction…

Replace in the same manner the R&D manager and time to market performance.

Think this way about all departments and activities which performances improvement gives a competitive advantage.

How many opportunity wastes will you discover?

HC online

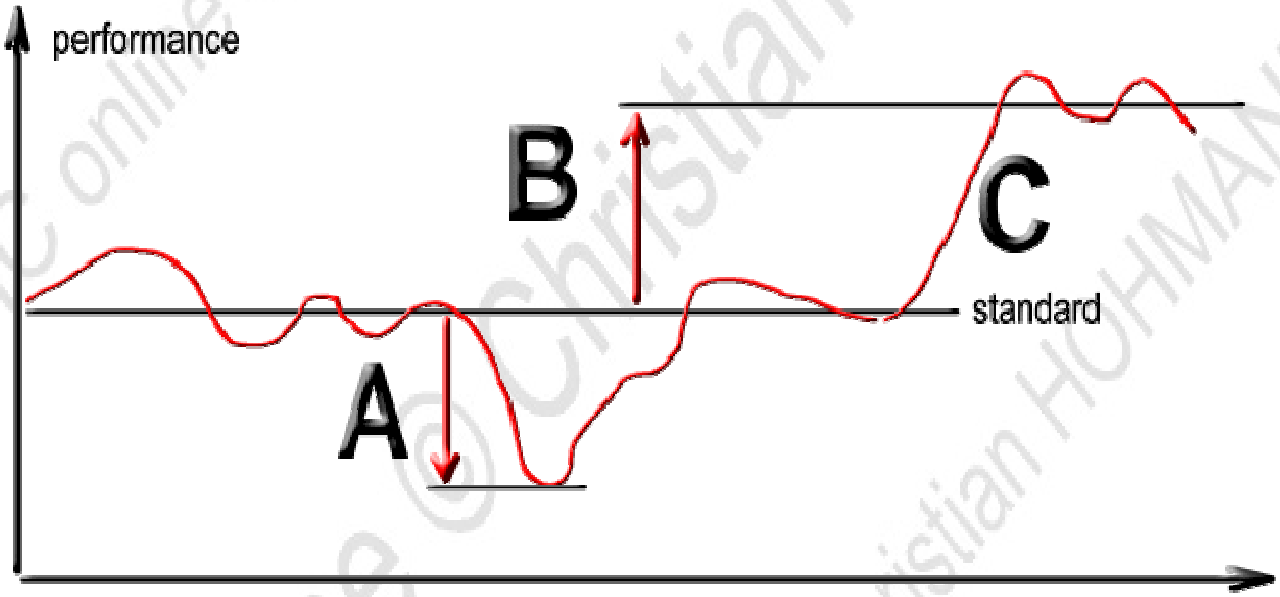
Waste of opportunities

Generally

Performance losses are generally understood as a negative gap between actual measured level and a "standard" level, as shown in **A** on the diagram hereunder.

This performance loss may be slow and gradual, so that a poor monitoring system, or a busy manager do not take notice.

Moving from standard level to new standard level (in **C**) can be done step by step in small increments (continuous improvement, kaizen…), or with a breakthrough (Kaikaku, reengineering...), or by an opportunistic mix of both approaches.



Conversely, the positive gap **B** of achievable performance compared to standard is an opportunity. Not grasping this opportunity by moving up the **B** gap means to accept an "opportunity loss".

These opportunities are generally revealed by a comparison to an other standard, typically during a benchmark.

Womack et Jones* urge their reader to strive for perfection, to go beyond the limited objective of aligning to best in class (benchmarking), in order to get close to perfection and get outstanding competitive advantage.

* "LEAN THINKING : Banish Waste and Create Wealth in Your Corporation", James P. Womack, Daniel T. Jones