
Editorial

Carla S.E. Marques

Department of Economics, Sociology and Management,
University of Trás-os-Montes e Alto Douro,
Quinta dos Prados, Complexo Pedagógico,
Apartado 2013, 5001-801 Vila Real, Portugal
E-mail: smarques@utad.pt

The world has changed dramatically in the last ten years. With the global financial crisis and the various national recessions and uncertainty has greatly increased for individuals, families, national governments and, of course, for the firms, which must now learn to navigate this new and changing context in economies in crisis and their impact on the several stockholders.

Global financial crisis and national recessions have simply made the changes more rapid and the challenge of managing them bigger. In this context, innovation and learning therefore assumed special importance to firms changed more quickly. In this special issue we wanted to understand the changes occurring in the last years in the global economy, their impact on business innovation processes, learning and performance; and how knowledge and innovation could be a tool for sustainability in economies in crisis in the global economy.

The contributions we received could not have been more diverse. While initially surprising, it quickly became clear to us that this was an indication of the far reaching effects of the ongoing changes in the economies in crisis; as well as comprehensive impact of knowledge and innovation in dealing with them. We decided that the final selection of articles had to reflect this diversity and, in the end, feel the issue is richer for it.

Although the articles may appear to (and indeed to) deal with many different specific issues and national contexts, the underlying theme is precisely the role of knowledge and innovation in helping survive, adapt to or even take advantage of this new more turbulent business context in economies in crisis.

The issue starts in Spain, with the paper entitled 'Learning, knowledge and dynamic capabilities: theoretical implications for competitiveness and innovation in the 21st century' by Salvador Vivas-López, Marta Peris-Ortiz and Victor Oltra. This paper support dynamic capabilities as a strategic tool for company management, illustrating the evolution that can be discerned in the process of developing competitive advantage as a result of the organisation's internal analysis. In a first stage, interest was centred on understanding the nature of the firm's assets, and knowing which conditions would make it possible to turn them into lasting and sustainable sources of competitive advantage. During a second phase, interest was shifted towards the dynamic processes of generation, development and accumulation of assets. In this sense, dynamic capabilities are those which allow managers to activate and redirect the complex framework of influential economic and organisational factors, thus helping control the company's evolution and enhancing the organisation's wealth of opportunity. Dynamic capabilities are therefore

key factors in optimising innovation and the overall strategic course of the company's future.

The next paper explored the relation between innovation transfer system and the promotion of university spin-offs, entitled 'Are USOs more supported to compete than spin-offs not linked to universities? A dynamic overview and proposal of model of USOs support' by Nuria Calvo, David Rodeiro and Isabel Soares, investigates differential factors of survival of USOs compared to those spin-offs not linked to education institutions. Issues related to the entrepreneur specific human capital, and also related to environmental conditions are identified as the main factors. An academic model for USOs support is presented, considering the role of USOs' founders, academic institutions and government.

The issue then moves to another matter: business performance. The paper entitled 'The impact of non-technological innovation on the technological innovation in industry and services in Portugal' by Pedro Ferreira and Carla Susana Marques, researching the impact of organisational and marketing innovations (non-technological), on the technological innovation, both to the industry and to the services. They used data extracted from the *Community Innovation Survey 2008*, for Portugal, by applying a *probit* and *logit* regression. The obtained results confirm the importance of the marketing innovations for the services companies. The effects of the non-technological innovation, on the technological innovation vary according to the sector at which the company performs, although they cannot neglect the similarities in some results. Finally, the study shows the positive influence of the services companies on the likelihood of innovation and the extent of innovation. The paper entitled 'The differences in structural relationships among software engineering capabilities and business performance depending on origin of IT firm in Japan', by Yasuo Kadono, clarified the mechanism of how software engineering capabilities relate to business performance of IT vendors. They verified the relationships among software engineering capabilities and business performance very significantly depending on origin of vendor: maker-turned, user-turned or independent. In maker-turned vendors, service, process, and product innovations are effectively connected. In user-turned vendors, software engineering innovation is probably attributable to a management policy of paying extra attention to business performance. In independent vendors, human resource development is the only factor that positively and significantly influences the other capabilities and business performance.

There is an undeniable positive effect of innovation for both firms and the economy, with particular regards to the financial performance of firms. However, there is an important role of the decision making process for the allocation of resources to finance the innovation process. The next paper entitled 'Factors influencing innovation decision making in Portuguese firms' by Alexandra Braga and Vitor Braga, tried to understand what factors explain the decision making process in innovation activities of Portuguese firms. This is an empirical study, based on the modern theoretical approaches, which has relied on five key aspects for innovation: barriers, sources, cooperation, funding; and the decision making process. The results suggest that the factors that mostly influence the Portuguese firms' innovation decision-making processes are economical and financial (namely those related to profit increase and labour costs reduction).

To decide innovate is necessary have all the (in)formation possible. The term 'gatekeeper' is widely used to represent a class of those who collect information, knowledge and contextualise this before they can share with the rest of the members of the organisation knowledge networks-both formal and informal organisations. The next

paper, entitled 'Innovation and learning through knowledge gatekeepers: a critical examination of the relationship between trust, openness, and the use of gatekeepers in organisations' by Deogratias Harorimana, founded: that there is a strong relationship between the openness of a given firm, as regards its knowledge sharing culture and level trust, and that firm's use of knowledge gatekeepers, and that the stage of a given firm's growth corresponds to its strategic use of different types of gatekeeping. In early and decline (renewal) stages, for instance, firms tend to maintain an informal gatekeeping strategy, while firms who are in the peak phase generally focus on formal gatekeeping.

Innovation may be approached as the implementation of new or significantly improved products, of new processes, of new organisational methods for business practices and the local organisation of work or changes in the organisation's external relationships. In such contexts, the opinions of healthcare service users play a fundamental role in the reform of healthcare units, and especially in terms of economic efficiency, improving care standards and innovating in organisational structures and processes. The paper 'Knowledge and satisfaction – two premises for healthcare service innovation and development: the perspective of UCSPVR users' by Fernanda Maria Duarte Nogueira, Maria José de Matos Rainho and Lucinda Fátima Costa Vaz Silva, studied the level of user satisfaction with the services innovation provided by three healthcare units.

Recently, several studies have suggested that spin-off firms are not the most useful of the available pathways for transferring scientific knowledge from public research institutions to industry, even in the countries where the spin-off phenomenon is more extended. The paper 'The creation of new technology-based firms at the Spanish public research institutions: an analysis of their financial statements' by David Rodeiro, Sara Fernández, Milagros Vivel and Maria Jesús Rodríguez, carried out a descriptive analysis of the financial statements of new technology-based firms created by the Spanish universities and the Spanish National Research Council between the years 1998 and 2006. They find that, although public research-based spin-offs show positive asset and employment growth rates, they tend to remain relatively small and fail to generate positive returns to their investors.

Back to Asia, and at amore micro level, the paper entitled 'The relationship among organisations' factors, information technology, innovation and performance: an Indonesian SMEs study' by Ervi Cofriyanti and Achmad Nizar Hidayanto, examined the factors that influenced SMEs in Indonesia in utilising information technology as well as the impact of information technology utilisation for innovation and performance of SMEs. The results also showed that the utilisation of information technology has a significant positive impact on innovation and performance.

Again, in Europe, the paper entitled 'R&D capital and private production: testing firm characteristics using micro data' by Desiderio Romero-Jordán, María Jesús Delgado, Maria Jose Madeira Silva, Jacinta Moreira and Jorge Simões, provided evidence to add to current knowledge on the contribution of R&D capital to private production based on panel data of Spanish manufacturing firms over the period 1990 to 2005. The differences in how R&D capital affect firm production is explored for small and large firms and for technological intensity of the firm. The empirical exercise performed reflects that, for the whole sample, R&D effort has a significantly and positive impact on the firm production. They also find that the belonging to technology-intensive sector exert a positive effect on this relation.

Finally, the last contribution ‘Retail marketing innovation in Spain’ by Natalia Medrano-Sález and M^a Cristina Olarte-Pascual, carried out on innovation within the field of retail marketing. It arises from the limited scientific literature on the subject, given the significant current interest in marketing innovation as a possible solution to confront the new competitive scene in the current economic and social climate. The database utilised was provided by PITEC 2008 (June 2010). The main findings highlight that retail marketing innovation is in an initial phase; turnover, export activities and internal R&D appear to be the characteristics that make retailers more likely to develop marketing innovations.

We are grateful to the editor for this opportunity, and we hope that you will appreciate the variety of papers presented in this special edition of the *International Journal of Innovation and Learning*.