

# The Price of Actionability

ROGER MARTIN

Rotman School of Management, University of Toronto

*Pearce and Huang have written an article that chronicles the low and declining incidence of actionable research in two of the top managerial journals. In this paper, I quantify the cost of production of not-actionable articles, explain why I think that their production has flourished, discuss the difficulty of individual scholars speaking to both business and academic audiences, and provide a thought on how to stimulate production of actionable business research output.*

*I estimate that the cost of producing not-actionable "A-journal" articles is on the order of US\$600 million per year. It is not surprising to me that not-actionable article production has increased in that the "customers" for these articles are primarily other academics and not business people. I demonstrate that for this reason, it proves very difficult for a given scholar to simultaneously speak authoritatively to both fellow academics and business people. Finally, I suggest that to stimulate production of actionable business research output, the Academy needs to harness the power of case-based research methods to identify important actionable business issues and the meticulousness of scientific methodologies to generate rigorous actionable prescriptions for business people.*

Jone Pearce and Laura Huang have written an article that raises important questions about business school research. There are limitations to their approach to be sure. The sample of articles is from only two journals, *Academy of Management Journal (AMJ)* and *Administrative Science Quarterly (ASQ)*. These primarily strategy and organization journals may not be representative of top business academic journals generally, for example finance, accounting, or marketing journals. They sample only six individual years out of half a century, which may not be representative of the 50 years of journal articles. Their assessment of actionability uses a novel methodology that does not yet have a record of producing reliable results. However, I find their results sufficiently intriguing to warrant exploration of the implications as if the authors' findings are robust. I will leave it to others to question the sampling or assessment methodologies.

Alternatively, some might argue that the authors' core finding is unimportant because academic business articles needn't be directed toward informing business practitioners. I most certainly feel that in a professional discipline such as business (as with medicine or law) actionability by practitioners should be a key objective of research. Certainly some research won't lead directly to actionability, but it may, for example, create a methodology that can be used to generate actionable

research for another academic who uses the methodology. However, if a piece of research doesn't contribute to eventual actionability, it is difficult for me to see in what way it makes a useful contribution to the field. The most striking feature of the authors' findings is the dramatic increase in the production of articles categorized as not actionable.

Production of actionable articles stayed essentially flat over the half century with no real discernible trend. Business researchers have produced an average of 27.5 actionable articles per year (21, 29, 39, 22, 35, and 18, respectively, in the six sample years) in these two leading journals. The 2010 results could be seen as indicative of a sharp downward trend. But there was an equally big drop (17 articles) between 1980 and 1990, and sure enough, the production bounced right back in 2000. In contrast, the generation of not-actionable articles nearly tripled from the first three decades to the last two. For some reason, the business academy has generated a flat number of actionable articles over time and a rising level of not-actionable articles. Here, I will attempt to quantify the cost of production of not-actionable articles, explain why I think that their production has flourished, discuss the difficulty of individual scholars speaking to both business and academic audiences, and provide a thought on how to stimulate production of actionable business research output.

---

***I find their results sufficiently intriguing to warrant exploration of the implications as if the authors' findings are robust.***

---

### **COST OF PRODUCTION OF NOT-ACTIONABLE ARTICLES**

The authors' findings suggest that the societal investment in not-actionable business school research and journal publications must be pretty sizable. The focus of modern business academic research is to produce articles worthy of publication in the world's "A-journals" because these journals receive the lion's share of citations, meaning that at least other academics are reading them and doing something with the insights contained in them. Certainly work that appears in "B-journals" gets cited, but they are seen as B-journals (or less) for a reason; their impact is dramatically lower on average.

Estimating the cost of an A-journal article requires a definition of A-journals. For that definition, I use the *Financial Times* list, which identifies 45 journals worldwide as top tier. While complaints abound about journals improperly included or excluded, the *Financial Times* has consulted with business academic researchers to adjust the list over time, so it is a reasonably relevant list for our purposes. Three of the 45 journals are considered by most academics to be "practitioner journals" (*Harvard Business Review*, *Sloan Management Review* and *California Management Review*), leaving 42 traditional refereed business academic A-journals, (FT42), including *Academy of Management Journal* and *Administrative Science Quarterly*.

Using the Rotman School's most recent submission to the *Financial Times* (FT) for annual ranking and our own internal budget, I calculated the direct cost of an FT42 journal hit (using the FT system which gives proportionate partial credit for jointly-authored articles) at the Rotman School. The Rotman School could be seen as representative of a successful research-intensive business school, placing tied for 10th with Stanford Graduate School of Business in Research in the most recent FT research ranking (2012 Global MBA ranking). To make the calculation, I assumed as representative the University of Toronto weights for teaching (40%), research (40%), and service (20%), and therefore charged 40% of total tenure-stream faculty salaries plus benefit costs to article production. To be conservative, I

simply used these direct costs and didn't include research support costs, space costs, or external research funding grants. It turns out that the direct cost of research at Rotman is just over US\$500K per FT42 article produced.

I would love to assert (and in fact believe) that Rotman scholars produce a much higher proportion of actionable articles than the proportion discovered by Pearce and Huang (2012, this issue), but I can't prove that is the case. Hence for sake of this argument, I will use the cost of US\$500K per FT42 article as my estimated cost of an actionable FT42 article. The average of actionable articles in the entire sample is 41%, while the average for the two most recent sample years is 30%, meaning that if the authors' sample is representative, approximately one third of FT42 articles are actionable. This implies that it costs the business academy approximately US\$1.5 million to produce an actionable A-journal article.

If we were to extrapolate from the authors' sample of two A-journals, we could come up with a rough sense of the production of actionable and non-actionable articles in A-journals overall. If we assume for the moment that the actionable journal output of *Administrative Science Quarterly* (ASQ) and *Academy of Management Journal* (AMJ) are representative of the output of an A-journal and scale the two journals up to 42 journals, it would mean that the global business academy produces around 600 actionable A-journal articles per year.

If ASQ and AMJ are representative journals, and Rotman is a representative research establishment, this means that the business academy spends roughly \$900 million producing its 600 actionable A-journal articles per year—and around \$600 million of it goes to produce 1,200 not-actionable research articles.

Of course this calculation loads all of the research costs onto A-journal article production, and the researchers are almost certain to be targeting some of their work at B-journals to begin with (i.e., not as a back-up plan to a failed attempt to achieve A-journal publication) and writing books. So an argument could be made that \$600 million is the upper limit. But on the other hand, it is conceivable that Rotman is an FT42 article producer of above-average efficiency and instead the \$600 million estimate is low.

My reaction to the results is that \$1.5 million per actionable FT42 article seems surprisingly high and spending \$600 million/year on the production of non-actionable articles seems excessive. However, both reactions might be unwarranted. With respect to the former, it might well be that the business community gains more than \$1.5 million

in value per actionable *FT42* article produced by the business academy. At this point with the data available, it is not possible to know. With respect to the latter, it is further entirely possible that the production of not-actionable research is a critical precondition to the production of actionable research. This can't be proven or disproven, although the absence of an absolute increase in actionable articles over time while not-actionable article production rose dramatically suggests that we haven't seen that effect yet, and if that is an important effect, then it is taking more and more not-actionable papers to produce a single actionable one.

### THE NOT-UNEXPECTED PRODUCTION OF NOT-ACTIONABLE ARTICLES

However costly or wasteful it might or might not be to spend \$600 million/year (and growing) on not-actionable article production, I don't find the phenomenon particularly surprising. In competitive markets, producers tend to evolve to producing what customers want to consume. This is clearly a competitive market with thousands of researchers in hundreds of researching schools competing to get their research into one of the small number of *FT42* journals. The customers of *FT42* journals are overwhelmingly other academics. It is not as though there are no consumers of these articles outside the Academy. Some business people will regularly read academic journals in their specific field. I have met two in my life, so I know they exist. But I haven't met many. In addition, the authors make clear that *The Economist* magazine writers and editors certainly don't read business academic journals.

---

***However costly or wasteful it might or might not be to spend \$600 million/year (and growing) on not-actionable article production, I don't find the phenomenon particularly surprising.***

---

It is pretty clear that as the world of academic business journals evolved, the customers that shaped demand have been academics not business people. So it is pretty obvious that in an assessment of whether the articles are useful to noncustomers (i.e., business people), we shouldn't assume for any reason that they would be.

However, it is conceivable that the academic customers of the journals would set as the focus of

their demand the production of articles that provided actionable advice for business people. We know from Pearce and Huang's data that around a third of the articles in at least these two *FT42* journals are actionable. Therefore, there was either enough demand by customers (i.e., subscribing academics) for actionable advice for noncustomers (i.e., nonsubscribing business people) to result in a nontrivial minority of actionable articles or that outcome was purely accidental. Which it is cannot be determined based on the data at hand. It might be interesting for the authors to go back to the 18 authors of 2010 *AMJ* and *ASQ* actionable articles and ask them their motivation for writing the articles in question.

We can explore what would influence an academic who writes *FT42* journal articles to prioritize the interests of other academics over those of other business people in their work. It would seem that the deferral is sensibly made to the interests of other academics.

It is clear that the only thing that matters to pretenure academics is what other academics think of their work. Academics will only achieve positive tenure decisions if their work is pleasing enough to other academics that they write positive tenure review letters. They will write those positive reviews only to the extent that the professors in question have published articles in *FT42* journals. Since those *FT42* journals are edited and reviewed entirely by academics, it holds that only if pretenure professors do things that are pleasing to these academics will they get tenure. Were those academics to insist that pretenure professors write actionable articles, that is what those professors would do. Were those academics to insist, instead, that the pretenure professors write not-actionable articles, that too is what those professors would do. The tenure decision is so important and so entirely in the hands of other academics that it would be crazy for pretenure professors to do anything other than what other academics wish them to do.

The conventional wisdom is that after professors earn tenure, they have the job security to do anything they desire. So if a tenured professor wants to do actionable research, it is fully possible. However, it is arguable that, once again, pleasing other academics is an important driver of behavior. Social status within the business academy, both within the academic's school and within the academic's discipline across schools, comes from getting *FT42* journal publications. Consistently hitting *FT42* journals is what garners seminar invitations, conference presentations, and opportunity to exercise academic organization administrative responsibility. If you don't please other academics, you

will have low status throughout the environments that are very important to the everyday life of a business academic.

In addition, as all deans know, there is a two-tier salary market when it comes to business professors. There is a higher salary tier for *globally relevant researchers*—defined as those who can hit the *FT42* journals—and a lower salary tier for those who can't.

The consequence is that both social status and academic salary for any business academic derive substantially from their capacity for and proclivity to please other business academics. This applies to all business academics: One doesn't escape from this equation when one becomes a senior academic. Social status in the Academy is still determined largely by one's ability to please other academics.

### THE STATUS EXCEPTION

However, there are exceptions: business school professors who choose to speak to the wider audience of business people and the business media. One measurement of the prominence of a business scholar with the broader business audience is placement on the Thinkers50,<sup>1</sup> a biennial list of the world's 50 top management thinkers that has gained considerable prominence since its inception in 2001. It is selected by a panel of experts,<sup>2</sup> who have their own experience plus the results of open on-line voting on which to make their decisions. The Thinkers50 list typically contains academics (mainly from business, but also other disciplines), business executives, consultants, and writers. On the 2011 list are 21 tenured full professors of business who hold doctorates—that is, are trained to do and have a job that presumes they will do academic research.

I think it is safe to assume that these 21 professors are exemplars of those who speak authoritatively to the business world and reap the social and economic benefits of that positioning. It is not possible to assert with certainty that their work meets the criteria of actionability set out by Pearce

and Huang here. It is indeed possible that business people read and listen to these scholars and don't attempt to take action on their thoughts. However, I observe enough business people studying "disruptive innovation" strategies, exploring "blue oceans," developing "generic strategies," and creating "balanced scorecards" to view these scholars as being on this list primarily because business people in general find their thoughts helpful to their work.

The question is whether these professors can do both—that is, speak authoritatively to their peer academics at the most advanced level while at the same time speaking authoritatively to the business world in general. To get a sense of that, I looked at the *FT42* journal publications of these 21 scholars both over their careers and over the past 10 years (see Exhibit).

The median is 8 lifetime *FT42* journal articles, which converts to a rate of one article every 3 years following earning of their doctorate. The top producer is Jeffrey Pfeffer, who has managed to produce an average of one *FT42* article per year over his 40-year career. At the other end are Andrew Kakabadse, Linda Hill, and Rakesh Khurana, who have not produced a single *FT42* article across their 35-, 28-, and 14-year careers, respectively.

There is a striking contrast with the recent records of these scholars. The median number of *FT42* articles published in the past decade (2002–2011) drops to one single publication, with Pfeffer and Pankaj Ghemawat the highest at 7 and 6, respectively. All but 4 of the 21 produced 3 or fewer *FT42* articles in the past decade. Looked at a different way, the median number of articles after the first decade of their postdoctorate career is three lifetime articles. So even for those who start off producing *FT42* articles, the vast majority (Pfeffer and Ghemawat excepted) largely stop producing *FT42* articles after 10 years.

These appear to be low numbers of *FT42* publications for these senior business scholars, especially production in the past decade. To get a sense to how this production level compares to scholars who are consistently successful in publishing *FT42* articles, I used the Rotman faculty as a comparator. We have 42 professors at the rank of full professor, and I looked at the 10% with the greatest scholarly production of *FT42* articles as a proxy for scholars that are as accomplished in writing for fellow scholars as these 21 Thinkers50 scholars are in speaking to the business audience. The Rotman scholars produced a median of 11.5 *FT42* articles over the past decade and 1.05 per year across their careers—over 10 times the recent production and

<sup>1</sup> <http://www.thinkers50.com/>

<sup>2</sup> For the 2011 list, the expert panel was composed of: Josh Macht, Group Publisher, *Harvard Business Review* Group; Mohi Ahmed, Corporate Brand office, Fujitsu; Mary Glenn, associate publisher, Business & Finance, McGraw Hill; Santiago Iniguez, Dean, IE business school; Mark Jenkins, research director, Cranfield School of Management; Kevin Kelly, CEO, Heidrick & Struggles; Richard Stagg, editorial director of *Financial Times* Prentice Hall; Dr Ali Qassim Al Lawati of Abu Dhabi's Department of Economic Development; and Steve Mostyn, associate fellow, Saïd Business School, at the University of Oxford.



**EXHIBIT**  
**Thinkers50 2011 Scholars**

Rank	Professor	School	Doctorate	FT42 Lifetime	FT42 2002–2011	Years since doctorate	FT42 Per year
1	Clay Christensen	HBS	1992	4	0	20	0.20
2	W. Chan Kim	INSEAD	1984	18	1	28	0.64
3	Vijay Govindrajana <sup>a</sup>	Tuck	1976	13	1	36	0.36
5	Michael Porter	HBS	1973	7	0	39	0.18
13	Nitin Nohria	HBS	1988	10	3	24	0.42
14	Robert Kaplan	HBS	1968	21	1	44	0.48
16	Linda Hill	HBS	1984	0	0	28	0.00
18	Theresa Amabile	HBS	1977	4	1	35	0.11
20	Richard Rumelt <sup>b</sup>	Anderson	1972	6	1	40	0.15
21	Richard D'Aveni	Tuck	1987	13	1	25	0.52
22	Jeffrey Pfeffer	Stanford	1972	39	7	40	0.98
25	Rosabeth Moss Kanter	HBS	1967	6	0	45	0.13
26	Nirmalya Kumar	LBS	1991	9	2	21	0.43
27	Pankaj Ghemawat <sup>c,d</sup>	IESE	1982	11	6	30	0.37
28	Herminia Ibarra <sup>d</sup>	INSEAD	1989	8	2	23	0.35
30	Henry Mintzberg	Desautels	1968	12	0	44	0.27
31	Costas Markides <sup>b</sup>	LBS	1990	6	1	22	0.27
35	Amy Edmondson	HBS	1996	10	5	16	0.63
41	Rakesh Khurana	HBS	1998	0	0	14	0.00
44	Andrew Kakabadse	Cranfield	1977	0	0	35	0.00
48	Sheena Iyengar	Columbia	1997	5	5	15	0.33
	<b>Median</b>			<b>8</b>	<b>1</b>	<b>28</b>	<b>0.33</b>

<sup>a</sup> HBS MBA;  
<sup>b</sup> HBS DBA;  
<sup>c</sup> HBS PhD;  
<sup>d</sup> Former HBS faculty member  
Note. HBS = Harvard Business School; LBS = London Business School; IESE = Business School at University of Navarra.

three times the lifetime frequency of the Thinkers50 group. It is important to note that the Thinkers50 list represents a far more extreme sample than the Rotman scholars: The former draws 21 professors from the entire business school world, while the latter draws 4 professors from only a single school. If we were to find the 21 global scholars with the greatest numbers of FT42 journal publications, the contrast would be even greater.

The implication is that very rarely is a scholar able to maintain a meaningful level of speaking to his academic colleagues and at the same time achieve a valued position as a provider of ideas to the outside business world. With a couple of experienced exceptions in Pfeffer and Ghemawat, who have been able to maintain a steady participation in FT42 journal production across their careers, and two young scholars, Edmondson (PhD, 1996) and Iyengar (1997), who have started their careers publishing a relatively high number of FT42 articles (although Iyengar has dropped to zero after her first decade like the majority on the list) and gained the managerial attention to make it onto the Thinkers50 list; it seems as though scholars

find it necessary to choose to which audience they will speak.

---

***Very rarely is a scholar able to maintain a meaningful level of speaking to his academic colleagues and at the same time achieve a valued position as a provider of ideas to the outside business world.***

---

Perhaps many more could follow the lead of Pfeffer and Ghemawat and not feel the need to stop publishing FT42 articles in order to become prominent in the business community. There is certainly an economic incentive to do so. It is arguable that even the lowest fee for a single speech for a person on that list of 21 scholars is as much as most scholars earn in a month of writing FT42 articles, and some of the highest speaking fees would amount to more than one quarter of a year's academic salary. Given the

ample benefits that accrue to an academic who can do both, my suspicion is that the vast majority of scholars capable of producing *FT42* articles don't attempt to do both because doing both is so difficult; otherwise, we would see more evidence of it happening.

It is arguable that the degree of difficulty in bridging the two worlds would not be so high if business academics primarily chose highly actionable, business-relevant subjects to research. Speaking to business audiences wouldn't be as distracting from journal article writing work if the two were consistently similar in topic, intent, and approach. But this is clearly not the case—based on Pearce and Huang's assessment.

### A THOUGHT ON HOW TO STIMULATE PRODUCTION OF ACTIONABLE BUSINESS ARTICLES

Pearce and Huang (2012, this issue) posit that we might not get more actionable research than we do because it is more difficult than not-actionable research. I think they are right but perhaps for different reasons than they might imagine—and the reasons for the difficulty can be overcome.

Smart businesses know that it is very hard to design products or services that customers will really love if they don't talk to those customers enough to find out what they want and need. It becomes much easier if they talk to their customers. I think that the only way that business academics won't find it hard to produce actionable articles is if they spend quality time interacting in businesses with business people to find out what would entail actionable knowledge for them.

Undoubtedly some business academics do spend time in businesses interacting with business people, and I suspect this is from whence the one third actionable *FT42* articles come. But I suspect that lots of business academics don't, and for that reason, they would find it really hard to write actionable articles. I have one full professor on my faculty who boasted to me that he, in turn, bragged to his students that he had never gone out to visit a business. For him, it was an indication of his purity. For me, it guaranteed that he would find the writing of actionable articles difficult.

This is a respect in which I think that Harvard Business School provides a model worth exploring. Of the 21 tenured full professors on the Thinkers50 list, nine are HBS professors, and another 5 are either HBS-trained or ex-HBS faculty members (or the two combined)—a stunningly high share. Harvard Business School may be the world's biggest and most famous business school, but I don't think

that alone explains having two thirds of the entire list as its current or past faculty or students.

I suspect that being the world's only consequential business school that does substantial case-based research ensures that its faculty members get substantially closer to business people than the faculty of any other school. They get close enough to business to know what research would be actionable for them, and that produces a level of actionability in their work that makes them prominent in the business community. However, many, if not most, researching business academics look askance at HBS' case-based research as lacking scientific rigor. And indeed, the HBS professors on the Thinkers50 list aren't at all prominent in the *FT42* journals. The median for lifetime articles per year of the nine HBS professors is 0.18 *FT42* articles/year—just over half the median of the overall sample—and the median for articles in the past decade is zero (instead of 1 for the overall sample).

The trick, of course, is to combine the interaction spurred by a case-based research culture with the scientific rigor desired and required by the Academy and its journal editors. It seems currently that it is an either-or situation: Case-based research provides an understanding of the actionable business issues but doesn't encourage scientific rigor, while *FT42*-style research demands scientific rigor but, as Pearce and Huang demonstrate, doesn't lend itself to actionability.

I have long believed that case-based research and *FT42*-style research can and should be integrated along a time continuum. The greatest utility for case-based research is not to produce rigorous answers but rather to raise interesting questions. The greatest utility for *FT42*-style research would be to take those interesting and action-oriented questions and perform scientifically rigorous research on them. However, this doesn't happen much, mainly because of the schism between case-based and *FT42*-style research. Neither camp has much love or enthusiasm for the other.

---

***The greatest utility for case-based research is not to produce rigorous answers but rather to raise interesting questions.***

---

Instead, the business research community should see case-based research as playing a critical role in producing the interaction between business academics and business people, which helps identify key issues on which actionable

learning would be valued. And it should see *FT42*-style research as the preferred methodology for following up on these identified issues to produce scientifically rigorous actionability. Right now, this doesn't happen. Rather than an integrated continuum, it is two warring camps.

## CONCLUSIONS

I doubt that business professors have an explicit desire to or bias toward producing not-actionable research. However, if they spend all of their research time with other academics rather than with business people, I think they will naturally struggle to create actionable research. Thus I believe that the biggest lever for producing more actionable research is to recognize that actionable research has two essential stages. In the first, close interaction with business identifies the nature of the issue or problem that calls for rigorous research. In the second stage, application of rigorous scientific methodology generates actionability that is based on rigorous science. Rather than

those who engage in the former and the latter seeing each other as misguided, they need to see one another as key components of the actionability equation.

My hope is that this greater sense of partnership would create a convergence between what academic reviewers insist on seeing and what business people experience as actionable research, and in doing so, convert some of that \$600 million per year into research that makes a difference to business people outside the Academy.



**Roger Martin** has served as dean of the Rotman School of Management at University of Toronto since 1998. He is the award-winning author of *The Opposable Mind* (2007); *The Design of Business* (2009); and *Fixing the Game* (2011). Martin holds an MBA from the Harvard Business School (1981).