

Responsible Research in Business and Management
Delphi Study Summary Report
November 1, 2016

1. Introduction: Responsible Business School Research

Consistent isomorphic pressures like rankings, ratings, league tables and institutional recruitment, promotional and auditing mechanisms have helped create the craving amongst academics for the publication of articles in top ranked journals (Wilson & McKiernan, 2011). Many scholars (e.g., McKiernan, 2009; Pfeffer, 2009; Tsui, 2015; Walsh, 2011)¹ have noted the continued problematique of this type of specialist article that, despite its undoubted skill in technical theory building and conceptual analysis, remains light on useful knowledge exchange. Consequently, few practicing managers read the work of business school scholars. Put bluntly, the work has been accused of being “irrelevant”.

In the face of such a serious accusation, a group of multidisciplinary business academics (BA) with support from the European Foundation for Management Development (EFMD) and the American Association of Collegiate Schools of Business (AACSB), joined virtually to address this problem. Their ambition was to stop the publication juggernaut and make a “turn of relevance” (TOR) in business school research.

As part of this TOR ambition, a Delphi study was conducted to tease out the key issues as perceived by “experts”. Two samples were chosen—one group of business academics who are members of the Community for Responsible Research in Business and Management (the Community) and the other group are authors who have published works about the topic under investigation.²

In this report, we first provide a brief discussion of the Delphi method and then report the process and results of the Delphi study conducted by the Community.

2. The Delphi Method

Named after the oracle at “Delphi”, the Delphi method or technique³ was developed by the Rand Corporation in 1957 and is used in research studies to engage with expert opinions on an individual basis. It has been used, *inter alia*, in healthcare studies (Guyzys et al., 2015; McKenna, 1994; Thangaratinam & Redman, 2005); transportation studies (Robinson, 1991; Saito & Sinha, 1991); education (Styliandes & Pashiardis, 2007); tourism (Garrod & Fyall, 2004), as well as specialty domains like human resource management (Tsui, 1987) or information systems (Okali & Pawlowski, 2004). In particular, given its roots in technological forecasting, it has been a valuable asset in futures studies (see, for instance, Czinkota & Ronkainen, 1997; Helmer, 1967). Herein, it is used for the evaluation of risk when complexity is high such as structural interventions, where probabilistic modeling techniques struggle because the nature of the contextual forces may have changed markedly.

¹ Many papers have been published since the early 1990s discussing the problems in business school research. A partial bibliography of over 60 papers is available from Anne Tsui (atsui@nd.edu).

² A bias is inherent in these samples. Most of the senior scholars and academic authors lean toward a critique of the current publication trend in business and management research and, by and large, would claim to support the irrelevance argument.

³ There are many definitions of Delphi method/technique/process/approach – see Mullen (2003).

Experts could be asked about the key drivers of future change and about future events and when they might happen. Often, Delphi is used in parallel with, and supportive of, other future orientated techniques like scenario planning.

2.1. Delphi Philosophy and Method⁴

Delphi is based on the Hegelian ‘dialectical inquiry’ approach, which consists of ‘thesis’, where an opinion is formed on a complex topic; ‘anti-thesis’, where a counter opinion is offered and ‘synthesis’, where a new thesis is established through consensus. Essentially, but not exclusively, it is a consensus seeking process, which taps expert opinions for the purposes of idea generation for understanding and improvement, problem solving and forecasting.

The Delphi process consists of the formation of panels of experts (50 plus in big projects) who are surveyed on the topic of interest. Usually, experts are dispersed geographically and this allows for a broad cross-cultural mix. They operate individually and anonymously, thus allowing for ‘softer’ voices to express themselves, to eliminate factors that can contaminate meetings such as hidden agendas, dominant personalities, status differences, and to negate the influence of ‘group think’.

The project professionals design a set of questions to elicit the opinions and counter opinions of panel members. Their answers are assessed using content analysis and, often, a coding technique customized to the project. This analysis forms the basis for the design of a further round of questions and this can continue through a ‘continuous loop’ system until the experts converge on a common output.

Two Delphi approaches are used actively in modern futures work—the basic ‘paper and pencil’ approach and the ‘broadband digital conference version’; although, hybrid techniques using software like ‘Survey Monkey’ are widely used.

Whichever data collection approach is used, the Delphi process is consistent across them. Normally, this consists of a flowchart of activity that includes:

1. Definition and scope of research topic.
2. Identify a moderator for the process. The role requires a firm hand from an experienced individual who is familiar with the topic.
3. Identify ‘experts’ for the panel and brief them thoroughly on the project’s objective and scope.
4. Design a set of easily understood and answerable questions that interrogate the topic. Send these to the panel members and treat all responses as anonymous. The moderator supervises this Round One activity.
5. Maintaining the breadth of responses, analyze the variety of responses using metrics to score or rank the answers.
6. Show the analysis (non attributed) to the experts and obtain feedback, giving them an opportunity to change their views.
7. Further analysis can follow, the questions reformulated (or even new ones added) and then the process is repeated for Round Two, in the hope of achieving consensus.

⁴ This section draws upon McKiernan, P., ‘Delphi Technique’ in Clegg, S.R., and Bailey, J.R., (2008), *International Encyclopedia of Organisation Studies*, Sage Publications Inc.

8. The cycle can be repeated to achieve as much consensus or depth of knowledge as required.

2.2. Critique of the Delphi Method

Although it can lead to rapid consensus amongst participants, the Delphi method has been criticized on a number of levels (Helmer & Rescher, 1959; Linstone & Turoff, 1975). First, as Mullen (2003) notes, positivists argue (e.g., Sackman, 1975) that Delphi fails to follow respected scientific principles such as psychometric validity. However, defenders point out that Delphi, by providing high-level and indispensable judgmental information, can operate well in conditions when formal Operational Research techniques suffer. Indeed, as a method of last resort, it is used when no other technique can cope with the complexity involved. Because Delphi bridges the gap between qualitative and quantitative techniques, its integrity is open to much debate.

Positivist critics have railed about: a) *the concept of an 'expert'*, especially where non-conventional experts might be required such as in policy studies. Hence, Cantrill, Sibbald, and Buetow (1996) suggest broadening the sample to include any individual with relevant knowledge of the topic and/or ranking an individual's knowledge of the topic beforehand (Linstone, 1978); b) *the optimum size of the Delphi panel*, especially in the search for sample representativeness and statistical significance—samples as low as 7 (Linstone, *op cit*) to 300-500 have been recommended (Wild & Torgeson, 2000); although as Mullen (*op cit*) contends, size is only an issue if Delphi is confused with conventional quantitative techniques; c) *the focus on consensus*, when some projects need to garner all the differing views from parts of society—as in policy studies where consensus may neither be achieved nor desired (Walker & Self, 1996); d) *poorly designed questionnaires*; e) *the validity of scoring methods*; f) *anonymity of respondents*, especially where this could limit the extent of exploratory thinking (Bowles, 1999) and accountability (Sackman, *op cit*).

Whatever the scientific critique of Delphi, Mullen (*op cit*) concludes that good research practice from both qualitative and quantitative studies should be exercised to offset any potential problems. Then, it has proven an invaluable technique in practice, when a topic is highly charged e.g., in politics or education, or when actions may have serious and enduring outcomes such as thermo-nuclear warfare. Okali and Pawlowski (*op cit*) make a strong case for its use in theory building, particularly in generating key variables and relationships in the early stages, in assessing construct validity and, especially, if panel experts are asked for justification for their reasoning. Given Delphi's versatility, it ought to be possible to customize a good design to suit any form of project.

3. The Delphi Study of Responsible Business School Research

3.1. Task Force and Objective

The purpose of this Delphi study was to obtain a list of key problematic issues facing business and management research and potential solutions, prioritized by their perceived relative importance. We used the Delphi as a calibration exercise rather than as a conclusive platform for our enquiry. Our purpose was not to seek a consensus on a set of problems or solutions, but to identify a broad set of both, first through an open-ended format and then a rating scale on a set of statements to tease out those with majority views.

Four members of the Community representing the disciplines of Finance, Marketing, Strategy and Management comprised the Delphi Study Task Force. This group designed and oversaw the Delphi study, which consisted of two rounds. Round One obtained opinions on a set of open-ended questions. Round Two assessed a set of ideas or suggestions obtained from round one in a structured format. Since the Delphi study did not seek consensus on a set of ideas for decision-making, one round of structured responses was deemed sufficient. An experienced member of the Delphi Task Force was appointed as the ‘monitor’ to oversee the Delphi process.

3.2. Delphi Study Participants

Twenty business academic (BA) members of the Community from different disciplines, excluding the ‘monitor’, were invited to participate in the Delphi study. In addition, 35 papers on problems of business schools were identified and the first and second authors (A) were approached as potential participants. The initial sample consisted of 20 BAs and 27 As (excluding a few authors who were also members of the Community).⁵

For the author sample, an email invitation was sent stating that: “...*the purpose of the Delphi is to seek input from opinion leaders to produce a report⁶ that articulates the major problems that confront business school research and identifies powerful solutions. We will disseminate the report widely to encourage debate and discussion among important stakeholders.*”

The process was explained further:

“We need your kindness and help in completing four questions in our short Delphi study. We will run two rounds of the Delphi and your total commitment will be less than an hour. In return, we will share a draft version of the report with you before it goes public. Of course, your individual response will be confidential. The report will contain only aggregate data.”

A total of 18 authors responded positively to this invitation (67% response rate). These responses were treated as anonymous, though members of the BA group were aware of the overall membership of their group; members of the A group were anonymous within their own group and between the two groups.

3.3. Delphi Round One

Round One took place during November and December 2015. Two members of the Task Force drafted the questions for Round One while the other two members edited and refined the questions. The finalized questions are contained in Table 1 below. The same questions were posed to the A group without the examples in brackets. This design was chosen to test any variation in the responses between the two samples.

⁵ The Business Academic participants are from the Community for Responsible Research in Business and Management, a group of 24 scholars from five business disciplines (accounting, finance, management, marketing, operations) at 23 universities in ten countries. The Author participants are senior scholars in management, accounting and operations from 25 universities in five countries.

⁶ The report is the White Paper by the Community for Responsible Research in Business and Management.

Table 1: Round One Delphi Open-ended Questions

1. What challenges around business school research should the report or the position paper include and discuss? (e.g., relevance, research quality, research purpose, journal publication criteria, promotion criteria, instrumentality rationality, etc.)
2. Which groups should the position paper identify as key potential change levers? (e.g., senior faculty, deans, associate dean of research, recruiting committees, journal editors, promotion committees, accreditation bodies, ranking agencies, granting agencies, influential executives and businesses, etc.)
3. What potential solutions or actions do you suggest (for each group)? (e.g., journal review criteria, evaluation criteria to include quality and importance of idea in addition to number of papers, doctoral training to include purpose of science and responsibility of scientists, change promotion and recruiting criteria, etc.)
4. Over the next 20 years, what are the grand challenges in organizations that business school research should address (e.g., income inequality, poverty alleviation, managerial ethics, job stress, virtual firms, etc.)?

3.3.1. Round One Delphi Open-ended Questions

The questions were inserted into the ‘Qualtrics’ software by an administrator at the sponsor organization (EFMD) and sent out to the samples of BAs and As. Three reminder letters were sent to stimulate the response rate. In addition, the task force kept close checks on response quality and response timing by frequent analysis of the interim replies. In total, 17 responses were received from the sample of BAs (85%) and 16 responses from the sample of As (89%).

For the analysis of the open-ended responses, two members of the task force conducted the initial analysis and coding, while the other pair checked, changed and verified that work.

3.3.2. Round One Results

There were some interesting differences but mainly similarities in the replies from the two groups. Since the purpose of the open-ended questions is to pool the opinions of the experts, all the responses were allowed to fall into the set for consideration during the second round. Appendix A contains the total responses of all the Delphi participants to each of the four questions. Presented next are the responses that are similar between the BA and the A groups, for each of the four questions.

Question 1 inquired about the main challenges for business school research.

- a. There is a disconnect between academic theory and real-world practice.
- b. Desire or necessity to publish in A-ranked journals stems creativity, causes conformity, which leads to insignificant research.
- c. Over-emphasis on academic theory makes academic research highly specialized and non-accessible to the larger public.
- d. Due to high pressure to produce publications, questionable research practices that threaten intellectual integrity and do not contribute to advancing the field emerge.
- e. Not enough interdisciplinary research.

- f. Research focus has been zeroed in on economic performance of large firms in the western world. Other societal challenges and problems need to be researched as well.
- g. Need to conduct research that is meaningful and can improve human condition, instead of just studying the past.
- h. Administrative goals (rankings, publications) interfere with academic integrity and intellectual autonomy.
- i. Innovative and exploratory research (non-main stream topics) is not valued, due to over-emphasis on theory.
- j. Questionable practices by journals or publishers such as manipulation of citations to inflate impact factor.
- k. How technological development can increase accessibility to papers.

Question 2 asked about the main agents of change.

Influential agents ranged amongst university administrators (including Deans), journal editors, senior scholars, accreditation and ranking agencies, funding bodies, business leaders and journal publishers.

Question 3 inquired about potential solutions or actions that the Delphi participant would suggest for each change agent.

- a. Journal editors:
 - i. Publish important topics and innovative research of relevance to society and practice.
 - ii. Change review criteria to include both relevance and technical quality, and to create professional review standards.
 - iii. Come together to discuss and agree on publishing research with impact on practice and society.
- b. Deans, associate deans of research, and department heads
 - i. Change promotion and tenure criteria, summer support, and annual reports from counting to significant contribution in ideas and with impact.
 - ii. Develop a vision and strategy to focus on research that makes a difference and accumulate knowledge on important issues.
 - iii. Reward papers with impact and with risky and path-breaking research.
 - iv. Change PhD training to focus on both impactful and ethical research practices.

Question 4 sought grand challenges that business school research should address.

- a. How business can contribute to poverty alleviation, economic integration, and wealth creation for all people.
- b. Natural environment, climate and sustainability issues.
- c. Social environment, social sustainability, e.g., inclusiveness issues.
- d. Managerial ethics.
- e. Influence of technology on business, work, and organizations.
- f. Reconsider the purpose and long-term impact of business firms in society.
- g. New employment relationships in changing economies, technologies, and multi-culturalism.

3.4. Delphi Round Two Structured Survey

Based upon the responses of Round One, the Delphi task force developed themes and identified items within each theme for each question. A simple rating system was developed for Round Two. For each item, the respondents were asked to select one of three possible choices: Most Important, Less Important, or Not Important (for Questions 1 and 2) or Totally Agree, Agree, or Do Not Agree (for Question 3). The questions about change agents and possible actions were combined into one question, hence this Round Two contained three structured questions with the list of items developed from the responses during round one. The original wording of the responses was retained as much as possible and edited only when it was absolutely necessary to improve clarity. In addition, to check for Type 1 and Type 2 errors in the round one responses, participants were given an opportunity to: a) emphasize what was valuable about business school research (Question 4), and b) add any other issues/themes that were important, but had not been included so far (Question 5).

To ensure the quality and readability of the structured survey, two leading scholars (one previous editor of and another previous associate editor of two leading management journals) pre-tested the online survey. Their suggestions improved the wording of the items.

Round Two was carried out during February and March 2016. Only those who completed the round one survey (17 BAs and 16 authors) were invited to participate in the round two survey.⁷ Since the purpose of round two was to develop a list with a priority ranking (based on the importance or agreement responses) across both samples, members of the two samples completed the same survey. Three reminders sent to improve the response rate. The same checks and balances that operated in round one were applied to response quality and timing. Twenty-seven of the 33 invited completed the round two survey, with a response rate of 81%.

3.4.1. Round Two Results

The results for Round Two are contained in Appendix B. The items in Appendix B are ranked by the degree of importance or agreement with the question presented. The top five most important issues under each main question for both groups are as follows:

Question 1. What are the most important issues in business school research that our report or position paper must address?

1. Research does not produce relevant knowledge for business practice and societal improvement.
2. Rewarding the number of papers in A-journals distorts incentives towards a narrow focus and excludes many important papers that are published in lesser-ranked journals.
3. Lack of insightful, forward-looking and relevant knowledge for a larger audience beyond the academic community.
4. Star journal obsession and consequences.
5. An over-emphasis on theory leads authors to frame their research in highly specialized, unintelligible framing, the crafting of complicated analysis, and a bias against negative findings.

Question 2. Who are the most important change agents and what actions can they take?

1. Change promotion and tenure criteria from counting publications to valuing broad and

⁷ Two authors who did not participate in Round One were invited to participate in Round Two by mistake. They completed the Round Two survey and we had to exclude their responses in this final report.

- significant contributions.
2. Journal editors and professional associations.
 3. Administration: deans, associate deans, department heads, etc.
 4. Develop better measures for impact in evaluating individuals, departments, and schools.
 5. Reward risky, path-breaking research that contributes to practice and society.

Question 3. What are the grand challenges that responsible business school research should address?

1. Poverty, income inequality, economic integration, increase wealth for all.
2. Natural sustainability, environment, climate, ecology, natural resources.
3. Impact of firms on society beyond shareholders.
4. Changing nature of work and workforce.
5. Social sustainability, health systems, inclusive organizations, job stress, burnout.

The additional questions for Type 1 and Type 2 errors (Questions 4 and 5) provided considerable supportive detail for these main issues.

4. Conclusion

As expected, the Delphi results indicate the strength of feeling amongst senior scholars about the general malaise of academic research and publishing in business schools. This report provides clarity on the nature of the problem facing business school research, incorporates the views voiced by both business academics in the Community for Responsible Research in Business and Management and authors who have written papers on this problem. The Delphi results also suggest or implicate a series of remedial propositions. They provided some clarity on the causes and remedies that the profession could adopt to rectify it. The full results and main summary were handed to the scholar members in the Community to include in the formal project report, i.e., the white paper. The white paper will be distributed widely, discussed at major conferences, underpin journal special issues, and help guide Deans and other key stakeholders in their quest for a more productive and impactful research agenda. It marks a small yet crucial part of the debate, and hopefully the much needed progress in the relevance of business school research.

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