PERSPECTIVES

presents emerging issues and ideas that call for action or rethinking by managers, administrators, and policy makers in organizations

Bridging the Chasm between Management Education, Research, and Practice: Moving Towards the 'Grounded Theory' Approach

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Executive Summary

This paper addresses the issue of best-practice research methodology in management. It is argued that management research should follow what is known as 'grounded theory,' or what Harvard Business School Professor, Robert Kaplan, termed as "innovation action research."

Today, management research is found following an inappropriate model, the hypothetico-scientific method designed for laboratory research in the natural sciences. This is unsuitable for management and not aligned with case-based pedagogy, action learning or reality-based executive programmes. The result is a painful disconnect between management research and management teaching.

There is an increasing divergence and separation between educators and researchers, when in fact these endeavours should be integrated and converging. While educators use case studies intensively, researchers reject N=1 qualitative methods and instead employ $N \geq 25$. It is indeed strange that sometimes the educator and the researcher are the same person. This strange methodological schizophrenia needs a remedy.

For management, world is the laboratory. It therefore requires a 'worldly' research methodology. Management educators seek to use reality-based tools; yet, they often do research that is abstract and diffused. Some of the leading management tools taught by management educators originated, in fact, in best-practice innovations in organizations.

- Why not adopt this as general best-practice?
- And why, then, does management research pay lip service to the natural sciences, when its most powerful theories and tools emerged from clinical, not laboratory, settings?

This paper offers an alternative, a new way forward, based on the familiar concept of grounded theory. Through examples and case studies, it shows how this approach might be applied and how teaching and research can become tightly integrated. It concludes with some poignant thoughts on the way forward, including finding robust ways to partner between management researchers, educators, and practitioners (who are participants of executive education programmes in most business schools). For instance:

- There would be a need for extensive collaboration between these three constituents.
- Management education and research must include extensive team work, rather than the common phenomenon of each educator doing his 'solo' act in management education programmes and moving on.
- There should be relevant and well-thoughtout themes that facilitate high quality dialogue between the three constituents (educators, researchers, and practitioners), where there is intense learning on the part of all of them.
- Significant mindset changes on the part of companies sponsoring their managers for management education programmes would be necessary.

It is hoped that this paper would generate a lot of dialogue resulting in positive changes that would bridge the existing chasm between management education, research, and practice.

KEY WORDS

Innovation-Action Research

Grounded Theory

Phenomenological and Positivist Approaches

Action Learning

Case Study Method

Management Educator-Researcher Scientist-Practitioner

Balanced Scorecard

This paper presents a thesis many will reject as radical and even insulting. We claim that management scholars and executive educators, in India and abroad, do not practice what they preach. We argue that management research and teaching has been powerfully and unduly influenced by the scientific method, a methodology tailored for the natural and exact sciences but unsuited for management and not aligned with case-based pedagogy, action learning or reality-based executive programmes. The result is a painful disconnect between management research and management teaching. Management preaches using reality-based tools, yet itself uses 'research' that is abstract and diffused. We offer an alternative, a new way forward, based on the familiar concept of grounded theory. We provide examples and case studies of how this approach might be applied and show how this way teaching and research can become tightly integrated.

WHAT IS GROUNDED THEORY IN A MANAGEMENT CONTEXT?

A world-renowned professor in the science faculty of the Technion-Israel Institute of Technology once made this critique of management research:

> *"Management research is an oxymoron — an internal contradiction. Engineers and scientists follow the scientific method. They define their terms, build theories, frame hypotheses, and test those hypotheses in carefully controlled experiments. They then publish their results, so that others can replicate their experiments. In contrast, management 'scholars' invent buzzwords, like 'managing by walking around' or 'the learning organization' — and then 'sell' their buzzwords in books that tell a lot of stories. There is no validation, hypothesis testing, or scientific method. This may be amusing, but it is not research."* [1]

The problem, we assert, is *not* that many management researchers fail to use the scientific method. The problem is precisely that they *do* use it, religiously, perhaps more faithfully than scientists and engineers pursuing research in their respective domains. This is the crux of the problem.

In 1875, the social science discipline known as Economics faced a crossroads. Two intellectual giants, Leon Walras and Alfred Marshall, offered two totally different paths. Walras offered a mathematical Newtonian vision of Economics, abstract and aspiring to the stature of Physics. Marshall offered a practical, grounded behavioural vision of Economics, defined as the "study of Man in the ordinary business of life." Marshall was right. But Marshall lost. Economics chose to walk with Walras, in Professor Milton Friedman's phrase. Until Daniel Kahneman, Amos Tversky, Richard Thaler and others restored behaviour to Economics, during the past three decades, it remained abstract and disconnected with life. The choice, though deplorable, was understandable. The reasoning was, why not elevate a behavioural science to the exalted status of an exact one, Physics, by imitating its tools – even if those tools were utterly unsuitable and ineffective for Economics?

The discipline of management has made the same error. By embracing the standards and methods of statistical inference, generally with $N \geq 25$, and the scientific method, in its journals, the young discipline of management has taken the wrong path. Its research, when 'scientific,' is largely irrelevant. Its teaching, when case-based, is inconsistent with its research. A vast case study literature is regarded as useful for pedagogy, but its research value, which is potentially enormous, is considered minimal. Indeed, those who invest effort in writing case studies are in general not credited with having done research at all. As with Economics, this is understandable. Business schools exist within the larger context of universities, whose methods and standards often dominate in the hiring and tenure processes. It is the university that in general sets the rules of the game. Management has put up a very weak fight, if at all.

We propose an alternative – an integrated consistent research and teaching methodology based on grounded theory and results-based inquiry. We suggest replacing $N \geq 25$ with $N \leq 1$ in research as well as in teaching. We offer examples of theory-in-use. Our approach suggests developing executives in ways similar to how medical interns are trained: See one, hear one, do one.

Grounded theory is a research methodology developed by two sociologists, Barney Glaser and Anselm Strauss (1967). Their book, *The Discovery of Grounded Theory,* explains how to generate theory from data – something these authors did themselves when they studied the dying in hospitals. When a researcher uses this method, *a theory emerges about the phenomena they are studying, a theory that can be evaluated.* Glaser and Strauss,

[1] We prefer to leave the source's name anonymous; his views are very widely held.

after discovering grounded theory by practising it, disagreed and parted ways on the precise methodology. We need not be concerned about this.

The basic elements of grounded theory are clear:

- Begin with a problem, issue or challenge.
- Look systematically for causal conditions; context; intervening conditions; action strategies; and consequences, in the data themselves. (See Box).

Box: Key Elements of Grounded Theory*

Grounded theory: Theory that is inductively derived from the study of the phenomenon it represents.
Grounded theory approach: "A qualitative research method that uses a systematic set of procedures to develop an inductively derived grounded theory about a phenomenon."
Criteria for judging the applicability of theory to a phenomenon: 1. Fit 2. Understanding 3. Generality 4. Control. "The theory should provide control with regard to action toward the phenomenon."
Origins: Grounded theory was developed by two sociologists, Anselm Straus and Barney Glaser; their backgrounds (University of Chicago and Columbia University, respectively) drove them both to producing research useful for professional or lay audiences. Their seminal grounded-theory work on the dying, in hospitals, was addressed to those audiences.
Requirements for implementing grounded theory methods: 1. Learn the procedures thoroughly; 2. Follow them carefully; 3. Retain openness and flexibility, to adapt these methods to different phenomena and research situations.
The Role of theory: "The theory should guide not only what you look for and where you go to find it in the field, but also what you look for in your data."

* **Source**: Strauss and Corbin (1990).

Researching business is utterly different from researching molecules, atomic particles, lungs, or brains. In the complex real world of business, there are no laboratories or controlled experiments; the business *itself* is the laboratory. Yet the predominance of the natural sciences has compelled management research to follow its 'scientific' methods, misguidedly, to the detriment of both management research and education. And incidentally, in management research and education, stories *are* our most effective tool. One may object to vague, empty stories. But powerful stories, known to us as case studies, are to management research what the X-ray or MRI or CT scanner are to the radiologist – they reveal things otherwise unseen about businesses, things that lead to powerful insights and effective teaching. In management education and research, God is in the details, and the details are in the 'stories' or case studies.

In the 'grounded theory' approach, management scientist-practitioners engage in field research, constantly scanning for new methods, tools, and approaches. When they discover such a method, they explore it, write a case study about it, teach it, apply it, generalize it, and continually test its efficacy in the field. They implement this process and run it through in several cycles, after which the theory becomes firmly grounded in reality and in practice, and is generalized and customized. The test of a grounded theory becomes not the fitting of curves to data, or the statistical significance of regression coefficients, but rather *intervention* — how well it works in practice in achieving its pre-defined goals.

Ideally, this approach generates not only powerful new management tools but also creates a lifelong-learning mindset among managers who collaborate with management researchers. It creates a powerful collaborative alliance between management educators and researchers and managers in the field, both senior and junior. When such an ecosystem of knowledge is created, it becomes a powerful tool that generates both better theory and better practice – better management tools and research and better management education.

The scientific model uses abstract models, hypotheses, pseudo-experiments and data analysis, and verification, based on data samples of $N \geq 25$. Its criterion for validity is essentially fitting data to theoretical curves. In management research based on the scientific method, the gold standard is statistical inference; many researchers accept this without question. This approach is shown schematically in Figure 1. As a result, any form of qualitative research sees its wicket fall right from the outset; indeed, many researchers do not even bother to pick up the qualitative bat.[2]

A second stream is that of grounded-theory case study research, or "$N \leq 1$ methodologies," generally rejected by the social scientists. This approach is shown schematically in Figure 2.

After the first author had spent a lifetime pursuing research in the scientific mode, generating a file cabinet full of correlation coefficients and least-square regressions, he has become a late convert to $N \leq 1$. The second author recognizes the value of phenomenological and positivist approaches and sees each as appropriate in different settings. The third author was essentially 'born' into the Grounded Theory, due to his long years in the corporate world and subsequent migration into academics.

[2] There are notable exceptions; see Eisenhardt (1989), a proponent of building theories from case studies.

Figure 1: Scientific Method in Natural Sciences

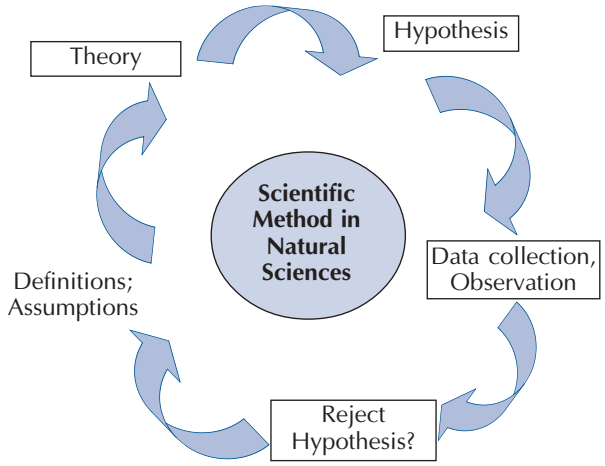
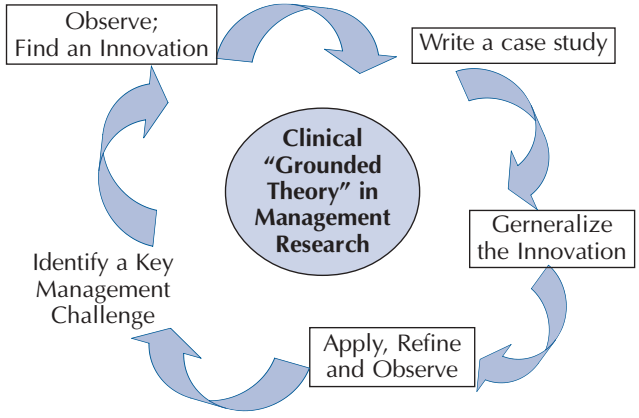


Figure 2: Grounded Theory in Management Research



Source: Kaplan, 1998

Field-tested

Grounded theory, in management, ascribes to the validity definition of social psychologist, Kurt Lewin, cited in Kaplan (1998):

> *If social scientists truly wish to understand certain phenomena, they should try to change them. Creating, not predicting, is the most robust test of validity-actionability.*

Management educators who seek credibility among their senior-management students must present material that meets the Lewin acid test. In our experience this is essential. They must present ideas that have been extensively field-tested and are backed by case-study evidence showing how they work in practice. Ideally, they present ideas they themselves have implemented and examined in the field. In this sense, management educators are, or should be, scientists-practitioners. They develop new ideas and new knowledge, as scientists, then test them in practice as practitioners (or work closely with practitioners). The act of implementing creates new insights that, in turn, serve to help modify and improve the original ideas and tools. This is what we like to refer to as the scientist-practitioner model of research.

The N=1 methodology provides depth and detail missing in $N \geq 25$. It also enables first-hand interactions that often generate powerful new ideas or modifications of existing ones. And the scientist-practitioner model integrates education and research.

Management educators preach against "silos" — management functions such as marketing, strategy, sales, finance, production, conducted vertically, as 'chimneys,' with few horizontal connecting links. We fear that in management education, there are growing silos between those who teach, those who research, and those who do. The result is as negative for the service of business education as similar silos are for companies' products and services. When management education employs an N=1 case methodology, while management research ascribes to the $N \geq 25$ approach, the resulting schizophrenia and misalignment impairs both teaching and research.

The remedy is clear. It is what Cooper and McAlister (1998) call "applications driven theory" – "relevance is to be attained by starting with a concrete problem in the context of an actual application with approaches that are then generalized and made publicly available (e.g., by publication) with sufficient rigour and precision to admit validation by 'third parties.'

The essence of applications-driven theory – known more widely as grounded theory — is the identification of a pressing problem or question, or a burning issue that afflicts managers in the field, to which no good solution exists. This is grounded theory because it is grounded firmly in the reality of management decision-making.

In management research, it is overwhelmingly clear that good answers to great questions are far and away preferred to great answers to weak questions. As the American humorist, James Thurber, once observed, it is far better to know *some* of the [right] questions than to know *all* of the right answers. Only by being a practi-

tioner can a management educator truly have a hand on the pulse of the burning issues on managers' agenda.

It is time that management educators turned their attention to building an indigenous research methodology, one tailored to their discipline, rather than to Physics or Molecular Biology. Fortunately, the rudiments of such a methodology, built by sociologists, already exist; it simply needs a critical mass of management followers and some adaptation. For this approach to flourish more widely in business schools, it ideally needs an implicit nod of encouragement and recognition from academic administrators that indeed it is a legitimate method for valuable research. Even if such ideal encouragement is a far cry in today's business academia, at a minimum, such a research track should not be treated as a poor cousin of the scientific research methods that are commonly considered as the sole custodian of legitimate management research.

Grounded Theory and The Case Method

We ask readers to take the following (voluntary) test:

First, place your hand upon your heart.
Next, ask yourself if you have ever peeked first at your data, and then formulated your hypotheses.

- If the answer is: 'Never,' then you are a true pure scientist following the scientific method; you are likely to achieve sainthood in your lifetime.
- If the answer is, often, 'Yes,' then you are a follower of Galileo (who refuted Aristotle's false law of gravity by a possibly-apocryphal grounded-theory experiment at the Tower of Pisa) and you are, like it or not, know it or not, a grounded-theory adherent, one who aggressively acquires and explores real experience and data and then builds theory based on observations and insights, then applies the knowledge to see if it really works in more than a single instance.

AN ACTION-LEARNING APPROACH TO GROUNDED THEORY: GETTING STARTED

> *"… you are going to find out what is really happening there."*
>
> — Bob Dick

The late Peter Drucker (1994) recommended, in a classic article, "The Theory of the Business," that all businesses should regularly re-examine the basic assumptions underlying their products and business design. The business of management research must do this as well.

One often unspoken assumption underlying a substantial body of management research is that the hypothetico-deductive scientific method is the one and only legitimate research methodology. This assumption deserves to be strongly challenged.

Moliere's doctor was surprised to learn that for 40 years, he had been speaking prose and did not realize it. We believe many management educators, especially those who write case studies, will be equally surprised to learn that for years they have been engaged in legitimate, potentially-breakthrough grounded-theory action research – but failed to realize it, because of the overwhelming dominance of the scientific method in academic life, and in academic journals, and because they failed to take case writing one step further, to become case-based research.

How can management educators, interested in implementing grounded theory, get started? Here is a brief primer, based on a Web article by grounded-theory expert, Bob Dick* . The quoted passages are his words; the questions and comments are ours. We have re-arranged his excellent article as a virtual interview.

How do I begin doing 'grounded theory'?

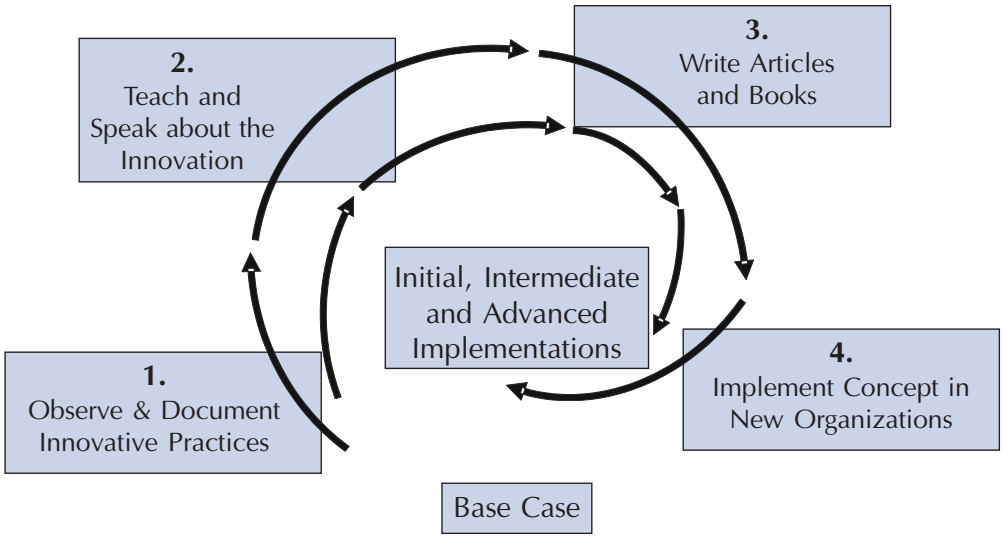
"Grounded theory begins with a research situation. Within that situation, your task as researcher is to understand what is happening there, and how the players manage their roles. You will mostly do this through observation, conversation, and interview. After each bout of data collection, you note down the key issues: this I have labeled "note-taking." (See Figure 3). (Note how similar this process is to that of case writing.)

What comes next?

"Constant comparison is the heart of the process. At first you compare interview (or other data) to interview (or other data). Theory emerges quickly. When it has begun to emerge you compare data to theory. The results of this comparison are written in the margin of the note taking as coding. Your task is to identify categories (roughly equivalent to themes or variables) and their properties (in effect their sub-categories)."

* Used with permission.

Figure 3: Innovation-Action Research Feedback Loop



Source: Kaplan (1994).

But where does the theory come in?

"As you code, certain theoretical propositions will occur to you. These may be about links between categories, or about a core category: a category which appears central to the study. As the categories and properties emerge, they and their links to the core category provide the theory. You write yourself notes about it — memoing. As the data collection and coding proceeds the codes and the memos accumulate." (See Case Study 1).

Case Study 1: Core Competency

The single most reprinted and requested article ever published in *Harvard Business Review* is Prahalad and Hamel's (1990) 'The Core Competency of the Corporation.' This article is based on a field observation by the authors, that successful firms are good at identifying their core skills and leveraging them to achieve competitive advantage. This is a strong example of grounded theory – simply reading the article shows how powerful a role field observations played in building the theory of core competency.

Is a single case study sufficient? Or are several such studies needed?

"You add to your sample through theoretical sampling. This is purposive sampling which increases the diversity of your sample, searching for different properties. If your core category and its linked categories saturate; you no longer add to them or their properties. This is a sign that it is time to move to sorting. You group your memos, like with like, and sequence them in whatever order will make your theory clearest."

How important is it to search the existing literature?

"The literature is accessed as it becomes relevant. It is not given special treatment."

How and when do I begin to write up the grounded theory?

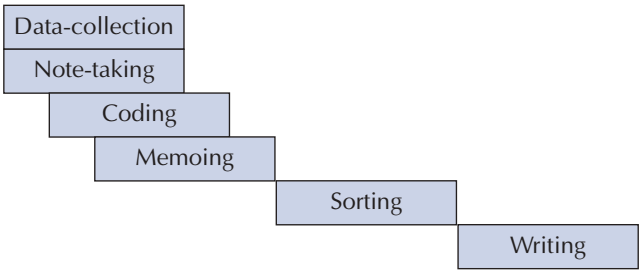
"The order of your sorted memos provides you with the skeleton, and many of the words, of your thesis." You begin writing.

"Over time, a grounded theory study works through the following mostly-overlapping phases. In short, data collection, note-taking, coding and memoing occur simultaneously from the beginning. Sorting occurs when all categories are saturated — this is explained in more detail later, as are the elements of this diagram. Writing occurs after sorting." (See Figure 4).

How rigid is this methodology?

"For ease of explanation, [this] may seem a bit prescriptive. Feel free to experiment with it until you find some-

Figure 4: Grounded-theory Method: Different Stages



thing that works for you. The theory is emergent — discovered in the data."

What is the main difference between grounded theory and other research methodologies?

"What most differentiates grounded theory from much other research is that it is explicitly emergent.. It does not test a hypothesis. It sets out to find what theory accounts for the research situation as it is. In this respect it is like action research: the aim is to understand the research situation. The aim, as Glaser in particular states it, is to discover the theory implicit in the data."

"This distinction between "emergence and forcing", as Glaser frames it, is fundamental to understanding the methodology. Most of you, whatever your discipline, would have been exposed more to hypothesis-testing research than to emergent research. The research processes you have learned and the thesis structures you have internalized are those of hypothesis testing, not of emergence. Doing grounded theory well is partly a matter of unlearning some of what you have been taught or have acquired through your reading."

"If you judge grounded theory by the criteria you have learned to use for hypothesis testing research you will likely misjudge it, perhaps badly. In particular, the place of literature is quite different. So is the way in which both methodology and theory develop gradually as data and interpretations accumulate."

Those who practice scientific methodology claim that grounded theory is inherently lacking in rigour. Is this true?

"Judgments about the rigour of research are often based on narrow criteria: criteria which make sense only for the methodology for which they were developed. Grounded theory has its own sources of rigour. It is responsive to the situation in which the research is done. There is a continuing search for evidence, which disconfirms the emerging theory. It is driven by the data in such a way that the final shape of the theory is likely to provide a good fit to the situation."

"In fact, Glaser suggests two main criteria for judging the adequacy of the emerging theory: that it fits the situation; and that it works — that it helps the people in the situation to make sense of their experience and to manage the situation better."

Is grounded theory, in a sense, a "fishing expedition"?

"In diagnostic interviewing, I begin in a very open-ended way. For instance, I may often say "Tell me about this organization" or whatever it is. I then keep the person talking for somewhere about 45 minutes without asking specific questions. This increases the likelihood that the data come from the informant's experience, not from the questions I ask. I memorize the themes they mention (some of my colleagues instead take key-word notes, which serve the same purpose)." (See Case Study 2).

Case Study 2: Good to Great

Jim Collins' bestselling book, *Good to Great (2001)*, compiled an enormous database of thousands of firms, to identify the 11 firms that achieved outstanding, not simply good, results. Collins then sought common features among those 11 excellent firms. This is large-scale exploratory research, in the great tradition of grounded theory, because Collins and a large team interviewed many managers in the 11 companies, to learn their secret. This book began with a question – not with a preconceived hypothesis.

Is grounded theory collaborative in nature?

"I prefer to work with a colleague who at the same time interviews a different informant. After each pair of interviews we compare notes. We identify those themes, which both informants mention. Sometimes those themes are mentioned in the same way by both informants. Sometimes they mention the same theme, but with disagreement. As with grounded theory, the explanations emerge gradually from the data as the study proceeds. All interviews begin open-ended. In the later interviews there are more probe questions. And more

of those probes are specific. The theory emerges from the data, from the informants. In the early stages, it consists primarily of themes. These become more elaborated as the study develops."

How do I know that all this lengthy process is not a waste of time?

"I have no doubt that you will have a contribution to knowledge at the end of it all. The theory will arise more quickly than you imagine. You'll enjoy doing it (Glaser calls it the "drugless trip"). There is a good chance it will be an addition to the literature because most research builds on what has gone before. You, on the other hand, are going to be responsive to the research situation as it is. You are going to find out what is really happening there."

Perhaps one of the most powerful arguments for grounded research is simply that it is truly interesting, absorbing, energizing, and enjoyable. It effectively bypasses the burnout encountered by many academic researchers, who plough the same data field repeatedly, mine it for every last publication, advance up the ladder of promotion – and find little fun or interest in this process, as they hit diminishing returns. The joy of surprising discoveries in grounded theory is much like panning for nuggets of gold in a river – the odds are not high, but the prize is rich and the process itself is enjoyable. The key phrase is: You are going to find out what is really happening there. Not: You are going to spend years gathering data, running statistical regressions, coaxing out significant coefficients – and in the end you will not be any closer to understand what is really happening there, because what is really happening is deeply buried under *N*=100.

THE MANAGEMENT EDUCATOR-RESEARCHER AS SCIENTIST-PRACTITIONER

> *If mediocrity is tolerated both in philosophy, because it is philosophy, and in plumbing, because it is plumbing — then neither society's theories nor its pipes will hold water.*
>
> — John Gardner

Grounded theory is a process – a research method. Its product is powerful concepts and tools. But another product, no less important, is the creation of the scientist-practitioner – educators skilled at discovering new knowledge, and at conveying that knowledge with a sense of excitement to their manager-students. As business schools seek to rejuvenate their languishing MBA programmes, we believe such scientist-practitioners – who are increasingly scarce – are desperately needed. Grounded theory can help generate more of them. Here is why.

In the competitive world of publish-or-perish in business schools, there is a growing divergence between two camps: the educators, who are good at teaching, and the researchers, who are good at research and publishing and who are often rewarded with reduced teaching loads. This is lamentable, because educators cannot be truly great unless they are grounded in real business practice – possible only when they engage in active research programmes.

One reason for the divergence of teaching and research is the widespread perceived necessity for applying the scientific method, for collecting large databases and for following the principles of statistical inference. Few business schools – even those that focus specifically and single-mindedly on the case study method – accept case study publications as true evidence of research achievement and qualification. The so-called "qualitative" research is not generally regarded seriously as true research. The result is the bifurcation of education and research. A major advantage of the grounded-theory approach is that it *reunites* education and research, by reviving the concept of the scientist-practitioner – the scientist, who tests, retests, invents and re-invents theories, and the practitioner, who constantly applies, examines, and evaluates those theories, and the uniting of those two 'hats' upon a single head. Case studies – the $N = 1$ approach – are truly research of the grounded-theory variety, when done well and properly, and when driven and guided by the grounded-theory methodology. (See Case Study 3).

Case Study 3: Clinical Psychology

> *Hear one; see one; do one.*
>
> — saying of clinical medical educators

Clinical psychology provides a good case study of the scientist-practitioner model. In 1950, a group of clinical psychologists gathered at Boulder, Colorado, USA. They tackled the issue of how best to train clinical psychologists. What emerged was a training model "combining the scientific foundation of psychology with its practice

applications, so that clinical psychologists were to be trained to be both scientists and practitioners." (Raimy, 1950, cited in Stickler, 1997, p. 442). This has become known as the scientist-practitioner model. It is equally valid in management as it is in clinical psychology.

The scientist-practitioner model is an exceedingly tough one to implement. Clinical psychologists, according to Stickler (1997), have largely failed: "It is unusual for individual psychologists to contribute in both research and practice venues because some choose academic or research careers and most choose practice careers. They often continue to pledge allegiance to the model but often are unable to achieve it in their careers".

According to Rice (1997), American psychology is an academic profession that developed applied and professional interests, and "driven by economic and social forces, has undergone differentiation to a point where complete division into two professions is a definite possibility." He refers to the divergence between theory and practice, as separate professions, that appears to also afflict management education and research. Psychologists increasingly are either scientists, or practitioners. Is this also increasingly true of management professors?

A key issue addressed by Gelso (2006) is this:

"…one of the bottom-line issues is whether it is viable to train students to be scientists generally and psychological researchers specifically when, at the core, these students enter training with the wish to be practitioners and not researchers." .

Gelso notes that "At present, psychology as science and psychology as profession seem to be splitting; this is suggested by the existence of two major professional organizations and two types of doctoral programmes." It is ironic that the discipline in which the scientist-practitioner model was most clearly enunciated, in 1950, should be the one in which this divergence is occurring the fastest.

This raises a key issue for management education: With the bulk of management students in MBA programmes aiming to be practitioners, can educators train them to think as scientists as well? Are educators sufficiently determined and courageous to do so?

Regrettably, the answer is often, no. Most management educators are themselves not scientist-practitioners, and do not adhere to the grounded-theory action-research model. The divergence between theory and practice in management, as in psychology, is strongly reflected in the extreme divergence in curriculum between MBA, and Ph.D., DBA, or D.Sc. programmes, in management. The doctoral degrees train researchers and scholars, using the scientific (deductive) method; the former trains practitioners, using various blends of the case study method. Can they be integrated? Once case study methodology is seen in the true light as a research methodology as well, then grounded theory becomes a common thread between the second degree and the third degree programmes. (See Case Studies 4, 5, and 6).

Case Study 4: Kaplan's Innovation-Action Research Version of Grounded Theory

Kaplan (1998) has presented the most careful and thorough analysis of grounded theory as practised in management research, which he calls "innovation action research". In innovation action research, scholars work with client organizations to enhance and test an emerging theory that has been proposed to improve organizational performance… one of the prime objectives of innovation action research is to modify and extend the emerging theory in light of knowledge gained through experience.

In Kaplan's model, an initial management innovation is identified, conceptualized, written up as a case study, taught, then based on practice, modified, and improved, a new case is written… and so on. This circular loop is implemented several times, each time strengthening the original concept. (See Figure 3). It is the case that in management, the most powerful theories and tools are generally those arising from best-practice innovations by experienced managers, observed by scholars and consultants, generalized, then modified, organized, and improved. A strong example is Kaplan's Balanced Scorecard. Kaplan did not invent it; he observed an early version in action at Analog Devices Inc. (see below).

The main elements of innovation action research are as follows:

- Management research single-mindedly seeks to create 'fruit' — knowledge that improves organizational performance – rather than simply 'light' (understanding, insight). Management scholars believe firmly that if you truly understand a phenomenon, you should be able to change it for the better.

- Management scholars study existing management practices, then work with managers to create new theories to modify those practices. This research is strongly field-based, and addresses real, pressing problems that managers encounter in their daily tasks. It scrupulously avoids the behaviour of the man in the old Yiddish joke, who raced through the streets of an Eastern European village yelling, "I've got the answer! I've got the answer! ...Now... what is the question?" The research questions come from working managers grappling in the field with real problems facing organizations.
- Like much scientific research, innovation action research begins with a 'base case' — a concrete example that reveals deficiencies in management practice in a specific company or part of a company. This base case leads to a search for potential solutions, a search that begins with basic theory.
- Like scientific research, innovation action research follows a careful step-by-step procedure: (1) observe and document innovative practice, usually in case studies; (2) teach and speak about the innovation, through a series of case studies; (3) write scholarly articles and books about the theory and its practice; (4) implement the concept in new organizations. Validation of the theory occurs when it is successfully implemented in companies beyond the initial group of firms where the concept was first developed.

In a sense this type of management research is similar to medical research, based on "hard, persistent, intelligent, responsible, unremitting labour in the sick room, not in the library [or laboratory]". And in management, there are a great many 'sick rooms.'

Case Study 5: Activity-based Costing

An example of innovation action research is Cooper and Kaplan's activity-based cost accounting (ABC). In 1984, while teaching about the failures of conventional cost accounting measures to executives, a manager at John Deere (a farm implement company) suggested a possible innovative remedy. Robin Cooper and Bob Kaplan developed the basic concept and wrote a case study on it, taught the case at many companies and to Harvard MBA students, with the participation of John Deere managers, and then generated a series of cases on other firms. This process generated modifications and changes in the original theory, documented in articles *in Management Accounting*, *Harvard Business Review,* and *Journal of Cost Management*. Activity-based management is today successfully implemented by many organizations around the world — management research's equivalent of the replicable laboratory experiment in science.

Case Study 6: Kaplan's Innovation-Action Model in Action: the Balanced Scorecard

One of the most widely employed management frameworks used to formulate and implement vision-based strategy is known as the Balanced Scorecard (BSC). A large global network of users exists, known as the Balanced Scorecard Collaborative, which includes both for-profit and not-for-profit organizations. The balanced scorecard is a strong example of grounded theory, or, in Kaplan's phrase, innovation action research. The story of its birth is revealing, and shows the power of grounded theory when implemented rigorously. This account is based in part on the account by a senior executive at Analog Devices, named Arthur M Schneiderman, who relates how the first Balanced Scorecard occurred. It merits being recounted in some detail.

Analog Devices was founded over 40 years ago, in 1965, by two MIT classmates, Ray Stata and Mathew Lorber, in the basement of a Cambridge MA apartment. Some 41 years later, it has grown to become a $2.5 b (annual sales) company; Stata remains its Chair. According to the company website, "ADI's analog, mixed-signal, and digital signal processing (DSP) integrated circuits (IC) play a fundamental role in converting, conditioning, and processing real-world phenomena such as light, sound, temperature, motion, and pressure into electrical signals to be used in a wide array of electronic equipment."

The story of the birth of the Balanced Scorecard, as told by Schneiderman, is as follows.[3] Prof. Robert Kaplan was scheduled to present a seminar on activity-based costing (ABC) to Analog Devices on March 23, 1989. Kaplan, a Professor of Accounting, identified a major business challenge: the failure of companies to control their fixed costs, because unlike variable costs, fixed costs had no single manager who was responsible for them. ABC, by examining the firm's activities, converted all costs, including the fixed ones, into variable costs, creating an incentive to reduce and control them among

[3] http://www.schneiderman.com/Concepts/The_First_ Balanced_ Scorecard/ The_Kaplan_Connection.htm

those for whom those costs appeared in their unit's bottom line. ABC was developed by Kaplan from a seminal idea found at John Deere Inc. "In preparation for the seminar", notes Schneiderman, "I met with Bob (Kaplan) on February 28, 1989, at his office." There he showed Kaplan a slide on ADI's "scorecard deployment methodology" and Corporate Scorecard. He also described an approach known as the "half life method" for setting ADI's short-term and long-term goals (the Balanced Scorecard, too, focuses on the key tradeoff between short and long term). Kaplan asked if he could write a case study, not on Balanced Scorecard, but on the half-life method. Schneiderman agreed. Together with two students, Kaplan visited ADI's largest plant in Wilmington, MA. Kaplan wrote a case study titled: "Analog Devices: The Half-Life System", and presented it for the first time at the HBS Advanced Management Programme on April 17, 1990, with Schneiderman present. (Schneiderman says he regrets Kaplan did not call the case: Analog Devices: the Balanced Scorecard Method). On July 19, 1990, Schneiderman and Kaplan teamed in a pair of presentations; Schneiderman's included a slide that captures the essence of the Balanced Scorecard approach and its link to strategy. It shows that the origins of the Balanced Scorecard theory were not in the classroom or a research project, but in Analog Devices' corporate boardrooms – a true example of grounded theory.

According to Schneiderman, ADI's corporate scorecard aroused great interest. This led to a study of the balanced scorecard, in which the participants implemented it under the eyes of the researchers, by the Nolan Norton Institute (a branch of the leading accounting firm KPMG, which had acquired the rights to Kaplan's ABC concept). This study, in turn, led to the first article on the Balanced Scorecard by Prof. Kaplan together with David Norton, published in *Harvard Business Review* in 1992. Kaplan went on, together with Norton, to write many more case studies of Balanced Scorecard implementations, to refine the theory in a series of books and articles, and to develop the tool far beyond what it was at its birth, using the feedback-loop shown above in Figure 3.

Shortly afterward, Kaplan reflected on this learning episode, and realized that it had generated not only a powerful management theory and framework, but also typified a new way to engage in management research. Kaplan called it "innovation-action research," and described the method in two academic articles, published in 1994 and in 1998.[4] His innovation-action research has also led to a powerful example of what is now known as 'open-architecture innovation,' in which user communities and networks improve and perfect a product, service or process that all use or enjoy. It is known as the Balanced Scorecard Collaborative, and like its name, comprises BSC users who meet frequently to exchange notes and learning, and to trade tips. Sub-groups form concentrations from selected industries, and from non-profit organizations (such as hospitals).

It is our understanding that the two management theories developed together – ABC and BSC – had very different, diverging paths. One, ABC, was acquired by a leading accounting and consulting firm, KPMG, whose interest was largely profit, and who therefore did not seek to extend, develop, and expand the concept of ABC, using the innovation-action learning feedback loop, thus truncating the vital learning feedback loop. The other, BSC, was retained exclusively by Kaplan and his associate David Norton, and constantly refined, extended, improved and broadened, ultimately creating a framework that exists, in some form, in most major global organizations.

It is important to understand the key role played by case studies in the Kaplan grounded-theory, or innovation-action research, approach. Case studies provide $N \leq 1$ evidence for successful use of the framework, while at the same time showing how it has been modified while in use – theory-in-use, or theory-in-action. By writing these case studies, Kaplan and Norton achieved valuable insights that were later incorporated in their books. These books, in turn, usually alternate theory or method chapters with case-study chapters illustrating the theory.

OPPONENTS AND CRITICS OF GROUNDED THEORY AND CASE STUDY METHODS

This is admittedly a polemic article, advocating a specific research methodology. But there are strong opponents of the case-method-based grounded-theory approach. Their arguments should be noted.

The main critique comes from the left of grounded theory (in the direction of *more* action-based research, not less), rather than the right. The thrust of this critique is directed against the case study method in pedagogy; if the case method fails as an educational tool, it is unlikely to win adherents as a research tool. Atlas (1999)

criticizes the case method, as practised in classes with 80 students, who may each at best make one or two brief interventions, because it focuses on the professor, and because it provides MBA students with ready-made cases rather than challenging them on their own to develop the case, find the data, and identify the issues in a murky consulting environment – the environment they will encounter as working managers.

Critics of the case method instead recommend small-group discussions, with 3-6 participants, typical of real-world business meetings. In this "authentic learning" approach, students are taught to acquire facts and theories, and engage in role-playing and simulations. The primary objective is not to convey content, as with the case method, but to create learning experiences as close to reality as possible. Ricks (1994) objects to the centrality of the teacher, whose superiority dominates the active thinking of the student-participants. Gordon (1998) recommends that instead of pre-chewed cases, students should be challenged to examine a real situation and prepare a plan for solving it. In authentic learning, the role of the teacher changes from being a leader of case discussions to becoming a mentor to students who *take full responsibility for their education.* In this approach, students do authentic learning work outside the class, then meet in class to examine, appraise, and analyse it.

There certainly is validity in this critique. But essentially, it proposes a very ambitious model in which management students themselves practice the technique of grounded theory and are sent out into the field as researchers. We believe the key question is whether MBA students will live up to this challenge. It is certainly worth a trial run; we know of no major business school in which this 'authentic learning' model currently dominates, though certainly it exists in selected courses, mostly electives.

Case Study 7: Seminar on Innovation Management

In an intensive 40-hour one-week course on innovation management, taught in several countries, the first author organizes participants (usually between 50 and 70) into teams. Each team meets, and comes up with a new product, process or service innovation idea. During the week, he teaches them tools for building strong business designs around those ideas, which they apply in team working sessions. Teams are sent into the field to talk to existing and potential customers and to acquire experiential data. They then construct a business plan and present their business model visually as a poster, accompanying it with an 'elevator speech.' The course is a variation on 'authentic learning,' in that it tries to simulate, in a compressed time frame, what students will experience when they actually engage in innovation in start-up companies or in established organizations.

One may legitimately ask — what are the implications of what we discussed above? Must *all* research of relevance to management come from sample size $N<=1$? Does success in grounded theory require one to be a Robert Kaplan, in order to come up with a useful research output?

In our view, Grounded Theory as described above is not the sole, unique Holy Grail for quality management research. Undoubtedly, there are other means that can also yield useful insights. Excellent management research will always be a diversified portfolio, with substantial (but not exclusive) investment in grounded theory. In our view, management researchers will take a cue from what they observe, and continuously look for conforming or conflicting evidence to strengthen or disprove these observations. When this is done repeatedly and in a systematic manner, it can yield powerful theories that are more extensively generalizable. If such generalization is not possible, the efficacy of the observation may be significantly constrained in terms of broader applicability. The leap from a special case to a general theory or framework is a crucial one. It is to this important aspect of building theories from observations, using the tools of Grounded Theory that we now turn our attention to.

From Phenomena to Theory

The end objective of Grounded Theory is generation of theory from data. A classic example of an observation on the ground leading to a more 'universal' theory can be found in Herbert Simon's (1991) reflections on his approach to doing research. Simon came across an empirical regularity in the frequency distribution of species in genera in plants and animals in Lotka's *Elements of Physical Biology*. "Lotka's data show that when the number of species belonging to each genus in some order of plants or animals is counted, and the genera are then arranged according to the number of their species, the genus with the nth largest number of species will have about $1/n$ as many species as the genus with the largest number."

In a remarkable leap of insight, Simon then observes that this regularity can be seen as well with respect to *words in a book* in any alphabetical language and in the *population of cities* in the United States. "When the frequencies with which different words appear in a book are counted, and words are then arranged in order of their frequency, the nth most frequent word will occur about $1/n$ times as frequently as the most frequent word. Moreover, about half of all the words that occur in a book will occur exactly once, about one-sixth exactly twice, one-twelfth three times, and so on. The same regularity is seen in the population of cities in the United States. The nth largest city is about $1/n$ times as large as New York."

Simon's efforts to find an explanation for this regularity in terms of general laws follow an interesting process. He first identifies a mathematical function that fits this data; the frequency $f(i) = 1/[i(i+1)]$ whose integral $F(i)$ is $1/i$. He then sees that these kinds of expressions are encountered in problems involving combinations and probabilities. Simon notes in his reflections that this connection can be seen only by "someone who has a little mathematical knowledge."

The next link is seeing the choice of a word or a city as similar to instance of a probabilistic scheme for drawing balls of different colours from an urn and consequently, he arrives at the frequency formula as the steady state of some sampling process.

The last and perhaps the most critical step in this process was providing a behavioural basis for the probability assumption. "For word distributions, it can mean that the chance of a word being chosen as the next word in a text is proportional, because of association, to how often it has been used already, and also proportional, because of long-term associations stored in memory, to how often it is used in the langauge. In the case of city sizes, it can mean that birth and death rates are approximately independent of city size, while cities will be visible and attractive to migrants in proportion to their current sizes."

Typically, descriptive studies are used to ascertain the generalizability of the propositions that emerge as end products of a grounded theory approach. The anecdote describing Simon's observations and the consequent conclusions provide two interesting lessons for researchers. The first is that the broader the knowledge of the researcher, the more likely he or she is to achieve powerful insights from small anomalies. The second is that the more exposed researchers are to those with inquiring minds, the more likely they are to be exposed to interesting anomalies. We explore each in turn.

The Prepared Mind

Simon makes the process of moving from the observed phenomena to theory seem very easy. He points out that he was not surprised to find later that G Udny Yule, an English statistician, had indeed constructed a similar model way back in 1924 to explain the distribution of species among genera. Also, D G Chambernowne constructed a model of income distribution in 1953 and B Mandelbrot developed an informational theory of the statistical structure of language that described a similar process. Simon himself was able to later use the same mechanism to understand the size distributions of business firms and their economic implications. Simon's suggestion that "a little mathematical knowledge" is required to make the required transition in this case from a data regularity to a mathematical function is an enormous understatement. An extensive and deep knowledge of several domains is required to make such a transition.

In another instance, Simon reasons that his extensive knowledge of economic theory helped him recognize behaviour that was contradictory to that prescribed by economic theory. He then embarked on a long journey seeking to understand human rationality that resulted in concepts such as bounded rationality and "satisficing". He concludes that "accidents happen to the prepared mind" – paraphrasing French scientist, Louis Pasteur's famous quip, when accused of being lucky, "chance favours the prepared mind." Simon's remarkable mind was indeed prepared, by extensive studies of psychology, history, mathematics, statistics, and economics – and almost anything else Simon found interesting. He had a unique method for learning subjects – he would volunteer to teach a course in the subject, thus forcing himself to learn it thoroughly (at Carnegie Mellon University, he once gave a famous course on the French Revolution).

Find Other Inquiring Minds

In Kaplan's development of the balanced scorecard, a critical role was played by the senior manager of a firm who was grappling with an accounting problem in practice. It is unlikely that Kaplan would have come up with his now famous tool, the Balanced Scorecard, to link

strategy and execution in an organization, purely by a flash of intuition, devoid of any linkage with the 'harsh realities of the real world.' Moreover, the continuous process that he and his colleague, Norton, embarked on over a period of over a decade resulted in continually fine-tuning the tool, from a mere reporting tool in the initial years (1994) to an essential tool for strategy translation, communication, implementation, and monitoring, linking everything that goes on in an organization through the idea of 'strategy maps' (2004) was the result of continual 'churning' depicted in Figure 3.

How does one generate in large numbers observations of phenomena that are interesting and worth researching? Perhaps at this point, the reader may recoil, claiming : 'I am not Herbert Simon, able to come up with startling theories and insights from stray occurrences! Neither am I Kaplan to have flashes of brilliance like the Balanced Scorecard!' Does this mean that there is no hope for other management researchers?

Surely, not! One option is to engage and interact regularly with practitioners in a structured setting. Executive education provides an excellent forum for such an endeavour. This is particularly true when the theme for executive education is sufficiently complex. "Managing the Context" is one example of such a theme. In the strategy domain, a dialectic approach is adopted to facilitate learning regarding the subtleties associated with context facet.

Executive Education and Grounded Theory

Consider senior executives, participating in such a programme, when presented with two extreme points of view exemplified by the following statements (DeWit and Rono, 2005):

- "The pilot cannot mitigate the billows or calm the winds." – Plutarch
- "The reasonable man adapts himself to the world; the unreasonable one persists in trying to adapt the world to himself. Therefore all progress depends on the unreasonable man." – George Bernard Shaw

Senior managers grappling with complex issues such as "Managing the Context" often examine some of their strategic decisions from the two extreme ends of the continuum represented by the above statements and articulate phenomena that are unexpected and surprising. For instance, a discussion could be generated on whether corporate social responsibility is discretionary or obligatory. Contextual determinants of corporate social responsibility could be articulated by participants leading to the recognition that social structure is an important factor in explaining attitudes of firms toward social responsibility.

Recently one of the authors was involved in conducting a programme at IIM Bangalore for senior managers of a large multinational company (with revenues of about US$ 6 billion per annum). These managers were drawn from various global operating locations of the firm. This company was getting under increasing pressure in international markets from Indian manufacturers in the same industry, who were beginning to compete intensely with this company in markets that it long considered were its strongholds. With a view to studying the Indian success phenomenon, twenty-five senior managers of the company recently spent a week in India trying to understand India. They could have opted to learn about India and the competitiveness of Indian companies by getting a few Indian faculty knowledgeable about the success of globalization of Indian companies, to lecture to them in their home base country. Instead they chose the more difficult path of action learning. For the faculty involved, it was a first step in innovation-action research, as the following narration describes.

These MNC managers came to India to validate the conclusion that is widely prevalent at the top management levels of the multinational corporation — that Indian companies are competitive simply because of their low costs. The mindset of these managers when they landed in India recently (many for the first time) was that since their cost base was much higher, they could do nothing but to endure the Indian competitive onslaught.

The programme to educate these managers about the drivers of success of Indian companies was conducted by IIM Bangalore. Rather than going through a series of classroom lectures or conventional case study discussions, these managers visited, for a day, the slums of Mumbai, travelled in rush hour electric trains in Mumbai, and walked through the markets of Mumbai where crores of rupees of business are transacted from 'pigeon holes' no bigger that 6 feet by 6 feet, etc. They then came to the institute, had a series of interactions with senior managers of various companies from diverse industries (including many from outside the industry

to which the multinational belonged), visited many Indian companies, talked to managers at various levels in these organizations, and did much more, to help them 'learn.' This learning process was facilitated by one of the authors, who was a faculty for this programme, as well as a professor from one of the top European management schools. Both of them brought the conceptual arsenal and general understanding of ideas relating to the pro-cess of globalization. The resulting discovery process generated valuable insights both for the senior managers and for the two academics. The key finding by the MNC managers, facilitated by the two academics was that low cost is not the only driver for success of Indian companies in the global markets. The senior managers unearthed at least a dozen other equally important drivers for the success of Indian companies in the global markets. The MNC managers went back with a much better understanding of the key drivers of competitive advantage of their Indian competitors. These insights helped them to craft powerful strategies for the continued well-being of their own organization. The academics, too, got a much richer perspective of drivers of Indian competitiveness. This picture was a lot richer that what had hitherto been presented in the management literature on this topic. This will ultimately lead to a series of case writings, further dialogue with other managers on this subject, etc., as their future agenda, until a valid theory that significantly enhances the existing knowledge emerges. All this was made possible by the intense interactions between the MNC managers, managers of Indian companies as well as the academics (validating Simon's revelation: "accidents happen to the prepared mind.")

The role of the prepared mind was played by the instructors who used their knowledge of existing theory in this domain to recognize interesting phenomena among the views articulated by practitioner participants.

Another example in this genre of research is the development of the value-based framework in business-to-business markets, developed by two American management educator-researchers, James C Anderson and James A Narus. While the importance of value has long been recognized in marketing, they brought it to the centre stage through their now seminal book on the subject: *'Business Market Management: Understanding, Creating and Delivering Value.'* This became possible by their talking to thousands of practising managers in hundreds of executive education programmes, developing dozens of case studies, testing them out, and persevering in their effort till a robust model that seeks to explain in a holistic manner, the dynamics of business markets, emerged.

It can thus be argued that executive education forums provide rich platforms for grounded theory research. Participants are practitioners who have the advantage of observing ground realities. Faculty, who are well equipped with the state–of-the-art theories, undertake delivery of the programmes. If the participants and faculty spend part of the learning time visiting the 'field' and talking to people knowledgeable about the phenomenon being studied, the process of learning can be further enriched and accelerated. The coming together of these two streams (practitioners and faculty) provides the two critical elements respectively of phenomena and the prepared mind. With these two critical elements in place, the entire research process starting from exploratory work to tight explanations is likely to be catalysed. In order for this catalysis to occur, it is vital that both faculty and participants in executive education realize *that they are in fact not only teaching, processing, and learning existing knowledge, but may very well be creating new knowledge.*

CONCLUSION: IMPLICATIONS OF GROUNDED THEORY FOR EDUCATORS AND RESEARCHERS

"Should we not explore ceaselessly in order to return home – and know the place for the first time?"

— T S Eliot

There are a number of key implications of grounded theory for both management educators and researchers.

For many management educators, the message of grounded theory resembles the lesson learned by Moliere's doctor, who discovered that he had been speaking prose for 40 years but had not realized it. Many educators, who consult and write case studies as part of their teaching, are in fact engaging in serious research. But like Moliere's Doctor, they fail to realize it, because they have been imbued with the principles of the scientific method that require large databases and formal models and hypotheses. We urge them to study and embrace the basic ideas of grounded theory – and see their activities in a new light.

New ways to leverage the collective wisdom of groups of senior managers who are typical participants of management education programmes in business

schools must be evolved. Currently, much of management education oriented to practising managers in business schools is done in a 'delivery mode,' with a succession of faculty 'delivering' their sessions, and moving on. Very little of real life problems and their solution approaches are captured, perhaps largely due to the absence of institutionalized mechanisms. In this paper, we have not delved into what those mechanisms ought to be. One thing, however, is clear: If these forums should serve as powerful laboratories for generating new knowledge as we have advocated in this paper, teaching in these programmes should undergo some fundamental transformations. It will be inadequate for each faculty to deliver his/her part independently in such programmes and move on. Instead, it would be essential to have a research team of inter-disciplinary faculty, research staff, and even participants of long-term programmes such as MBA and doctoral programmes, sit in on these sessions, to look for cues to further the research agenda based on the grounded theory approach that has been advocated in this paper. Additionally, mechanisms for continuing the dialogue with the practising managers well after the formal programme at the business school has ended, must be evolved.

We equally urge business schools to treat case studies as legitimate expressions of grounded research when evaluating faculty members' performance – while, of course, applying the highest and most stringent possible standards for evaluating those case studies. It is significant that even Harvard Business School does not, we believe, give adequate weight to case study research when making tenure decisions, partly because of the paucity of high-impact peer-reviewed journals that publish such case studies.

For management researchers, we urge them to study and adopt the role of scientist-practitioners – professionals who engage in serious practice, in the field, and who use this practice as scientists, in part, to discover both the burning issues facing those with whom they work, and the innovative tools and approaches adopted to deal with those issues, and to develop those tools. Many have already embarked on this journey.

For practising managers, the implications are equally profound. The structuring of management education programmes for this target audience in business schools must undergo significant modification. In an atmosphere of trust that is the joint responsibility of all stakeholders, participants must be encouraged to surface important issues they are grappling with. They will need to partner with management educators and researchers, to jointly expand the body of available knowledge that they can leverage into their practice. The consequent implications and mindset changes for the respective organizations with which these managers are affiliated cannot be understated.

Great management research has almost invariably emerged from this scientist-practitioner approach. It is time that the role models of young management researchers became more original, homegrown, and not borrowed from the natural sciences.

Ultimately, management is not only a discipline. It is also a well-developed culture. As such, it has its own language, values, and practices. Grounded theory is the discipline of management's best practice in research. It is time this best practice became common practice in our business schools.

Let us return home, and see, perhaps for the first time, the truly powerful potential for discovery, right under our noses.

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