*The absolute need for **fast** improvement **right now***

Economic recession currently has become a major concern worldwide and is the sole preoccupation for most industrial companies. Some companies, characterized by cost focused management, see the current situation as an opportunity for downsizing, which was difficult to effect until recently because of a booming business environment. Now, however, with the global financial crisis, many businesses are afraid of their future sales.
This piece focuses on two ideas. First, is everyone in fact concerned to the same extent by this crisis? Second, how could the global meltdown be turned into a significant opportunity?

1. Are we all equally concerned?
The fear the financial crisis has evoked is a fact. But which are the markets that are the most concerned? Are they not the markets of houses, cars, expensive luxury goods, and in general goods that are bought on credit? Are all companies supplying these markets? Or do they all belong to supply chains that depend on such markets? Indeed there are many. But not all companies are in this situation. Examples? Still in the game are companies that supply food, furniture, pharmaceutical products, health care, clothes, toys, electronic and IT, devices, packaging etc.
Are there reasons that consumer behaviour has changed significantly, especially knowing that many European and other governments are trying to encourage consumers to spend and not to save?

In fact, however, even counter-cyclical companies noticed significant and unusual decreases in sales at the end of 2008. If these figures are used in a quantitative forecasting calculation and integrated into the forecast model, the business outlook for 2009 certainly looks rather bad. However, it can also be demonstrated that this part of the forecast is not a trend, but just an event that will take place for a limited period of a few months.
Cost-focused thinking drives managers, who uncritically accept this forecast and revise their projections downwards by -20%. They downsize their workforce and capacity. At the same time, such managers risk making bad decisions and missing a significant opportunity, namely acquiring and inducing true supply chain thinking.

What is a typical supply chain? Each supply chain finishes at the end consumer. In most cases the consumer buys products in a store or has them delivered by a retailer. Stores and retailers source from some local distribution warehouses whose supplies in turn are delivered by regional warehouses. The latter are directly linked to the producer. The producer himself is the client of different raw material and components suppliers. The chain goes on for one or even more upstream link. Depending on the product type and the geographical position of the market, a typical supply chain is thus composed of four to six and even more links or agents.

If we focus on the last link in the supply chain, such as the end consumer of a food or pharmaceutical product, the first question to ask is whether there is any reason this consumer will change his or her consumption behaviour. The answer is a change in consumer behaviour, which is caused by a decrease in income or fear of such a decrease. In fact loss of income begins with corporate downsizing. But this is certainly not significantly impacting the above-mentioned markets. Food and drugs still remain essential consumer goods, which must be produced, must be packed, shipped and distributed. The corresponding links in the pharmaceutical and food chains should not be affected by the economic crisis.

The observation of decreasing business is a combination of fear based upon the agents' and the retailers' reactions on the one side and high inventory supply chain pipelines on the other side, but is limited in time. In fact, if fear results from recent negative economic events, every businessman in a supply chain is induced to maximize cash flow and above all to avoid a build up in inventory. This provokes a chain reaction as most of these chains are crowded with inventories and have many links.

The retailer, the closest link to the end consumer, starts eliminating its huge inventory, even if it means offering special price reductions. His main nightmare is to look at a projected future weighed down with unsold goods. He will do everything to accelerate the flow into the downstream direction. Reaction with respect to the upstream is just the opposite: Don't buy new inventory.

In our view, the supply hole seen by upstream links in the supply chain however is just momentary. This hole moves backward to the first link in the chain and thus creates the impression of decreasing sales and business.
In other words there is not only a chance that sales will restart but also a certainty. However the restart is phased for different agents.
The phenomenon is nothing else but emptying the pipeline of over-crowded supply chains. It confirms one important statement that still is denied in a cost-oriented world, namely that *there are no true sales in a supply chain for any agent until the final consumer has paid for the product.* What is currently happening shows that internal supply chain sales are nothing else but a blockage in the tube and slows delivery to the ultimate market.

Companies, which are facing a current drop in sales and react by downsizing, kill their own future business. On some future day, the tube will be empty and lacking of products with high logistic constraints in terms of lead-time and due date performance. When this occurs, companies will require overcapacity compared to the normal load they had before the crisis. Those who downsized will struggle to remain a reliable and competitive supply chain partner.

Several questions arise. First, when does the business of my link restart? How much time must I bridge? Second, what can I do during this period? How can I capitalize on this?

Let's start with answering the first question. If I'm a link in a supply chain, I must try to get information about the level of the pipeline blockage. This information, which is disaggregated at each link, can help evaluate the time that it takes for any agent to feel an increase in business. One has to calculate local inventory coverage at the downstream links and the moment those downstream links must restart their replenishment. The good news is that replenishment will eventually restart. Moreover there could be a real chance to create chains that are closely synchronised to the true market demand. This is positive because it could change the future behaviour in the chain if all agents become conscious of the advantage of true supply chain thinking and behaviour: Focus on high speed material flow rather than on local efficiencies, thus consistently reducing the huge amount of money absorbed in pipeline inventories.

Finding out when my business will restart, can only be estimated by cumulating all downstream coverage periods.

2. The crisis a huge opportunity to innovate supply chains

The second question, what can be done in the meantime, is as important in terms of developing new competitive advantages.

The fact is that the high inventories sitting at each link and adding up when looking along the whole chain have been created by management rules. Those rules were derived from the so-called cost world that almost exclusively focuses on efficiencies and cost allocation systems. A simple question like "Why does a retailer keep two months of inventory when he could have same-day deliveries (in terms of transportation time from a regional warehouse)?" is even not asked. The two months inventory stems from a sales process that sells cost rather than value.

Again why should a regional warehouse keep four months of inventory when it can be replenished in one or two weeks? All these inventories are due to the fact that today a vast majority of companies still continue to live in a cost world.
This world is characterised and governed by local optima rules. This means that each company in the supply chain focuses on bottom-line results that are calculated according to a cost accounting system.

Moreover there is not sufficient awareness that the results of the bottom-line of each agent are inter-dependent. Once this awareness will exist, things might change. Every business unit, department and work centre is looked at as being completely independent. Environments in which all components are independent obey additive laws. Based upon the assumption of independence, companies are right to think that performance adds up. But are all actors, events, departments, business units and even legally separated agents independent? The fundamental assumption that is driven by a focus on cost is wrong. However, companies continue to build their measurement systems on this basis and the result is local optima rule governance. This is the deeply rooted cause of many failures and restricted business and profit.

To illustrate the point, consider the following example.
A company has serious competitiveness problems. It starts by assessing what has gone wrong. One important step is to pass review products and identify non-profitable products. Satisfied with having identified the source of its 'losses' the company discontinues these products.

But what is the result of discontinuing products based upon their product costs? First it ignores the possibility that the company's competiveness problems are due to huge overcapacity. For such a company *each* product for which the sales price exceeds the material price is *definitely profitable*.

However, the cost allocation system shows exactly the opposite and cost allocation systems drive performance measurements and decision-making. Moreover, discontinuing products does not necessarily remove the costs to which they are allocated. The company ends up reducing sales but not changing its costs. Result: In attempt to increase profitability, actual profit is reduced!

The cost world is the Enemy Number One to true supply chain behaviour, whether it is inside or outside a company. Again local optima rules are the main governance tool. Which are those local optima rules at the supply chain level? The most disastrous in any supply and distribution chain is the order quantity or the lot size. Buyers buy prices and vendors sell cost. The underlying commonality is the economy of scale that exists at the production and the distribution levels. The immediate consequence is high inventory at the level of each agent. In addition transportation lots are maximised for cost reasons. *By the way how can all those companies complain about high transportation cost and jeopardize all logistics best practice rules, which decided to relocate their production to so-called low cost countries while continuing selling for European local markets.* To reduce costs, large batches are purchased and transported. Cost focused operations managers, who are measured on productivity as defined by the number of items produced per unit of time or hour worked, drive *optimal* lot size productions. But what does *optimal lot size* mean? It still signifies that the cost of set up times must be largely compensated by the *productive time* at any resource.

The result is clear. One must produce large batches, especially when markets are low, sales are low and the first law is to reduce cost according to a mathematical cost phantom produced by cost allocation systems! Who takes into account that all logistics competitive advantages are jeopardized? Who takes care of the opportunity losses? Who takes care of losing customers not responding to their logistics expectations in terms of reduced lead times and due date reliability? Which cost system is at all able to evaluate those *true costs?* Who worries about long cycle times induced by long batches and large campaigns generating high work in process inventory and high semi-finished and finished goods inventories.

Especially in times of business contractions, when it is crucial to free cash, too many companies, in the name of productivity and cost reductions prevent themselves from making cash. Such local initiatives unfortunately not only affect the company responsible for such decisions but also jeopardize the whole supply chain's competitiveness.

In general, business slumps are unfortunately used to only reduce cost, cost as calculated by cost allocation systems. This in fact triggers a vicious circle that begins with low competitiveness and ends up with even lower competitiveness. Periods of recession should be looked at as opportunities to develop competitive advantages. There is huge capacity available to concentrate on improvement projects that could positively impact the bottom-line. Crises show up organisational weaknesses and the limitations of its downstream and upstream supply chain links. It is the ideal time to start thinking about how to improve competitiveness and develop new and lasting competitive advantages.

We previously mentioned that, despite the apparent crisis, many supply chains will not experience a protected period of slow business. However, all agents of the same supply chain will experience a short period of contraction and the periods are phased because lack of previous supply chain synchronisation.

This means first that the different agents have not unlimited time to develop and implement improvements and second that all agents cannot do it at the same time. Nevertheless if a supply chain was to be winning chain in the future, a global improvement strategy based upon solidarity of all the agents belonging to that chain must be developed. It is not sufficient for one agent to dramatically improve his lead-time and due date performance if the downstream agents will break the flow.

If a supply chain is to become stronger then it must *surprise* the end consumer. He is the only one that can enlarge the pipeline. This means that in general at least four to five agents must start new types of partnering based upon trust and win-win relationships. The speed of the material flow to the end consumer as well as the speed of the money flow from the end consumer to the most upstream agent must be high.

Supply chains must be improved. Innovation is the key word. But what does innovation mean in this context? Is it internally focused innovation, is it product innovation or is it innovation for the end-customer. The latter means that the consumer must win. But can this be achieved if we don't really know him and if we ignore his pain points. A company must become understand their customers and consider how to identify and to exploit his constraints. Knowledge about customer pain points is important, be it internal pain or be it at the link to the customer. It can only be acquired if the supplier has been able to build a partnership with this customer. Trust is built, when the supplier has the clear intention of making his customer win.

Today such type of partnering is nearly impossible. The local optima rules are totally opposed to fostering such behaviour. This is an unintentional result of the cost world paradigm in which everything is looked at as independent, the focus always remains local, and inertia protects management behaviour and prevents real improvements.

Partnership, trust and *win-win* are the three *key words* that best characterize *supply chain behaviour.*

In the current economic crisis, it is even more important to make innovative supply chain thinking happen. Innovation must be designed in a way that it spreads like a virus through the whole chain, upstream up to the raw material provider and downstream to the end consumer. Building up this type of partnership at each link is the only way to be prepared when business returns to pre-crisis levels. Only those chains that are fully reactive at this moment will be able to *surprise* the end consumer and beat the competing chain. It is the only way to synchronize the whole chain. It is the only way to speed up the whole chain and to avoid any future pipeline blockage. Finally it is the only way to increase the business. *The more I'm able to make my customer making business, the more I will be able to make business myself.* The focus must remain on the chain. The solidarity and responsibility of a group of agents joined together in a strategic supply chain is necessary. It must be leveraged by one step. It is *not my* company *but our* supply chain. It is *not my* customer *but our* consumer.

A crisis is not the same for everybody. It should not be used as an excuse to downsize, as it is the case today. It should be used to develop innovative supply chain thinking and behaviour, and create winning supply chains.

There is one necessary condition to this: *we must shift from local optima rules governance to the global maximum rule governance*.