

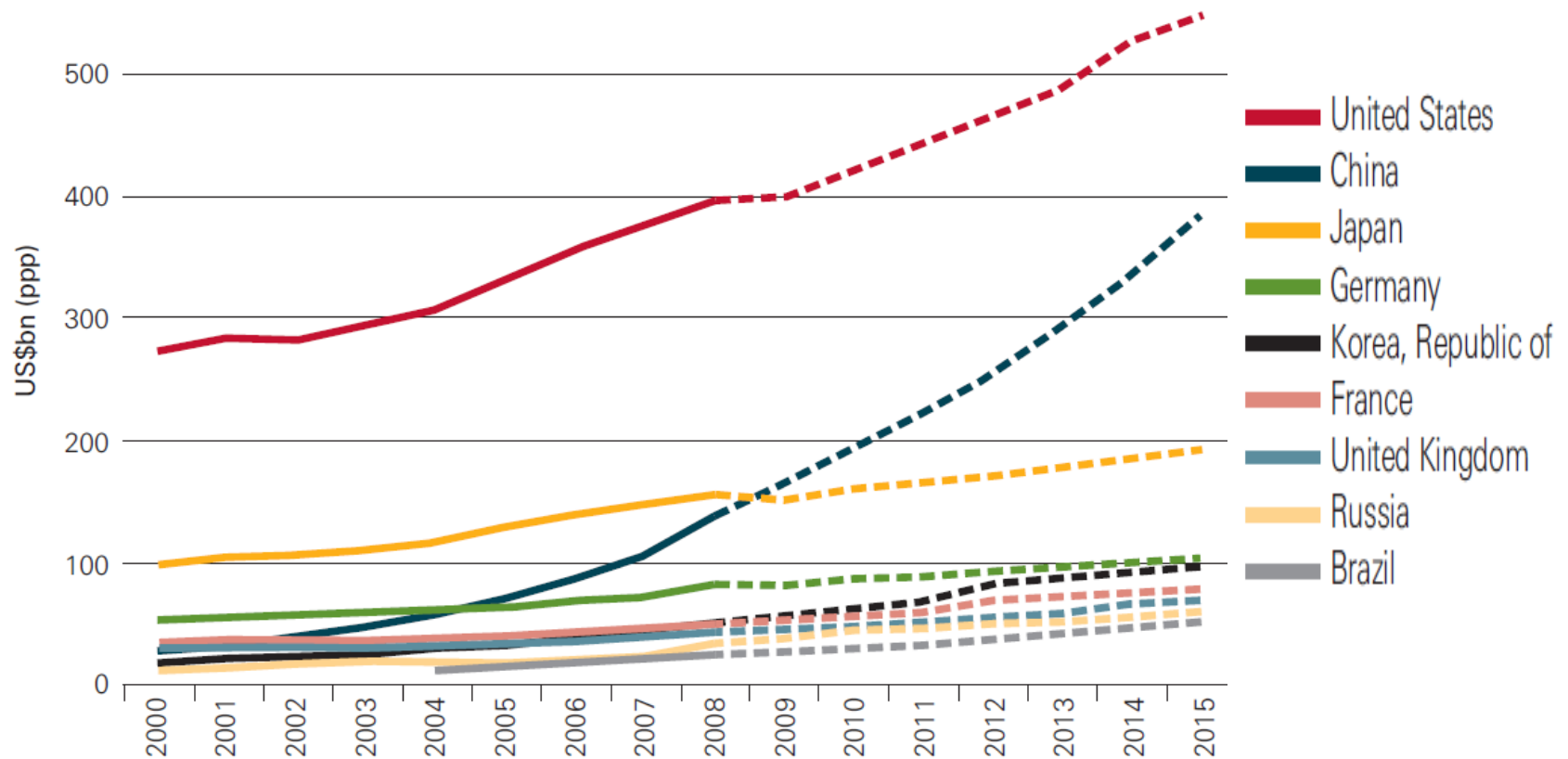
Can pre-submission editing services help expedite peer review of research manuscripts?

JINWON KO

[Sales & Marketing Manager, Academia]

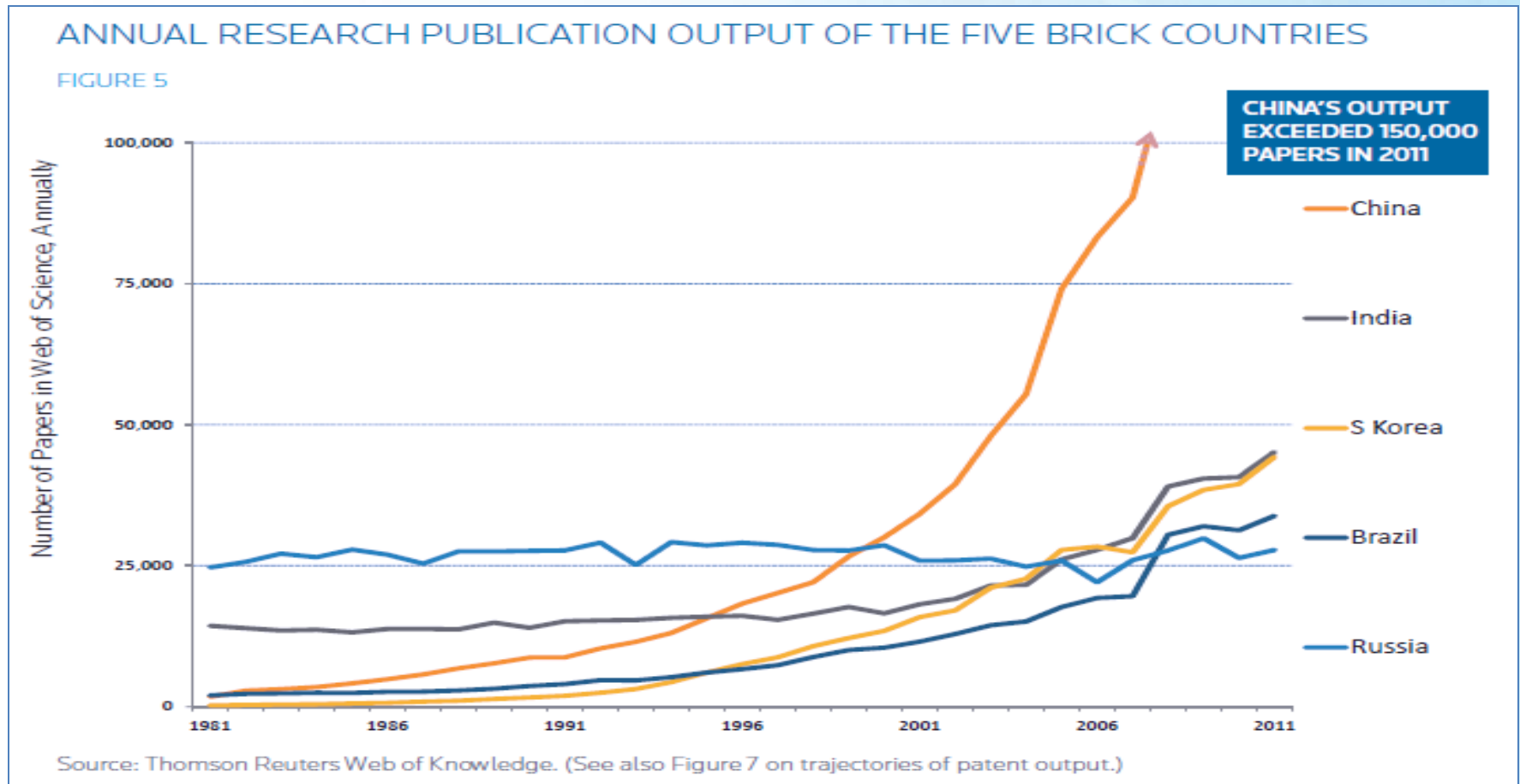
Increasing global expenditure on R&D

R&D spending, selected countries (2000-2015)



From *Knowledge, Networks, and Nations*, Royal Society of London, 2011

Increasing research output from non-English speaking countries



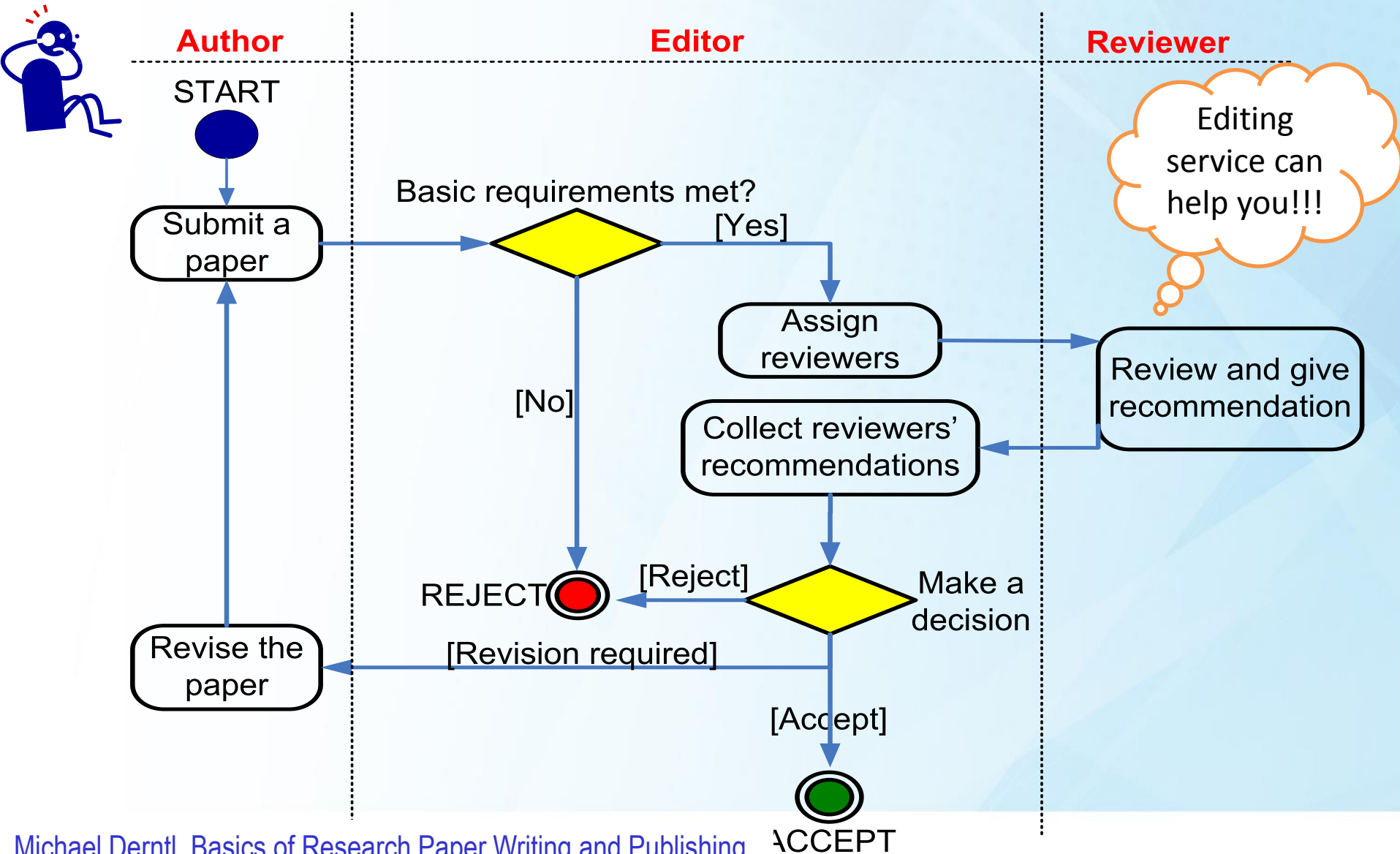
From J. Adams, D. Pendlebury, B. Stembridge, *Building Bricks: Exploring the Global Research and Innovation Impact of Brazil, Russia, India, China, and South Korea*, Thomson Reuters, 2013

Why is peer review so slow?

- Difficulty identifying peer reviewers
- Difficulty in getting peer reviewers to agree and respond on time
- Reviewers spending too much time commenting on basic language and presentation issues in manuscripts?



A General Peer-Review Process



Can pre-submission editing reduce the burden on peer-reviewers?

- Are there any specific errors peer reviewers most frequently point out in manuscripts of non-native-English-speaking (**NNES**) authors?
- Can these errors be fixed before journal submission through editing services?

Analysis of 'Editage' Editing Service : Study design and methods

We analyzed 1035 peer reviewer comments in 72 manuscripts written by NNES authors

All sampled manuscripts

- Were original research articles
- Were sent to Editage, Cactus Communications—a company that offers English editing and publication support services—after receiving peer reviewer comments from the journal.

The following comments were excluded (n = 560) :

- Those pertaining to study design
- Those indicating basic oversights or typographical errors
- Those seeking clarification
- Those expressing the reviewer's subjective opinion
- Those where the reviewer's rationale was not clear



The remaining comments related to study reporting (n = 475) were classified according to the error category and manuscript section.

Error categories

- Inappropriate title
- Inadequate literature review
- Inaccurate reporting
- Incomplete reporting
- Inconsistent reporting
- Unclear reporting
- Redundancy and wordiness
- Structural organization
- Inadequate discussion
- Stylistic conventions
- Grammar and writing quality

Manuscript sections

- Title
- Abstract
- Introduction
- Methods
- Results
- Discussion
- Figures and tables
- References



The correlation between specific error categories and manuscript sections was analyzed using Spearman rank correlation analysis, with significance set at $p < 0.05$.

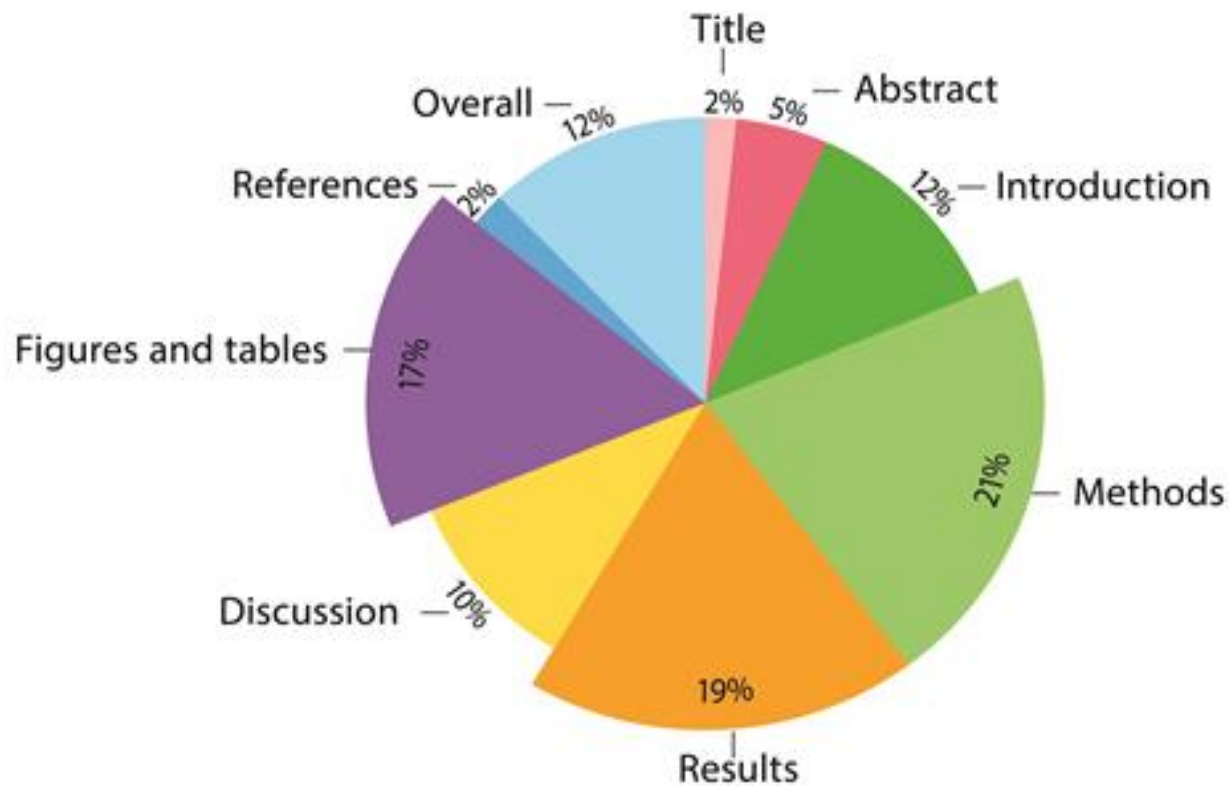
Editage's case analysis : Research results 1/3 – Error Categories

Fig. 1. Distribution of error categories pointed out by peer reviewers



Editage's case analysis : Research results 2/3 - Manuscript

Fig. 2. Distribution of manuscript sections pointed out by peer reviewers



Editage's case analysis : Research results 3/3

Figure 3. Correlation between error categories and manuscript sections

Error category	Title	Abstract	Introduction	Methods	Results	Discussion	Figures & tables	References	Overall	Total
Inappropriate title	5*									5
Inadequate literature review			15*	1	1	3		4	4	28
Inaccurate reporting	1	4	7	5	8	2	4	2	8	41
Incomplete reporting		9	10	33	22	6	38*		4	122
Inconsistent reporting		1	1	2	5	3	10*	2	7	31
Unclear reporting		3	7	24*	21*	5	10		2	72
Redundancy and wordiness			7	8	10	5	13*		3	43
Structural organization				2	8*	7*			5	22
Inadequate discussion						7*				7
Stylistic conventions		1	1	3	2		3	1	9*	20
Grammar and writing quality	2	6	12	22	12	11	3		16*	84
Total	8	24	57	100	89	49	81	9	58	475

Note: Numbers indicate the number of comments; asterisks indicate significance at $p < 0.05$.

Common issues reported by peer reviewers

- Vague/inadequate method description
- Poor organization
- Too long and verbose
- Failure to communicate clearly
- Poor grammar, syntax, or spelling
- Poorly written abstract
- Repetition of text in the results and tables

All these can be fixed by editing services before submission to a journal!

Conclusions

- In addition to improving the overall grammar and writing quality of manuscripts, editing services should focus on reducing the following errors:
 - ✓ Incomplete reporting, inconsistent reporting, and redundancy in figures and tables
 - ✓ Unclear reporting in the methods and results
 - ✓ Structural organization in the results and discussion
- Thus, editing services can substantially improve manuscripts before journal submission
- This will allow peer reviewers to focus on study design and novelty instead of basic language and presentation
- This will reduce the burden on peer reviewers and may help expedite the peer review process