



TII 2005 ANNUAL CONFERENCE

University of Applied Sciences Fribourg (EIA-FR)

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27-29 April 2005

COMPANY NETWORKING FOR IMPROVED INNOVATION AND INDUSTRIAL PERFORMANCE

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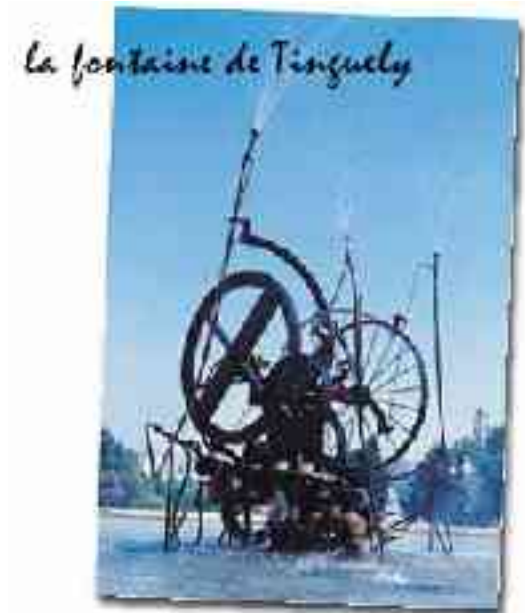
Innovative Supply Chain Management by integrating Lean principles

Herman Deroost

Parallel Workshop: Track 3 – Innovation Networks and Clusters

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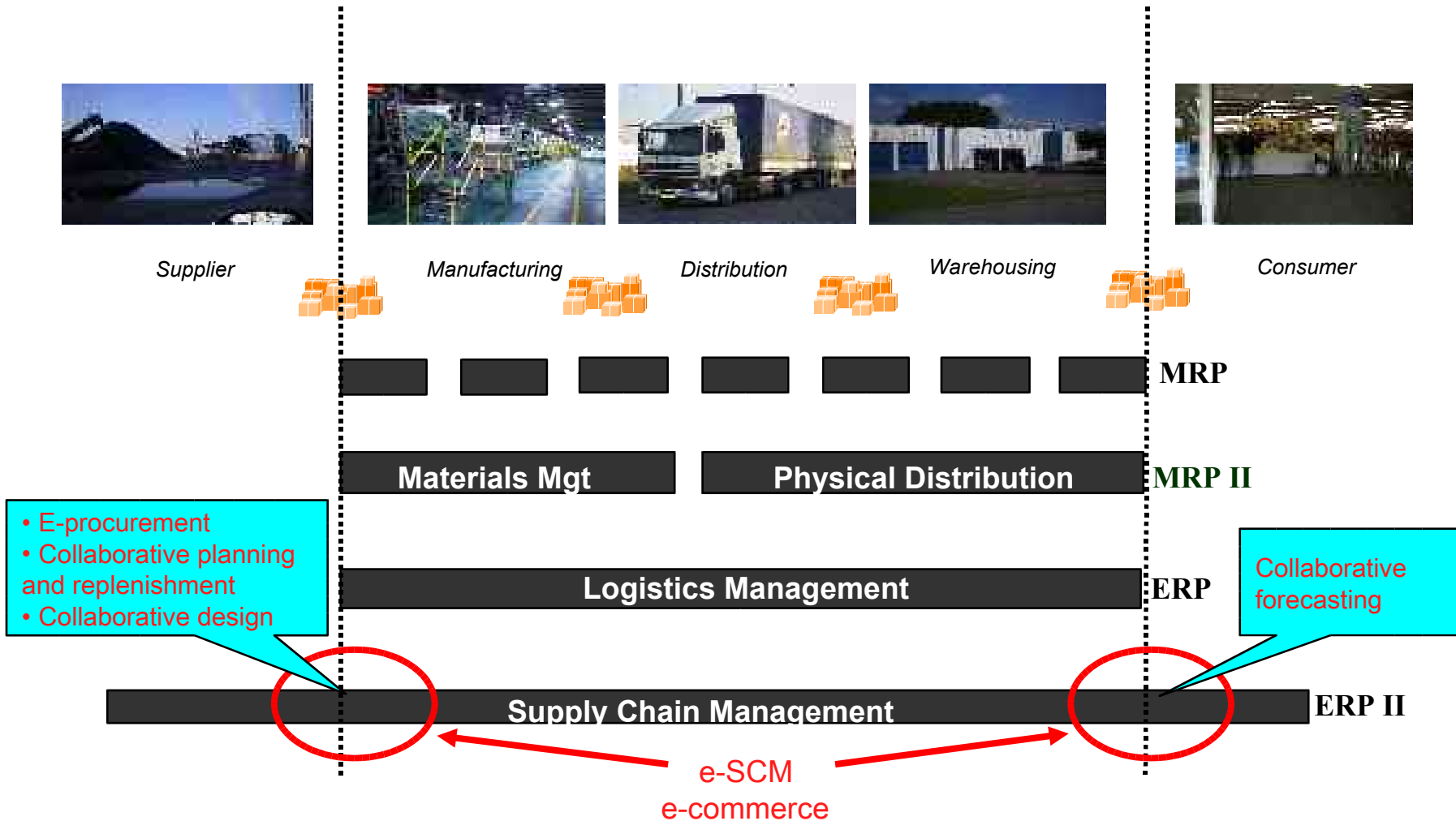


1. Supply Chain today.

Whenever we talk about Supply Chain today, mostly we are talking about physical distribution of goods from companies to warehouses, from warehouses to distributors, and from distributors to end customers.

Whereby every player tries to optimise their own part of the chain hardly listening to the voice of the customer and in fact never going any further upstream the Supply Chain process.

1. Supply Chain today.



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2. Supply Chain, going up-stream.

Supply Chain should not be about materials flow only.

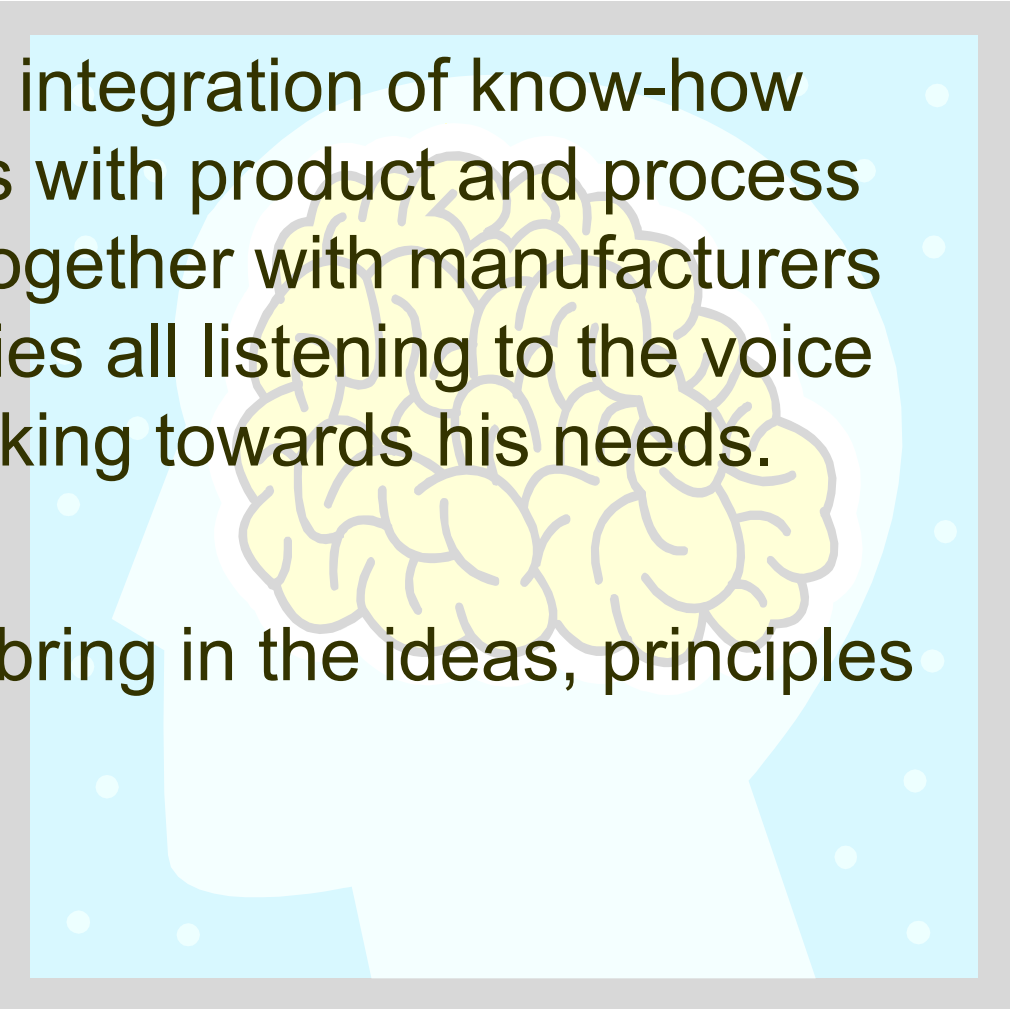
Supply Chain should start far more early in the process.

Know-how of knowledge institutes as well as the product and process developers must be taken into account in the Supply Chain

3. Supply Chain in full.

Supply Chain should be the integration of know-how and knowledge institutes with product and process developing companies together with manufacturers and distributing companies all listening to the voice of the customer and working towards his needs.

To achieve this we need to bring in the ideas, principles and techniques of Lean.



4. Lean.

Lean Principles:

- * Listen to the customer
- * Think as an operator
- * One Piece Flow
- * Pull in stead of Push
- * Delete all waste
- * Do it now

LEAN



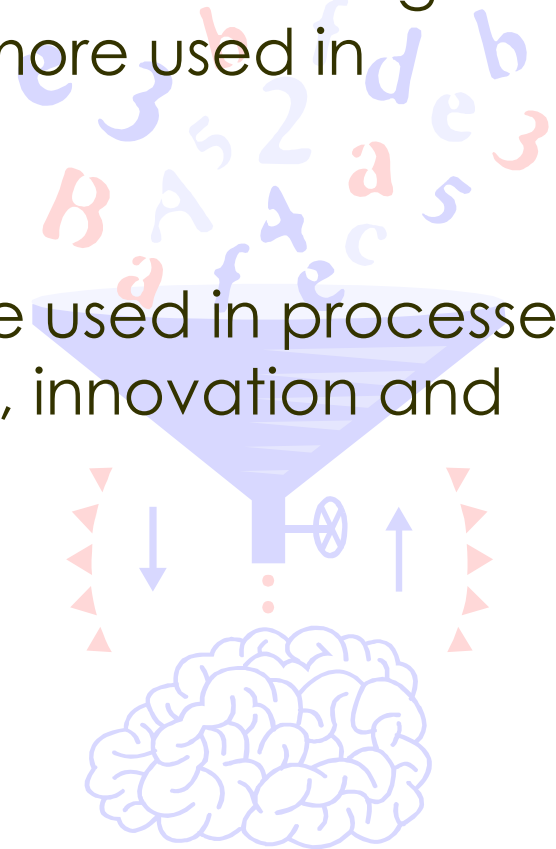
5. What Lean can be used for.

Lean can bring to us processes that run smoother with less cost.

6. Where can we use Lean?

Since Lean was founded by Toyota in a manufacturing site, these Lean principles are more and more used in manufacturing all over the world.

Lean principles can be transformed to be used in processes in logistics, product and process design, innovation and knowledge institutes.



7. Lean into Supply Chain management.

Let's find out what the result can be when introducing Lean in the Supply Chain, by checking out every Lean principle.

Listen to the Customer:

The customer drives the Lean Supply Chain. The customer will stretch the Supply Chain to its very end.

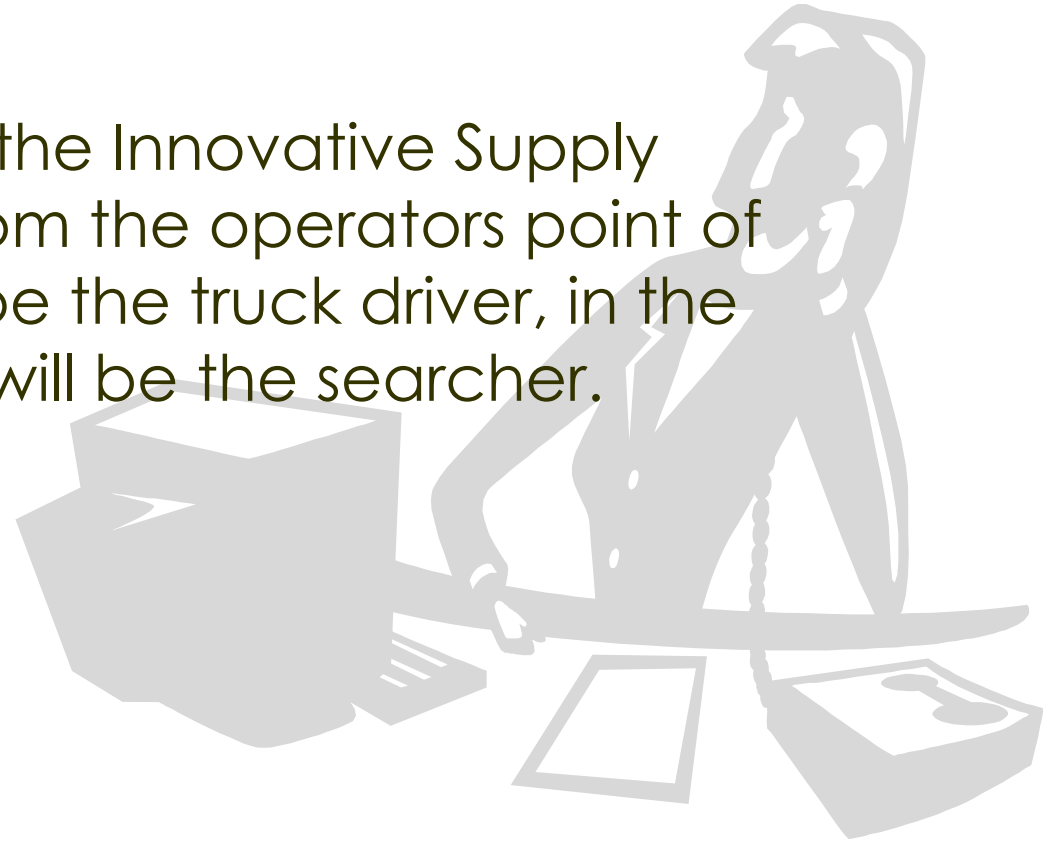
Every player, from the Know-how and knowledge institutes, the product and process developers, manufacturers and logistics partners will have to work towards the needs and wishes of the customer.

We can call this the Innovative Supply Chain, ISC.

7. Lean into Supply Chain management.

Think as an operator:

Every action that is taken in the Innovative Supply Chain will be looked at from the operators point of view. In transport this will be the truck driver, in the knowledge companies it will be the searcher.

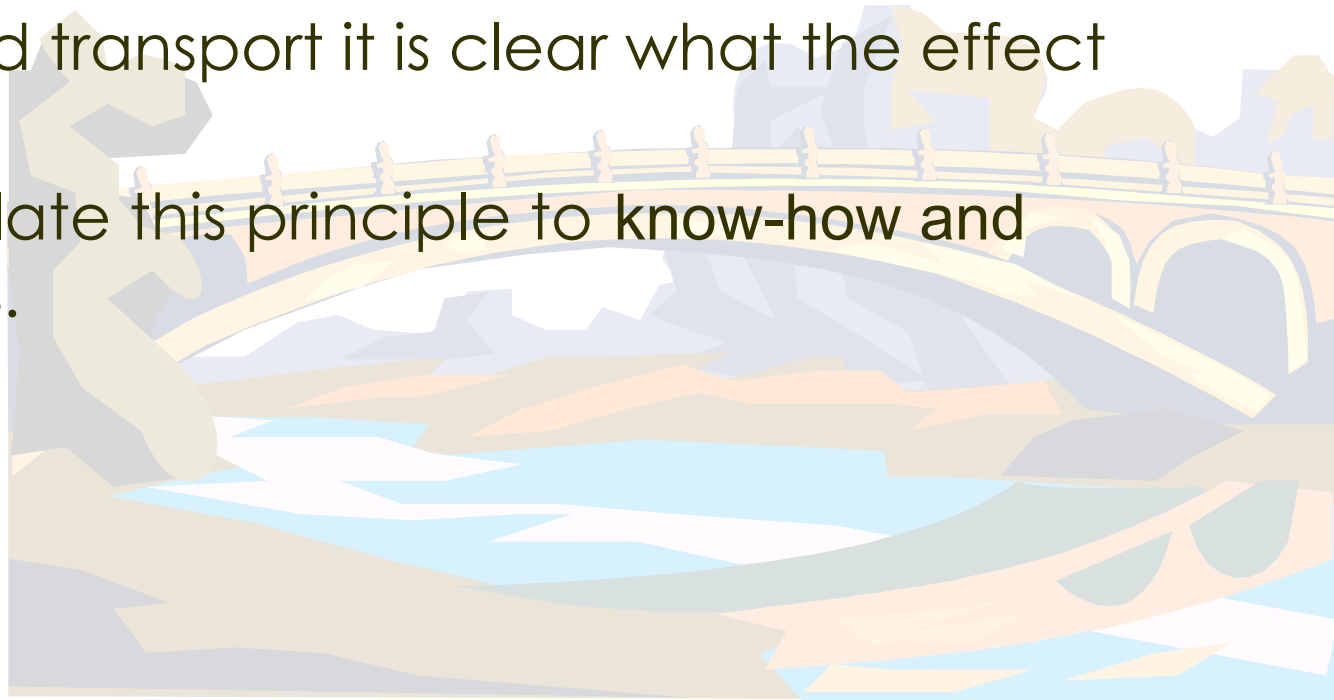


7. Lean into Supply Chain management.

One piece flow:

In manufacturing and transport it is clear what the effect of this principle is.

We will have to translate this principle to know-how and knowledge institutes.

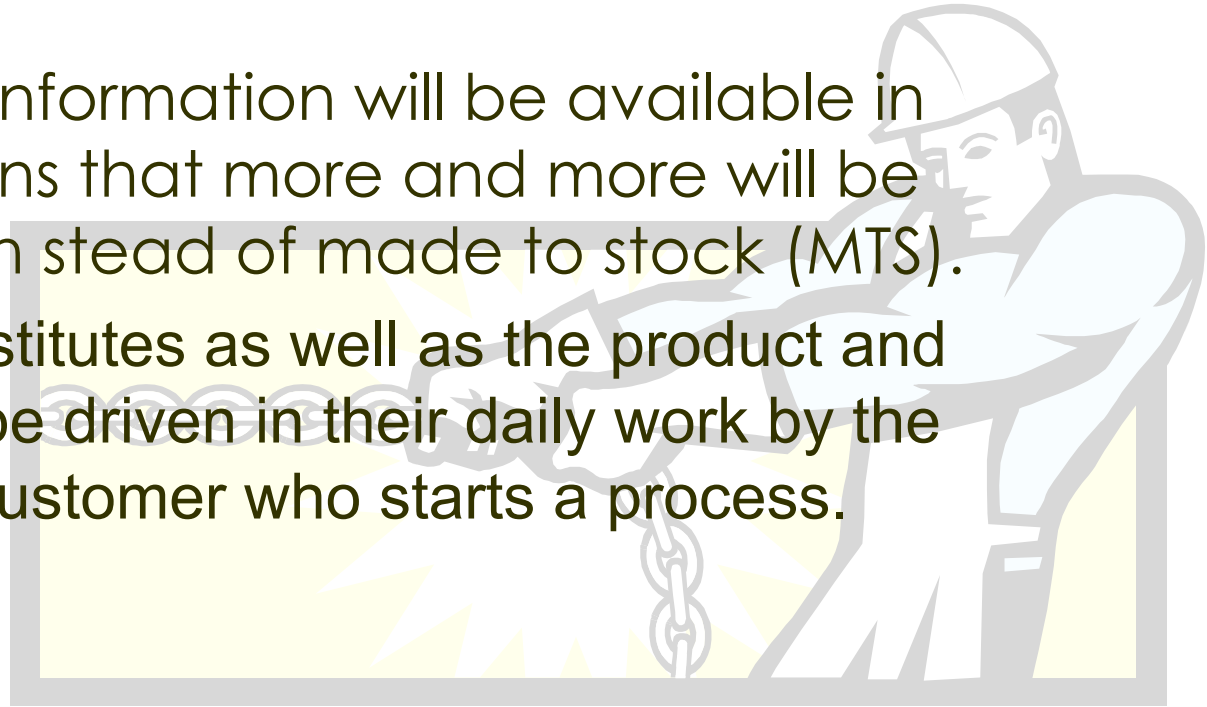


7. Lean into Supply Chain management.

Pull instead of Push

Less and less goods and information will be available in a warehouse, this means that more and more will be made to order (MTO) instead of made to stock (MTS).

Know-how of knowledge institutes as well as the product and process developers will be driven in their daily work by the customer since it is the customer who starts a process.



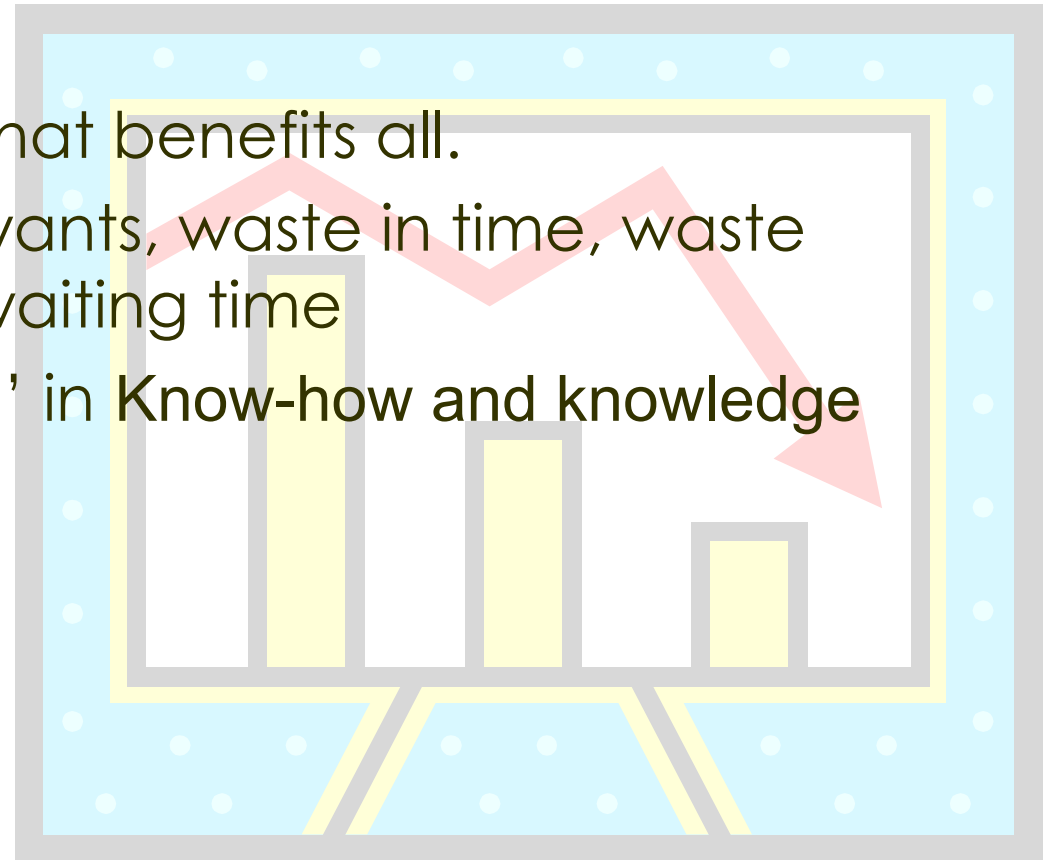
7. Lean into Supply Chain management.

Delete all waste

This principle will be the one that benefits all.

Waste is something nobody wants, waste in time, waste in defect goods, waste in waiting time

We will have to define 'waste' in Know-how and knowledge institutes.



7. Lean into Supply Chain management.

Do it now

Since Innovative Supply Chain management goes beyond the borders of one company, and changes in the current Supply Chain involve mostly a lot of people and money, 'do it now' should be translated into 'simulate it now' and let's clearly understand what the cost is and benefit will be.

8. Who could profit from the Lean Supply Chain?



Since the Innovative Supply Chain is driven by the customer, the customer will benefit directly.

All other players will benefit from Innovative Supply Chain, that is if we can detect the real customer demand and if the customer is willing to pay fully for the consequences of what he defines as his need.

9. Conclusions

Using the Lean principles in Innovative Supply Chain management is definitely the right thing to do.

Therefore;

We need to understand that the material flow is only a very small part of the Lean Supply Chain.

We need to integrate the flow from knowledge institutions through intermediates to end product delivering companies into the Lean Supply Chain.

We have to cluster the real needs of the customer, the end product delivering company and the distributor.

We have to look at Lean Supply Chain management from a 'total cost' or even 'total effort' angle.