Guidelines for Papers for the ORSNZ Conference

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Abstract

This document provides style guidelines for papers submitted to the annual ORSNZ Conference.

Guidelines for ORSNZ Conference papers include fonts and margins, section headings and numbering, diagrams, tables, and images, math models, submission format, and references.

Word users can use this document as the basis for their article. Those using other word processers should follow these guidelines as closely as possible.

Place a solid line above and below the abstract, with the word "Abstract" centred in 14-point font bold. The abstract body should be even-justified in 12-point font, using a line spacing of "at least" 15 points. If you cannot get 15 point line spacing, please use single spacing.

Key words: An optional comma separated list of list of key words formatted as per the abstract body can be included. This list (if present) is to be preceeded by the words "Key words:" in bold.

1 Layout Guidelines

Layout guidelines for ORSNZ Conference papers include fonts and margins, section headings and numbering.

1.1 Fonts and margins

All fonts (including fonts in graphics, where possible) should be Times Roman or Computer Modern. Avoid all capitals, which slow reader comprehension. Do *not* use underlining. Use italics if the text requires emphasis.

Centre the title in 24-point font. Centre author names and contact details, in 12-point font, and separate from the title by one line.

Format your file for A4 paper with a 2cm margin at the top and bottom, and 3 cm margins at left and right (to leave room for binding). Do not number the pages; the editor will number the entire Proceedings. Papers (including abstracts, tables, figures and references) are restricted to no more than 10 pages when printed.

1.2 Section headings and numbering

Each section should be named and numbered in the "1.1" format. Major section titles should be 14-point bold. There should be a 12-point space above and a 6-point space below each section title (or 1 line above and below if you can't achieve this).

Sub-section titles should be 12-point bold. There should be a 6-point space above and a 6-point space below each sub-section title (or 1 line above and below if you can't achieve this).

The body text should be 12-point font on a line of 15 points, left justified. (If you cannot get 15 point spacing, use single line spacing.) Indent paragraphs by 6mm. Do not have extra space above or below the paragraph. Do not indent the first paragraph after a heading.

Avoid footnotes.

2 Diagrams, tables, and images

2.1 Diagrams and tables

The best reference on scientific graphics is Tufte (1983).

Diagrams and tables should be centred, in-line with the text, as near to the first point of reference as reasonably possible, as illustrated by Figures 1 and 2. As much as possible, text in tables and graphics should be 12 point Times Roman or Computer Modern. Captions should be in 12-point font, centred, and consecutively numbered and, below the figures and above the tables.

If you use Excel charts you can improve Excel's default charts by removing the frame, the grid, and the grey background. Before you paste an Excel chart into Word, while still in Excel, set the chart's font to Times New Roman, Regular (not bold), 12 points, with Autoscale turned off. Make all text in the graph read from left to right (orientation of zero degrees), including the label on the y-axis.
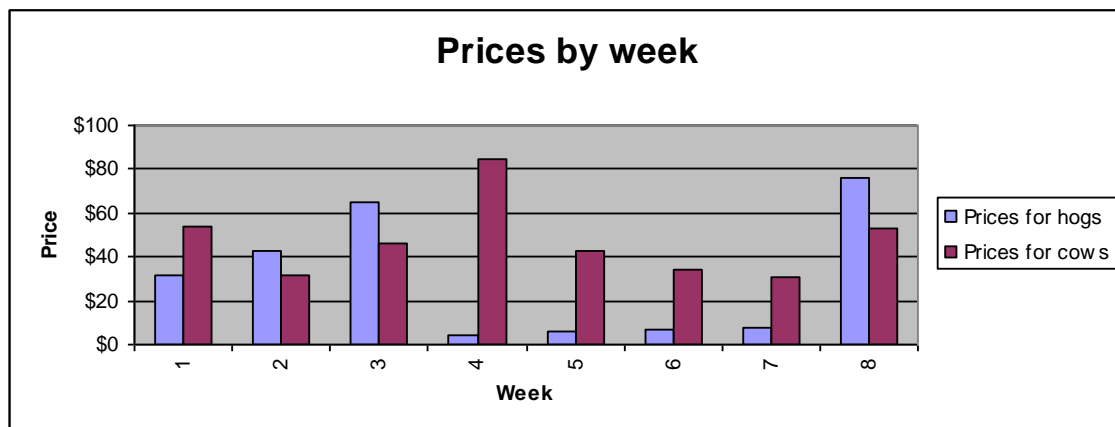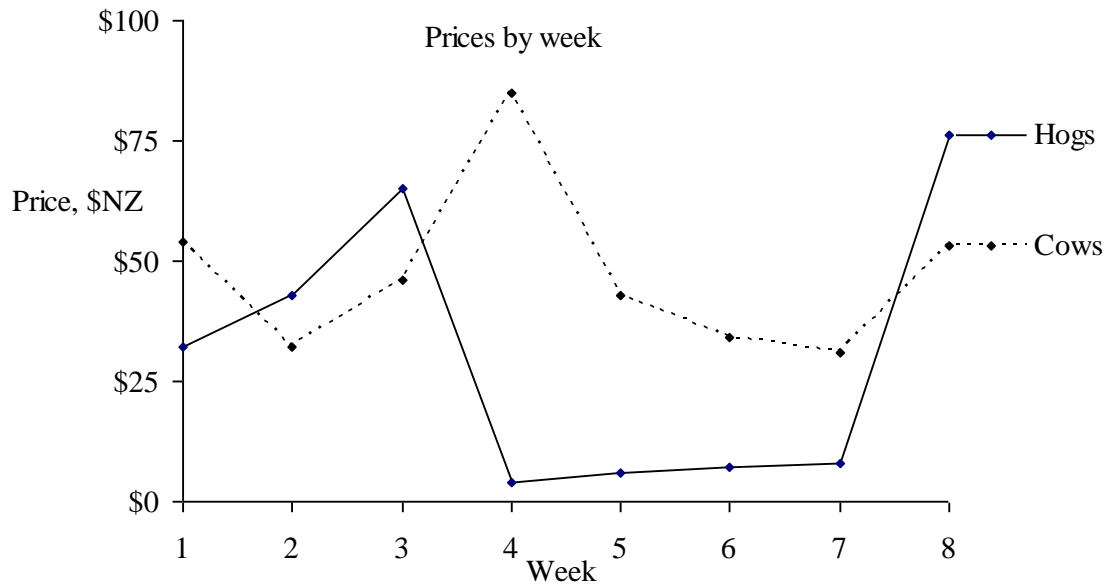

Figure 1. This is horrible.

Figure 2. This is the same data as the previous graph, but it is much more readable, and will photocopy better. Note that the font style and size matches the article's text.

Tables are almost always improved by removing the vertical lines. Right-justify numbers in tables.

2.2 Images

Please convert photographs and screen shots to greyscale *before* you convert the file to postscript or PDF. (In Word, right click the picture, select Format Picture, Picture, Color, Grayscale.) You will be able to preview the image on screen as it would be printed, and the resulting PDF file will be much smaller.

3 Math models

Math models should be formatted to best suit their purpose in the paper. All parameters and variables should be clearly defined in the paper. These definitions and explanations of the non-trival constraints and objective functions should be included or referred to near the model formulation.The following guidelines will help to ensure the model is complete and well documented.

Name the model (e.g. FruitTraNZ below) for handy reference elsewhere in the paper. Following mathematical tradition, you should italicise parameters, variables, and subscripts. Font style and size should be consistent with the document's text. Do not use more than two levels of subscripting or superscripting. It is helpful to distinguish parameters from decision variables, for instance with parameters as upper case and decision variables as lower case. Complex formulas are best displayed using an equation formating package such as MathType.

The following example may be helpful:

Indices

i = plant: P = {Chch, Auckland}.

j = wholesaler: 1,…, 5.

Parameters

C_{ij} = cost to send a box from plant i to wholesaler j.

K_i = production capacity of plant i, in boxes.

D_j = minimum demand for boxes at wholesaler j.

Decision variables

x_{ij} = boxes to send from plant i to wholesaler j.

Model FruitTraNZ

$$\text{Minimise } \sum_{i \in P} \sum_{j=1}^{5} C_{ij} x_{ij}$$

(1) $\sum_{j=1}^{5} x_{ij} = K_i$ for i = Chch, Auckland.

(2) $\sum_{i \in P} x_{ij} \geq D_j$ for j = 1, 2, …, 5.

$x_{ij} \geq 0$.

Explanation

The objective is to minisime total transportation cost. Constraint (1) requires plants to produce at full capacity. Constraint (2) ensures minimum demand is satisfied for each wholesaler.

4 Readability

Please proofread your paper and use a spelling checker. Spelling should follow standard New Zealand, British or U.S. spelling, but must be consistent throughout. The grammar checker in Word can be helpful to indicate more obvious gramatical errors.

On matters of style, authors (especially new authors) are urged to study Strunk & White (1979) and Gopen & Swan (1990).

5 Submission format

Please submit your documents in "printer-ready" form, as PostScript or Adobe PDF. Many free PDF converters are available through the web. If you cannot produce a PostScript or PDF file, please contact the editor of the Proceedings.

Send your file to conference@orsnz.org.nz.

6 How to reference other articles

Format references as in the journal *Management Science*. In the text, give the author's last name and the year, e.g. Dantzig, Fulkerson & Johnson (1954). In the References section at the end of the article, order the references alphabetically, in the style shown below. Avoid the use of journal title abbreviations.

Reference a web page in the text by its author and the date that you check it, as University of Canterbury (2002). In the Reference section, give its author, title, URL, and the date that you checked it.

7 Checklist

- Font, font size.
- Indents, margins, paper size.
- Graphics are clean and grey-scale, with text in 12-point Times or Computer Modern.
- References, reference format.
- Spell-checked and proofread.

Acknowledgments

Acknowledgments can appear in an unnumbered section preceding the references. This article was revised by John F. Raffensperger, based on a version by Andrew Mason, University of Auckland. It has subsequently been revised again by Andrew Mason, and by Shane Dye.

8 References

Dantzig, G.B., D.R. Fulkerson,. and S.M. Johnson. 1954. "Solution of a large-scale traveling-salesman problem." *Operations Research* **2**:393-410.

Department. of Management, University of Canterbury. 6 Nov 2001. www.mang.canterbury.ac.nz.

Gopen, G.D., J.A. Swan,. 1990. "The Science of Scientific Writing." *American Scientist*, **78** (Nov-Dec):550-558.

Strunk, W., E.B. White. 1979. *The Elements of Style*, 3rd edition, MacMillan Publishing Co., Inc., New York.

Tufte, E.O., 1983, *The Visual Display of Quantitative Information*, Graphics Press, Cheshire, Conn.