

Research rankings of Asia Pacific business schools: Global versus local knowledge strategies

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Published online: 8 March 2008

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Abstract Despite the increasing recognition of the importance of the research mission of universities, no previous work has investigated the research productivity and research strategies of Asia Pacific business schools. This article fills this important gap by conducting the first study to rank the publication productivity of 130 Asia Pacific business schools. Drawing on data from the UTD Top 100 Business School Research Rankings™ and several additional sources, we rank Asia Pacific business schools' research productivity in three areas: (1) twenty-four leading business journals, (2) seven top management journals, and (3) five Asia Pacific management journals. We also extend this analysis by documenting the distinct publishing strategies of various Asia Pacific business schools—global, local, or both.

Keywords Asian Pacific business schools · Research · Rankings · Productivity

This research was supported, in part, by the Perelman Senior Research Fellowship at Temple, the Provost's Distinguished Professorship at UTD, and the National Science Foundation (CAREER SES 0552089). We thank Andrew Delios for helping us collect data and for his hands-on editorial assistance. We also thank Dave Ahlstrom and Anne-Wil Harzing for helpful comments and Ted Khoury, Kenny Oh, and Sylvia Yen for research assistance. We are grateful to Dean Hasan Pirkul for granting us permission to use data from the UTD Top 100 Business School Research Rankings™. All views expressed are ours and not those of the underwriters.

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Universities and their affiliated business schools have two distinct roles: knowledge creation (primarily through research) and knowledge dissemination (primarily through teaching). Although Asia Pacific universities in general and their business schools in particular have historically emphasized knowledge dissemination, they are now increasingly focusing on knowledge creation (Au, 2007). This transformation is natural. The Asia Pacific economies are currently the fastest growing ones in the world and this trend is set to continue for the coming decade. Such growth calls for the generation of new knowledge and innovation. As demand for highly skilled professionals in these economies burgeons, universities are set to become increasingly important players in local, regional, and global systems of innovation.

With growth has also come an intensification in competition among Asia Pacific universities. For universities in general and business schools in particular, the pursuit of excellence increasingly involves benchmarking progress against regional and international competitors. Being recognized for excellence is important, since both tuition and research funding is progressively being channeled to those institutions that can demonstrate that they rank among the best among their peers. In this context, the need to identify regional research centers of excellence is critical.

This trend of intensified competition among business schools, primarily through various rankings, is global. The rankings in influential global publications, such as *Business Week* and *Financial Times*, both reflect and catalyze this competition. Formal government efforts to gauge the research productivity of universities have been launched in the United Kingdom (Research Assessment Exercise), Australia (Research Quality Framework), Hong Kong, Poland, and Denmark, to name a few. Existing research rankings have focused on disciplines such as accounting (Chan, Chen, & Cheng, 2006) and international business (Chan, Fung, & Lai, 2005; Kumar & Kundu, 2004; Xu, Yalcinkaya, & Seggie, 2008), and geographic regions such as China (Quer, Claver, & Rienda, 2007), Central and Eastern Europe (Meyer & Peng, 2005), and Western Europe (Baden-Fuller, Ravazzolo, & Schweitzer, 2000). However, despite the recent proliferation of various rankings, no previous work has investigated the overall research rankings of Asia Pacific business schools. Given the rising interest in research among Asia Pacific business schools (Lau, 2007; Leung, 2007; Li & Peng, 2008; Peng, 2005, 2007; Pleggenkuhle-Miles, Aruol, Sun, & Su, 2007), this lack of rankings on such a crucial dimension seems to be a significant gap in our knowledge.

In response, we have conducted what we believe to be the first ranking study on the research productivity of Asia Pacific business schools, a crucial segment of the regional university infrastructure. This article fills an important gap by addressing some basic questions: First, how have various Asia Pacific business schools performed in terms of publication productivity? Second, is this performance the result of distinct research strategies? In other words, is there a role for global as well as local research strategies? We measure knowledge creation in Asia Pacific business schools based on the volume of refereed research published by their faculty. Refereed research publications are a well-established, objective measure to compare research output (Chan et al., 2006; Meyer & Peng, 2005; Pomfret & Wang, 2003; Schmotter, 2001; Xu et al., 2008).

Specifically, we compare 130 Asia Pacific business schools' productivity in three areas: (1) Twenty-four leading business journals, (2) seven top management journals, and (3) five Asia Pacific journals. Our data are from the UTD Top 100 Business

School Research Rankings™ and additional sources. Our analysis indicates that the variation of productivity tends to reflect schools' strategic choices—global, local, or both. Finally, we discuss our findings in the context of rising interest in research among Asia Pacific business schools and of heated debates about the direction of such research.

Business school research

Universities are a key part of national, regional, and global systems of innovation (Carlsson & Mudambi, 2003). Their two roles, creation and dissemination of knowledge, correspond to the two basic missions of the modern university, namely, research and teaching, respectively (Brouthers, Mudambi, & Reeb, 2005). In most countries, a wider range of institutions undertake the teaching mission, and a smaller number of schools focus on research.¹

These two university roles have differential value. There is considerable evidence that research is valued much more highly than teaching and that academic departments with research capabilities are able to exercise power and control budgets within the university (Brouthers et al., 2005). Research capabilities also influence constituencies outside the university.

On the other hand, questions about the value of research conducted in business schools persist to this day (Schramm, 2006), with questions being raised about the compatibility of the two missions (Pocklington & Tupper, 2002; Robinson, 1994). It has been suggested that a focus on the research ranking process itself may have a negative effect on the teaching mission (Gioia & Corley, 2002).

However, few of these negative views of business school research are based on empirical research. Most recent quantitative results indicate that there is a strong commonality of factors associated with the two main missions of the business school: research and teaching (Armstrong, 1995; Ehrenberg, 2005; Siemens, Burton, Jensen, & Mendoza, 2005; Treischmann, Dennis, Northcraft, & Niemi, 2000). It remains true that there is a strong correlation among business school rankings, faculty research productivity, and the value-added in salaries commanded by graduates (Tracy & Waldfogel, 1997). We therefore contend that achieving research excellence is a highly desirable aim for Asia Pacific business schools, and that such excellence is measurable, observable, and comparable—as described in the next section.

Methodology

Our basic methodology is to count the number of publications in refereed academic journals—one of the standard methods to ranking research productivity (Xu et al., 2008). This method certainly is not perfect and publication counts are not necessarily correlated with impact, which is often measured by citations (Peng & Zhou, 2006).

¹ For example, of the 4,387 postsecondary educational institutions in the United States recognized by the Carnegie Foundation in 2002, only 163 (3.71%) had PhD-granting status in the full range of disciplines and only 89 (2.03%) were ranked in the highest category of “Research I.”

However, since we are conducting the very first exercise in this area, we believe that it is important to start with basic publication counts, upon which future scholars may build in order to conduct more sophisticated analysis (such as citation analysis).

We focus on three sets of journals (Table 1). First, following most existing ranking studies, we collect data on 24 mainstream journals that business school faculty and PhD students around the world, including those in Asia Pacific, aspire to publish. We use the world's most comprehensive database for this purpose: The University of Texas at Dallas (UTD) Top 100 Business School Research Rankings™ (see Appendix 1). Unleashed in 2005, the rankings have now been increasingly used by other (usually highly ranked) schools as a recruiting tool. The UTD database (<http://top100.utdallas.edu>)² is ideal for us because it contains information about authors and their institutions on all papers from the beginning of 1990 to the end of 2006.³

We first exclude authors not affiliated with universities and then remove schools not located in Asia Pacific. Eventually, 130 Asia Pacific business schools remain as our sample.⁴ These schools have at least one author who published in at least one of the 24 journals during 1990–2006 (inclusive). These schools include those in Australia (22 universities), China (17), Fiji (1), Hong Kong (7), India (6), Japan (18), Korea (34), Macau (1), New Zealand (5), Philippines (1), Singapore (5), Taiwan (12), and Thailand (1). Affiliations of authors are coded at the time of paper publication.

Second, we focus on the seven journals in the core area of management, which are a subset of the 24 journals in the UTD database. These seven top management journals are the *Academy of Management Journal*, *Academy of Management Review*, *Administrative Science Quarterly*, *Journal of International Business Studies*, *Management Science*, *Organization Science*, and *Strategic Management Journal*.

Third, given the known US- (and Western-) centric tendency of the “mainstream” journals identified above (none of which is published or edited in Asia Pacific), there is a heated debate on whether Asia Pacific business schools and their faculty should target these journals (Au, 2007; Leung, 2007; Meyer, 2006, 2007; Ramaswamy, 2007). Although debating this issue is beyond the scope of our research, we acknowledge the possibility that certain Asia Pacific business schools may intentionally avoid the “mainstream” journals and focus on region-specific outlets. As a result, only focusing on the “mainstream” journals may underestimate their efforts in creating local knowledge. Therefore, to measure productivity in Asia Pacific management journals, we concentrate on five region-specific journals: *Asia Pacific Business Review*, *Asia Pacific Journal of Management*, *Asian Case Research Journal*, *Australian Journal of Management*, and *Journal of Asian Business*. We track authorship and institutional affiliation in these five outlets. The data on Asia Pacific management journals are not directly comparable to the UTD data (1990–2006), because the observation periods vary among Asia Pacific management journals and not all were in existence in 1990. The longest running Asia Pacific journal is the *Australian Journal of Management*

² The database is interactive and continuously updated as new research is published. See Appendix 1.

³ Publications in *Manufacturing & Service Operations and Management* are tracked starting in 1999, when it published its first volume.

⁴ Although Hofstede (2007) would probably consider Israel and Turkey as “Asian,” schools in Israel have been considered in rankings of research productivity among European schools (Baden-Fuller et al., 2000) and schools in Turkey have not been active in publishing in these 24 journals. Therefore, we have excluded schools in Israel and Turkey.

Table 1 Three sets of journals.

24 leading business journals ¹	7 top management journals	5 Asia Pacific management journals
Accounting (3)	<i>Academy of Management Journal</i>	<i>Asia Pacific Business Review</i>
<i>Accounting Review</i>	<i>Academy of Management Review</i>	<i>Asia Pacific Journal of Management</i>
<i>Journal of Accounting and Economics</i>	<i>Administrative Science Quarterly</i>	<i>Australian Journal of Management</i>
<i>Journal of Accounting Research</i>	<i>Journal of International Business Studies</i>	<i>Journal of Asian Business</i>
Finance (3)	<i>Management Science</i>	<i>Asian Case Research Journal</i>
<i>Journal of Finance</i>	<i>Organization Science</i>	
<i>Journal of Financial Economics</i>	<i>Strategic Management Journal</i>	
<i>Review of Financial Studies</i>		
Information Systems (7)		
<i>Information Systems Research</i>		
<i>MIS Quarterly</i>		
Management (7)		
<i>Academy of Management Journal</i>		
<i>Academy of Management Review</i>		
<i>Administrative Science Quarterly</i>		
<i>Management Science</i>		
<i>Journal of International Business Studies</i>		
<i>Organization Science</i>		
<i>Strategic Management Journal</i>		
Marketing (4)		
<i>Journal of Consumer Research</i>		
<i>Journal of Marketing</i>		
<i>Journal of Marketing Research</i>		
<i>Marketing Science</i>		
Operations Research (5)		
<i>Journal on Computing</i>		
<i>Journal of Operations Management</i>		
<i>Manufacturing & Service Operations Management</i>		
<i>Operations Research</i>		
<i>Production and Operations Management</i>		

¹ This list is from the UTD Top 100 Business School Research Rankings™ (website: <http://top100.utdallas.edu>). Used with permission.

(founded in 1976), and the youngest one is the *Asian Case Research Journal* (founded in 1997). Therefore, for journals founded after 1990, we track every publication from the first volume to the end of 2006.

In addition to information on author affiliation maintained by the UTD database, additional information comes from various databases, including ABI/Proquest, EBSCOhost, JSTOR, and the various publishers' online databases. Following standard practice in ranking studies (Chan et al. 2006; Meyer & Peng 2005; Xu et al. 2008), we give credit to multiple authors of a single publication. A single-author paper results in the school of affiliation being credited with a score of 1. If there are multiple authors, the school gets a score of $1/n$ for each of their faculty members, where n is the number of authors.

Overall, we have assembled the most comprehensive research output record of Asia Pacific business schools. Our database has 1,088 papers authored by scholars at Asia Pacific business schools in 24 leading business journals, in which 486 appear in the seven top management journals. In addition, we also have 790 papers that are published in the five Asia Pacific management journals. Strictly speaking, our level of analysis is university rather than business school. Although it is true that a majority of authors identify their affiliation as business school, it is possible that some authors are not housed in a business school. For instance, some authors are affiliated with the Australian Graduate School of Management (AGSM) while others list their affiliation as the University of New South Wales (UNSW)—AGSM is one school within UNSW. In this case, we aggregate the research output by business school and university in one university-level observation: UNSW.

Rankings in three sets of journals

Table 2 reports the research productivity of the 25 most prolific Asia Pacific universities, ranked by weighted count, in the 24 leading business journals offered by the UTD database. The top four are Hong Kong University of Science and Technology (HKUST), National University of Singapore (NUS), UNSW, and The Chinese University of Hong Kong (CUHK). The table shows that the nationality of the top 25 universities is highly diverse, including Australia (5 schools), Hong Kong (5), Korea (5), Singapore (4), New Zealand (3), India (1), Japan (1), and Taiwan (1). It not only suggests that HKUST is the most prolific institutional contributor in these 24 leading business journals, but also indicates that the gap between HKUST and other institutions is large—the second highest ranked institution, NUS, has only about half of HKUST's output.

Table 3 presents Asia Pacific universities' productivity in the seven top management journals. Overall, universities in Hong Kong, Australia, and Singapore—led by UNSW, HKUST, NUS, and CUHK as the top four—perform better. Compared with Table 2, Table 3 reveals that Asia Pacific schools that perform better in the 24 leading business journals also perform well in the seven top management journals. This point is supported by the correlation coefficient between the rankings of the two journal sets ($r = .95$, $p < .01$). Accordingly, excluding the journals outside the set of seven top management journals will not substantially change the ranking order. In addition, the variation of seven top management journals is smaller than that of 24 journals (standard deviation of 24 leading business journals =

Table 2 Most prolific Asia Pacific business schools in 24 leading business journals: 1990–2006¹.

Rank	University	Raw count	Weighted count	Country
1	Hong Kong University of Science and Technology	181	98.93	Hong Kong
2	National University of Singapore	90	48.92	Singapore
3	University of New South Wales ²	73	41.41	Australia
4	Chinese University of Hong Kong	72	34.12	Hong Kong
5	Nanyang Technological University	51	29.82	Singapore
6	University of Melbourne	36	22.68	Australia
7	Hong Kong Polytechnic University	38	20.77	Hong Kong
8	City University of Hong Kong	41	19.08	Hong Kong
9	University of Auckland	27	18.31	New Zealand
10	Korea University	30	15.63	Korea
11	University of Queensland	28	14.77	Australia
12	Seoul National University	24	11.69	Korea
13	KAIST University	19	11.47	Korea
14	University of Hong Kong	23	11.43	Hong Kong
15	Singapore Management University	24	10.72	Singapore
16	Yonsei University	19	8.12	Korea
17	University of Sydney	12	7.65	Australia
18	Monash University	13	7.49	Australia
19	Hitotsubashi University	8	6.16	Japan
20	National Taiwan University	14	6.15	Taiwan
21	Victoria University of Wellington	10	5.41	New Zealand
22	INSEAD Singapore	12	5.31	Singapore
23	Indian Institute of Management	10	5.26	India
24	University of Otago	8	5.00	New Zealand
25	Sungkyunkwan University	9	4.82	Korea

¹ Source: The UTD Top 100 Business School Research Rankings™ (<http://top100.utdallas.edu>). See Table 1 for the list of 24 leading business journals.

² Author affiliation identified as the Australian Graduate School of Management is counted as affiliated with the University of New South Wales.

20.83 versus standard deviation of seven top management journals = 8.05). Qualitatively, this suggests that leading schools in management, compared with those in other disciplines, do not possess significant competitive advantage relative to followers. In fact, the leading school, UNSW, leads by a small margin over the second ranked HKUST (25.11 versus 24.50 by weighted count; see Table 3).

We now turn to publications in the five Asia Pacific management journals. Table 4 shows that similar to the research performance in 24 top business journals, publications in Asia Pacific management journals also have high variation (standard deviation = 17.15). The leading contributor, NUS, produced about three times the weighted number of publications generated by the second highest ranked school, UNSW.⁵ This is probably because that both the *Asia Pacific Journal of Management* and *Asian Case Research Journal*, two out of five Asia Pacific outlets that we examine, had been founded and published by NUS.⁶ Overall, the list of top contributors remains diverse,

⁵ In the *Asia Pacific Journal of Management* during the period 1997–2006, the top ten institutional contributors were (1) NUS, (2) CUHK, (3) Lingnan University, Hong Kong, (4) City University of Hong Kong, (5) Nanyang Technological University, Singapore, (6) Hong Kong Baptist University, (7) HKUST, (8 tied) Concordia University, Canada, (8 tied) Xi'an Jiaotong University, China, (10 tied) Ohio State University, USA, and (10 tied) Thunderbird, USA (Pleggenkuhle-Miles et al., 2007: 475).

⁶ As of 2002, NUS transferred its editorial control of the *Asia Pacific Journal of Management* to the Asia Academy of Management (Lau, 2007; Peng, 2007).

Table 3 Most prolific Asia Pacific business schools in seven top management journals: 1990–2006¹.

Rank	University	Raw Count	Weighted Count	Country	Rank	University	Raw Count	Weighted Count	Country
1	University of New South Wales	40	25.11	Australia	21	Victoria University of Wellington	4	2.33	New Zealand
2	Hong Kong University of Science and Technology	52	24.50	Hong Kong	22	Sungkyunkwan University	4	2.33	Korea
3	National University of Singapore	37	20.60	Singapore	23	University of Technology, Sydney	3	2.25	Australia
4	Chinese University of Hong Kong	39	18.75	Hong Kong	24	National Taiwan University	6	2.24	Taiwan
5	Nanyang Technological University	20	11.68	Singapore	25	University of Otago	3	2.00	New Zealand
6	University of Hong Kong	19	9.35	Hong Kong	26	University of Canterbury	2	2.00	Australia
7	University of Melbourne	15	9.07	Australia	27	Waseda University	4	1.99	Japan
8	City University of Hong Kong	19	8.71	Hong Kong	28	Lingnan University	4	1.83	Hong Kong
9	Hong Kong Polytechnic University	15	7.47	Hong Kong	29	University of Western Sydney	3	1.82	Australia
10	University of Queensland	15	7.44	Australia	30	Kobe University	4	1.66	Japan
11	Korea University	12	6.99	Korea	31	Curtin University of Technology	2	1.66	Australia
12	KAIST	10	6.81	Korea	32	China Europe International Business School	3	1.58	China
13	Seoul National University	12	5.97	Korea	33	Peking University	4	1.53	China
14	Hitozubashi University	7	5.83	Japan	34	Nanzan University	2	1.50	Japan
15	Singapore Management University	12	5.06	Singapore	35	University of Sydney	4	1.49	Australia
16	Yonsei University	12	4.63	Korea	36	University of Tsukuba	2	1.33	Japan
17	Monash University	7	3.91	Australia	37	National Central University	3	1.25	Taiwan
18	University of Waikato	5	3.33	New Zealand	38	University of Western Australia	3	1.20	Australia
19	INSEAD Singapore	6	2.83	Singapore	39	Hong-Ik University	2	1.00	Korea
20	University of Auckland	4	2.50	New Zealand	40	Chulalongkorn University	1	1.00	Thailand

¹ The seven top management journals are the *Academy of Management Journal*, *Academy of Management Review*, *Administrative Science Quarterly*, *Journal of International Business Studies*, *Management Science*, *Organization Science*, and *Strategic Management Journal*.

Table 4 Most prolific Asia Pacific business schools in five Asia Pacific management journals: 1990–2006¹.

Rank	University	Raw Count	Weighted Count	Country	Rank	University	Raw Count	Weighted Count	Country
1	National University of Singapore	161	142.58	Singapore	21	University of South Australia	9	7.17	Australia
2	University of New South Wales	73	56.09	Australia	22	Hanyang University	10	6.83	Korea
3	Chinese University of Hong Kong	50	34.57	Hong Kong	23	University of Auckland	9	6.5	New Zealand
4	University of Melbourne	40	30.25	Australia	24	Curtin University of Technology	7	6	Australia
5	Hong Kong Baptist University	31	23.33	Hong Kong	25	Peking University	6	6	China
6	University of Western Australia	24	19.43	Australia	25	University of Otago	6	6	New Zealand
7	Monash University	26	19.00	Australia	27	Lingnan University	11	5.17	Hong Kong
8	University of Queensland	26	18.67	Australia	28	Massey University	6	5.17	New Zealand
9	Australian National University	20	17.83	Australia	29	University of Tokyo	5	5	Japan
10	City University of Hong Kong	24	15.33	Hong Kong	30	Macquarie University	7	4.83	Australia
11	University of Hong Kong	23	15.33	Hong Kong	31	Victoria University of Wellington	5	4.5	New Zealand
12	Hong Kong Polytechnic University	19	14.00	Hong Kong	32	University of Wollongong	6	4.17	Australia
13	University of Sydney	20	13.82	Australia	33	University of Tsukuba	3	3	Japan
14	Queensland University of Technology	20	13.08	Australia	34	Yonsei University	4	2.75	Korea
15	Indian Institute of Management	14	12.00	India	35	Griffith University	4	2.5	Australia
16	Nanyang Technological University	19	11.08	Singapore	36	Korea University	5	2.42	Korea
17	Hong Kong University of Science and Technology	12	10.17	Hong Kong	37	University of Macau	3	2	Macau
18	INSEAD Singapore	11	10.00	Singapore	38	University of Southern Queensland	2	2	Australia
19	University of Waikato	10	7.33	New Zealand	38	University of Western Sydney	2	2	Australia
20	University of Technology, Sydney	10	7.25	Australia	38	University of Tasmania	2	2	Australia

¹ The five Asia Pacific management journals are the *Asia Pacific Business Review*, *Asia Pacific Journal of Management*, *Asian Case Research Journal*, *Australian Journal of Management*, and *Journal of Asian Business*.

including schools in Australia (17 schools), Hong Kong (7), New Zealand (5), Korea (3), Singapore (3), Japan (2), China (1), India (1), and Macau (1).

Globalization or localization?

Globalization in this article is defined as an interest in publishing in “mainstream” top journals. Localization refers to an interest in pursuing indigenous knowledge, as evidenced by publications in Asia Pacific region-specific outlets. Ideally, top performing Asia Pacific business schools would have strong presence in both mainstream and Asia Pacific region-specific journals (Meyer, 2006). However, constraints in resources often prevent this from happening. In other words, achieving both globalization and localization in research output may be difficult. To examine how schools perform along these two dimensions, we have developed a 2×2 framework (Figure 1). Based on the medians of weighted number of publications in the seven top management journals (median = 0.415) and in the five Asia Pacific outlets (median = 0.5), schools are classified into four groups. In Group 1, 47 schools are found to be high on both dimensions, because they have better-than-average performance in both the top mainstream and Asia Pacific outlets. Groups 2, 3, and 4 are identified in the same fashion.

Table 5 shows the full distribution that underpins our 2×2 analysis in Figure 1. Schools in Australia, Hong Kong, New Zealand, and Singapore have a strong tendency to be in Group 1—high on both mainstream management and Asia Pacific outlets. In China, India, Japan, and Korea, the tendency is quite the opposite—schools tend to cluster in Group 3, usually with relatively low output in both mainstream and Asia Pacific outlets.

Does country matter?

Table 6 explores the relationship between nationality and the number of the 40 prolific Asia Pacific universities in terms of appearances in the mainstream and Asia Pacific journals. For the seven top management journals, Australia, Hong Kong, and Korea are the most productive countries. For the five Asia Pacific journals, Australia remains at the top, followed by Hong Kong and New Zealand.

We further assess how nationality influences the choice between publishing in top management and Asia Pacific journals. As Column 3 in Table 6 notes, it is unusual for Asia Pacific business schools to equally contribute their research in these two sets of journals—a balance would have a score of zero difference between Columns 1 and 2. For example, three Taiwanese universities perform well in top management journals; yet no Taiwanese school is active in Asia Pacific outlets. Schools in Australia, by contrast, seem to be more interested in Asia Pacific outlets than top management journals.⁷

⁷ We suspect that the reward system in Australia may play a role. Australia’s Department of Education, Science, and Training (DEST) point system rewards quantity *regardless* of the outlets (Harzing, 2005; Yang & Terjesen, 2007: 503). This may explain the significant interest among Australian authors in Asia Pacific outlets.

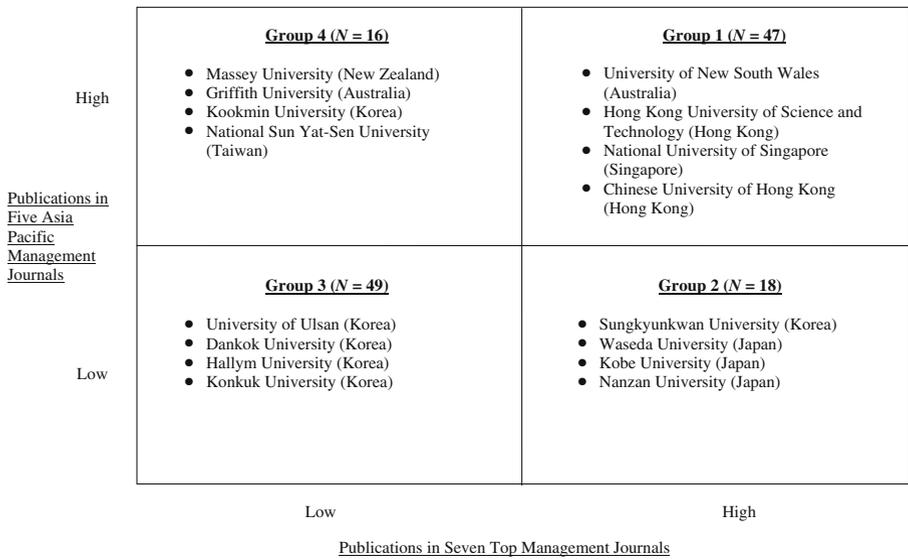


Figure 1 Globalization/Localization matrix. In each group, only the top four schools are reported.

Table 6 also allows us to examine whether the productive universities uniformly recognize top management journals and Asia Pacific management journals. We explore this issue by examining the variation of the nationality of the most prolific universities. Our assumption is that standard deviation of the number of productive schools across 13 countries will reflect the level of consensus shared by researchers. The smaller the variation, the stronger the consensus regarding what are the most desirable outlets in which to publish. To examine this conjecture, we use the number of most prolific 40 universities in each nation to compute two indexes (in terms of top management and Asia Pacific journals). Interestingly, we find that Asia Pacific business schools have greater variation in the nationality distribution of Asia Pacific

Table 5 Globalization and localization in publishing activities at 130 Asia Pacific business schools.

Nationality	Group 1 (High globalization/high localization)	Group 2 (High globalization/low localization)	Group 3 (Low globalization/low localization)	Group 4 (Low globalization/high localization)
Australia	13	0	3	6
China	2	1	10	4
Fiji	0	0	1	0
Hong Kong	7	0	0	0
India	1	0	4	1
Japan	3	5	9	1
Korea	8	7	18	1
Macau	1	0	0	0
New Zealand	4	0	0	1
Philippines	0	0	1	0
Singapore	4	0	1	0
Taiwan	4	4	2	2
Thailand	0	1	0	0
Total	47	18	49	16

Table 6 Nationality and the 40 most prolific Asia Pacific business schools.

Nationality	(1) Top management journals Number of schools (%)	(2) Asia Pacific journals Number of schools (%)	(3) Difference (%) (3) = (1)–(2)
Australia	10 (25%)	17 (42.5%)	-17.5
China	2 (5%)	1 (2.5%)	2.5
Hong Kong	6 (15%)	7 (17.5%)	-2.5
Fiji	0 (0%)	0 (0%)	0
India	0 (0%)	1 (2.5%)	-2.5
Japan	5 (12.5%)	2 (5%)	7.5
Korea	6 (15%)	3 (7.5%)	7.5
Macau	0 (0%)	1 (2.5%)	-2.5
New Zealand	4 (10%)	5 (12.5%)	-2.5
Philippines	0 (0%)	0 (0%)	0
Singapore	4 (10%)	3 (7.5%)	2.5
Taiwan	3 (7.5%)	0 (0%)	7.5
Thailand	0 (0%)	0 (0%)	0
Total	40 (100%)	40 (100%)	

management journals (standard deviation = 4.70) than in that of top management journals (standard deviation = 3.15). This suggests that Asia Pacific business schools' interests in publishing in region-specific journals are comparatively more diverse. In other words, Asia Pacific researchers and schools have relatively stronger consensus on, and more uniform recognition of, the seven top management journals. For region-specific outlets, some researchers and schools appreciate them much more than others.

Summary of findings

In short, four main findings emerge:

- Research output by Asia Pacific business schools in the three sets of journals is contributed by a diversity of schools located in different countries.
- Schools pursue distinctive orientations in their publishing strategy—global, local, or both.
- To some extent, Asia Pacific business schools' research productivity is influenced by a language bias. Scholars based in English-speaking countries, specifically Australia, Hong Kong, New Zealand, and Singapore, have a clear advantage in placing their work in the three sets of leading outlets, all of which are published in English.
- Asia Pacific researchers and schools have stronger and more uniform interests in the seven top management journals than in the five Asia Pacific region-specific outlets.

Discussion

Contributions

In our view, at least two contributions emerge. First, this article contributes to the literature by providing the first set of research rankings of Asia Pacific business schools. We demonstrate conclusively that business schools in the Asia Pacific region have matured and seen themselves as key elements of their regional innovation systems. In other words, knowledge creation as measured by research

publications is taking its place alongside teaching and knowledge dissemination as a core business school mission. The progress of research in Asia Pacific business schools in the period that we study, 1990–2006, is striking.⁸ Shown in Appendix 2, in 1990, no Asia Pacific business school was ranked among the global top 100 most prolific institutional contributors according to the UTD Top 100 Business School Research Rankings™. In 2006, six universities made the global top 100: HKUST (27th worldwide), NUS (62), University of Melbourne (65), UNSW (78), Nanyang Technological University (78), and Hong Kong Polytechnic University (84). Overall, combining all publications in the 24 top business journals during the entire period of 1990–2006, five Asia Pacific schools appear in the global top 100, led by HKUST as the 39th in the world (see Appendix 2).

The 1990–2006 period that we examine can be labeled the “childhood” or “adolescence” of research endeavors of business schools in the region (Pleggenkuhle-Miles et al., 2007). While rankings such as the UTD Top 100 Business School Research Rankings™ provide a good picture of the worldwide standing of the top 4–5 Asia Pacific business schools that made the global top 100, until this study, there had been no information on the research rankings of Asia Pacific schools, the majority of which, unfortunately, are not in the global top 100 yet. This study, thus, has filled an important gap, shedding light on how Asia Pacific business schools stack up on a crucial dimension—research.

Second, our findings suggest that Asia Pacific business schools have publishing strategies that are different from universities in North America. When devising a research strategy, Asia Pacific business schools face a strategic choice—global, local, or both. Although the top schools in the region (Group 1 in Figure 1) are often criticized by their seemingly one-sided interest in global outlets and pay inadequate attention to region-specific issues (Meyer, 2006), this group has actually pursued *both* globalization and localization strategies in their publishing activities.

In this respect, business schools in the Asia Pacific region are no different than other elements of the regional innovation system. For the best organizations, both connectivity with the global innovation system and the development of locally relevant expertise are important. These organizations serve as bridging institutions or “anchor tenants” contributing to and accessing knowledge from the global system (Agrawal & Cockburn, 2003). Such organizations then transfer knowledge to local players through planned and unplanned knowledge spillovers (Mudambi & Navarra, 2004). One measure of the extent of a business school’s participation in the global innovation system is its volume of publication in top-ranked international journals. At the other end of the spectrum, niche players lay emphasis on packaging and applying knowledge to the local context. Much of this specific knowledge may not be relevant beyond the region, so that it remains locally bound, perhaps in regionally focused journals. In some cases, a regional research strategy may be seen as the first step towards more ambitious global goals (Li & Peng, 2008).

⁸ In some disciplines, Asia Pacific business schools now rank very high. In international business, five Asia Pacific business schools are now in the global top 20, led by CUHK (sixth in the world—see Xu et al., 2008).

Limitations and future research directions

This article has several limitations, which suggest a number of future research directions. First, we have measured intellectual contribution by quantity rather than quality or impact. While there are several ways to measure impact, the most commonly used measure is citations, which are not necessarily correlated with quantity (Peng & Zhou, 2006). Therefore, future researchers may want to build on our study and probe into the impact (citations) of research generated by Asia Pacific business schools (see Pleggenkuhle-Miles et al., 2007 for an early example).

Second, in this article, the contributions to local knowledge are limited to the five region-specific journals, all of which are in English. In reality, researchers often contribute to indigenous journals outside the set of five outlets (often in local languages such as Chinese, Japanese, and Korean) (Li & Peng, 2008). Although such research certainly contributes to the mission of Asia Pacific business schools, we have been unable to locate and measure such contributions. Therefore, we must have *under-counted* Asia Pacific business schools' contributions to local knowledge. Future researchers may endeavor to be more inclusive in identifying such important contributions.

Conclusions

What is the extent of research mission among Asia Pacific business schools? How are various Asia Pacific business schools ranked in terms of publication productivity? What research strategies are being pursued by these business schools? For the first time, these important but unexplored questions are answered. Overall, we provide the first clear empirical picture of the nature and location of business school centers of excellence in the Asia Pacific region. In conclusion, our analysis not only ranks the research productivity of 130 Asia Pacific business schools, but also finds that these schools exhibit distinctive strategic choices in their publishing activities—global, local, or both. Given the debate about the direction of Asia Pacific management research (Au, 2007; Lau, 2007; Leung, 2007; Meyer, 2006, 2007; Peng, 2007; Ramaswamy, 2007; Yang & Terjesen, 2007), it will be interesting to see whether the rankings and patterns we find, essentially during the first phase of the take off of Asia Pacific business school research (Peng, 2007), will remain the same or change substantially when future ranking studies are conducted 10 or 20 years down the road.

Appendix 1

The Database for the UTD Top 100 Business School Research Rankings™

The UTD Top 100 Business School Research Rankings™ (<http://top100.utdallas.edu>) is a database that reports publications in 24 leading business journals (see Table 1). It covers the period between 1990 and the present, and is being updated on a *continuing* basis as new research is published. It produces two rankings—North America and worldwide.

Single-authored paper is counted as one publication for a university, and research contributed by more than one author is weighted by the number of authors in the paper. As such, the rankings can reflect universities’ academic output in an accurate, objective manner. These rankings are not adjusted for faculty size, due to the difficulties in accurately measuring faculty size.

The database is highly interactive and flexible. It not only allows users to get the list of particular journals (such as operations management journals), but also enables researchers to sort out the publication of a university, a scholar, or a particular title (“SEARCH” by school name, author name, and article title, respectively). To get the first top 100 rankings listed in Appendix 2 (1990),

1. Go to “Rankings by journal,” and select “check all journals” (any single journal or any combination of the 24 journals can also be selected)
2. Select time “from 1990” and “to 1990” (it is possible to select any year or any combination of certain years since 1990)
3. Click “worldwide” (the other alternative is “North America”)

Appendix 2

UTD Top 100 Business School Research Worldwide Rankings™

1990	2006	1990–2006
1. U. of Pennsylvania	1. U. of Pennsylvania	1. U. of Pennsylvania
2. U. of Texas at Austin	2. New York U.	2. New York U.
3. U. of Michigan	3. Duke U.	3. U. of Michigan
4. U. of Chicago	4. U. of Maryland	4. Columbia U.
5. New York U.	5. U. of Michigan	5. Harvard U.
6. Harvard U.	6. Harvard U.	6. U. of Chicago
6. Duke U.	7. U. of Chicago	7. MIT
8. Stanford U.	8. MIT	8. U. of Texas at Austin
9. Northwestern U.	9. Columbia U.	9. U. of California, Los Angeles
10. MIT	10. U. of Texas at Austin	10. Stanford U.
11. Columbia U.	11. U. of Minnesota	11. Northwestern U.
12. U. of Minnesota	12. Northwestern U.	12. Duke U.
13. U. of California, Los Angeles	13. U. of Southern California	13. U. of Southern California
14. Ohio State U.	14. Indiana U. at Bloomington	14. U. of Minnesota
15. U. of Washington	15. INSEAD	15. Pennsylvania State U.
16. U. of Wisconsin—Madison	16. Stanford U.	16. U. of Washington
16. Arizona State U.	17. U. of Texas at Dallas	17. U. of Maryland
18. U. of British Columbia	18. Pennsylvania State U.	18. U. of North Carolina
19. U. of Southern California	19. U. of Illinois at Urbana-Champaign	19. Carnegie Mellon U.
20. U. of Rochester	20. U. of Florida	20. Ohio State U.
21. U. of Arizona	21. Michigan State U.	21. INSEAD
22. Purdue U.	22. U. of California, Los Angeles	22. U. of Illinois at Urbana-Champaign
23. U. of California, Berkeley	23. U. of North Carolina	23. U. of California, Berkeley
24. U. of Florida	24. U. of Pittsburgh	24. Purdue U.
25. U. of Houston	25. Arizona State U.	25. Indiana U. at Bloomington
25. Texas A&M U.	26. Cornell U.	26. Arizona State U.
25. Cornell U.	27. Hong Kong U. of Science and Technology	27. U. of Florida

(continued)

1990	2006	1990–2006
28. Dartmouth College	28. U. of California, Berkeley	28. Michigan State U.
29. Pennsylvania State U.	28. U. of Washington	29. U. of Wisconsin—Madison
29. U. of Illinois at Urbana-Champaign	30. U. of California, Davis	30. Cornell U.
31. U. of Colorado at Boulder	30. U. of Iowa	31. U. of California, Irvine
32. U. of Pittsburgh	32. U. of South Carolina	32. Washington U.
33. Indiana U. at Bloomington	33. Washington U.	33. U. of Rochester
34. Rutgers U.	34. Carnegie Mellon U.	34. Emory U.
34. Southern Methodist U.	35. Emory U.	35. London Business School
36. Louisiana State U.	36. Dartmouth College	36. U. of British Columbia
36. McGill U.	37. Ohio State U.	37. Texas A&M U.
36. U. of North Carolina	38. U. of Wisconsin—Madison	38. U. of South Carolina
36. Virginia Tech	39. Yale U.	39. Hong Kong U. of Science and Technology
40. U. of South Carolina	40. U. of British Columbia	40. Rutgers U.
41. Carnegie Mellon U.	40. London Business School	41. U. of Pittsburgh
42. U. of Iowa	42. U. of Toronto	42. U. of Arizona
43. CUNY Baruch College	43. Purdue U.	43. Yale U.
44. Yale U.	44. Southern Methodist U.	44. Dartmouth College
45. U. of Maryland	45. Georgia Tech	45. U. of Texas at Dallas
46. U. of Utah	46. Boston College	46. U. of Notre Dame
47. U. of Georgia	47. Texas A&M U.	47. U. of Western Ontario
47. Tel Aviv U.	47. U. of California, Irvine	48. U. of Iowa
47. Case Western Reserve U.	49. U. of Rochester	49. Case Western Reserve U.
47. London Business School	50. Tulane U.	50. Boston College
51. U. of California, Irvine	51. Georgia State U.	51. U. of Colorado at Boulder
51. Vanderbilt U.	52. Brigham Young U.	52. Vanderbilt U.
53. SUNY at Buffalo	53. U. of Notre Dame	53. Georgia State U.
54. Florida State U.	54. U. of Arizona	54. Southern Methodist U.
55. Northeastern U.	54. Rutgers U.	55. U. of Toronto
56. North Carolina State U.	56. U. of California, Riverside	56. U. of Georgia
57. U. of Oklahoma	57. U. of Miami	57. U. of Utah
58. U. of Connecticut	58. U. of Western Ontario	58. U. of Connecticut
59. Boston U.	59. Rice U.	59. Boston U.
59. U. of Notre Dame	60. Boston U.	60. Georgetown U.
59. U. of New South Wales	60. Case Western Reserve U.	61. U. of Houston
59. U. of Texas at Arlington	62. National U. of Singapore	62. CUNY Baruch College
63. U. of Toronto	63. U. of Georgia	63. U. of Cincinnati
64. Boston College	64. U. of Cincinnati	64. U. of Miami
64. INSEAD	65. CUNY Baruch College	65. McGill U.
66. American U.	65. U. of Melbourne	66. Georgia Tech
66. Universite Laval	65. U. of Utah	67. U. of Oregon
66. U. of Alberta	68. Vanderbilt U.	68. Virginia Tech
66. U. of Tennessee at Knoxville	69. McGill U.	69. Tulane U.
70. U. of Texas at Dallas	69. U. of Houston	70. National U. of Singapore
70. York U.	69. U. of Calgary	71. Tilburg U.
70. U. of Missouri at Columbia	72. York U.	72. SUNY Buffalo
70. Emory U.	73. U. of Alberta	73. Louisiana State U.
70. Oklahoma State U.	74. U. of Colorado at Boulder	74. U. of California, Davis
75. Georgia State U.	75. Georgetown U.	75. Temple U.
75. Texas Tech U.	76. Washington State U.	76. U. of Oklahoma
75. Santa Clara U.	77. U. of Oklahoma	77. U. of Alberta
78. San Jose State U.	78. U. of New South Wales	78. Tel Aviv U.
78. U. of Baltimore	78. Nanyang Technological U.	79. Brigham Young U.
80. Baylor U.	80. HEC Montreal	80. U. of Wisconsin—Milwaukee
81. Hebrew U. of Jerusalem	81. U. of Central Florida	81. Rice U.
81. U. of Cincinnati	82. SUNY Buffalo	82. Florida State U.

(continued)

1990	2006	1990–2006
81. U. of Delaware	82. Copenhagen Business School	83. Washington State U.
81. U. of Massachusetts	84. Erasmus U. Rotterdam	84. U. of New South Wales
81. U. of Warwick	84. Temple U.	85. U. of Virginia
81. U. of Wisconsin—Milwaukee	84. Hong Kong Polytechnic U.	86. U. of Delaware
81. Wayne State U.	84. U. of Oregon	87. Erasmus U. Rotterdam
88. Marquette U.	88. U. of Texas at Arlington	88. U. of Missouri at Columbia
89. U. of Oregon	89. Tilburg U.	89. Santa Clara U.
90. Texas Christian U.	90. U. of Connecticut	90. York U.
91. Temple U.	90. Bentley College	91. U. of Kentucky
91. HEC	90. Imperial College	92. Chinese U. of Hong Kong
91. U. of Virginia	93. U. of Kentucky	93. Florida International U.
91. Washington State U.	94. U. of Illinois at Chicago	94. U. of Colorado at Denver
95. La Salle U.	94. Indiana U. at Indianapolis	95. Syracuse U.
95. Brock U.	94. Lancaster U.	96. U. of Illinois at Chicago
95. College of William and Mary	97. Marquette U.	97. Hebrew U. of Jerusalem
95. Georgia Tech	98. HEC	98. Nanyang Technological U.
95. Concordia U.	98. George Mason U.	99. U. of Calgary
95. U. of Illinois at Chicago	100. Clemson U.	100. U. of Arkansas

Source: Adapted from search results from <http://top100.utdallas.edu>. See search procedures described in Appendix 1. **Bold** typeface indicates an Asia Pacific business school. Used with permission from Dean Hasan Pirkul, School of Management, University of Texas at Dallas.

References

- Agrawal, A., & Cockburn, I. 2003. The anchor tenant hypothesis: Exploring the role of large, local, R&D-intensive firms in regional innovation systems. *International Journal of Industrial Organization*, 21: 1227–1253.
- Armstrong, J. S. 1995. The Devil's advocate responds to an MBA student's claim that research harms learning. *Journal of Marketing*, 59: 101–106.
- Au, K. 2007. Self-confidence does not come isolated from the environment. *Asia Pacific Journal of Management*, 24: 491–496.
- Baden-Fuller, C., Ravazzolo, F., & Schweizer, T. 2000. Making and measuring reputations: The research rankings of European business schools. *Long Range Planning*, 33: 621–650.
- Brouthers, K. D., Mudambi, R., & Reeb, D. M. 2005. The homerun hypothesis: Influencing the boundaries of knowledge. Working paper available at SSRN: <http://ssrn.com/abstract=1015588>.
- Carlsson, B., & Mudambi, R. 2003. Globalization, entrepreneurship and public policy: A systems view. *Industry and Innovation*, 10: 103–116.
- Chan, K. C., Fung, H. G., & Lai, P. 2005. Membership of the editorial boards and rankings of schools with international business orientation. *Journal of International Business Studies*, 36: 452–469.
- Chan, K. C., Chen, C. R., & Cheng, L. T. W. 2006. A ranking of accounting research output in the European region. *Accounting and Business Research*, 36: 3–17.
- Ehrenberg, R. 2005. Going broke by degree: A review essay. *Journal of Labor Research*, 26: 739–752.
- Gioia, D. A., & Corley, K. G. 2002. Being good versus looking good: Business school rankings and the Circean transformation from substance to image. *Academy of Management Learning & Education*, 1: 107–120.
- Harzing, A. 2005. Australian research output in economics and business: High volume, low impact? *Australian Journal of Management*, 30: 183–200.
- Hofstede, G. 2007. Asian management in the 21st century. *Asia Pacific Journal of Management*, 24: 411–420.
- Kumar, V., & Kundu, S. K. 2004. Ranking the international business schools: Faculty publications as the measure. *Management International Review*, 44: 213–228.
- Lau, C. M. 2007. The first decade of the Asia Academy of Management. *Asia Pacific Journal of Management*, 24: 401–410.
- Leung, K. 2007. The glory and tyranny of citation impact: An East Asian perspective. *Academy of Management Journal*, 50: 510–513.

- Li, Y., & Peng, M. W. 2008. Developing theory from strategic management research in China. *Asia Pacific Journal of Management*, 25 (in press).
- Meyer, K. E. 2006. Asian management research needs more self-confidence. *Asia Pacific Journal of Management*, 23: 119–137.
- Meyer, K. E. 2007. Asian contexts and the search for general theory in management research: A rejoinder. *Asia Pacific Journal of Management*, 24: 527–534.
- Meyer, K. E., & Peng, M. W. 2005. Probing theoretically into Central and Eastern Europe: Transactions, resources, and institutions. *Journal of International Business Studies*, 35: 600–621.
- Mudambi, R., & Navarra, P. 2004. Is knowledge power? Knowledge flows, subsidiary power and rent-seeking within MNCs. *Journal of International Business Studies*, 35: 385–406.
- Peng, M. W. 2005. From China strategy to global strategy. *Asia Pacific Journal of Management*, 22: 123–141.
- Peng, M. W. 2007. Celebrating 25 years of Asia Pacific management research. *Asia Pacific Journal of Management*, 24: 385–393.
- Peng, M. W., & Zhou, J. Q. 2006. Most cited articles and authors in global strategy research. *Journal of International Management*, 12: 490–508.
- Pleggenkuhle-Miles, E. G., Aroul, R. R., Sun, S. L., & Su, Y. S. 2007. The adolescence of Asia management research: *APJM*, 1997–2006. *Asia Pacific Journal of Management*, 24: 467–489.
- Pocklington, T., & Tupper, A. 2002. *No place to learn: Why universities aren't working*. Vancouver: University of British Columbia Press.
- Pomfret, R., & Wang, C. W. 2003. Evaluating the research output of Australian universities' economics departments. *Australian Economic Papers*, 42: 418–441.
- Quer, D., Claver, E., & Rienda, L. 2007. Business and management in China: A review of empirical research in leading international journals. *Asia Pacific Journal of Management*, 24: 359–384.
- Ramaswamy, K. 2007. Asian management research needs broader initiatives and focused incentives. *Asia Pacific Journal of Management*, 24: 519–525.
- Robinson, P. 1994. *Snapshots from hell*. New York: Warner Books.
- Schmotter, J. W. 2001. Making sense of the rankings. *Selections*, 1: 2.
- Schramm, C. J. 2006. The broken MBA. *Chronicle of Higher Education*, 52: B16.
- Siemens, J., Burton, S., Jensen, T., & Mendoza, N. 2005. An examination of the relationship between research productivity in prestigious business journals and popular press business school rankings. *Journal of Business Research*, 58: 467–476.
- Tracy, J., & Waldfogel, J. 1997. The best business schools: A market-based approach. *Journal of Business*, 70: 1–31.
- Trieschmann, J. S., Dennis, A. R., Northcraft, G. B., & Niemi Jr., A. W. 2000. Serving multiple constituencies in business schools: M.B.A. program versus research performance. *Academy of Management Journal*, 43: 1130–1141.
- Xu, S., Yalcinkaya, G., & Seggie, S. 2008. Prolific authors and institutions in leading international business journals. *Asia Pacific Journal of Management*, 25 (in press).
- Yang, X., & Terjesen, S. 2007. In search of confidence: Context, collaboration, and constraints. *Asia Pacific Journal of Management*, 24: 497–507.

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