Can You Use KPIs to Predict the Future of Our Supply Chain?

How can we be reactive to changes in the world around us so that our company can be competitive in any situation? How can we systematically prepare for this uncertain future? In this article, Professor Maria Jesus Saenz and her team from the Zaragoza Logistics Center, Spain, examine these questions and outline the scope of a thesis that will look at KPIs and their usefulness in predicting the future of our supply chain.

These questions are exactly what we are working on together with students from the MIT-Zaragoza International Logistics Program, a partnership between the Center for Transportation and Logistics at Massachusetts Institute of Technology and the Zaragoza Logistics Center. The purpose of this research project is to develop predictive indicators that will help Clariant and its business units to be proactive in their supply chain strategies. The methodology proposed in this research is designed to be replicable at any business unit located at any region around the world. To demonstrate the system of analysis, the research will focus its scope on the company’s Supply Chain Network in the growing region of the Asia-Pacific.

In today's business environment, uncertainty about the future is higher than what it was before, even more so now that the world evolves at a much faster pace. In this uncertain world how can we know what kind of supply chain strategy will better serve our needs, say ten years from now? By using a methodology known as Scenario Planning we are attempting to answer these fundamental questions.

One of the objectives of the research project is to develop a systematic methodology that allows us to develop plausible scenarios describing how the world may look like in the medium to long term. The purpose of these scenarios is not to accurately predict the future but to help organizations develop robust enough strategies by looking into external driving forces (Social, Technological, Environmental, Economic, and Political trends, among others.) that impact key internal factors that affect the performance of the company. By playing with these interactions it will be possible to determine the implications of various strategies however shape the future might be.

Another objective of the study is to develop supply chain predictive indicators to serve as ground sensors that would help indicate in which direction the future is shaping to be. Once we have tools that help us monitor how the world is turning into, we may know what changes in market trends may happen before they materialize, enabling us to be proactive in our supply chain strategy.

As Prof. Maria Jesus Saenz who is the academic advisor for this project noted on multiple occasions our collaboration will prove interesting for the Supply Chain Excellence group at Clariant as well as professors and students at the MIT Zaragoza Program. We will jointly research key supply chain trends and come up with innovative ideas and tools that will help our business.

*By Prof. María Jesus Saenz, Mark Boyonas and Luis Olavarria*