# Emerald Insight

## Journal of Business & Industrial Marketing

Business, industrial marketing and uncertainty
José M. Merigó Anna M. Gil-Lafuente Jaime Gil-Lafuente

## For Authors

If you would like to write for this, or any other Emerald publication, then please use our Emerald for Authors service information about how to choose which publication to write for and submission guidelines are available for all. Please visit www.emeraldinsight.com/authors for more information.

## About Emerald www.emeraldinsight.com

Emerald is a global publisher linking research and practice to the benefit of society. The company manages a portfolio of more than 290 journals and over 2,350 books and book series volumes, as well as providing an extensive range of online products and additional customer resources and services.

Emerald is both COUNTER 4 and TRANSFER compliant. The organization is a partner of the Committee on Publication Ethics (COPE) and also works with Portico and the LOCKSS initiative for digital archive preservation.

*Related content and download information correct at time of download.

# Business, industrial marketing and uncertainty

*José M. Merigó*

Department of Management Control and Information Systems, University of Chile, Santiago, Chile, and

*Anna M. Gil-Lafuente and Jaime Gil-Lafuente*

Department of Business Administration, University of Barcelona, Barcelona, Spain

## Abstract

**Purpose** – This special issue of the *Journal of Business & Industrial Marketing*, entitled "Business, Industrial Marketing and Uncertainty", presents selected extended studies that were presented at the European Academy of Management and Business Economics Conference (AEDEM 2012).

**Design/methodology/approach** – The main focus of this year was reflected in the slogan: "Creating new opportunities in an uncertain environment". The objective was to show the importance that uncertainty has in our current world, strongly affected by many complexities and modern developments, especially through the new technological advances.

**Findings** – One fundamental reason that explains the economic crisis is that the government and companies were not well prepared for these critical situations. And the main justification for this is that they did not have enough information. Otherwise, they would have tried any possible strategy to avoid the crisis. Usually, uncertainty is defined as the situation with unknown information in the environment.

**Originality/value** – From a theoretical perspective, the problem here is that enterprises and governments should assess the information and the uncertainty in a more appropriate way. Usually, they have some studies in this direction, but many times, it is not enough, as it was proved in the last economic crisis.

**Keywords** Uncertainty, Editorial, Industrial marketing, AEDEM 2012

**Paper type** Viewpoint

## Introduction

This special issue of the *Journal of Business & Industrial Marketing*, entitled "Business, Industrial Marketing and Uncertainty", presents selected extended studies that were presented at the European Academy of Management and Business Economics Conference (AEDEM). This edition of the conference was hosted by the Faculty of Economics and Business at the University of Barcelona in Barcelona, Spain, between 5 and 7 June, 2012. The event had several invited speakers, including Fynn Kydland, Nobel Prize of Economics in 2004. More than 200 persons participated in the conference presenting different issues regarding business and management. The main focus of this year was reflected in the slogan: "Creating new opportunities in an uncertain environment". The objective was to show the importance that uncertainty has in our current world, strongly affected by a lot of complexities and modern developments, especially through the new technological advances.

The aim of this special issue is to present high-quality papers that reflect the importance that uncertainty and other complex issues of information may have in our world, with special focus on business and industrial marketing research. A key example showing the importance of dealing with uncertainty is the recent economic crisis. One fundamental reason that explains the economic crisis is that the government and companies were not well prepared for these critical situations. And the main justification for this is that they did not have enough information (Merigó *et al.*, 2015a). Otherwise, they would have tried any possible strategy to avoid the crisis. Usually, uncertainty is defined as the situation with unknown information in the environment.

From a theoretical perspective, the problem here is that enterprises and governments should assess the information and the uncertainty in a more appropriate way. Usually, they have some studies in this direction, but many times, it is not enough as it was proved in the last economic crisis. The advantage of dealing adequately with uncertainty is that the companies and governments get a complete view of different situations that could happen in the future. Therefore, they prepare strategies to assess any situation that could occur, so

they can afford better any unexpected event. In the case of a crisis, ideally, the strategies should be able to correct it or at least minimize the costs as much as possible. And in an expansive economic process, they should be able to use the additional benefits in the most efficient way to maximize them as much as possible. The problem with the last economic recession is that many companies and governments did not take the problem of the financial and housing sector seriously. Thus, when these sectors really fell, they were not prepared to afford these critical events, so many enterprises went to bankruptcy and with a lot of costs for the whole economy. Note that in a critical macroeconomic event, it is more difficult to deal with these situations because the quantities of resources involved are extremely huge.

Focusing on marketing, uncertainty also plays an important role because all the marketing strategies are affected by uncertainty and a wide range of complexities in the information. When preparing marketing plans, analysts need to consider carefully all the potential situations that may happen in the future and be ready to adapt the strategies into any scenario. By doing so, they will be able to maximize the benefits and minimize the costs as much as possible. For example, in pricing decisions, it is important to analyze strategies that adapt the price to the dynamics of the economic fluctuations where sometimes it is better to increase the prize and sometimes it is better to decrease it. If the companies do not assess the complexities of the information and the uncertainty, they will not be able to properly assess the optimal variations to be made in the price throughout time. Many other issues could be considered in marketing problems including product decisions, promotion policies, distribution channels and technological issues (Casillas and Martínez-López, 2010). Obviously, this is also applicable to industrial marketing because any process of a firm usually depends on the available information to optimize it (Martínez-López and Casillas, 2013).

There is no doubt that a lot of research should be developed in this direction due to the important implications it may produce. Today, there are many theories for dealing with information. A strong research area in this context primarily based in the computer science community is computational intelligence. This field is very interdisciplinary and also has a significant influence in mathematics, engineering, operations research, management and economics fields. In social sciences, it is becoming very popular due to the high degrees of uncertainty that many times affect these disciplines. Computational intelligence (Engelbrecht, 2007; Gil-Lafuente and Merigó, 2010), strongly connected to the concept of soft computing (Yager *et al.*, 2013), represents a set of methods and techniques that aim to represent the information under a wide range of frameworks. Mainly, it is constituted by fuzzy sets and systems (Merigó *et al.*, 2015b; Zadeh, 1965), neural networks (Gurney, 1997), evolutionary computation (Back *et al.*, 1997) and probabilistic computing. Additionally, there are many other topics that can get involved under this framework including business analytics (Saxena and Srinivasan, 2012), business intelligence (Chaudhuri *et al.*, 2011) and many other quantitative methods that many times connect with computational intelligence including decision theory (Figueira *et al.*, 2005) and time-series forecasting

(Yager, 2008). The aim of this special issue is to present some current research in this direction showing how business and industrial marketing research is growing in this direction. After a careful review process, we have selected nine papers for inclusion in this special issue.

The first article, by Antonio Navarro-García, Marta Peris-Ortiz and Ramón Barrera-Barrera, studies the effect of market intelligence on perceived psychic distance, strategic behaviors and export performance in industrial small and medium enterprises (SMEs). They find that decisions that adapt marketing mix elements to fit foreign markets have a positive effect on export performance. Additionally, the results indicate that there are more strategic adaptations when managers perceive a greater psychic distance.

The second study, by Francisco Javier Arroyo-Cañada, analyzes the incidence of incentives for t-commerce acceptance. They study an application in the television sector seen as a distribution channel. The authors use computational intelligence techniques for assessing the data including fuzzy relations (Zadeh, 1971) and the theory of forgotten effects (Gil-Aluja, 1999).

The third work, written by Natalia Medrano-Sáez and Cristina Olarte-Pascual, analyze the effects of the last economic crisis on marketing innovation. They focus on the Spanish case which was substantially affected by the crisis. They analyze the results before and after the crisis and identify an important decrease on marketing innovation after the recession.

In the fourth paper, María Dolores Gallego, Salvador Bueno and David López-Jiménez, studies the impact of business-to-consumer e-commerce codes of conduct on sales volume. They analyze the Spanish case to see the implications that this market may bring to this topic. The main test analyses the relationship between corporate image and corporate satisfaction. The results show that connecting to a code of conduct usually brings an increase in sales.

The fifth article, by Wenhua Shi, Lingshu Tang, Xiaohang Zhang, Yu Gao and Yameng Zhu, analyzes the impact that word of mouth has on customer satisfaction. They develop an experiment to prove this idea. Note that the concept of word of mouth is growing a lot strongly motivated by the development of modern technologies that facilitates the communication.

The sixth study, written by Nadia Jiménez and Sonia San Martin, focuses on the reputation that firms have in developing markets through the concept of country of origin. They use ideas from a wide range of disciplines including management, psychology and sociology. They analyze the moderating role of ethnocentrism in this framework and including animosity, trust, risk and purchase intention. Their model considers consumers from a developing market evaluating imported products.

The seventh work, by Daniel Palacios-Marqués, Maria Guijarro and Agustín Carrilero, studies the use of customer-centric philosophy in hotels to improve customer loyalty. This approach introduces an innovative framework that connects marketing with tourism research.

The eight article, by Rubén Huertas-García, Juan Gázquez-Abad and Santiago Forgas-Coll, develops a new design strategy for improving adaptive conjoint analysis. They

introduce a method for manually arranging profiles into subsets of two profiles. They suggest that this process could be automated through a computer algorithm using a full profile approach to show the prototypes. They show an illustrative example focused on a business-to-business problem.

Finally, in the last paper, Mehran Salavati, Milad Tuyserkani, Seyyede Anahita Mousavi, Nafiseh Falahi and Farshid Abdi present a new framework for improving new product development by using risk management methods. Several issues are considered from the areas of technology, marketing, organization and commerce, to prove the connection with new product development.

## References

Back, T., Fogel, D.B. and Michalewicz, Z. (1997), *Handbook of Evolutionary Computation*, Oxford University Press, Oxford.

Casillas, J. and Martínez-López, F.J. (2010), "Marketing intelligent systems using soft computing: managerial and research applications", *Studies in Fuzziness and Soft Computing*, Springer, Berlin.

Chaudhuri, S., Dayal, U. and Narasayya, V. (2011), "An overview of business intelligence technology", *Communications of the ACM*, Vol. 54 No. 8, pp. 88-98.

Engelbrecht, A.P. (2007), *Computational Intelligence: An Introduction*, Wiley, Chichester.

Figueira, J., Greco, S. and Ehrgott, M. (2005), *Multiple Criteria Decision Analysis: State of the Art Surveys*, Springer, Boston, MA.

Gil-Aluja, J. (1999), *Elements for a Theory of Decision Under Uncertainty*, Kluwer Academic Publishers, Dordrecht.

Gil-Lafuente, A.M. and Merigó, J.M. (2010), *Computational Intelligence in Business and Economics*, World Scientific.

Gurney, K. (1997), *An Introduction to Neural Networks*, Routledge, London.

Martínez-López, F.J. and Casillas, J. (2013), "Artificial intelligence-based systems applied in industrial marketing: an historical overview, current and future insights", *Industrial Marketing Management*, Vol. 42 No. 4, pp. 489-495.

Merigó, J.M., Engemann, K.J. and Gil-Lafuente, A.M. (2015a), "Intelligent systems in business and economics", *Cybernetics and Systems*, Vol. 46 Nos 3/4, pp. 145-149.

Merigó, J.M., Gil-Lafuente, A.M. and Yager, R.R. (2015b), "An overview of fuzzy research with bibliometric indicators", *Applied Soft Computing*, Vol. 27, pp. 420-433.

Saxena, R. and Srinivasan, A. (2012), *Business Analytics: A Practitioner's Guide*, International Series in Operations Research & Management Science, Springer, New York, NY.

Yager, R.R. (2008), "Time series smoothing and OWA aggregation", *IEEE Transactions on Fuzzy Systems*, Vol. 16 No. 4, pp. 994-1007.

Yager, R.R., Abbasov, A.M., Reformat, M.Z. and Shahbazova, S.N. (2013), *Soft Computing: State of the Art Theory and Novel Applications*, Springer-Verlag, Berlin.

Zadeh, L.A. (1965), "Fuzzy sets", *Information and Control*, Vol. 8 No. 3, pp. 338-353.

Zadeh, L.A. (1971), "Similarity relations and fuzzy orderings", *Information Sciences*, Vol. 3 No. 2, pp. 177-200.

## Corresponding author

**José M. Merigó** can be contacted at: jmerigo@fen.uchile.cl