## Editorial

## Facing the winds of change: The managerial power of Open Innovation

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Since Henry Chesbrough coined the term of Open Innovation in 2003, it has attracted increasing interest from academics, practitioners and policy-makers alike. More than a decade after, some noticeable and contrasted facts emerge. First, Open Innovation has deeply penetrated the research realms, across disciplines, yet mainly in business, economics and management. Interestingly, this research has primarily focused on the inbound side of Open Innovation, first depicting the phenomenon, then exploring the contingencies and processes, and finally, examining the relationship between Open Innovation adoption and performance. Qualitative, exploratory research has been progressively complemented by large-scale, empirical studies. Unfortunately, few studies exploit indicators going beyond the usual suspects, such as cooperation practices, information sourcing, strategic alliances, joint patenting, and the like to capture the complex and multifaceted nature of Open Innovation. The Outbound, and concomitantly, the coupled side of Open innovation is now gaining more popularity within the research community, with seminal contributions, usually depicting how firms can leverage on external channels to increase their profits and societal impact. An illustration of such research, authored by Chesbrough and Chen, is included in this thematic issue. This broadening of the scope of research on Open Innovation may signal a growing awareness of firms for alternative ways to monetize their novelties in times of uncertainty, complexity, volatility and ambiguity. It may also reflect a shift in the mindset of organizations, thanks to innumerable initiatives, networks, conferences, communities and events focusing on Open Innovation, with brilliant keynote speeches, excellent illustrations and showcases. The policy making arena is also increasingly involved and is actively shaping the R&D and innovation programs so that they require the involvement of several stakeholders, they advocate for an open and inclusive approach. Among this myriad of initiatives, we purposefully want to shed light on three of those, which also resonate with our aim of combining academia, practice and policy-making. First, the largest European-funded network, OI-Net, which aims at shaping new curricula centered on Open Innovation. The young generation is our future. Raising their awareness to Open Innovation and its foundational principles, is key as it may impact their propensity to implement Open Innovation practices, and to avoid the typical syndromes hampering its success, namely the "not-invented-here" (Katz & Allen, 1982) and the "not-sold-here" (Lichtenthaler et al., 2010) and to the best of our knowledge, the not-yet coined "not-

funded-here" syndrome. Second, the MOOI (Managing and Organizing Open Innovation, mooiforum.com) forum, which is an online community of professionals active in the field of Open Innovation, and which teams up with academics to develop actionable content for innovation managers and leaders. Third, the Open Innovation 2.0 initiative, which describes itself as "a positive approach for innovation which helps solving key European challenges by embracing change, not resisting it!"(Digital Agenda, European Commission). Bringing together stakeholders from all backgrounds, fields, disciplines, businesses, and organizations, this forum and conference is a key platform for thought leadership in the field of Open Innovation. These initiatives, and many others, reflect the shift in individual mindsets, in organizational behavior, and in public policy development. They also pinpoint that Open Innovation is growing concurrently with the richness of approaches used to apprehend and comprehend it, the mingling of diverse scholars, disciplines and fields. and the increasing maturity and readiness of organizations to turn its principles into practice. As the say goes, Rome has not been built in a day, so this is the first thematic issue on Open Innovation and we are already looking forward to next year's edition, hoping that giant and robust leaps will have been performed in the understanding of Open Innovation, and in its implementation in practice with societal impact. We advocate an even diverse and richer research in the field, at all levels of analysis, and for positive evolution of organization ethos regarding Open Innovation.

The Academic Letter of this Issue, by Torkkeli and Mention, elaborates on the emergence of Open Innovation as an academic field. Since the term was originally coined by Chesbrough (2003), Open Innovation has attracted increasing interest from scholars, practitioners and policy-makers. This simultaneous enthusiasm from all communities has materialized into a growing number of academic publications, an expanding awareness and adoption of OI practices by firms, across all sectors, sizes and industries, and by the elaboration of public policies fostering the implementation of OI. These rationales have supported the development of the largest European-funded network in the field of OI (namely, OI-Net, <u>www.oi-net.eu</u>), which aims at developing academic curricula where OI is the cornerstone. Education is one of the most powerful tools to shape the future. Developing curricula, targeting all levels of education, from bachelor to executive masters and PhDs, revolving around OI and establishing it as a discipline is the intended contribution of this network.

The second Letter of this Issue reviews the evolution of OI, and elaborates on the new era of Open Innovation 2.0, which is defined as "a new paradigm based on principles of integrated multidisciplinary collaboration, co-created share value, cultivated innovation ecosystems, unleashed exponential technologies, and focus on innovation adoption", as stated by Curley in his Letter. One of the tenets of this new paradigm is the involvement of civil society, as well as the simultaneous prerequisites of having a common vision, aiming at delivering value and sharing values. Curley further discusses the role of intelligent solutions, and the role of ICT as a transformational tool for addressing societal challenges. After giving a couple of examples of OI2.0 initiatives in action, Curley elaborates on the need for measuring innovation, depicting the research yield index, which apparently avoids the traditional pitfalls of measurement systems, and adopts an impact-based approach.

The third Letter of this Issue by Erkinheimo et al. discusses about crowdsourcing and how this practice can affect the leanness and success of start-ups. The Authors provide illustrations on several mechanisms which can help start-ups grow and innovate, relying on the crowd either for the development of products and services or for achieving internal process innovations. They also elaborate on how crowdsourcing can influence the decision-making process in the early stage of innovation.

The opening article of this Issue is a contribution co-authored by the Father of Open Innovation, Henry Chesbrough. In their article, Chesbrough and Chen explore the effectiveness of the outbound Open Innovation strategy to recover abandoned, yet developed at high costs, pharmaceutical compounds. In doing so, they enrich the stream of research on the outbound side of Open Innovation, which remains relatively scarcely covered to date, and they unveil how such a strategy can help address unmet societal needs while simultaneously widening the pool of revenue sources and business models for the pharmaceutical industry.

In their research on the relationship between OI practices and performance, which is captured through three manifest variables, Ahn et al. concentrate on a sample of 306 innovative Korean SMEs. Their empirical study, which responds to the call for more quantitatively-grounded research on the essential relationship between innovation and performance, unveils that broad and intensive OI adoption positively affects the performance of the firm. Their findings also indicate, in contrast to prior literature, that adopting many OI modes may not harm the performance of the firm, suggesting to some extent, that there is no such thing as "too much openness". Nevertheless, their findings also reveal that not all OI modes affect performance positively and further stress that technology and market-oriented OI modes, taking the forms of joint R&D, user involvement and open sourcing, which involve relatively low levels of change can positively enhance firm's performance. Finally, they confirm that innovative SMEs can benefit from cooperation with non-competing parties such as customers, consultancies, intermediaries and public research institutes.

In their empirical contribution, Alvarez and Iske concentrate on low and medium tech SMEs as they are a significant component of the European economy. Their research aims at testing the complementarity or substitutability between internal innovation capabilities and external knowledge sourcing, distinguishing between technology and market knowledge sources, and their effect on innovation performance, measured as the successful introduction of new products to the market. Their results confirm the widely acknowledged fact that product innovation in low and medium tech industries is not only about technology but is rather a market-driven process. Exploring further the interplay between internal capabilities and knowledge sourcing, their findings unveil that technological capability and external technology knowledge sourcing are substitute, thus leading to a negative relationship between them. Their exploratory study of 142 Dutch SMEs further uncover a negative interplay between marketing capability and external market knowledge sourcing. These last findings pave the way for further research in this specific type of firm, and a deeper understanding of the framework conditions, as well as the contingencies for Open Innovation to unleash its potential benefits in this peculiar setting.

Prud'homme van Reine elaborates a comprehensive framework comprising a set of nine connecting capabilities, which is intended as an analytical tool to assess the readiness of firms towards Open Innovation. The Scholar empirically validates the developed framework in two Dutch regions which display comparable features including specialized clusters. This exploratory study unveils that the technology industry is ahead, compared to the knowledge intensive business services sector, in terms of its ability to benefit from Open Innovation, which may be the consequence of prior and long experience in innovation networking. Prud'homme van Reine further advocates that the framework of connecting and networking capabilities is a promising tool to support companies in their journey of joint value creation and capture in open innovation networks. Policy implications, namely the framework conditions to set up an efficient and effective regional open innovation ecosystem, are also provided.

Virlée et al. concentrate on the largely ignored service industry and explore the contextual factors conducive to the adoption of OI practices, as well as the types of practices implemented. Based on an in-depth review of the literature on OI focusing on services, the Scholars elaborate a framework unveiling four practices, classified

according to their inbound versus outbound nature and the degree of control or freedom, embracing the monetary and non-monetary features. Their empirical study of eighteen service SMEs from high tech and knowledge intensive service firms uncovers that SMEs are more prone to adopt inbound OI practices, whereas the decision on which sub-practice should be adopted is largely determined by the type of actor, the firm's vulnerability, its internal managerial skills and the existence of complementarities.

In "Open Innovation research: trends and influences – a bibliometric analysis", Santos reviews the abundant literature on OI over the 2003-2013 period. His undertaking pursues a threefold objective: first, to characterize the Scopus-listed literature in the field; second, to explore the theoretical influence on OI research and third to analyze the influence of OI literature on other fields of research. His contribution unveils the prominent and most prolific scholars in the field, traces the roots of OI in several areas of economics and management, and also highlights the linkages and interrelationships, as well as the lack of those, with innovation systems, clusters and networks, public policy analysis and the need for further research on OI at individual level. Santos further advocates for an enlargement of the scope of OI research, through diversification strategies, in terms of e.g. units of analysis, methods and disciplines.

This call for an enlargement of the research scope of OI resonates with our views, and depicts the necessary evolution of OI, as a new paradigm for addressing the challenges and transformational needs of the 21<sup>st</sup> Century and hopefully achieving Ramaswami & Ozsan's 3Ws, "Wealth, Welfare and Wellbeing for our societies.

We would like to conclude this editorial by thanking Prof. Giovanni Perrone, Università degli Studi di Palermo, and Associate Editor of the Journal of Innovation Management for his valuable contribution in producing this Issue. We also would like to welcome onboard of our journey Dimitrios Salampasis, an Open Innovation Scholar and our first Editorial Assistant.

We wish you an enlightening journey in your reading of this issue of the Journal of Innovation Management.

Innovatively Yours,

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