Formatting PICMET Papers: Papers for Proceedings Vol. 1: Book of Summaries and Vol. 2: CD-ROM

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Abstract-The final formatting of the papers will be done by the PICMET staff. However, some formatting is necessary before the PICMET staff finalizes it. These instructions will give you basic guidelines for that initial formatting. This document has the same look as the paper should have when it is sent to PICMET by March 1. Please use Times New Roman or an equivalent font. The title of the paper should be bold, 14 pt. type, centered on the page. The authors' names should be separated with commas, using 12 pt. type. The authors' affiliations and mailing addresses should be in 10 pt. type. The abstract should be bold, 9 pt. type. Please use upper- and lower-case letters for the title, authors and affiliations/mailing addresses. Do not use authors' titles such as Dr., Prof., etc., and do not give e-mail address. Also, do not cite references in the abstract, and do not exceed the equivalent of 30 double-spaced pages for the full paper.

I. INTRODUCTION

The section titles such as "INTRODUCTION" should be upper case and centered in the page, using 11 pt. type. The main body of the text, including the *italicized* subheadings, should be in 10 pt. type. Your paper will simulate the usual appearance of the papers in *IEEE Transactions on Engineering Management*. One difference is that the authors' affiliations should appear below their names. If there are multiple authors, each name should have a superscript, and the information about each author should be given with the associated superscript as shown above, unless all authors have the same address. In that case, the common address is given without using superscripts.

A. Type sizes and typefaces

Please prepare the manuscript in Microsoft Word format, using the font sizes listed in Table I.

TABLE I TYPE SIZES FOR PICMET PAPERS

Type Size ^a

- 8 TABLE CAPTIONS (UPPER CASE, centered), references, tables, figure captions (centered), footnotes, text subscripts and superscripts
- 9 Abstract (bold)
- 10 Authors' affiliations, main text, *subheadings (italics)*, equations
- 11 Section titles (UPPER CASE)
- 12 Authors' names
- 14 Paper title (bold, upper and lower case)

This work has been conducted under a grant from PICMET (Portland International Conference on Management of Engineering and Technology).

^a Type size is given in points.

II. HELPFUL HINTS

A. Figures and Tables

Figure captions should be below the figures; table captions should be above the tables. Avoid placing figures and tables before their first mention in the text. Use the abbreviation "Fig. 1" even at the beginning of a sentence. Figure axis labels are often a source of confusion. Try to use words rather than symbols. Figure labels should be legible, using 8 point type.

B. References

Number the citations consecutively in alphabetical order using the first author's last name. Use square brackets for citations [1]. The sentence punctuation follows the brackets [2]. Refer simply to the reference number, as in [5]. Do not use "Ref. [5]" or "reference [5]" except at the beginning of a sentence: "Reference [3] was the first..."

Number footnotes separately in superscripts¹. Place the actual footnote at the bottom of the page in which it is cited. Do not put footnotes in the reference list. Use letters for table footnotes (see Table I). Use the referencing style used in the *IEEE Transactions*. Note that it is quite different from that used by most other journals. For example, use "IEEE Trans. Eng. Mgmt., Vol. 25," not "vol. EM 25."

Give all authors' names; do not use "et al." unless there are six or more authors. Papers that have not been published, even if they have been submitted for publication, should be cited as "unpublished" [3]. Papers that have been accepted for publication should be cited as "in press" [4]. Capitalize only the first word in a paper title and subtitle except for proper nouns. Working papers should be cited as "working papers" [6].

C. Abbreviations and Acronyms

Define abbreviations and acronyms the first time they are used in the text, even after they have been defined in the abstract. Abbreviations such as PICMET, IEEE, USA, and MOT do not have to be defined. Do not use abbreviations in the title unless they are unavoidable (for example, "PICMET" in the title of this article).

D. Equations

Number equations consecutively with equation numbers in parentheses flush with the right margin. Italicize Roman symbols for quantities and variables, but not Greek symbols. Use parentheses and brackets to avoid ambiguities, as in

Minimize
$$Z = P_1 \left(d_1^- + d_1^+ \right)$$

 $+ P_2 \left[\sum_{i=1}^{m-1} w_i d_i^- \right] + P_3 \left(d_m^- + d_m^+ \right)$ (1)

subject to
$$x_n - x_1 + d_1^- + d_1^+ = \Omega$$
 (2)

$$x_k - x_j + d_i^- + d_i^+ = \pi_{jk}$$
 (for all k, j and i) (3)

$$x_n - x_1 + d_m^- + d_m^+ = 0 (4)$$

Be sure that the symbols in your equation have been defined before or immediately after the equation appears. Use "(1)," not "Eq. (1)" or "equation (1)," except at the beginning of a sentence: "Equation (1) is ..."

¹It is recommended that footnotes be avoided. Instead of using footnotes, try to integrate the footnote information into the text.

E. Other Recommendations

The Roman numerals used to number the section headings are optional. If you do use them, number INTRODUCTION but not ACKNOWLEDGMENT and REFERENCES, and begin subheadings with letters. Use two spaces after periods (full stops). Avoid dangling participles, such as, "Using (1), the potential was calculated." Write instead, "The potential was calculated using (1)," or "Using (1), we calculated the potential." Use a zero before decimal points: "0.25," not ".25" If your native language is not English, try to get a native English-speaking colleague to proofread your paper. Number the *back* of each page, by hand, at the top, right-hand corner as "1 of 3," "2 of 3," etc.

The word "data" is plural, not singular. The subscript for the Null Hypothesis is zero, not a lowercase letter "o." In American English, periods and commas are within quotation marks, like "this period." A parenthetical statement at the end of a sentence is punctuated outside of the closing parenthesis (like this). (A parenthetical *sentence* is punctuated within the parentheses.) A graph within a graph is an "inset," not an "insert." The word "alternatively" is preferred to the word "alternately" (unless you really mean something that alternates). Do not use the word "essentially" to mean "approximately" or "effectively." Be aware of the different meanings of the homophones "affect" and "effect," "complement" and "compliment," "discreet" and "discrete," "principal" and "principle." Do not confuse "imply" and "infer." The prefix "non" is not a word; it should be joined to the word it modifies, usually without a hyphen. There is no period after the "et" in the Latin abbreviation "et al." The abbreviation "i.e." means "that is," and the abbreviation "e.g." means "for example." An excellent style manual and source of information for science writers is [7].

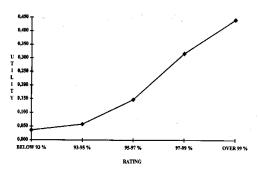


Fig. 1. The utility curve of reliability. (Note how the caption, "RATING," is centered in the column.)

ACKNOWLEDGMENT

The preferred spelling of the word "acknowledgment" in America is without an "e" after the "g." Try to avoid the stilted expression, "One of us (R.B.G.) thanks..." Instead, try "R.B.G. thanks..." Put sponsor acknowledgments in the unnumbered footnote on the first page.

REFERENCES

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- [5] J. K. Pinto and D. P. Slevin, "Critical success factors in R&D projects," Res. Technol. Management, pp. 30-35, Jan./Feb. 1989.
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- [7] M. Young, The Technical Writer's Handbook. Mill Valley, CA: University Science, 1989.