From market instability to business agility?
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Currently, we all witness a great deal of instability in the global economy, caused by the effects of the ‘credit crisis’. Reuters states today (November 13th): “Germany has fallen into recession and China’s industry output growth waned to its weakest in seven years”. We see that our highly connected business world also leads to an interconnection of financial effects: what started as a problem in the U.S. housing market in 2007 now leads to great problems of all kinds of enterprises worldwide. To some, it almost looks like the well-known butterfly effect from chaos theory. Obviously, the current volatility of markets requires great flexibility of enterprises to deal with – or even counteract – unplannable or completely unforeseen circumstances. This holds now when things spiral downward, but may – or even will – also hold at the end of the crisis, when things spiral upward again.

Flexibility can be sought inside a company, but more and more, flexibility is achieved outside the company, i.e., by the formation of business networks that implement value chains, supply chains, comakerships, etcetera. This external flexibility needs to be shaped differently in times like these than in times that are more stable – this because the context changes are in a different order of magnitude. We see external flexibility in two ‘flavors’: flexibility with respect to the ‘contents’ of existing business relations and flexibility with respect to ‘structure’ of business networks. In the first flavor, we see that contracts between enterprises become smaller to reduce risks, leading to more contracts that each deal with shorter periods of time and smaller amounts of exchanged values. In the second flavor, we see that business networks become more dynamic, because customer demands and provider offerings change quickly. This means that business relations need to be established and dismantled frequently and swiftly, leading to business forms like dynamic virtual enterprises.

Clearly, applying both flavors in a serious way comes at a cost too: the overhead of managing business relations increases in a significant way. Traditional ways of contracting and business network formation become too costly and too slow. This is where new concepts and automated support for these concepts are entering the playing field. We see the development of approaches and tools for electronic contracting, semi-automated establishment of dynamic virtual enterprises, automated business service outsourcing, and automated support for seamless business process management across organizational boundaries. This all boils down to a creative integration of new business models and advanced information technology. Part of this is ready for practical use, other advanced parts are currently being researched – for example at TU/e.

The bottom line of this is that we currently are confronted with instability that will last for some time – hopefully soon into a more positive direction though. Industry needs to take measures to deal with this: move from instability via structural flexibility to business agility.