A pragmatist solution to the relevance gap of business school education

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Purpose
Within the context of business school education, the purpose of this paper is to propose a conceptual foundation in making academic knowledge more relevant to managerial practice through the use an off-shoot of pragmatist philosophy, Bridgman's "operationalism," in order to integrate theoretical knowledge with managerial experience.

Design/methodology/approach
Drawing on practice theory and Dewey's theory of education, the paper argues that operationalization of concepts into a set of actions brings theory closer to experience. An example from decision-making during World War II illustrates the approach.

Findings
Facing future uncertainty, managerial practice strives to achieve goals in particular contexts. Knowledge is prospectively useful in situ when it is a source of fertile suggestion in perplexing situations. By presenting concepts as actions, students should find it easier to develop cognitive skills that can combine experience and knowledge for addressing novel decision-making situations.

Research limitations/implications
The research presents an application to decision-making. More research is needed to determine how the approach can be extended into other domains of business education. Empirical testing of the effectiveness of the proposed method in different contexts may explicate how the method can be implemented, developed, and improved further.

Originality/value
The debate on how to educate future business leaders has addressed concerns over the relevance of abstract knowledge, business practices, legitimacy, and professionalism. It has also been marked by a lack of prescription for improving business school education. The current paper addresses this lack and will facilitate the development of teaching pedagogies that are more relevant to managerial practice in business education by providing a solid theoretical foundation.

Keywords Business education, Relevance, Academic Knowledge, Experiential Knowledge, Epistemology, Operationalism, Pragmatism, Decision-making

I. Introduction

Since their inception business schools have been derided in various ways (Mintzberg, 2004; Khurana, 2007; Augier and March, 2011). After World War II, North American business schools were referred to as "the slums of the educational community" (James E. Howell cited in Augier and March, 2011, p. 2). Critics bemoaned that "the quality of business education is generally inferior … the problem consists of unimaginative, non-theoretical faculties teaching from descriptive, practice-oriented texts to classes of second-rate vocationally-minded student" (Khurana, 2007, p. 248). For some economists, psychologists, or mathematicians "'business school' is a dirty word" (Simon, 1967, p. 9). A plethora of recent critique includes lack of relevance to practice (Mintzberg, 2004), deviating from the mission of management as a profession (Khurana, 2007), excessive reliance on the 'scientific model' (Bennis and O'Toole, 2005; Sandberg and Tsoukas, 2011), the abstract nature of curriculum (Chia and Holt, 2008), and claims that the management theories taught in business schools contributed to corporate scandals by corrupting management practice (Ghoshal, 2005). Although recent critiques of business schools, and their MBA education in particular, sketches near-dystopian futures few solutions have been proposed (Rubin and Dierdorff, 2013).

Business schools have a dual mission of training students for "the practice of management as a profession, and to develop new knowledge that may be relevant to improving the operation of business" (Simon, 1967, p. 1). An important part of the debate centered around the separation and relationship between academic knowledge and experiential knowledge (Augier and March, 2011, p. 216; Raelin, 2007; Sandberg and Tsoukas, 2011). Although the debate has been driven more by personal convictions and biases, there seems to be consensus on a need to balance or integrate these two forms of knowledge with an appropriate mix (Augier and March, 2011, p. 219). Herbert Simon suggested "… almost every curricular area can be organized so that practical management problems are rubbed up against economic and psychological theories and mathematical techniques …" (Simon, 1967, p. 13). The purpose of the current paper is to propose such an approach of integration of academic knowledge with practice by means

of contextualizing theoretical management concepts through applying Bridgman's operationalism (Bridgman, 1927). Bridgman's contribution to educational thought added to Dewey's pragmatism a focus on the relationship between concepts and experience.

The rest of the paper is organized as follows. The following section explores the problem of the usefulness of knowledge for managerial practice, focusing in particular on the requirement to deal holistically with a myriad of observations. Section III suggests Bridgman's operationalism as an approach for conceiving of the use of existing knowledge in new situations. Section IV illustrates the elements of experiential learning with a well-documented and publicly available example of decision-making and leadership from WWII. Section V offers a concluding discussion and suggestions for future research.

II. Usefulness of Knowledge & Managerial Practice

Characterizing and defining the relevance of knowledge to future managers is at best difficult if not intractable (Khurana, 2007; Mintzberg, 2004; Raelin, 2007, p. 498). Ambiguities linger along the dimensions of clear identification of values, short-term versus long-term focus, and relevance to whom, top managers, society leaders, stockholders, students, or customers (2007, pp. 138–139). In the accounting literature, in particular, the question of the social value of public accountancy has attracted much debate (Arnold and Cooper, 1999; Arnold and Sikka, 2001; Cooper, 2005; Merino, 1993; Sikka and Willmott, 1995; Williams, 2002). While some argue that business school education has a monumental and direct corrupting impact on practice (Ghoshal, 2005), others argue that business school education is entirely irrelevant to practice (Mintzberg, 2004). Jarzabkowski, Mohrman, & Scherer (2010) concede "we do not know how we can make academic work more relevant for practice or even whether this would be desirable."

An attempt at characterizing the dimensions of usefulness of knowledge to practitioners starts with the context in which practitioners carry out their organizational roles.

Managerial practice as it transpires in reality (Chia and Holt, 2008; Raelin, 2007; Sandberg and Tsoukas, 2011), as opposed to in theory, may help develop a notion of usefulness which may guide a successful teaching pedagogy. Unlike scientists who have the luxury of focusing and studying only one aspect of a totality of observations in order to obtain a "discovery of a single comprehensive fact" (Dewey, 1910, p. 150), practitioners must deal with the world of observations in all its complexity and totality in a holistic manner (Sandberg and Tsoukas, 2011, p. 341). Some prior research has therefore focused on how reflection might help students, especially those who previously worked, turn experience into knowledge (Brown and Mccartney, 1998). Every minute details of a context, acting together with or against other contextual factors, may have a positive or negative impact on achievement of goals at hand.

Managerial decision-making is essentially of a situational nature (Chia and Holt, 2008, p. 473; Sandberg and Tsoukas, 2011, p. 341). Perception and comprehension of situational elements lay the foundation for effective decision-making in dynamic, complex environments (Endsley, 1995, p. 32). Abstract causal explanations of management theories ignore the situational complexity facing managers by simplifying and generalizing phenomena. For example, consider the story of a junior nurse who was having trouble communicating the deteriorating health of a 900-gram neonatal baby ((Benner, 1994, pp. 139–140) discussed by (Weick et al., 2005, p. 410) to illustrate organizational sensemaking processes). The junior nurse, after a few unsuccessful attempts at convincing the doctors of the urgency of the baby's failing health, consults a senior nurse. The senior nurse "walks up to the Attending [Physician in charge of patient] very quietly, sidles up and says: 'You know, this kid, Jane is really worried about this kid.' She told him the story, and said: 'He reminds me about this kid, Jimmie, we had three weeks ago,' and he said: 'Oh.' Everything stops. He gets out the stethoscope and listens to the kid, examines the kid and he says: 'Call the surgeons.'" (Benner, 1994, p. 140; Weick et al., 2005, p. 413) In this example, the senior nurse's solution 'He reminds me about this kid, Jimmie, we had three weeks ago' is specific to the situational elements of the context: location, organization, time, roles, particular baby, particular

nurse, particular doctor, historical progression of events, and so on. The situational nature of practice dictates that useful knowledge must apply to managerial situations.

No teaching pedagogy or knowledge content is capable of solving all aspects of a situational problem. "There is no label on any given idea or principle which says automatically, 'Use me in this situation' — as the magic cakes of Alice in Wonderland were inscribed 'Eat me.'" (Dewey, 1910, p. 107) "Much managerial work involves addressing problems that involve turbulence, doubt, uncertainty, and the potential for significant error" (Hall, 2010, p. 301). Managers strive to obtain detailed information from formal and informal sources to develop a heightened situational awareness of "'what's going on here?'… 'what's the story?'" (Weick et al., 2005, pp. 412, 413). It is illogical that knowledge of any kind is universally valid, "In a world in which knowledge, as some have portrayed it, would be valid, intelligence would be unnecessary, since habit would be a universally safe guide." (Lewis, 1929, p. 340) Whether any proposition, be it academic or experiential, applies with certainty to a given situation cannot be a measure of its usefulness because this will never be the case.

That said, the situational nature of practice does not imply that abstractions or generalizations that leave out the contingent details of situations are not useful. In inquiring about the nature of practice, researchers seem to focus on literature that studies individual practitioners solving bounded operational problems, e.g. Orr's (1996) field technicians, who repair machines, "Buchanan's (1999) change manager, who must handle an awkward colleague, Weick's [(1993)] Mann Gulch smoke jumpers, who confront a huge fire mistaken initially for an ordinary one, and Badaracco's (2002) loan officer" (Sandberg and Tsoukas, 2011, p. 342). Robert Anthony's separation between operational, management, and strategic control (Birnberg, 2011, p. 599) is glossed over in the literature on business education. This is significant because managerial problems present themselves at different levels of generalization. To be efficient in use of resources and time, and produce high impact, "[Effective executives] try to make the few important decisions on the highest level of conceptual understanding. *They try to find the constants in a situation*, to think through what is strategic and generic rather than to

‘solve problems.’” (Drucker, 1967, emphasis added) For example, general solutions were developed in the example of the care of the neonatal baby. The Artemis system has been developed based on general clinical rules for early detection of latent diseases in neonatal babies (Blount et al., 2010). Artemis system uses general clinical rules such as ‘‘if mean arterial BP (MBP) is less than the neonatal patient’s current gestational age (e.g., 24 mmHg for 24 weeks gestation) for 20 s or more, and if SpO2 is less than 85% for the same period of 20 s or more, then a reportable condition is present.” (2010, p. 114) Such clinical rules, which are independent of baby, doctor, nurse, hospital, and time, can lead to improved baby health and reduced length-of-stay resulting in higher efficiency for all neonatal care units regardless of context. Although these rules are operational and subject to false negative and false positive errors, this example illustrates the power of abstraction as part of a generalized problem solving strategy intended for value creation in a wide span of situations. It suggests that abstraction or conceptualization are vital elements of managerial practice and should be a dimension of usefulness of knowledge.

Facing future uncertainty, managers are concerned with tempo and timing (Sandberg and Tsoukas, 2011, p. 342). Many business decisions are time-sensitive and urgency influences the ways in which managers decide and act. Managers are also interested in predicting and shaping the future. Making predictions about the future is fundamentally different from making predictions in reductionist scientific inquiry which has the goal of identifying invariant phenomena independent of time and place (Sarewitz and Pielke Jr, 2000, pp. 12–14). The unknown possibilities of the future compels the decision maker to collect all relevant situational information; however, even then this is not enough to be able to predict the future accurately. Unknowable conditions of the future leave managers inevitably ignorant of particulars of future situations, which are to be influenced by decisions. Managers must necessarily abstract away from situational elements because they inherently do not have the situational information of the future. Prominent management thinkers advocate utilizing the scientific method to guide managerial decisions in developing theories of how their environment works in order to learn what the future may hold (Drucker, 1994; Magretta, 2002). As managers

communicate their knowledge and change their conceptions through talk (Ahrens, 1997), the nature of this type of theorizing is in the sense of (Ryle, 1949)'s notion of intellectual activity "What characterizes intellectual activity, over and beyond activity that is merely intelligent, is the person's building and having a theory, where theory is understood as the knowledge a person must have in order not only to do certain things intelligently but also *to explain them, to answer queries about them, to argue about them, and so forth*… The notion of theory in the sense used here applies not only to the elaborate constructions of specialized fields of enquiry, but equally to activities that any person who has received education will participate in on certain occasions" (Naur, 1985, p. 257). Hence, knowledge can be useful to managers as a vital element of theory building to be able to explain, justify, answer questions and argue about their decisions, approaches, and activities.

Knowledge is not of static nature because "experience is not a rigid and closed thing; it is vital, and hence growing. When dominated by the past, by custom and routine, it is often opposed to the reasonable, the thoughtful." (Dewey, 1910, p. 156). Here, our line of argument follows prior pragmatics-inspired research into the usefulness of a processual perspective on accounting (Quattrone, 2004). If managers' conceptualizations or meanings do not evolve with the environment, performance will suffer (Drucker, 1994). If organizations are fixated on their worldviews, frameworks, or mindsets and fail to revise with evidence, undesired consequences such as surprises and accidents will ensue (Weick et al., 2008, p. 41; Woods, 1988, p. 130). The scientific attitude of the mind functions as a mechanism for creation and destruction of concepts in order "to both shape and be shaped by a changing environment" for survival (Boyd, 1976, p. 1). "An evolution of conceptions thus goes on simultaneously with the determination of the facts; one possible meaning after another is held before the mind, considered in relation to the data to which it is applied, is developed into its more detailed bearings upon the data, is dropped or tentatively accepted and used" (Dewey, 1910, p. 106).

The problem of business education is to nurture the scientific attitude of the mind. This end can be achieved first through defining and building up knowledge, "a world of

meanings, a store of concepts (so fundamental to all intellectual achievement)" (1910, p. 161) in learners' minds; however, "if one is not able to estimate wisely what is relevant to the interpretation of a given perplexing or doubtful issue, it avails little that arduous learning has built up a large stock of concepts. For learning is not wisdom; information does not guarantee good judgment" (Dewey, 1910, p. 107). Second, knowledge should take a flight from the immediate and directly observable to the abstract because of "the evil of the subjection of free and fertile suggestion to empirical considerations… A certain power of abstraction, of deliberate turning away from the habitual responses to a situation, was required before men could be emancipated to follow up suggestions that in the end are fruitful" (Dewey, 1910, pp. 155–156). Then, the function of knowledge is to enable and foster this progression from habitual responses to situations to successful manipulation of situations via emancipation from existing conceptualizations. This notion has been referred to as "negative capability" (Raelin, 2007, p. 506).

In summary, useful knowledge is a resource for action in situ to attain whatever objective a manager has at hand. However, validity of knowledge cannot be guaranteed in advance and this calls for sound judgment. Even though all situational factors are to be taken into account in a holistic and detailed form, abstraction is necessary for general and creative problem solving via preventing habitual and restricted responses to situations. The following section expands on the usefulness of Bridgman's operationalism for handling the plausible disconnect between existing knowledge and new situations.

III. Bridgman's Operationalism

The differences between actual practice and the theoretical management theories led researchers to doubt and scrutinize the usefulness or relevance of academic knowledge (Bennis and O'Toole, 2005; Chia and Holt, 2008; Raelin, 2007, p. 496). For example, Orr (1996)'s Xerox field technicians find documentation and training provided by the company valueless in a similar vein that managers may find management theories valueless. Condemnation of academic knowledge gave way to suggestions on improving business education which are almost content-free. Raelin (2007)'s building blocks of his

teaching pedagogy – tacit knowledge, critical reflection, and mastery – are all about different types of learning. Knowledge-by-exemplification embodies "ways of 'making do' rather than any formalized theories or concepts" (Chia and Holt, 2008, p. 480).

The reason for abandoning knowledge in favor of situational learning may stem from a superficial understanding of scientific knowledge as general, reductionist propositional statements, which may not be prospectively useful for in situ managerial action. However, this may be a misguided endeavor with serious consequences for the advancement and teaching of management knowledge. Harvard physicist Bridgman developed an alternative framework for handling the plausible disconnect between existing knowledge and new situations. Bridgman was astonished that Einstein, an outsider, could affect a revolution in physics with the theory of relativity. In physics, "it was a great shock to discover that classical concepts, accepted unquestioningly, were inadequate to meet the actual situation" (Bridgman, 1927). Contrary to the critiques of business education, Bridgman's response was not to abandon existing concepts, he believed instead "a sufficiently shrewd analysis should have prepared us for at least the possibility of what Einstein did" (1927). He recognized the perils of knowing in advance, "[The physicist] recognises no *a priori* principles which determine or limit the possibilities of new experience. Experience is determined only by experience." He had the conviction that "Recognising the essential unpredictability of experiment beyond our present range, the physicist, if he is to escape continually revising his attitude, must use in describing and correlating nature concepts of such a character that our present experience does not exact hostages of the future." His response to Einstein's theory of relativity was an alternative representation of knowledge, called operationalism. According to Bridgman, "the concept is synonymous with a corresponding set of operations." For example, the operational meaning of the concept of length is the set of operations by which length is measured. The next section develops an illustration taken from a decision-making episode of WWII.

IV. Application to Teaching of Decision-making

An application of operationalism to decision-making illustrates the ways in which it can help students understand and retain prospectively useful concepts. A conceptual framework popular in academic textbooks is Simon's decision-making process consisting of intelligence, design, choice, and review phases (Simon, 1977). However, Simon proposed these phases in order to develop a rational, scientific decision-making process in pursuit of his vision of management as a scientific discipline. It is not clear whether these phases can be observed in practice or their influence on practice. In particular, research has shown that expert decision makers classify a situation and immediately proceed to action (Endsley, 1995, p. 36). Therefore, a decision-making process originated in practice, which is not entirely different from Simon's process, may have better potential for being useful to students. According to Kimball Group, an organization that worked with hundreds of companies in the design and development of their business intelligence systems, the analytic application lifecycle is the most successful type of business intelligence application in supporting business decisions (Kimball et al., 2010, p. 590). There are five phases of this cyclic process are:

> **1.** *Publish reports*. Provides standard operational and managerial report cards on the current state of the business.
>
> **2.** *Identify exceptions*. Reveals exceptional performance (over- and under-performance) on which to focus attention.
>
> **3.** *Determine causal factors*. Seeks to understand the root causes behind the identified exceptions.
>
> **4.** *Model alternatives*. Aggregates what's been learned to model the business, providing a backdrop to evaluate different decision alternatives.
>
> **5.** *Track actions*. Analyzes the effectiveness of the recommended actions and feeds the decisions back to the operational systems and data warehouse (against which stage 1 reporting will be conducted), thereby closing the loop.

The analytic application lifecycle provides an operational meaning of decision-making by articulating the mental, physical, organizational actions that act upon organizational artefacts. Even though this process does not need reification as it consists of only actions and concrete artefacts, students may still perceive this process as abstract and far from

everyday events in organizations because students, undergraduate students in particular, may lack experience.

Operationalism serves to translate the abstract notion of decision-making into a set of concrete actions. In doing so, it enables introduction of situational experiences in which abstract concepts are implicated as actions. These experiences, when reflected upon, may capture the essence of practice in a way to improve student's understanding. For decision-making, suitable experiences are available in Errol Morris' documentary film '*The Fog of War: Eleven Lessons from the Life of Robert S. McNamara*' which "examines the psychology and reasoning of the government decision-makers who send men to war. How were decisions made and for what reason?" (Morris, 2003a). A desirable characteristic of decision-making situations in 'The Fog of War' is that they have not been posed in an analytical framework for teaching indicating a closer representation of the "relational whole" (Sandberg and Tsoukas, 2011, p. 344) in which practitioners operate. The documentary is available online on several video sharing websites and the video clips from the documentary can be supplemented with the official transcript (Morris, 2003b).

McNamara's analysis of World War II allied bombing operations over Germany and Colonel Curtis LeMay's subsequent decision, which is illustrative of the importance of critical thinking and human factors in organizations, is a good example for the teaching purpose at hand. This example is used either as an in-class or homework exercise. The students are asked to identify the decision-making phases from the analytic application lifecycle and the findings and consequences from each phase. Students watch the video clip from the documentary and see bombers being exploded in mid-air by enemy aircraft fire and snapshots of mission reports. The script of McNamara's narration in this multimedia case is as follows:

> The U.S. was just beginning to bomb. We were bombing by daylight. The loss rate was very, very high, so they commissioned a study. And what did we find? We found the abort rate was 20%. 20% of the planes that took off to bomb targets in Germany turned around before they got to their target. Well that was a hell of a mess. We lost 20% of our capability right there.

> The form, I think it was form 1—A or something like that was a mission report. And if you aborted a mission you had to write down 'why.' So we get all these things and we analyze them, and we finally concluded it was baloney. They were aborting out of fear.
>
> Because the loss rate was 4% per sortie, the combat tour was 25 sorties — it didn't mean that 100% of them were going to be killed but a hell of a lot of them were going to be killed. They knew that and they found reasons to not go over the target. So we reported this.
>
> One of the commanders was Curtis LeMay — Colonel in command of a B—24 group. He was the finest combat commander of any service I came across in war. But he was extraordinarily belligerent, many thought brutal. He got the report. He issued an order. He said, "I will be in the lead plane on every mission. Any plane that takes off will go over the target, or the crew will be court-marshaled." The abort rate dropped over night.
> Now that's the kind of commander he was.
>
> (Morris, 2003b)

Three characteristics of situations faced by practitioners (Sandberg and Tsoukas, 2011, p. 341) are exemplified in the case: the meaningful totality of McNamara's experience involving people (crews, commanders), data (mission reports), activities (writing reports) is captured; situational uniqueness such as daylight bombing and LeMay's character is presented; finally, temporal flow of activities is reflected as McNamara tells his story according to historical progression of events.

In the beginning of the case, the commanders' "absorbed coping" (Dreyfus, 1995, p. 69) of the bombing operations were disturbed by the very, very high loss rate akin to Heidegger's (1996) "complete breakdown," prompting the generals to request McNamara, an assistant professor at Harvard at the time, and colleagues to analyze their operations. Inviting an outside academic team would have provided the "theoretical detachment" (Dreyfus, 1995, pp. 79–81) in order to "take a new detached theoretical stance toward things and try to explain their underlying causal properties" (1995, p. 79). This enabled the analysts to see bomber crews' practice "as an array of discrete entities with specific abstract properties" (Sandberg and Tsoukas, 2011, pp. 345–346).

McNamara's team identified another disturbance from analyzing data & reports, a 20% abort rate, which is a near-complete breakdown, "Well that was a hell of a mess. We lost

20% of our capability right there." The snapshots of the mission reports from the documentary film indicated reasons such as "pilot got sick, radio equipment out, boots shorted, freezing, … burnt out." However, McNamara's team inferred that "it was baloney. They were aborting out of fear." That McNamara's team concluded that the information in the mission reports were falsified and abort rate was linked to fear of death exemplifies Dewey's notion of critical thinking as "suspended judgment; and the essence of this suspense is inquiry to determine the nature of the problem before proceeding to attempts at its solution" (Dewey, 1910, p. 74). It also manifests the power of theoretical detachment to "evoke suggestions or ideas that are pertinent to the occasion and fruitful in the sequel" (1910, p. 45). Colonel LeMay's reaction to the report in his order, "I will be in the lead plane on every mission. Any plane that takes off will go over the target, or the crew will be court—marshaled," not only illustrates the automaticity of decision-making by experts (Endsley, 1995, pp. 45–46) but also is indicative of further involved thematic deliberation (Dreyfus, 1995, pp. 72–73) or theoretical detachment in LeMay's mind that delved into causal relationships between his organization's structure and crews' fear of death. Lack of leadership (commander staying in the base) and lack of accountability (no consequences for aborting) led to fear which in turn led to high abort rate. In the end, LeMay's order was effective, "The abort rate dropped over night." This fruitful result is a consequence of looking at the organization as a set of discrete entities and inferring the link between their abstract properties not in aggregate but for the specific situation, e.g. the links between leadership & accountability properties of the organization, emotional state of the crews, and abort rate of the bombing operations.

V. Discussion & Conclusion

Knowledge is a codification of past experience in language with its meaning stored in concepts. Seeing knowledge as a set of operations (concepts) and the relationships between these concepts opens the possibility to treat knowledge as experience. Operationalism provides a connection between abstract concept and experience, opening the possibility that gaining knowledge amounts to Dewey's notion of education as "emancipation and enlargement of experience" (Dewey, 1910, p. 156). If management

theories can be operationalized as socio-material practices which are manifested in situational managerial experiences, then it would help students "make the link between the previously learned theory and their current workplace problems" (Raelin, 2007, p. 497).

According to Dewey, the problem of education is to develop power in thought such that students develop cognitive skills – curiosity, observation, investigation, suggestion, reasoning, wisdom, judgment, reflection – in coping with perplexing and doubtful situations by discovering fertile suggestions that are in the end effective (Dewey, 1910, pp. 45–46). The same applies to business education as one of its goals is "improving the operation of business" (Simon, 1967, p. 1). However, habitual responses or absorbed coping hinder the possibility of fertile suggestion; power of abstraction (Dewey, 1910, p. 156) via theoretical detachment is necessary. Merely adding technical content to syllabi, however, is not the answer because technical detail on its own does not enable students to act pragmatically (Merino, 2006). Many students struggle with theoretical detachment when confronted with a real-life situation which they see as one relational whole, possibly because students came to believe that there is chasm between abstract, general concepts and specific, concrete everyday events (Dewey, 1910, p. 51). Operationalism helps bridge this chasm by forcing the business educator to represent abstract concepts as a set of operations. By operationalizing decision-making into the analytic application lifecycle the abstract concept of decision is turned into a sociomaterial practice within its organizational context with its teleological structure, array of activities, rules, understandings, and tools (Schatzki, 2005, pp. 471–472). Students reflect on situational real-world experiences to develop power in efficiency and scope in carrying out the practice. Business education becomes relevant as students develop the power of theoretical detachment in their cognitive skills to be able to discover productive solutions to challenging business situations.

Future research could further explore this line of reasoning through empirical tests of the usefulness of pragmatism-inspired teaching approaches for business school graduates. Whilst test of students who benefited from such teaching might give initial indications of

their usefulness, we believe that the crucial test lies in the responses of graduates who have already entered employment. Alternatively, MBA students who are already employed may reflect upon the usefulness of the concepts in their current roles. Here, important questions arise for the research design. For example, it would need to be established how much work experience subjects should have and what kinds of work roles should be expected to benefit from a pragmatism-inspired teaching approach.

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