“In the paper we identify various aspects of integration and what are best for the environmental conditions in which companies are working. These are the main contributions we’ve made”.

Cristina holds a PhD in Business Administration from the University of Barcelona and a MSc in Logistics and Supply Chain Management from Cranfield University (UK). She is Assistant Professor in the Department of Operations Management and Innovation at ESADE and has extensive teaching experience in operations management and supply chain management. Cristina spoke to us about the key points in her paper “Business conditions, integration and performance in supply chains”.

Cristina Giménez
Assistant Professor of the Department of Operations Management and Innovation
Where did the idea of writing this paper come from?
Three of us have been working on it: Dirk Pieter van Donk and Taco van der Vaart from Groningen University in The Netherlands and myself. We met at an academic conference on Operations Management and as we had been studying it from different angles, we decided to carry out some more research on the topic. Until then, the literature had looked at the relationship between integration and performance, but ignored the environment. So, our paper was an attempt to bridge this gap: under which business environment is integration most appropriate?

How do you evaluate this joint project with your fellow authors? How did you go about writing the paper?
We used email to keep in touch, but we also had some face-to-face meetings: they came to Barcelona and I visited them in Groningen a couple of times. We also met up at some conferences. Working with them has been a very positive experience because we all have different points of view and also because the database we created to write the paper is made up of information about Dutch and Spanish companies.

How is the study structured?
Basically, we followed the guidelines for academic papers, beginning with an introduction to the topic setting out why it needs to be studied. In this case we focussed on two issues: (1) it contributes to literature because the topic hasn’t been studied yet, and (2) it is useful for companies. Integration calls for resources to create ties between companies and hence it is important to know whether there is a return on investment. After the introduction, there is a review of the literature on the topic, where we set out in more detail how our paper will contribute to existing knowledge about integration and performance. Next, in the methodology section, we describe how we collected the data and how it was analysed to answer the questions we posed at the beginning of the study. This is followed by an analysis of the results, and the paper finishes with the conclusions we came to about the relationship between integration and performance in different business environments.

You quote numerous sources throughout the paper. What criteria did you use for selecting them?
We consulted a range of online databases and conducted searches based on key criteria such as integration and performance. That guided us to many articles by other authors who had written about the issue, and through their bibliographies we also found more research about the topic.

In what ways does integration in the sense of cooperation have a positive impact on the supply chain?
On service and cost. In our paper we identify different aspects of integration and this is one of the main contributions we have made. For example, this integration might be physical (adapting containers or packaging based on customer needs, with frequent deliveries, etc.) or alternatively it could involve things like joint delivery planning or working together to reduce transport costs. Other aspects of integration are how information is exchanged (structured or non-structured channels) and attitudes (the perception of the various players in the supply chain).

These aspects do not all have the same impact on performance, but rather their impact (positive, negative or none) depends on the environment the company is in. This is the second contribution made by our paper. We classified companies based on whether they were working in simple or complex environments (simple environments are characterised by make-to-stock, little variety and large volumes,
big production batches and cost as an order winner). In simple environments, we saw that only a number of physical integration measures have an impact on performance, but only on service, not on cost. In contrast, in complex environments there are many more aspects of integration which impact performance. In these types of environments, sharing information, working together to enhance the supply chain and having a cooperative attitude lead to improvements in both service and cost.

Is integration a widespread concept or is it still the case that little work has been done on it?
People started talking about it at the beginning of the 1990s. However, Spanish firms in the fast-moving consumer goods sector started talking about it in 1997. Indeed, there are still many companies that haven’t achieved the degree of cooperation with customers and/or suppliers that integration requires. This shows that it’s hard to put integration into practice as there are many barriers. If we can analyse when to invest in integration is a good idea, we will help companies to prioritise their resources.

What was the most difficult thing about writing the paper?
The most difficult part was gathering the data, especially because of the low response rate we had in the survey. It was really tough getting answers from companies.

Are there plans for fresh studies to expand our knowledge of integration?
As a matter of fact, I’m still working on it. Some other lecturers in the Department of Marketing at ESADE and myself were awarded research funding from the International Commerce Institute of ECR Europe to look into how this cooperation between companies actually takes place. In this study we are looking at the tools used by companies to achieve integration. We haven’t finished it yet, but so far we’ve already seen how factors such as the people involved, the organisational structure and the incentives system play a key role.