

## UNVEILING RESEARCH IMPACT OUTSIDE ACADEMIC BOUNDARIES: A PRACTICE-BASED VIEW

**Abstract:** In this paper, we build on the longstanding issue of whether and to what extent scholarly research affects stakeholders outside academia and focus on the management and IS fields. We take a practice-based view and build theoretically on the concepts of sites of knowing and knowing in practice. We interviewed experienced practice scholars and reviewed key practice theorizing concepts to demonstrate that: 1) impact outside academia does happen but in ways that are not evident from published academic papers; and, 2) the practice-based view allows us to understand how impact occurs and offers effective strategies to enhance it. Yet, practice scholars' impact outside academia still holds substantial areas of improvement, which we identify theoretically and showcase with concrete examples leading to recommendations. The insights we propose are not directed only to practice scholars, though. They can assist scholars of all epistemological, methodological, and theoretical perspectives to enhance research impact and engage meaningfully with multiple stakeholders beyond academic boundaries.

**Keywords:** practice-based view; research impact; relevance; impact means; impact modes; dissemination.

## 1. Introduction

Whether and how academic research can influence industry partners and other stakeholders such as product/service users, customers, government entities and other actors has been a longstanding issue in several scientific disciplines. In this paper we focus on the management and information systems (IS) fields, which over the last few decades have seen multiple debates concerning the ability of scholarly research to reach practitioners and influence their practices (cf. Benbasat and Zmud 1999; Corley and Gioia 2011; Rai 2019; Robey and Markus 1998; Sharma and Bansal 2019; Van de Ven 2007). Here we aim at taking this debate further by building on past related research and distilling practices that can help move management and IS scholarship insights beyond academic boundaries.

We do this using a practice-based approach (Barad 2003; Bourdieu 1977; Schatzki et al. 2005), which focuses on capturing people's *doings* when dealing with organizational dynamics and assumes that practices are everywhere, at least ontologically and cannot be disentangled from people's actions (Orlikowski 2010). Because of the close relationship between practice scholars and industry practitioners (e.g., because of practice scholars' ethnographic work), one might think that this approach would be more versed than others to identify issues of practitioners, and this is in part true. However, we have reasons to believe that practice scholarship also retains relevant areas of improvement for creating *practical impact*, here defined as one's ability to influence and change managerial ideas, assumptions and decisions, thanks to insights deriving from academic investigations (Bartunek and Rynes 2010; Kieser et al. 2015; Rai 2019).

To substantiate this paper with field evidence we interviewed IS and management colleagues who are established academics and engage in scholarship largely from a practice-

based approach. We went *behind the scenes* of practice-based research and unveiled processes, techniques and strategies that practice scholars adopt to disseminate their findings outside academia and thus generate impact. We added their insights to our own experience as practice scholars. All this enabled us to identify four impact means that correspond to particular strategies to build impact. These means are not specific to practice-based research, but we explain how a practice-based approach can help bring to the surface the hidden bridges that many scholars have already crossed, while shedding light on ways to make research more impactful.

It is well-known that a common strategy to impact one's field is to publish in top journals and disseminate work through specialized conferences, while impacting practitioners requires additional and somewhat different efforts and tools, often demanding to conduct a "parallel" dissemination into practical venues. Yet, making research impactful (also) beyond academia requires working closely with practitioners to identify research questions that are not just meaningful theoretically but that are also practically relevant (Alvesson and Sandberg 2013). Relevance to academia must be achieved because we are asked to publish in top-journals (for career purposes), yet as researchers we have the duty to create and develop knowledge that crosses our professional boundaries and impacts the "real world." It is therefore paramount to identify ways to achieve academic as well as practical impacts within the same research projects – in other words, it is important to have your cake and eat it too.

The contribution of this paper lays on theorizing around *how* this can take place; the two strategies (academic publications and conferences, and dissemination to the broad public) often intersect and overlap, and we explain how this happens by drawing on concepts such as knowledge translation, co-production of knowledge and engaged scholarship, which we have

analyzed with respect to two concepts of practice-based theorizing; sites of knowing and knowing in practice.

We link these concepts to the impact means that emerged from our fieldwork and our own research/expertise. We were therefore able to build a framework of non-prescriptive guidelines that enabled us to: 1) discuss insights on how practice research can help shedding light on how to generate impact outside academia; and 2) provide recommendations for all researchers on how to take research impact further.

Our paper proceeds as follows: in Section 2 we provide a summary of past research on impact, present challenges and do so with respect to a practice perspective of knowledge sharing and translation; we end the section with a brief methodological note. In Section 3 we present our findings related to the impact means. In Sections 4 and 5 we discuss the impact means in light of practice theorizing principles before drawing conclusions and outlining the implications of our study.

## **2. Theoretical Background**

### **2.1. Knowledge Translation, Co-production and Engaged Scholarship**

Scholarship in the management and IS disciplines has a longstanding history of debates around the need to produce research providing implications for practitioners, these implications thus far believed to be insufficient to create relevant impact (cf. Benbasat and Zmud 1999; Dubé and Paré 2003; Ghoshal 2005; Rynes et al. 2001; Van de Ven and Johnson 2006). Some of the reasons behind the apparent “failure” of academics to bridge research and practice relate to academics being too focused on *how* to obtain research findings rather than on the findings themselves (*why* they matter and *for whom*), better known as the *rigor-relevance* tradeoff (cf. Corley and Gioia 2011; Davenport and Markus 1999; Robey and Markus 1998; Rosemann and

Vessey 2008; Tushman and O'Reilly 2007). An emphasis on processes (and the underlying theoretical developments) is arguably shaped by the rules of the academic system in which we operate, which emphasizes rigorous methodological approaches and heavy theory development. This often comes at the expense of attention paid to concrete or practical results that can be effectively translated into advice to managers, executives and the like.

Some have suggested that the debate on how to make academic research relevant to practitioners has little chances to be solved (Augier and March 2011; McKelvey 2006; Nicolai and Seidl 2010). Others, though, having realized that it might be easier to set up practitioners-focused dissemination strategies rather than to adjust P&T (promotion and tenure) systems in academia, have proposed various solutions that focus on how academic research and dissemination to practitioners can be conducted together, within the same (or slightly similar) research processes. Most notable is the scholarship focusing on knowledge translation (KT) – a way to share knowledge with practitioners so that the (practical) implementation of research findings happens in a smooth and timely fashion (Grimshaw et al. 2012). The main assumption of KT is that knowledge, being sticky by definition (Szulanski 1996), cannot be moved across sites as if it were an intangible asset (Newell et al. 2009) and therefore needs to be, to some extent, transformed (or, better, *translated*) to overcome professional boundaries (Carlile 2004).

KT has been conceptualized and applied along with different competing frameworks (Oborn et al. 2013c), yet one that seems to fit practice-based research concerns the idea of involving practitioners at various stages of a research “journey” to better frame research questions (i.e., by making questions not just rigorous but also relevant) as well as to implement findings into practical settings gradually, because practitioners are involved in these processes from the onset. For instance, Oborn et al. (2013b after conducting a longitudinal study of nine

healthcare networks in the UK (the CLAHRCs – Collaboration for Leadership in Applied Health Research and Care<sup>1</sup>) were able to identify five archetypes which, to various extent, illustrate KT strategies to influence practices. In this specific case the study referred to speeding up innovation processes in clinical settings.

Interestingly, the various strategies suggested by Oborn et al. (2013b) indicate that translating academic research into practice involves more than a simple effort to share knowledge across professional boundaries. Moving research beyond academic boundaries requires an approach not limited to identifying common ground through resources such as boundary objects, knowledge brokers and the like (Bechky 2003; Dobbins et al. 2009; Levina and Vaast 2005). This type of KT is enabled by ongoing commitment and close collaboration between researchers and practitioners with activities that revolve around the concept of co-production of knowledge, happening when knowledge is the outcome of joint collaboration between researchers and practitioners (Barrett and Oborn 2018; Rai 2019; Soper et al. 2015). Co-production of knowledge requires engaged scholarship (Van de Ven 2007; Van de Ven and Johnson 2006), which is a pluralistic and collective way for researchers and practitioners to work together towards a common goal in the long-term.

All this said, the literature on impact highlights several challenges preventing engaged research and co-production of knowledge, or more generally KT. One main challenge relates to knowledge sharing between researchers and practitioners, which often does not take place because, among other reasons: 1) academics present their findings in a too sophisticated way; 2) academics and practitioners are not always interested in long-term collaborations because the benefits from long-term commitment are not certain for both parties, and; 3) consequently

---

<sup>1</sup> The CLAHRCs initiative (<https://www.clahrcprojects.co.uk/about>) was funded by the UK National Institute for Health (NIH) Research

academics put limited effort in disseminating findings outside the scientific community (Corley and Gioia 2011).

Other challenges rest on the implicit assumption that academia and practitioners inhabit two different worlds, and this suggests that one (academia) is based on theory while the other (industry) is based on practice, them being hardly intersecting (Rynes et al. 2007). Therefore, and sadly, some academics do not even try to pursue collaborations with industry partners, also because in many academic systems these types of collaboration and knowledge sharing initiatives do not pay off with respect to one's (academic) career.

It is interesting to note, however, that some scholarly frameworks have been successfully shared with practitioners, who use them widely. Examples of such frameworks include Porter's *Five Forces* and *Three Strategies*, Kaplan and Norton's *Balanced Scorecard* and Mintzberg's *Structure in Fives* – 5 ways in which organizations are set up for strategizing (Kaplan and Norton 1996; Mintzberg 1980; Porter 1991). However, these are exceptions. We need a consolidated approach to make academic knowledge flow into the industry realm and vice-versa. As Van de Ven and Johnson (2006) recall, the knowledge food chain is a two-way process therefore both parties need to be engaged and find mutual benefits from collaborations. This, once again, begs the questions of how to engage practitioners and where do we, scholars, find incentives to engage with them in ways that make our research impactful broadly, while helping us land our academic milestones and targets (i.e., P&T related goals) – in other words, *have your cake and eat it too*.

In sum, knowledge co-production incorporates KT concepts such as close collaborations with practitioners which are expected to happen over time. Yet, it highlights specifically that researchers are responsible for proactively questioning key stakeholders to obtain advice and

multiple perspectives from them, e.g., users, clients, sponsors and practitioners, to understand a complex problem or phenomenon (Van de Ven 2018). Engaged scholarship is a way to co-produce knowledge but here scholarship takes the lead and is in charge of developing interesting questions that should appeal to both parties, a process that has been historically very challenging (Simon 1976).

Co-production of knowledge through engaged scholarship is nevertheless a localized process and effort, meaning that it poses issues when it is time to disseminate, e.g., research findings across sites, organizational settings and industries (D'Andreta et al. 2016). Localized processes are common to most KT initiatives (cf. Oborn et al. 2013a) and are most evident in clinical research which, once implemented (i.e., translated) into local settings, is hardly diffused even in nearby organizations (Rycroft-Malone et al. 2011; Scarbrough et al. 2014), albeit the advantages of these disseminations, at the national level, have been highlighted, for instance by some CLAHRs research (Currie and White 2012; Evans and Scarbrough 2014).

Some advocate for the relevance of social networks for “spreading out” innovative practices (Owen-Smith and Powell 2004; Powell et al. 2005). This approach, however, would leave academics out of the loop, making practitioners fully responsible for building linkages across organizations, networks and industries, and for making these processes sustainable over time. This seems a rather unrealistic scenario, because of industry competitions and firms’ effort to retain and protect innovation (Jarvenpaa and Majchrzak 2016; Trkman and Desouza 2012). As McKelvey (2006, p. 828) puts it, when discussing problems of knowledge transfer from academia to practitioners and between practitioners: “why would Dell go out of its way to give the good stuff to HP?”.

One way for academics to try to generalize knowledge across industries is to develop wide quantitative studies with the goal of distilling prescriptive “rules” that may arguably be sold to practitioners. This strategy, however, might be problematic for several reasons: first, most quantitative studies conducted by academics focus on specific and narrow topics, because academia rewards depth at the expense of breadth, for instance to problematize a specific issue to tackle thoroughly (Alvesson and Sandberg 2011). This does not sit well with, e.g., an executive’s need to gain high-level understanding of a multitude of phenomena that would support current and future decision-making. Second, most companies – even those who cannot be called “data-driven” – make use of some sort of analytics systems to obtain a grand vision of their industry and to make strategic decisions (Davenport and Bean 2018).

Third, attempting to obtain and generalize findings in a too broad way might be detrimental to one’s academic career (again, we are asked to focus on depth, not breadth). Therefore this might be something not many academics would want to pursue. Finally, when generalization happens it often originates so called “best practices,” prescriptive to-do lists on how to pursue industry goals similar to these provided by major consultant companies such as McKinsey, Accenture, Gartner etc. Yet, best practices are infamous for ignoring cultural and localized factors that make each organizational community a unique entity (Szulanski 1996).

As practice theorists, we suggest a different approach through which researchers should take responsibility and, when applicable, should lead the knowledge production food chain by generalizing to theory rather than trying to make inferences that might or might not be valid across fields (Markus and Rowe 2018). Along with this approach, scholars can provide high-level and principle-based recommendations and disseminate meaningful findings while avoiding the best practices trap.

We detail this scenario below, where we made use of practice-based theorizing to showcase how this perspective can help scholars understand how to translate knowledge to broader audiences through co-production and engaged scholarship – and how we could enhance the practical impact of our research.

## **2.2 Knowing in Practice and Sites of Knowing**

Practice scholarship focuses on local settings, where practices are being generated through social and material interactions (Feldman and Orlikowski 2011). Distilling recommendations “at large” is thus generally inadequate since each context is unique. A focus on situated actions and their consequentiality exposes a characteristic of practice research that some might confuse with a limit; that paying attention to specific contexts prevents generalization and does not allow one to identify best practices as most consultants do. As Orlikowski (2010, p. 29) noted:

*Knowledge outcomes from intensive practice studies tend to take on a different form than traditional academic research. They are much more likely to be directly relevant to the practitioners and contexts studied. ... The deep engagement in particular sites allows for the findings generated to be very applicable to the situation at hand. Extending these specific findings to other contexts is more challenging. In particular, such insights are bounded, historically and contextually, and any theory that is built from participant observation studies is necessary grounded in specific conditions.*

Practice research in the IS domain reveals that providing companies with best practices (i.e., prescriptions on how to implement a large-scale system) is risky as organizations and the people who work for them are all different and unique (Boudreau and Robey 2005; Newell et al. 2009; Wagner and Newell 2004; Wagner et al. 2010). Best practices can be dangerous if followed blindly – for instance think of all the failed implementations of ERP (enterprise resource planning) systems in the 1990s and the 2000s that have relied on prescriptive advice from consultant companies (cf. Nelson 2007).

Another, more specific, example is about an attempt to implement mobile payment in two developing countries (cf. Barrett and Orlikowski 2014). In 2005, UK-based Vodafone Group built a digital innovation system for Kenya called M-PESA (Pesa refers to Kenya's currency) that facilitated money transfer through cell phones without a bank account. The performance of this highly successful initiative was disappointing when replicated in neighboring Tanzania. Thus, one can see that best practices – or a “replication strategy” as Barrett and Orlikowski (2014) call it – fall short if transferred *tout court*.

One last example is from the automotive industry. Paul Carlile, through an ethnographic study at a US carmaker company, found that a team of engineers was using crash test-simulation parameters that had successfully worked with one car with another (similar but not identical) car and that, as a result, the second simulation failed miserably (Carlile 2004). In other words, knowledge-sharing gaps between the engineers and other technical teams and the belief that moving conditions from one setting to the other could make things work, caused the second simulation to fail.

All the above leads us to put the emphasis on *knowing in practice*; it implies that knowledge(ability) and practices are mutually constitutive “so it does not make sense to talk about either knowledge or practice without each other” (Orlikowski 2002, p. 250). This view of knowledge holds important implications for examining how academics in general and practice-based scholars in particular create impact because impact stems from generating new knowledge (or, better, *knowing*). Viewing the generation of knowledge as an enactment is at odds with the idea that organizational knowledge can be built upon pre-set rules (or best practices). Thinking otherwise would imply that knowledge is static and conceived as something that can be easily “owned,” mobilized and transferred. This view of knowledge – adopted by some (Nonaka 1994;

Nonaka and Konno 1998; Spender 1996) – does not acknowledge the emergent and unpredictable nature of knowing in its constant unfolding through practices (Swan et al. 2010).

Yet, practice scholars have identified important ways in which knowing can be translated and “put into practice.” For instance, Gherardi (2006 highlighted three instances of knowledge translation: invisible learning, mock learning, and catch learning that are developed around the concept of “memory work.” Nicolini (2011, p. 615) distinguished between translation *by contact* and *at distance*, and emphasized the role of mediators (social and material artifacts) that “establish and support an active process of translation” (p. 615), in contrast with the passive support given by “carriers” that are not embodied in practices. The role of mediators, according to Nicolini (2011, occurs in *sites of knowing* and is very important because it helps cross-fertilization across professions in a way that accounts for the emergence of knowing in practice.

Considering the conceptual mechanisms of knowing in practice and sites of knowing – and therefore accounting for the localized nature of knowledge – helps to understand not just how knowledge is situated and needs to be in some way translated from research to practice (i.e., how KT happens), but also how it could impact different and potentially unrelated practical settings through engaged scholarship and co-production of knowledge. The approach involves abstracting local findings and insights at the theory level, therefore generating non-prescriptive principles that can be understood, learned and *practiced* – rather than simply applied – by practitioners in a variety of circumstances.

One good example of the difference between best practices and principles that can advance practitioners’ understanding of challenges stemming from academic research is related to how power relationships affect the implementation of large-scale and centralized ERP systems in organizations (Markus 1983). As it is now well-known, ERP systems challenge power

dynamics in organizations. This can happen, for instance, as processes become more transparent and therefore there is less room for management to act (at times subtly) at the expense of other employees or the organization's mission (Ke and Wei 2008; Nandhakumar et al. 2005; Silva and Fulk 2012). It is however very difficult to be prescriptive in telling practitioners how they need to manage power dynamics while implementing centralized systems: each organization has its own politics that are embedded in specific cultural, historical, and symbolic aspects (Marabelli and Newell 2019).

Nevertheless, scholars have undertaken fieldwork with a number of organizations experiencing these issues, and some principles have been distilled that highlight the relevance of power and politics while undertaking ERP systems implementations. In this way, knowledge (or, better, knowing) is not simply transferred across sites, but it is instead newly created in each *site* (knowing in practice) and is about accounting for power issues, rather than considering specific organizational mechanisms that *need* to be implemented to avoid political backlashes after a system is rolled out (Marabelli and Newell 2014).

Yet, how can engaged scholarship disseminate co-produced findings at the local level and beyond? Where do sites of knowing take place? How is knowing in practice elaborated through social (and material) interactions between scholars and a broad array of practitioners, once fieldwork is being conducted and the local setting benefits from co-produced knowledge?

To learn more about this, we engaged in conversations with senior scholars who have, throughout their career, conducted practice-based research. We also relied upon our own experiences as practice researchers. Doing this has provided us with meaningful insights on how knowing in practice and sites of knowing are being created through various dissemination practices. Many of these practices are common to most management and IS scholars. Yet in this

paper we emphasize how practice-based theory can offer potential solutions to overcome barriers between academics and practitioners in large-scale dissemination settings and across sites, as per what is documented by some CLAHRCs-related research, for instance (cf. Evans and Scarbrough 2014; Rycroft-Malone et al. 2011; Scarbrough et al. 2014)

### **2.3. Our approach to uncovering impact means**

We conducted six interviews with well-reputed practice scholars. During the interviews, we focused on understanding the extent to which a scholar's career has had impact outside academic boundaries, as per our definition of impact. We also investigated the underlying techniques/strategies they used to impact practitioners. In a practice-based fashion, we kept the interview protocol broad and the conversation informal (Schultze 2000). We asked interviewees to explain their research and dissemination strategies to us and, when possible, to provide examples of some challenges they had faced. Note that all participants knew about our study and its goal. We believe that this fact does not compromise our findings since we did not aim at testing whether practice scholarship generates impacts outside academia. Instead, we wanted to understand practice scholars' approaches towards impact and their thoughts towards their own engagement in practice.

We recorded and transcribed all interviews. We then wrote up a one-page vignette to summarize each interview. We sent the summaries to the corresponding study participants to ensure we had captured their "story" in a way that adequately reflected their thought processes. We coded the interviews using "impact strategy" as the unit of analysis. Having identified several specific impact strategies, we performed a code-revision analysis whereby we distilled categories from the various examples the interviewees suggested. Via this process, we engaged in code reduction through an abstraction process (Markoczy and Goldberg 1995). These second-

order codes (Strauss and Corbin 1994) proved helpful to single out high-level impact strategies (impact means).

For instance, several scholars mentioned that they had influenced practice via translating field knowledge into class discussions, explaining organizational dynamics, questioning established theorizing and best practices, and so on. We collapsed all these examples into the impact means “class discussion” as a way to impact prospective professionals and more established managers and decision makers (e.g., people in several types of graduate courses, such as master’s degrees in science, MBAs and executive education courses). We showcase our main findings next.

### **3. Practice research as a journey: four impact means**

In this section, we present and analyze four key impact means that we identified: *teaching cases, interim and post hoc reports, class discussions, and KT initiatives.*

#### **3.1. Teaching cases**

The first impact mean, *teaching cases*, pertains to single case fieldwork published in a variety of outlets including the *Journal of Information Technology Teaching Cases* and *Case Research Journal* along with other resources such as The Case Center<sup>2</sup> and Harvard Business School Publishing (HBSP)<sup>3</sup>. In this paper, we define teaching cases following Lawrence (1953, p. 215), who explains that teaching cases represent “the vehicle by which a chunk of reality is brought into the classroom to be worked over by the class and instructor.”

Teaching cases impact a variety of prospective professionals worldwide because business schools have broadly adopted them. This first impact means has three relevant dissemination aspects: *direct dissemination, indirect dissemination* and *organizational awareness.*

---

<sup>2</sup> <https://www.thecasecentre.org/main/>

<sup>3</sup> <https://hbsp.harvard.edu>

*Direct dissemination* concerns practice scholars' disseminating their research findings and experience in class through one or more teaching cases. Our interviewees often distributed their own work to students (published or not) to use as the building blocks for the class to engage in discussion and critically appraise organizational problems. This dissemination involved cross-fertilization, one of them suggested, because, "we can reach the students to share with them those troubles and concerns and also some of the insights of how we talk about practice centered, practical solutions to these problems." As we will explain later in this section, direct dissemination leads to another strategy, class discussion, similar in general terms with teaching cases, yet consequential to delivering a case in class (plus, often class discussions do not need a specific case to take place).

*Indirect dissemination* concerns the practice of distributing teaching cases to other scholars worldwide (often via the Case Center and HBSP portals that we mention above). This strategy might provide insights without as much depth to classes (since other instructors might not have the same contextual awareness of the people who undertook fieldwork and wrote the teaching case). Yet it represents a powerful strategy to broaden the reach to practitioners. As another informant pointed out:

*If I were to show practitioners writings based on my academic studies ... I cannot give them an MISQ, so what I do is I summarize my writing in some type of piece [i.e., a teaching case] that then gets used at least by other academics for teaching similar courses.*

*Organizational awareness* concerns scholars' giving back to the organizations they have worked at through writing a teaching case. In this regard, one of our informants highlighted that, with teaching cases, "you're getting the students reflect, teaching cases have to be vetted by the organization and so they become a source of inquiry inside the organization." Another informant further articulated this point in suggesting that:

*I write teaching cases because I actually need them for my classes so of course you don't only impact your students and future practitioners through the case studies you write but you actually also help the organization that you're writing a case study about.*

Given the above, the teaching cases strategy creates broad impact. Teaching case often appeal to organizations because publishing a teaching case related to an organization (with its name disclosed, as it is customary) contributes to diffusing name and brand. Note that even teaching cases where problematic situations are exposed end up showing how organizations address internal issues seriously. However, it is also worth noting that for the same reason – exposure of the organization's name – publishing a teaching case might become problematic. Some organizations not familiar with the teaching case might see this as inconsistent with Non-Disclosure Agreements (NDAs) often signed at the outset of a collaboration/fieldwork. Regardless, these negotiations might take a long time, also because all people named in a case need to sign an individual clearance document.

Teaching cases are particularly valuable when they are critical and expose important organizational issues. The straightforward implementation of an analytics system, in contrast, might not be particularly interesting and conducive of generative discussions. Students would simply tend to distill best practices rather than examine underlying problems. Therefore, the timing for negotiating a teaching case might be chosen strategically. We suggest starting to discuss a teaching case having reached data saturation allowing thus to write academic research, should the organization not allow an undisguised report (i.e., a teaching case). An alternative approach is to keep the organization anonymous, as it happens in some outlets, e.g., the Case Center. This would limit opportunities for brand/reputation of the organization, yet represents a good compromise for publishing practical insights when organizations do not feel comfortable with disclosing their name.

While the dissemination of research findings through teaching cases is typical to qualitative research in general, it is possible that practice-based researchers delve more into particular organizational issues such as power dynamics, the political role of knowledge, the performative use of technologies and so on.

This impact mean *does* have a direct impact to organizations with whom scholars engage. Yet, the *teaching cases* resource remains rather static. The second impact mean is narrower in scope (i.e., on one organization) but deeper and more dynamic in terms of its specific influence on people's practices since it promotes ongoing discussion, mutual learning and, potentially, organizational change.

### **3.2. Interim and post hoc reports**

The second impact mean, *interim and post hoc reports*, pertains to various types of deliverables and presentations that scholars provide to organizations during fieldwork and/or in its immediate aftermath. The practice scholars we approached made an important distinction between interim and ex post report, regardless of whether the organization that gave access to the data required them or whether the scholars provided them on a voluntary basis. Both types of reports are meaningful for different but complementary reasons. Interim reports generally help scholars tighten their relationships with organizations. Interim reports also help organizations understand “what’s going on with their issues” at the time these occur. Note that this can help to facilitate/support ongoing research access if the insights are valued by members of the organization. In fact, as one study participant pointed out:

*By the time a paper gets published the organization has moved on, you know, because usually the delay between collecting the data and actually getting something published can be three to four years easily. That sort of the early sense making that you have of the data that that’s where the sharing with the organization happens and the discussion with the organization happen.*

Our informants often conduct fieldwork using ethnomethodological methods. This, they told us, helped them explore social dynamics and issues in great detail. For instance, a scholar we interviewed highlighted the relevance of observing practices (i.e., shadowing practitioners) rather than only asking them questions. Although people know more about what they do than researchers give them credit for (Orlikowski 2002), shadowing actors onsite allows scholars to gain an overarching and holistic perspective of organizational issues that they can report “right away” (Czarniawska 2007; Nicolini 2012) without waiting for the issue to become a painful, ex post lesson learned. A practice scholar we interviewed noted how important he found it to bring up issues with organizations that actors could not see themselves (i.e., so-called elephants in the room) while they actually experienced them:

*To quote Bourdieu, the reason why you can't trust your interviews is because they can't tell you everything and it's your responsibility, so if you put your structural hat on, to engage with everybody, you know, then you know what the elephant looks like, right. So as a practice theorist and an ethnographer I have to say oh, that's an elephant and when I come back in and say guess what, this is an elephant problem. And it's not anybody's particular fault, it's a structural thing. And of course, I hate to use the word structural because some people might misunderstand but it's a configuration of practices.*

Post hoc reports focus on specific contexts and go into much detail since they assess practices and highlight issues that belong to organizations that we have studied for months or years. For instance, one of our informants explained that:

*I certainly give feedback at the end [of fieldwork] obviously, so a much more detailed presentation, recommendations, you know, we have a conversation. So there is the very direct influence hopefully, you know, hopefully for the better to the field sites where we've been studying, you know, to give people feedback and suggestions and guidance and you know, hopefully some learning insights that they get about their own organizations, practices.*

Although this type of impact “is obviously very narrow because it's only about the people that we have studied” (to quote one of our interviewee), one should not see it as a weakness of

practice research but instead as a characteristic of it since practices permeate the social, historical and cultural aspects of specific organizations, people, and objects (Orlikowski 2010).

### 3.3. Class discussions

The third impact means, *class discussions*, pertains to discussions in master's and executive courses where instructors engage students in critical reflections on organizational issues— as well as discussions with research students (during PhD seminars, for instance) to help them understand how they can impact their field. This impact means can be consequential to or independent from teaching cases. Discussion emerges as a “two-way generative process” (to quote one of the practice scholars we interviewed) and builds on the instructor's experience with and knowledge about organizational issues from the instructor's past research. In addition, this means, similar to the previous one (reports), addresses a specific population (a class) and does not claim broad diffusion as in a teaching case, which other instructors in other universities and countries can use. A practice scholar we interviewed highlighted that:

*For a small audience of practitioners that I teach I use the insights I get from my research, including theoretical insights, I can translate them to these practitioners with some impact.*

With this means, the two-way generative process helps professionals gain insights from expert scholars with wide knowledge about organizational struggles. In a similar manner, expert scholars gain insights about cutting-edge knowledge in organizations (e.g., technological innovations) from professionals, which we ourselves have often experienced. To this end, a scholar we interviewed made a relevant point about how her own research matters while talking about executive-level education:

*There is something unique about practice-based insights that can help practitioners... I think there's a lot more insights around the stories we can tell because they're more grounded. So the people we study lend themselves to good examples with rich descriptions. And I think, to me they open up possibilities for*

*saying... here are some practices, here are some ways to do things, you know, it kind of gives us maybe the way to think about it is some possible insights into what can they do differently on the ground, right, here are some different ways of creating norms or incentivizing or.... You know, because it's detailed, right, it's at the level where they can actually begin to influence what they do.*

The value of class discussions lays in the depth of the insights that instructors propose, and the critical approach instructors use to emphasize organizational issues. One interesting detail that emerged from our interviews concerns practice scholars' ability to capture the aspects of everyday organizational life that represent struggles and concerns. These "soft" issues do not relate to revenues, sales, performance or other tangible outcomes but focus more on aspects associated with "conditions, relations, here is how and why this situation has emerged, here is some possible directions to change things" (to quote a practice scholar). These conditions and relations help practitioners collectively reflect (i.e., in class with the instructor) on organizational issues (Levina 2005) as a scholar we interviewed pointed out:

*My own teaching is really based on my research insights. So as I conduct practice focused studies in organizations I learn a lot about practices and about, also about concerns. I think practice theory is often about understanding people's struggles and concerns, intentions. And I actually think this way we can reach the students to share with them those troubles and concerns and also some of the insights of how we talk about practice centered, practical solutions to these problems.*

### **3.4. KT initiatives**

The fourth impact means, *knowledge translation initiatives*, pertains to practice scholars' efforts to make research findings available to various stakeholders outside academia through several types of initiatives.

KT initiatives generally involve scholars' creating research centers and organizing events where they and practitioners can cross-fertilize the knowledge they have gained. For instance, a

practice scholar we interviewed pointed to the importance of recognizing that knowledge constitutes a collective and emergent process when scholars share it with practitioners:

*The practice aspect that matter when you organize meetings with practitioners is the idea of a community of practice in which everybody learns from each other, they learn from experience, the use of action learning, the use of peer assist, all these are tools that are based on our own background ... which is about our work on knowledge in practice. How does knowledge in practice work, where it stays, how does it go around. How is that done? How is it circulated? All these things, the awareness of these principles makes it easier to facilitate knowledge translation and transformation when we meet with companies*

Grant-based research represents also an opportunity to organize workshops and events to communicate and meet with stakeholders outside academia. For instance, one of our informants mentioned a government-funded project he had the opportunity to co-lead. By securing funds to organize workshops with practitioners, she could disseminate research findings as well as facilitate knowledge sharing “between two different worlds,” in his words. She provided the following example:

*So, for example, one of our forums was on patient engagement and what we would do is to invite speakers and panels and members from across the health ecosystem which would include IT companies, the clinicians that are working in different parts of the hospitals, researchers, people from the national health system itself ... to represent different parts of the ecosystem so that we get when there are the presentations and the panels we try to both get representation from those groups as well as to share it so that's to get feedback and input from the different groups on key themes like patient activation, how technology can help provide better closer patient engagement.*

Further, knowledge translation initiatives can involve a wide variety of professional communities beyond the healthcare community in the example above. For instance, they can involve entities such as governments as well. A scholar highly engaged in policy changes evidenced research impact at the national level in saying:

*It's a very large initiative called [name of the initiative] and the idea is that I represent the research group under the data foundations how we think about the new data principles which will be important for the government to build things*

*like digital twins to support the whole way in which we think about infrastructure and how that informs both our future developments through a number of different ICT initiatives. What's important about that is that it connects the three groups of academia, government and industry in a very significant way to come up with ground rules and principles on how we go about thinking about transforming the construction and infrastructure across the [country where the initiative took place].*

Our informants stressed how their own practice research was relevant in that it both offered in-depth details on practices and also supported processes of KT. Furthermore, most scholars we interviewed indicated that one way to disseminate their research outside Academia involves writing pieces for outlets such as *Harvard Business Review*, *MIT Sloan Management Review*, and *California Management Review* as examples of some of the most prominent journals that address practitioners' concerns in our discipline. Other journals such as *Information and Organization* have recently established a special forum such as the RICK (Research Impact and Contribution to Knowledge) section within the journal, to signify a holistic view of researchers thinking of contributing both to the field (academia) as well as practice.

In addition, it is not uncommon for scholars to use press and social media outlets to comment on practical issues bringing to the surface their knowledgeability, as field-based researchers. However, we did not classify these as distinct impact means *per se* because these outlets often demand a relatively standardized format (i.e., in language and ways to showcase findings “right away”) and focus far more on breakthrough novelties than methods. Therefore, the KT and transformation processes that we outline in the fourth impact means embed these dissemination efforts. Table 1 summarizes the four impact means.

**Table 1. Means that generate impact outside Academia**

Impact means	Description	Practice-based characterization of the means
Teaching cases (includes direct/indirect dissemination and organizational awareness)	<ul style="list-style-type: none"> <li>• Writing teaching cases during or after a research project to translate knowledge gained through fieldwork to young professionals</li> <li>• Opportunities to broadly disseminate one’s research findings to other institutions and countries.</li> </ul>	<ul style="list-style-type: none"> <li>• Practice research is prone to intense fieldwork, therefore teaching cases result in particularly rich details from different stakeholders.</li> <li>• Practice research takes a critical perspective; therefore, scholars look for organizational issues that practitioners struggle to address.</li> </ul>
Interim and post hoc reports	<ul style="list-style-type: none"> <li>• Industry partners sometimes require interim reports as part of an access deal. Post hoc reports sum up long-term studies</li> <li>• Industry partners provide an organization with a different/new perspective of people’s practices</li> </ul>	<ul style="list-style-type: none"> <li>• Organizational reports (interim and post hoc) stem from long-term exposure to fieldwork.</li> <li>• This is in contrast with studies based on surveys or systematic analyses of organizational dynamics (practice research is emergent and exploratory)</li> </ul>
Class discussion (MBA/executive teaching)	<ul style="list-style-type: none"> <li>• Class discussions among graduate students comprise two-way exchange of ideas and opinions with cross-fertilization among students/practitioners and between students and instructors.</li> </ul>	<ul style="list-style-type: none"> <li>• Practice scholars share their first-hand experience at various field sites with students who are also professionals at various levels.</li> <li>• Class discussions focus on these very troubles and practical solutions, which go beyond best practices and highlight the context specificity of organizational issues.</li> </ul>
KT initiatives (includes research centers and grants)	<ul style="list-style-type: none"> <li>• Building conceptual or physical infrastructures create opportunities for cross-fertilization between academics and various stakeholders.</li> <li>• KT initiatives commonly bring together academics and nonacademic stakeholders with the goal to share knowledge on more or less narrow/specific topics.</li> </ul>	<ul style="list-style-type: none"> <li>• KT initiatives reflect practice theorizing and concern the idea that knowledge creation occurs collectively.</li> <li>• KT initiatives concern scholars’ effort to translate theoretical tools into practical recommendations for other stakeholders in a nonprescriptive way.</li> </ul>

#### **4. Discussion and implications**

In this paper, we built on the existing debate that focuses on the extent to which academics can impact practitioners, thus influence and hopefully improve their practices. We have shifted the focus from attempting to make research findings more understandable by practitioners (Gioia and Pitre 1990) to trying to dig deeper into which theoretical tools are available to scholars to determine what issues are meaningful to *both* academics and practitioners (i.e., expanding on co-production of knowledge and engaged scholarship) and how these findings can impact local and national settings (KT and beyond).

The four impact means that we have identified illustrate some of the strategies through which scholars currently generate impact outside academia by creating and disseminating novel knowledge that can be effectively used by a variety of outside-academia stakeholders. While the four impact means are just examples of how impact might happen, they are also illustrative of how we can further explore processes underpinning impact from a theoretical standpoint.

##### **4.1. Theoretical Foundations of Impact Means**

Through the four impacts means that we have identified, we were able to illustrate strategies that, albeit common to several research approaches, are illuminated by practice theory. For instance, *sites of knowing* (Nicolini 2011) – where knowledge is being created by studying organizations and findings are constantly shared with the actors involved – can be linked with teaching cases and class discussions. In these contexts, cross-fertilization between practitioners' expertise and theoretical knowledge from scholars are mingled. Current and future professionals can learn how to apply theoretical principles to practical settings by, e.g., bringing to the surface their own professional experience as well as discussing issues and lessons learned that are presented in teaching cases (so, by other successful professionals). This leads to developing

awareness about the need to consider contextual conditions rather than attempting to replicate innovations blindly, which has been proved problematic (Wagner and Newell 2004). In this vein, teaching cases and class discussions are probably among these appropriate strategies to showcase the relevance of local practices and their surrounding contextual conditions.

KT initiatives and reports to organizations are more related to *knowing in practice*. While sites of knowing focus more on particular situations and specific moments in time where knowledge is being produced, KT has a different nature and requires long-term *onsite* activities of co-production of knowledge (perhaps in different sites of knowing, within an organization). Reports are clearly an asynchronous way to deliver knowledge, but they are heavily connected with the underlying KT practices (e.g., through an ethnography) and are ongoing interactions between us, academics, and the organizations we study.

For researchers, translating knowledge when being in practical settings takes time (Rai 2019) and requires constant engagement to first understand what practical issues need to be investigated (Van de Ven 2018) and then what research questions need to be asked that have theoretical value but also hold practical relevance (Alvesson and Sandberg 2013). It is only over time, however, that trust and bond between academics and practitioners develop, therefore researchers' exposure to fieldwork works best in ethnographic settings, or anyway when the approach is longitudinal. While we understand that academic pressure might lead to spend more time in writing and less time in developing social bonds with the people we study, it is the latter attitude that helps researchers build their reputation among practitioners, thus grant long-term access and set the stage for collaborations with other organizations in the future.

As we pointed out when discussing teaching cases, it is prudent to discuss this opportunity towards the end of fieldwork, to limit the potential for jeopardizing access. Yet, in

most cases organizations decline to participate in a co-written teaching case because they are afraid that the narrative we want to document and publish would damage their image with customers, which is a signal that they don't trust us, researchers (exceptions being made for organizations sharing particularly sensitive data).

Interim and post-hoc reports can be seen as part of KT efforts (therefore theoretically related to knowing in practice) because, albeit asynchronous, as we previously noted they mostly occur when fieldwork is ongoing or has just finished. Specifically, interim reports are helpful to make sure that both collaborative parties (academics and practitioners) are on the same page. Generating an interim report represents a two-way exchange of information and knowledge between researchers and practitioners because generally the latter not only take these reports in great consideration but also provide counter-feedback that helps researchers moving in the right directions for exploring further the phenomenon at hand.

Seen from this perspective, tight collaboration and KT efforts can very much promote research discoveries that are relevant to one's academic career (ability to go in-depth into important organizational issues – typical of practice research that aims to zoom in-to “what's going on” in an organization, with a magnifying lens) while generating relevant practical impacts – to wit, this is a way to have your cake and eat it too.

#### **4.2. Theoretical Framework of Means, with Respect to a Practice-based View**

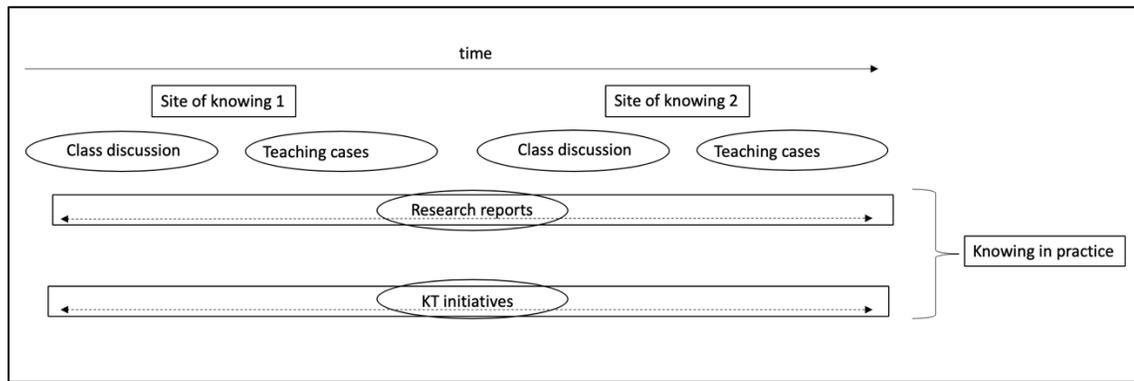
We have now demonstrated that there is plenty of room for us, practice scholars, to improve and refine our models of doing research to pursue broader impact. Yet, we also believe that we are well equipped for doing so. One main takeaway from practice research that one needs to remember – and here we specifically talk to qualitative/ethnographic scholars – is that viewing knowledge as divorced from contexts and practices can cause a variety of problems. One of these

problems stems from the false belief that knowledge can be transferred straightforwardly (Newell et al. 2009; Szulanski 1996). It is here that practice theorizing can help researchers develop awareness concerning knowledge dissemination beyond academic boundaries. Sites of knowing and knowing in practice do justice to localized practices that can be generalized at the theory level (Markus and Rowe 2018).

Yet, the conceptual mechanisms of *sites of knowing* and *knowing in practice* can be viewed as related to teaching cases and class discussions and with reports and KT initiatives respectively. While the distinction is mainly made for analytical purposes, we believe that it is theoretically important to associate modes with specific conceptualizations of knowing, using a temporal perspective.

The notion of sites of knowing implicitly evokes a static view of knowing in practice, because the generation of new knowledge is consequential to specific events (the discussion of a case, feedback related to a deliverable such as an essay etc.). So, for instance, a site of knowing can enable knowledge generation at a specific moment in time (say, a 2-hour class discussion). Then, the knowledge being created is constantly re-elaborated by the participants in their own practices, at the workplace with peers.

Knowing in practice however is a more fluid concept, and better describes processes of knowledge generation that happen over time. Knowing in practice occurs in constantly changing sites of knowing and develops in months and years, for instance through strategies such as engaged scholarship and co-production of knowledge. Figure 1 portrays the temporal relationships between impact modes and the supporting conceptual mechanisms of sites of knowing and knowing in practice.



**Figure 1. Temporal Relationship between Impact Means and the underlying Conceptual Mechanisms**

Having noted the relevance of temporality, we suggest that the four means (teaching case, class discussions, reports and KT initiatives) need to be performed in such a way that knowledge is locally recreated with other stakeholders, either in specific occasions or in a more systematic and processual fashion.

We now consequently propose novel ideas on how impact is enacted; this happens by introducing the notion of *impact modes*, which we define as performative actions aimed at applying one or more impact means to create concrete changes in organizational practices. According to this theorizing, impact means are seen as strategies or opportunities to co-create knowledge and disseminate findings outside academic boundaries. Impact modes represent the enactment of means via the underlying conceptual mechanisms of sites of knowing and knowing in practice). We unpack this last issues (modes) in the concluding section of our discussion, next.

#### **4.3. From Impact Means to (Performed) Impact Modes**

Modes related to impact means emerged more or less explicitly from fieldwork (and from our own experience as research) and we were able to conceptualize them, also drawing from the extant literature. For instance, three modes associated with teaching cases are direct dissemination (in class), indirect dissemination (via HBSP) and the creation of organizational

awareness, enabling managers and executive to distill lessons learned from collaborating with academics on a teaching case. Class discussions are enacted via making current or perspective practitioners reflect on how theoretical issues can be applied to practical problems. For instance, unpacking issues associated with the construct of power with practitioners can promote discussions on how politics can affect technology implementation and use at the workplace (Markus 1983). Both these sites of knowing promote local and rather static learning which however can then can spread throughout the organization. It is not uncommon that students contact instructors after graduation to explain how they were able to apply insights learned in school to their own job (as for instance happened to us).

Yet, some aspects of the creation/delivery of research reports and KT initiatives (the other two modes) might be more challenging, and here there is the need to articulate more accurate dissemination strategies that go beyond tight collaboration. The healthcare domain illustrates this issue quite well; clinicians are generally challenged by concurring demands of publishing basic research in premier academic disciplinary outlets such as the medical sections of Nature or Science while devoting effort in implementing findings locally and nationally, as per examples from the previously mentioned UK CLAHRCs (cf. Currie and White 2012; Scarbrough et al. 2014). For instance, D'Andreta et al. (2016 in a study of three UK CLAHRCs found that clinicians try to find a balance between publishing in academic journals on the one hand (so to disseminate field-based evidence at large), and pursuing “the translation of research evidence into practical settings” (p. 303) on the other hand. These two activities should not be pursued in tandem with different and parallel (thus not very efficient) efforts.

Modes associated with reports are about mutual and ongoing learning and focus on meetings with managers and executives to discuss fieldwork progress. While all four modes

revolve around two-way feedback, it is when we deliver research-based insights crafted purposely for practitioners that cross-fertilization on important issues occur. This mutual learning and development of knowing in practice can enable the development of trust (to grant long-term access) while supporting collective and dialectic processes to identify and refine research questions that are relevant for both academics and practitioners (Alvesson and Sandberg 2013).

Similarly, KT initiatives benefit from long-term social interactions with the subjects we study. The associated modes that help enacting KT involve organizing workshops, seminars and more generally activities that promote dissemination of research findings into practical settings. These include the creation of sustainable research centers and more generally the effort to turn grant-based initiatives into entities that are sustainable over time (Soper et al. 2015). One interesting aspect of setting up long-term initiatives in collaboration with practitioners is that several organizations attend workshops periodically, and this supports large-scale dissemination, i.e., cross-fertilization between organizations that are affiliated with, e.g., a research center.

We previously noted that organizations generally are not willing to share novel practices because of knowledge protection issues (Jarvenpaa and Majchrzak 2016; Trkman and Desouza 2012) – which however might be detrimental to innovation (McKelvey 2006). Engaging practitioners from various organizations through grant-based initiatives, centers of excellence and overall projects that become sustainable over time and involve gathering of academic/practitioner audiences, are in our opinion effective KT modes to push practitioners to share their own organizational knowledge with each other, and for us to create impact that goes beyond local and academic settings. Here too, knowing in practice is an ongoing process where actors from different communities create knowledge (or better knowing) jointly.

Another mode that expands on knowing in practice, therefore interacting with organizations by delivering reports and pursuing KT initiatives concerns engaging with practitioners through joint publications (often fine-tuned revisions of a final report, if targeting a practitioners journal). This goes beyond writing teaching cases with managers and executives, as we suggested above (previous modes). A teaching case is a descriptive “story” of an incident that ends generally with a cliffhanger to stimulate student thinking. An academic publication with practitioners, however, is more focused on key findings (i.e., the “meat”) and can be helpful to enhance a scholar’s reputation in non-academic communities therefore setting up the stage for future fieldwork.

Note that some practitioners feel empowered when they publish with us, academics, in academic journals; in addition, think of domains such as healthcare, where most practitioners need publications (not only in clinical research) to promote their own career. Publications with practitioners generally do not reach top-tier and mainstream academic journals, mainly because of the huge theoretical contribution required by these journals, which often cannot be made jointly by all coauthors. Yet, more specialized (still academic and peer reviewed) journals are more likely to welcome a mixture of academic and practitioners as coauthors where the requirements of theoretical and practical insights are more balanced (e.g., Marabelli et al. 2014; Zachariadis et al. 2013). Table 2 summarizes the relationships between conceptual mechanisms, impact means and modes.

**Table 2. Conceptual Mechanisms, Impact Means and Modes**

Conceptual mechanism	Site of knowing		Knowing in practice	
	Class discussions	Teaching cases	Research reports	KT initiatives
Means				
Modes	<ul style="list-style-type: none"> <li>Reflections on how theory can be applied to</li> </ul>	<ul style="list-style-type: none"> <li>Direct dissemination</li> </ul>	<ul style="list-style-type: none"> <li>Researcher-practitioner</li> </ul>	<ul style="list-style-type: none"> <li>Publishing in both academic</li> </ul>

	practical settings (e.g., power)	<ul style="list-style-type: none"> <li>• Indirect dissemination</li> <li>• Organizational awareness</li> </ul>	interactions (e.g., trust) <ul style="list-style-type: none"> <li>• Joint publications</li> </ul>	and practitioner journals <ul style="list-style-type: none"> <li>• Workshops, seminars</li> <li>• Effort to create sustainability from grants</li> <li>• Joint publications</li> </ul>
--	-------------------------------------	----------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

In summary, here we have made use of sites of knowing and knowing in practice to explain how impact means can help academics cross professional boundaries and have introduced the concept of modes to showcase examples of how means can be enacted in practice. Because of this, we argue that practice theorizing represents the main building block upon which we are able to shed light on already existing potential for research to impact practice, on the one hand, and to promote more localized knowledge translation processes, on the other hand.

### 5. Concluding Remarks

In this paper we suggested that bridges between academia and practitioners, with respect to the dissemination of research findings, exist but are still opaque and can become stronger. We also argued that the practice-based view has the potential to provide a helpful theoretical lens to uncover but more importantly enhance these hidden bridges. We focused on sites of knowing and knowing in practice, two key elements of practice theorizing, to explain how dissemination of scholarly research to practitioners is centered on the co-creation of novel ideas through fieldwork and theorizing. With the help of fellow practice scholars, we identified four key impact means. Although these means are not exclusive to practice research, we realized that practice scholars might be particularly well versed in exploiting these means to affect the practices of practitioners and, thus, to generate impact. We also identified ways to enact these means (modes) as potential suggestions of *how* practice-based scholars and other research traditions can enhance impact.

Even if here we rejected the unquestioned assumption of a strict research/practice divide, we acknowledge that there is still more that scholars can do to understand how research impacts practice. In our opinion, future research should shift the focus from *whether* to *how* this impact occurs and how this impact can be taken to the next step. We therefore expect fellow scholars to question and expand our insights and claims, in the critical spirit of the practice-based view. We thus suggest that it would be extremely relevant to explore further how modes (ways to enact means) can keep scholars engaged and generate co-produced knowledge to be translated to practitioners. To this end, we have also highlighted the relevance for scholars to support dissemination between organizations – as we cannot leave this task to practitioners only.

In relation to our fieldwork, it is worth noting that we exclusively interviewed senior scholars, who are highly reputed in the admittedly elitist academic circle – and this is probably a limit of this work. We suspect that practical impact is not always directly related to academic performance. We know more than a few fellow colleagues who are not as highly reputed as scholars. Yet they conduct research projects holding terrific practical impact. This issue, in our opinion, deserves attention. It will also bring to the surface another longstanding issue in academia, that is associated with academic merits – P&T “rules”, for instance – that are correlated with (almost exclusively) scholarly impact – one reason for this being the absence of consolidated metrics for appraising practical outcomes (Oborn et al. 2013b). This is surely an important topic to add to the “impact-how” (not impact-whether) research agenda, when discussing potential drivers and inhibitors, as some lament that P&T standards, especially in research-intensive schools, might be detrimental to a focus on one’s practical impacts. To this end, it is also worth recalling the DORA (Declaration of Research Assessment) principles on

impactful and responsible research<sup>4</sup>, which since 2019 have begun to be widely adopted by universities worldwide. These principles can be helpful to provide relatively objective metrics to evaluate scholarship contributions over time with respect to academic and practical impact. This also builds on our idea that academic and practical impact should not be pursued in parallel and with different effort, and, with this paper, we provided suggestions on how to have your cake and eat it too.

Finally, we would like to encourage our fellow practice scholars to become more vocal in making other academics aware of their important practical achievements. We had to go behind the scenes to learn about some of the practice-driven missions of our colleagues. To be fully honest, initially we did not anticipate to find so much impact. While this unexpected finding was extremely pleasing to us, we wonder about the *stickiness* of the (wrong) belief that we “own” our knowledge and that this knowledge is hard to share with practitioners. While knowledge might well be sticky and contextual, it is our duty as academics to deepen the impact of our research through communication, collaboration and co-production of knowledge in practice. This process is already visible in various academic initiatives and conferences including Academy of Management specialized conferences on responsible management and impact<sup>5</sup> and various panels and workshops at conferences such as the International Conference of Information Systems (*ICIS*) and the European Conference of Information Systems (*ECIS*). Yet, there is still much to do and with this paper, we hope to have provided one additional push to our fellow colleagues within and beyond practice-based researchers, to take our impact further.

## 6. Acknowledgements

---

<sup>4</sup> <https://sfdora.org>

<sup>5</sup> Cf. <http://www.academy-of-management.com/EventDetail.aspx?id=2147486791>

We are indebted to Wanda Orlikowski who has provided extensive feedback on earlier versions of this paper.

## 7. References

- Alvesson, M., and Sandberg, J. 2011. "Generating Research Questions through Problematization," *Academy of Management Review* (36:2), pp. 247-271.
- Alvesson, M., and Sandberg, J. 2013. "Has Management Studies Lost Its Way? Ideas for More Imaginative and Innovative Research," *Journal of Management Studies* (50:1), pp. 128-152.
- Augier, M., and March, J. 2011. *The Roots, Rituals, and Rhetorics of Change: North American Business Schools after the Second World War*. Stanford: Stanford University Press.
- Barad, K. 2003. "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," *Signs* (28:3), pp. 801-831.
- Barrett, M., and Oborn, E. 2018. "Bridging the Research-Practice Divide: Harnessing Expertise Collaboration in Making a Wider Set of Contributions," *Information and Organization* (28:1), pp. 44-51.
- Barrett, M., and Orlikowski, W. J. 2014. "Digital Innovation in Emerging Markets: A Case Study of Mobile Money," *MIT Sloan Management Center for Information Systems Research Briefings* (XIV:6), pp. 1-3.
- Bartunek, J. M., and Rynes, S. L. 2010. "The Construction and Contributions of "Implications for Practice": What's in Them and What Might They Offer?," *Academy of Management Learning & Education* (9:1), pp. 100-117.
- Bechky, B. A. 2003. "Object Lessons: Workplace Artifacts as Representations of Occupational Jurisdiction," *American Journal of Sociology* (109:3), pp. 720-752.
- Benbasat, I., and Zmud, R. W. 1999. "Empirical Research in Information Systems: The Practice of Relevance," *MIS Quarterly* (23:1), pp. 3-16.
- Boudreau, M.-C., and Robey, D. 2005. "Enacting Integrated Information Technology: A Human Agency Perspective," *Organization Science* (16:1), pp. 3-18.
- Bourdieu, P. 1977. *Outline of a Theory of Practice*. Cambridge, UK: Cambridge University Press.
- Carlile, P. R. 2004. "Transferring, Translating, and Transforming: An Integrative Framework for Managing Knowledge across Boundaries," *Organization Science* (15:5), pp. 555-568.
- Corley, K. G., and Gioia, D. A. 2011. "Building Theory About Theory Building: What Constitutes a Theoretical Contribution?," *Academy of Management Review* (36:1), pp. 12-32.
- Currie, G., and White, L. 2012. "Inter-Professional Barriers and Knowledge Brokering in an Organizational Context: The Case of Healthcare," *Organization Studies* (33:10), pp. 1333-1361.
- Czarniawska, B. 2007. *Shadowing: And Other Techniques for Doing Fieldwork in Modern Societies*. Copenhagen Business School Press.
- D'Andrea, D., Marabelli, M., Newell, S., Scarbrough, H., and Swan, J. 2016. "Dominant Cognitive Frames and the Innovative Power of Social Networks," *Organization Studies* (37:3), pp. 293-321.

- Davenport, T. H., and Bean, R. 2018. "Big Companies Are Embracing Analytics, but Most Still Don't Have a Data-Driven Culture," *Harvard Business Review* (February 15, 2018).
- Davenport, T. H., and Markus, M. L. 1999. "Rigor Vs. Relevance Revisited: Response to Benbasat and Zmud," *MIS Quarterly* (23:1), pp. 19-23.
- Dobbins, M., Robeson, P., Ciliska, D., Hanna, S., Cameron, R., O'Mara, L., DeCorby, K., and Mercer, S. 2009. "A Description of a Knowledge Broker Role Implemented as Part of a Randomized Controlled Trial Evaluating Three Knowledge Translation Strategies," *Implementation Science* (4:23), pp. 1-9.
- Dubé, L., and Paré, G. 2003. "Rigor in Information Systems Positivist Case Research: Current Practices, Trends, and Recommendations," *MIS Quarterly* (27:4), pp. 597-636.
- Evans, S., and Scarbrough, H. 2014. "Supporting Knowledge Translation through Collaborative Translational Research Initiatives: 'Bridging' versus 'Blurring' boundary-Spanning Approaches in the Uk Clahrc Initiative," *Social Science & Medicine* (106), pp. 119-127.
- Feldman, M. S., and Orlikowski, W. J. 2011. "Theorizing Practice and Practicing Theory," *Organization Science* (22:5), pp. 1240-1253.
- Gherardi, S. 2006. *Organizational Knowledge: The Texture of Workplace Learning*. Oxford: Blackwell.
- Ghoshal, S. 2005. "Bad Management Theories Are Destroying Good Management Practices," *Academy of Management Learning & Education* (4:1), pp. 75-91.
- Gioia, D. A., and Pitre, E. 1990. "Multiparadigm Perspectives on Theory Building," *Academy of Management Review* (15:4), pp. 584-602.
- Grimshaw, J. M., Eccles, M. P., Lavis, J. N., Hill, S. J., and Squires, J. E. 2012. "Knowledge Translation of Research Findings," *Implementation Science* (7:50), pp. 1-17.
- Jarvenpaa, S. L., and Majchrzak, A. 2016. "Interactive Self-Regulatory Theory for Sharing and Protecting in Interorganizational Collaborations," *Academy of Management Review* (41:1), pp. 9-27.
- Kaplan, R. S., and Norton, D. P. 1996. *The Balanced Scorecard: Translating Strategy into Action*. Harvard Business Press.
- Ke, W., and Wei, K. K. 2008. "Organizational Culture and Leadership in Erp Implementation," *Decision support systems* (45:2), pp. 208-218.
- Kieser, A., Nicolai, A., and Seidl, D. 2015. "The Practical Relevance of Management Research: Turning the Debate on Relevance into a Rigorous Scientific Research Program," *The Academy of Management Annals* (9:1), pp. 143-233.
- Lawrence, P. R. 1953. "The Preparation of Case Material," in *The Case Method of Teaching Human Relations and Administration*, K.R. Andrews (ed.). Cambridge, MA: Harvard University Press.
- Levina, N. 2005. "Collaborating on Multiparty Information Systems Development Projects: A Collective Reflection-in-Action View," *Information Systems Research* (16:2), pp. 109-130.
- Levina, N., and Vaast, E. 2005. "The Emergence of Boundary Spanning Competence in Practice: Implications for Implementation and Use of Information Systems," *MIS Quarterly* (29:2), pp. 335-363.
- Marabelli, M., and Newell, S. 2014. "Knowing, Power and Materiality: A Critical Review and Reconceptualization of Absorptive Capacity," *International Journal of Management Reviews* (16:4), pp. 479-499.

- Marabelli, M., and Newell, S. 2019. "Absorptive Capacity and Enterprise Systems Implementation: The Role of Prior-Related Knowledge," *ACM SIGMIS Database: the DATABASE for Advances in Information Systems* (50:2), pp. 111-131.
- Marabelli, M., Newell, S., Krantz, C., and Swan, J. 2014. "Knowledge Sharing and Health-Care Coordination: The Role of Creation and Use Brokers," *Health Systems* (3:3), pp. 185-198.
- Markoczy, L., and Goldberg, J. 1995. "A Method for Eliciting and Comparing Causal Maps," *Journal of Management* (21:2), pp. 305-333.
- Markus, M. L. 1983. "Power, Politics, and Mis Implementation," *Communications of the ACM* (26:6), pp. 430-444.
- Markus, M. L., and Rowe, F. 2018. "Is It Changing the World? Conceptions of Causality for Information Systems Theorizing," *MIS Quarterly* (42:4), pp. 1255-1280.
- McKelvey, B. 2006. "Van De Ven and Johnson's "Engaged Scholarship": Nice Try, but...", *Academy of Management Review* (31:4), pp. 822-829.
- Mintzberg, H. 1980. "Structure in 5's: A Synthesis of the Research on Organization Design," *Management Science* (26:3), pp. 322-341.
- Nandhakumar, J., Rossi, M., and Talvinen, J. 2005. "The Dynamics of Contextual Forces of Erp Implementation," *The Journal of Strategic Information Systems* (14:2), pp. 221-242.
- Nelson, R. R. 2007. "It Project Management: Infamous Failures, Classic Mistakes, and Best Practices," *MIS Quarterly Executive* (6:2), pp. 67-77.
- Newell, S., Robertson, M., Scarbrough, H., and Swan, J. 2009. *Managing Knowledge Work and Innovation*. London: Palgrave Macmillan.
- Nicolai, A., and Seidl, D. 2010. "That's Relevant! Different Forms of Practical Relevance in Management Science," *Organization Studies* (31:9-10), pp. 1257-1285.
- Nicolini, D. 2011. "Practice as the Site of Knowing: Insights from the Field of Telemedicine," *Organization Science* (22:3), pp. 602-620.
- Nicolini, D. 2012. *Practice Theory, Work, and Organization: An Introduction*. Oxford: Oxford University Press.
- Nonaka, I. 1994. "A Dynamic Theory of Organizational Knowledge Creation," *Organization Science* (5:1), pp. 14-37.
- Nonaka, I., and Konno, N. 1998. "The Concept of "Ba": Building a Foundation for Knowledge Creation," *California Management Review* (40:3), pp. 40-54.
- Oborn, E., Barrett, M., Prince, K., and Racko, G. 2013a. "Balancing Exploration and Exploitation in Transferring Research into Practice: A Comparison of Five Knowledge Translation Entity Archetypes," *Implementation Science* (8:1), p. 1.
- Oborn, E., Barrett, M., Prince, K., and Racko, G. 2013b. "Balancing Exploration and Exploitation in Transferring Research into Practice: A Comparison of Five Knowledge Translation Entity Archetypes," *Implementation Science* (8), pp. 1-20.
- Oborn, E., Barrett, M., and Racko, G. 2013c. "Knowledge Translation in Healthcare: Incorporating Theories of Learning and Knowledge from the Management Literature," *Journal of Health Organization and Management* (27:4), pp. 412-431.
- Orlikowski, W. J. 2002. "Knowing in Practice: Enacting a Collective Capability in Distributed Organizing," *Organization Science* (13:3), pp. 249-273.
- Orlikowski, W. J. 2010. "Practice in Research: Phenomenon, Perspective and Philosophy," in *Cambridge Handbook of Strategy as Practice*, D. Golsorkhi, L. Rouleau, D. Seidl and E. Vaara (eds.). Cambridge, UK: Cambridge University Press, pp. 23-33.

- Owen-Smith, J., and Powell, W. W. 2004. "Knowledge Networks as Channels and Conduits: The Effects of Spillovers in the Boston Biotechnology Community," *Organization Science* (15:1), pp. 5-21.
- Porter, M. E. 1991. "Towards a Dynamic Theory of Strategy," *Strategic Management Journal* (12:S2), pp. 95-117.
- Powell, W. W., White, D. R., Koput, K. W., and Owen-Smith, J. 2005. "Network Dynamics and Field Evolution: The Growth of Interorganizational Collaboration in the Life Sciences," *American Journal of Sociology* (110:4), pp. 1132-1205.
- Rai, A. 2019. "Engaged Scholarship: Research with Practice for Impact," *MIS Quarterly* (43:2), pp. iii-viii.
- Robey, D., and Markus, M. L. 1998. "Beyond Rigor and Relevance: Producing Consumable Research About Information Systems," *Information Resources Management Journal* (11:1), p. 7.
- Rosemann, M., and Vessey, I. 2008. "Toward Improving the Relevance of Information Systems Research to Practice: The Role of Applicability Checks," *MIS Quarterly* (32:1), pp. 1-22.
- Rycroft-Malone, J., Wilkinson, J. E., Burton, C. R., Andrews, G., Ariss, S., Baker, R., Dopson, S., Graham, I., Harvey, G., and Martin, G. 2011. "Implementing Health Research through Academic and Clinical Partnerships: A Realistic Evaluation of the Collaborations for Leadership in Applied Health Research and Care (Clahrc)," *Implementation Science* (6:1), p. 74.
- Rynes, S. L., Bartunek, J. M., and Daft, R. L. 2001. "Across the Great Divide: Knowledge Creation and Transfer between Practitioners and Academics," *Academy of Management Journal* (44:2), pp. 340-355.
- Rynes, S. L., Giluk, T. L., and Brown, K. G. 2007. "The Very Separate Worlds of Academic and Practitioner Periodicals in Human Resource Management: Implications for Evidence-Based Management," *Academy of Management Journal* (50:5), pp. 987-1008.
- Scarbrough, H., D'Andreta, D., Evans, S., Marabelli, M., Newell, S., Powell, J., and Swan, J. 2014. "Networked Innovation in the Health Sector: Comparative Qualitative Study of the Role of Collaborations for Leadership in Applied Health Research and Care in Translating Research into Practice," *Health Service Delivery Research Journal* (DOI 10.3310/hsdr02130).
- Schatzki, T. R., Knorr-Cetina, K., and von Savigny, E. 2005. *The Practice Turn in Contemporary Theory*. London and New York: Routledge.
- Schultze, U. 2000. "A Confessional Account of an Ethnography About Knowledge Work," *MIS Quarterly* (24:1), pp. 3-41.
- Sharma, G., and Bansal, P. 2019. "Cocreating Rigorous and Relevant Knowledge," *Academy of Management Journal* (Published Online: 14 Mar 2019, <https://doi.org/10.5465/amj.2016.0487>).
- Silva, L., and Fulk, H. K. 2012. "From Disruptions to Struggles: Theorizing Power in Erp Implementation Projects," *Information and Organization* (22:4), pp. 227-251.
- Simon, H. A. 1976. "The Business School a Problem in Organizational Design," in *Administrative Behavior: A Study of Decision-Making Processes in Administrative Organizations*, H.A. Simon (ed.). pp. 335-356.
- Soper, B., Hinrichs, S., Drabble, S., Yaqub, O., Marjanovic, S., Hanney, S., and Nolte, E. 2015. "Delivering the Aims of the Collaborations for Leadership in Applied Health Research and Care: Understanding Their Strategies and Contributions," *Health Services and*

- Delivery Research* (25(3):available at: <https://www.ncbi.nlm.nih.gov/books/NBK294356/>).
- Spender, J.-C. 1996. "Organizational Knowledge, Learning, and Memory: Three Concepts in Search of a Theory," *Journal of Organizational Change and Management* (9:1), pp. 63-78.
- Strauss, A., and Corbin, J. 1994. "Grounded Theory Methodology: An Overview," in *Handbook of Qualitative Research*, N. K. Denzin and Y.S. Lincoln (eds.). Thousand Oaks, CA: SAGE, pp. 273-285.
- Swan, J., Bresnen, M., Robertson, M., Newell, S., and Dopson, S. 2010. "When Policy Meets Practice: Colliding Logics and the Challenges of 'Mode 2' initiatives in the Translation of Academic Knowledge," *Organization Studies* (31:9-10), pp. 1311-1340.
- Szulanski, G. 1996. "Exploring Internal Stickiness: Impediments to the Transfer of Best Practice within the Firm," *Strategic Management Journal* (17:S2), pp. 27-43.
- Trkman, P., and Desouza, K. C. 2012. "Knowledge Risks in Organizational Networks: An Exploratory Framework," *The Journal of Strategic Information Systems* (21:1), pp. 1-17.
- Tushman, M., and O'Reilly, C. 2007. "Research and Relevance: Implications of Pasteur's Quadrant for Doctoral Programs and Faculty Development," *Academy of Management Journal* (50:4), pp. 769-774.
- Van de Ven, A. H. 2007. *Engaged Scholarship: A Guide for Organizational and Social Research*. Oxford University Press.
- Van de Ven, A. H. 2018. "Academic-Practitioner Engaged Scholarship," *Information and Organization* (28:1), pp. 37-43.
- Van de Ven, A. H., and Johnson, P. E. 2006. "Knowledge for Theory and Practice," *Academy of Management Review* (31:4), pp. 802-821.
- Wagner, E. L., and Newell, S. 2004. "'Best' for Whom?: The Tension between 'Best Practice' erp Packages and Diverse Epistemic Cultures in a University Context," *The Journal of Strategic Information Systems* (13:4), pp. 305-328.
- Wagner, E. L., Newell, S., and Piccoli, G. 2010. "Understanding Project Survival in an Es Environment: A Sociomaterial Practice Perspective," *Journal of the Association for Information Systems* (11:5), p. 276.
- Zachariadis, M., Oborn, E., Barrett, M., and Zollinger-Read, P. 2013. "Leadership of Healthcare Commissioning Networks in England: A Mixed-Methods Study on Clinical Commissioning Groups," *BMJ open* (3:2 - e002112), pp. 1-14.