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**Editorial:** 



# The Convergence, Communication, and Impact of Business Research



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In this first editorial of Volume 23 of the *Journal of Contemporary Administration (RAC)*, which begins this year of 2019 full of expectations, I would like to address two subjects that I believe are relevant to the efforts of business research, especially within the context of emerging economies: the convergence and communication of business research. Research efforts should not only have a purpose, but also need to be responsive to the changes that the world is going through and their current trend in the direction of growing complexity (Medina, Goles, Zarama, & Rica, 2017). In other words, research efforts should consider the needs of society and the problems that result from them. In a well-known Brazilian television program (TV Cultura, 2016), Professor Lee Sing Kong, ex-Director of Singapore's National Institute of Education, when asked about the aspects that he believes are pillars of the education system in his country, responded: developing the capacity of our students in terms of two abilities – knowing how to ask and knowing how to work as part of a team.

The first of these capacities is especially interesting to academic research. It is in this respect that Professor Kong was arguing that given the growing complexity of problems in the modern world, a properly phrased question ought to reflect an array of correlated aspects, that originate in various domains, and this is what requires researchers to have the ability to observe and reflect the complexity of problems in their questions. The second ability highlighted by Professor Kong is knowing how to work as part of a team, and it is based on the same vision and is a consequence of needing to collaborate on projects that are more and more complex. That is, the researcher should be capable of communicating with individuals from different areas of knowledge and with society in terms of capturing the essence of the problems that it is facing, and the problems that are on their way.

For this approach to be something present and demonstrable in business research, which by its nature is characterized by the need to reflect different domains and fields of knowledge, it is necessary

to pay attention to two preceding aspects, which should serve as a compass for business research programs designed to have a greater impact on society: convergence and communication.

Convergence brings together knowledge, ideas and tools from various fields of expertise to stimulate innovative research (Mendes-Da-Silva, 2019). This represents a significant change in the culture of business research institutions, as well as companies that wish to keep the term innovation on their agenda. Frequently companies and business research institutions have organizational structures that take the form of departments, and these are frequently based on disciplines (Ertas, Maxwell, Rainey, & Tanik, 2003). Thus, complex problems such as climate change, demographic transitions due to aging, the reduction of poverty and hunger, migratory movements, social justice, the spread of disease, renewable forms of energy, and human health, among others, require equally complex and multidisciplinary approaches.

## Convergence of business research

The National Science Foundation (NSF, 2016), in announcing its spending priorities has pointed to 10 areas that it deems relevant that it calls the 10 Big Ideas. The convergence of research can be seen as a way to solve research problems, in particular complex problems that focus on the needs of society. This implies integrating the knowledge and methods of various disciplines and forming new structures to catalyze scientific discoveries and innovations. The convergence of research is related to other forms of research that embrace multiple disciplines — transdisciplinarity, interdisciplinarity and multidisciplinarity. It is closest to transdisciplinary research, which historically has been seen as the height of the evolution of integration between disciplines (Battard, 2012; Linton, Klassen, & Jayaraman, 2007; Nyberg, Moliterno, Hale, & Lepak, 2014). This notion has supported areas of business research characterized by connected domains and interdisciplinarity, such as Biomimicry in business (Benyus, 1997; Foss, 1994; Iansiti & Levien, 2004; Lovins, Lovins, & Hawken, 1999; Moore, 1993; Peltoniemi & Vuori, 2004; Schneider & Somers, 2006).

The NSF identifies Convergent Research as having two essential characteristics. First, the research needs to be conducted in relation to a specific and convincing problem. Convergent research is generally inspired by the need to address a specific challenge or opportunity, due to profound scientific issues or preeminent social needs. The second essential characteristic suggests that there is a profound integration between disciplines. Given that specialists within various disciplines are facing similar research challenges, their knowledge, theories, methods, data, and research and language communities are increasingly shared or integrated. New structures, paradigms, or even disciplines can result from sustained interactions within various communities.

The paradigm of convergence intentionally unites intellectually diverse researchers to develop efficient forms of communication between disciplines. In addition, it adopts common structures and a new scientific language, which in turn can make it possible to solve the problem that led to this collaboration, develop new ways of framing research issues and open new perspectives for investigation. To make convergent research possible, it is necessary to address the main technical, organizational and logistic challenges that currently complicate truly transdisciplinary research. This involves a critical analysis of criteria and metrics and an adaptation of the merit analysis process to represent the broad specialization necessary to review and identify the best ideas and projects.

The NSF recognizes that the convergence of disciplines is a process. As a result, it seeks to promote convergent approaches among teams with different degrees of integration between their disciplines and different stages of readiness to adopt a convergence strategy. The main considerations are the potential for an advance in terms of a convincing research challenge which requires a new form of integration, deepens our knowledge, and provides evidence that the proposed activities will develop convergence.

The convergence of scientific research has also been a subject of interest in the European scientific community (Science Europe, 2014). To Science Europe (2014), convergence can play a central role in how to approach many key issues that face science, technology and society, bringing together scientists

of various disciplines, including the humanities and the social and applied sciences. It seeks to work together with a common vision and goal and/or a global challenge. Thus, convergence is seen as a government tool within the scientific research apparatus. In this sense, it is assumed that convergence is not restricted to applied research issues, but encompasses research *per se*, which includes basic research. On the level of organizations of international scope, the Organization for Economic Cooperation and Development (OECD), for example, has decided to create a convergence committee.

In terms of the convergence of research, specifically business research, but considering convergence as a research topic *per se* (convergence as a business model), Gustafsson and Schwarz (2013) point out that firms that pay special attention to convergence will have a competitive advantage compared to their peers, due to their capacity to create and propose effectively innovative and original products which are of value to consumers. Chesbrough (2010) adds that firms should propose experimenting and taking risks in the search for new products. In terms of convergence as a research project attribute for any subject of business interest, it is understood that it is a desirable aspect *vis a vis* the possibility that the results will be of greater impact in the real world.

In considering the research agenda set by the business literature, a need to consider a convergent vision of research has been noted in various areas of interest, such as entrepreneurship (Sutter, Bruton, & Chen, 2019), finance (Brooks & Schopohl, 2018), operations (Ansari & Kant, 2017; Guha & Kumar, 2018; Tanco, Escuder, Heckmann, Jurburg, &Velazquez, 2018), human resources (Budhwar, Tung, Varma, Do, 2017), tourism (Madera, Dawson, Guchait, & Belarmino, 2017; Ryan, 2018), and public administration (Cappellaro, 2017), among others, even though some recent studies are already featuring this convergent approach as a central pillar in emphasizing the contributions of their studies (Sutter et al., 2019).

#### Communication in business research

In order for there to be convergence in research efforts, there needs to be communication (National Academies of Sciences, Engineering and Medicine, 2014). The idea of the solitary researcher isolated from the real world is no longer easily accepted. These days, scientific research is built on dialogue, whether it is with peers, other fields of knowledge (in line with convergence), students or society in general. Communication with peers is essentially concentrated on new advances and progress in scientific knowledge. This dialogue deals with advances that offer different levels of contribution, from more modest ones to those that have the potential to be disruptive. Thus, presentations made in scientific events, the publishing of scientific articles, and other ways of disseminating scientific knowledge are the mediation channels which the academic community uses to present itself to its public. Therefore, the challenges of scientific investigation go beyond communication among peers.

In the name of promoting the impact of research (in the real world), the sharing of spaces and causes to pursue synergies between researchers within different domains becomes imperative, and this includes the sharing of installations, abilities, and even data (Hardwicke et al., 2018) to avoid redundant effort and take full advantage of these synergies. In this way, through shared projects researchers from areas such as engineering, medicine, administration or the arts can offer research results that have a greater chance of having a larger effective impact on society. Thus, without wishing to be repetitive, complex problems such as: the quality of life in cities, social inequality, food security, and national security, among others can be better addressed through communication and the work of teams from related areas, to achieve convergence.

The active participation of citizens in the production of knowledge is also a reality which is having a growing impact. However, no matter what its form, the involvement of society is essentially conditioned on society's understanding of science and the confidence that society has in science, and consequently the research community in general. Communication that is simple and objective in a manner that is intelligible enough to be understood by various relevant stakeholders, including: citizens, journalists, legislators and decision-makers on various levels, is equally relevant. Thus, the dialogue with society is also vital, above all in terms of the identification of subjects that need more investigation,

and problems that need to be solved through the use of technology or through legal measures. Levels of urban pollution and the quality of water that we consume are examples of aspects that are subject to regulation.

Students need to play a key role in the communication between researchers and society. In this respect, researchers should stimulate the curiosity and creativity of students in order to guide them in a scientific research environment oriented towards collaborating on solving the problems that face society. As a result, it is expected that students will be capable of formulating appropriately structured questions, seeking relevant and credible information, and concatenating arguments and points of view. Returning to the words of Professor Lee Sing Kong, the research ecosystem should make it possible for students to learn within a research context, becoming conscientious and responsible citizens and versatile professionals, capable of responding to countless modern challenges, in which change and uncertainty are not rare.

### **Final words**

The RAC, like Brazil, begins 2019 with various changes and positive expectations. In this issue we are publishing six new articles and a teaching case. The first article entitled **Incongruent Humour**, **Advertising Effectiveness and Women:** An Experiment On Facebook, is by Luciana Ribeiro, Martin de La Martinière Petroll, Fernanda Scussel, and Claudio Damacena, and its objective is to analyze how advertising with incongruous humor that appears on the social network Facebook functions in terms of the engagement, attitudes and buying intentions of female consumers. The methodological procedures are presented as an experiment conducted with the participation of 269 individuals. Based on this data, the authors seek to test whether the presence of incongruous humor influences the effectiveness of advertising.

The second article by Marilia Assumpção, Solange Alfinito, and Breno Giovanni Adaid Castro, entitled **Newspaper Consumption in Print and Online: Printed Newspapers is Status and Online is Easiness**, consists of a study that seeks to evaluate how motivational variables (i.e. human values and social axioms), as well as emotional and rational judgments, influence the use of printed and online newspapers. The authors adopt the Consumer Cultural Influence Model (CCIM). This study was conducted in two phases with readers of printed and online newspapers.

The third article, **Where are We Heading? An Analysis of the Corporate Governance Literature**, is a review of the corporate governance literature by Fernanda Kreuzberg and Ernesto Fernando Rodrigues Vicente. The authors have selected 31 theoretical and 59 empirical articles, and based on this selection they have identified research opportunities through an interpretive and critical approach, seeking to help guide new studies.

The fourth article is by Vinicius Costa da Silva Zonatto, Aline Weber, and Juliana Constâncio Nascimento, and is entitled **Effects of Budgetary Participation on Asymmetry of Information, Occupational Stress and Managerial Performance**. The research investigates the effects of budgetary participation on the asymmetry of information, occupational stress, and managerial performance among 121 managers with budgetary responsibility in Brazilian industrial organizations.

Tatiana Iwai, Adriana Bruscato Bortoluzzo, Lina Eiko Nakata, and José Eduardo Teixeira Costa are the authors of the new article **Climate Strength: Its Role as a Moderator in the Relationship Between Climate and Turnover**. In this work, the authors examine the effect of the work climate on turnover on an organizational level. To do this, they have collected data from a sample of 25,288 individuals from 150 medium and large size companies and a variety of sectors to test the direct and moderating effects of five dimensions of the work climate on collective turnover.

The sixth and last article is entitled **The Effects of Exploration, Exploitation, and Ambidexterity on Software Firm Performance**, and was written by Elizandra Severgnini, Edwin Vladimir Cardoza Galdamez, and Valter Afonso Vieira. The study's goal is to examine how the

congruence of dualities affects performance. Through a survey of 227 software companies, the authors test hypotheses related to the congruence and interaction of two factors related to ambidexterity.

Completing this edition of the RAC is a teaching case entitled **I Started a Venture**, **Now What? Opportunities in the Health Food Sector**, by Beatriz Saggioro Massolino, Simone Galina, and Erasmo José Gomes.

As a community, we researchers need to be sensitive to, and conscious of, the need to develop the abilities of researchers to make them capable of conducting studies that are in line with the needs of society across a variety of time horizons. We cannot be insensitive to the changes that they present, maintaining traditional practices of teaching and research. Convergence and communication can serve as compasses to guide business researchers in the direction that we all seek: having an impact on society.

With this first issue of 2019, we wish all of our readers, reviewers and authors an excellent year!

# RAC Editorial Process Indicators (Moving window from August 2017 to July 2018)

Situation	Ago'17- July'18	July'17- June'18	June'17- May'18	May'17- Apr'18
Total of published articles	36	36	35	42
Total of submitted articles	460	422	440	319
Articles under evaluation	53	52	56	55
Articles accepted and published	20	12	26	18
Articles accepted that will be published	05	12	6	4
Average time between submission and publication (# of days)	221	237	298	315

### Referências

- Ansari, Z. N., & Kant, R. (2017). Exploring the framework development status for sustainability in supply chain management: A systematic literature synthesis and future research directions. *Business Strategy and the Environment*, 26(7), 873-892. https://doi.org/10.1002/bse.1945
- Battard, N. (2012). Convergence and multidisciplinarity in nanotechnology: Laboratories as technological hubs. *Technovation*, 32(3/4), 234-244. https://doi.org/10.1016/j.technovation.2011.09.001
- Benyus, J. M. (1997). *Biomimicry, innovation inspired by nature*. New York, NY: HarperCollins ebooks.
- Brooks, C., & Schopohl, L. (2018). Topics and trends in finance research: What is published, who publishes it and what gets cited? *The British Accounting Review*, 50(6), 615-637. https://doi.org/10.1016/j.bar.2018.02.001
- Budhwar, P., Tung, R. L., Varma, A., & Do, H. (2017). Developments in human resource management in MNCs from BRICS nations: A review and future research agenda. *Journal of International Management*, 23(2), 111-123. https://doi.org/10.1016/j.intman.2017.04.003
- Cappellaro, G. (2017). Ethnography in public management research: A systematic review and future directions. *International Public Management Journal*, 20(1), 14-48. https://doi.org/10.1016/j.intman.2017.04.003

- Chesbrough, H. (2010). Business model innovation: Opportunities and barriers. *Long Range Planning*, 43(2/3), 354–363. https://doi.org/10.1016/j.lrp.2009.07.010
- Ertas, A., Maxwell, T., Rainey, V. P., & Tanik, M. M. (2003). Transformation of higher education: The transdisciplinary approach in engineering. *IEEE Transactions on Education*, 46(2), 289-295. https://doi.org/10.1109/TE.2002.808232
- Foss, N. J., (1994). The biological analogy and the theory of the firm: Marshall and monopolistic competition. *Journal of Economic Issues*, 28(4), 1115-1136. https://doi.org/10.1080/00213624.1994.11505614
- Guha, S., & Kumar, S. (2018). Emergence of big data research in operations management, information systems, and healthcare: Past contributions and future roadmap. *Production and Operations Management*, 27(9), 1724-1735. https://doi.org/10.1111/poms.12833
- Gustafsson, V., & Schwarz, E.J. (2013). Business modelling and convergence. In S. Diehl & M. Karmasin (Eds.), *Media and convergence management*. Springer International Publishing. Retrieved from https://pdfs.semanticscholar.org/faf4/595e1e4ff8f5cf4ce33302725cc56873a8ab.pdf. https://doi.org/10.1007/978-3-642-36163-0\_2
- Hardwicke, T. E., Mathur, M. B., MacDonald, K., Nilsonne, G., Banks, G. C., Kidwell, M. C., Hofelich Mohr, A., Clayton, E., Yoon, E. J., Henry Tessler, M., Lenne, R. L., Altman, S., Long, B. & Frank, M. C. (2018). Data availability, reusability, and analytic reproducibility: Evaluating the impact of a mandatory open data policy at the journal Cognition. *Royal Society Open Science*, 5(8). Retrieved from http://rsos.royalsocietypublishing.org/content/5/8/180448. https://doi.org/10.1098/rsos.180448
- Iansiti, M., & Levien, R. (2004). Strategy as ecology. Harvard Business Review, 68-78.
- Linton, J. D., Klassen, R., & Jayaraman, V. (2007). Sustainable supply chains: An introduction. *Journal of Operations Management*, 25(6), 1075-1082. https://doi.org/10.1016/j.jom.2007.01.012
- Lovins, A. B., Lovins, L. H., & Hawken, P. (1999). A road map for natural capitalism. *Harvard Business Review*, 73(3), 145-158.
- Madera, J. M., Dawson, M., Guchait, P., & Belarmino, A. M. (2017). Strategic human resources management research in hospitality and touri c\sm: A review of current literature and suggestions for the future. *International Journal of Contemporary Hospitality Management*, 29(1), 48-67. https://doi.org/10.1108/IJCHM-02-2016-0051
- Medina, P., Goles, E., Zarama, R., & Rica, S. (2017). Self-organized societies: On the Sakoda model of social interactions. *Complexity*, (2), 1-16. https://doi.org/10.1155/2017/3548591
- Mendes-Da-Silva, W. (2019). *Individual behaviors and technologies for financial innovations*. New York: Sage. https://doi.org/10.1007/978-3-319-91911-9
- Moore, J. F. (1993). Predators and prey: The new ecology of competition. *Harvard Business Review*, 71(3), 75-83.
- National Academies of Sciences, Engeneering and Medicine. (2014). *What is conve rgence?* Retrieved from https://youtu.be/QTP3X\_qExcQ
- National Science Foundation. (2016). *NSF's 10 big ideias*. Retrieved from https://www.nsf.gov/news/special\_reports/big\_ideas/index.jsp

- Nyberg, A. J., Moliterno, T. P., Hale, D., & Lepak, D. P. (2014). Resource-based perspectives on unit-level human capital: A review and integration. *Journal of Management*, 40(1), 316-346. https://doi.org/10.1177/0149206312458703
- Peltoniemi, M., & Vuori, E., (2004). Business ecosystem as the new approach to complex adaptive business environments. e-Business Research Center Frontiers of e-Business Research, 267-281.
- Ryan, C. (2018). Future trends in tourism research Looking back to look forward: The future of 'Tourism Management Perspectives'. *Tourism Management Perspectives*, 25, 196-199. https://doi.org/10.1016/j.tmp.2017.12.005
- Schneider, M., & Somers, M. (2006). Organizations as complex adaptive systems: Implications of complexity theory for leadership research. *The Leadership Quarterly*, 17(4), 351–365. https://doi.org/10.1016/j.leaqua.2006.04.006
- Science Europe. (2014, September 18 and 19). Workshop Report: Convergence of Disciplines. Retrieved from https://www.scienceeurope.org/wp-content/uploads/2015/12/Workshop\_Report\_Convergence\_FINAL.pdf
- Sutter, C., Bruton, G. D., & Chen, J. (2019). Entrepreneurship as a solution to extreme poverty: A review and future research directions. *Journal of Business Venturing*, *34*(1), 197-214. https://doi.org/10.1016/j.jbusvent.2018.06.003
- Tanco, M., Escuder, M., Heckmann, G., Jurburg, D., & Velazquez, J. (2018). Supply chain management in Latin America: current research and future directions. *Supply Chain Management*, 23(5), 412-430. https://doi.org/10.1108/SCM-07-2017-0236
- TV Cultura. (2016, maio 19). Roda Viva Lee Sing Kong. Recuperado de https://youtu.be/t-Io2ZfqUtU

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