



# DEVELOPMENT ENGINEERING

The Journal of Engineering in Economic Development

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### DESCRIPTION

**Development Engineering (Dev Eng)** is an open access, interdisciplinary journal applying engineering and economic research to the problems of poverty. Published studies must present novel research motivated by a specific global development problem. The journal serves as a bridge between engineers, economists, and other scientists involved in research on human, social, and economic development.

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Specific topics include:

- Engineering research in response to unique constraints imposed by poverty.
- Assessment of pro-poor technology solutions, including field performance, consumer adoption, and end-user impacts.
- Novel technologies or tools for measuring behavioral, economic, and social outcomes in low-resource settings.
- Hypothesis-generating research that explores technology markets and the role of innovation in economic development.
- Lessons from the field, especially null results from field trials and technical failure analyses.
- Rigorous analysis of existing development "solutions" through an engineering or economic lens.

Although the journal focuses on quantitative, scientific approaches, it is intended to be suitable for a wider audience of development practitioners and policy makers, with evidence that can be used to improve decision-making. It also will be useful for engineering and applied economics faculty who conduct research or teach in "technology for development."

The journal maintains high standards for publication, in terms of methodological rigor and contribution to the literature. It prioritizes novel, experimental work that directly integrates engineering research with statistically rigorous methods from the social sciences. The Editors will consider review articles that cover significant, emerging trends in engineering for global development. Published papers are expected to be applied in nature; however, they should generate fundamental knowledge that advances basic fields of science and engineering. Additionally, Dev Eng editors recognize that there is

a lack of high-quality work from researchers in developing countries published in leading international journals. To encourage and facilitate submissions from authors in low to middle income countries, the journal will offer mentorship support to help authors overcome barriers such as language differences, writing skills and familiarity with the publishing process.

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## ABSTRACTING AND INDEXING

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## GUIDE FOR AUTHORS

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### INTRODUCTION

Before you submit your paper, please read below the criteria that the journal uses to assess whether a paper is suitable for review and possible publication

#### *Review Guidelines*

The mandate of Development Engineering is to showcase research on innovations, in particular, innovative technologies that are improving welfare in developing countries, as well as novel measurement tools that are improving the quality and relevance of empirical data. Although the journal focuses on quantitative, scientific approaches, it is intended to be suitable for a wider audience of development practitioners, innovators, and policy makers, with evidence that can be used to improve decision-making.

The journal maintains high standards for publication, in terms of methodological rigor and contribution to the literature. It prioritizes novel, experimental work that directly integrates engineering research with statistically rigorous methods from the social sciences. The Editors will consider review articles that cover significant, emerging trends in engineering for global development. Editors will also consider design innovation papers that rigorously demonstrate new technologies or approaches within developing country contexts.

Please use the questions below to guide your review of manuscripts. Provide detailed justifications and explanations for your assessments, including positive and negative aspects of the submission.

**TOPICS:** Engineering research advances that respond to the unique constraints imposed by poverty. Assessment of pro-poor technology solutions, including field performance, consumer adoption, and end-user impacts. Novel technologies, tools, or strategies for measuring behavioral, economic, and social outcomes in low-resource settings. Hypothesis-generating research that explores technology markets and the role of innovation in economic development. Lessons from the field, especially null results from field trials and technical failure analyses. Rigorous analysis of existing technological development "solutions" through an engineering or economic lens.

To be accepted for publication, a manuscript should meet a reasonable subset of the following criteria though, the first five are non-negotiable.

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**Is the research or analysis technically sound? Does the research directly respond to some aspect of the global development challenge? Does the submission provide adequate references to, and anchoring in, the existing literature? Does the submission fall within one or more of the research areas listed above? Is the research technically innovative, or does it otherwise advance existing knowledge by providing novel perspectives or integration?** Does the work integrate technology or engineering research with statistically rigorous methods from the social sciences? Do the authors utilize rigorous, transparent, and reproducible research methods? Is the research part of a significant, emerging trend in research on global development? Does the manuscript generate knowledge that advances the relevant fields of science and engineering for improved application to a development problem? Is the work suitable for a wider audience of development practitioners and policy makers, in addition to engineering and applied economics faculty?

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Is the lead author from a low- or middle-income country? Is this manuscript suitable for mentorship by a senior researcher in an established lab or group? Would mentoring help the authors overcome barriers such as framing, writing skills, and familiarity with the publishing process?

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You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

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#### *Introduction*

State the objectives of the work and provide an adequate background, avoiding a detailed literature survey or a summary of the results.

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Provide sufficient detail to allow the work to be reproduced. Methods already published should be indicated by a reference: only relevant modifications should be described.

#### *Theory/calculation*

A Theory section should extend, not repeat, the background to the article already dealt with in the Introduction and lay the foundation for further work. In contrast, a Calculation section represents a practical development from a theoretical basis.

#### *Results*

Results should be clear and concise.

#### *Discussion*

This should explore the significance of the results of the work, not repeat them. A combined Results and Discussion section is often appropriate. Avoid extensive citations and discussion of published literature.



### Conclusions

The main conclusions of the study may be presented in a short Conclusions section, which may stand alone or form a subsection of a Discussion or Results and Discussion section.

### Appendices

If there is more than one appendix, they should be identified as A, B, etc. Formulae and equations in appendices should be given separate numbering: Eq. (A.1), Eq. (A.2), etc.; in a subsequent appendix, Eq. (B.1) and so on. Similarly for tables and figures: Table A.1; Fig. A.1, etc.

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Reference to a book:

Strunk Jr, W., White, E.B., 2000. *The Elements of Style*, fourth ed. Longman, New York.

Reference to a chapter in an edited book:

Mettam, G.R., Adams, L.B., 2009. How to prepare an electronic version of your article, in: Jones, B.S., Smith, R.Z. (Eds.), *Introduction to the Electronic Age*. E-Publishing Inc., New York, pp. 281–304.

Reference to a website:

Cancer Research UK, 1975. Cancer statistics reports for the UK. <http://www.cancerresearchuk.org/aboutcancer/statistics/cancerstatsreport/> (accessed 13.03.03).

Reference to a dataset:

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