

# INFORMS

# Style Guide

For use with the following journals:

*Decision Analysis (DECA)*  
*Information Systems Research (ISRE)*  
*INFORMS Journal on Computing (IJOC)*  
*INFORMS Transactions on Education (ITED)*  
*INFORMS Journal on Applied Analytics (INTE)*  
*Management Science (MNSC)*  
*Manufacturing & Service Operations Management (MSOM)*  
*Marketing Science (MKSC)*  
*Mathematics of Operations Research (MOOR)*  
*Operations Research (OPRE)*  
*Organization Science (ORSC)*  
*Service Science (SERV)*  
*Stochastic Systems (STSY)*  
*Strategy Science (STSC)*  
*Transportation Science (TRSC)*

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## Introduction

### GENERAL EDITING GUIDELINES

Substantive editing of INFORMS articles should be avoided. Substantive edits include: changes in metadata; changes in conclusions; major factual changes, particularly changes in facts that were stated in the original abstract. If you find any discrepancies or errors, notify your production representative.

Query the author if it is necessary to recast a sentence (e.g., Please check all edits to the sentence beginning “One potential concern with our analysis...” to confirm that they preserve your intent).

### SPELLING

British spelling is acceptable *if* British spelling has been used consistently throughout the article. Change the spelling of a word or words only if the author has been inconsistent in usage of British versus American spelling within the article, and then change it to the most commonly used spelling (i.e., British *or* American) throughout the article text (excluding proper nouns, affiliations, and references).

### STYLE

Refer to this style guide regarding matters of editorial style as it relates to the INFORMS journals. Refer to the following references for other style points:

**Grammar:** *The Chicago Manual of Style* (17th Edition and [online](#))

**Spelling:** *Merriam-Webster's Dictionary* (11th Edition and [online](#))

### USING THIS GUIDE

All entries in the Table of Contents are hyperlinked for quick access, as are any cross-references in text. Simply click on the hyperlink to be taken directly to the section that is being cross-referenced:

Spell out [Australian states and territories](#), [Canadian provinces and territories](#), and [US states](#) in affiliations.

Text box notes highlight important aspects or interpretations of various style points:

**Note** Assumptions can be set as a numbered list rather than a level 3 heading; follow the author.

Additional text boxes highlight deviations from style:

**Deviation** In *INFORMS Transactions on Education* (ITED), acknowledgments should be written in the first person.

# Article Front Matter

The article front matter consists of the following components in the following order:

[Article ID](#)  
[Supertitle](#)  
[Article title](#)  
[Author line](#)  
[Affiliations](#)  
[Contact information](#)  
[Received, revised, and accepted dates](#)  
[Online publication date](#)  
[Subject classifications \(\*MOR\* and \*OPRE\* only\)](#)  
[Area of review \(\*OPRE\* only\)](#)  
[Article DOI](#)  
[Article summary \(select titles\)](#)  
[TOC blurb \(select titles\)](#)  
[Copyright line](#)  
[Abstract](#)  
[History line](#)  
[Open Access statement](#)  
[Conflict of interest statement](#)  
[Funding](#)  
[Supplemental material](#)  
[Keywords](#)

## Article ID

The article ID appears at the top of the title page and is inserted by the compositor.

## Supertitle

Supertitles are set in title case and appear directly above the article title; they are inserted by the compositor.

Supertitles include (but are not limited to):

**Call for Papers**  
**Case Article**  
**Contextual Areas**  
**Crosscutting Areas**  
**Editorial**  
**From the Editors**  
**OM Forum**  
**OR Forum**

**Note** In the online version of an article, supertitles are followed by an em dash and are run in with the article title (e.g., OM Forum—An Essay on Operations Management).

## Article title

The article title should be set in [title case](#).

### Examples:

**Optimal Ordering Policy for Inventory Systems with Quantity-Dependent Setup Costs  
Mutual and Exclusive: Dyadic Sources of Trust in Interorganizational Exchange  
Do Plant Inspects Predict Quality? The Role of Investigator Experience**

No registration, copyright, or trademarks should appear in the article title.

**Note** Titles for the MKSC “Frontiers” article type should begin with **Frontiers** followed by a colon (e.g., **Frontiers: Secondary Market Options for the Future**).

## Author line

Include each author’s full first name and surname just below the article title. Add a period to all initials; include a space between multiple initials (e.g., William S. G. Ball).

Use serial commas to separate all author names; do not include the word “and” before the final author name:

Emanuela Romano, Brian C. Betts  
Grégoire Altan-Bonnet, Rosa Barreira da Silva, Christian Müntz

Offset patronymics with a comma, and include a period (e.g., John Lee, Jr., William Hill, Sr.).

Authors are connected to their respective [affiliations](#) by superscript, boldface, lowercase letters; for example:

Christine C. Krieger,<sup>a</sup> Robert F. Place,<sup>b</sup> Carmine Bevilacqua,<sup>c</sup> Bernice Samuels,<sup>b</sup> Brent S. Abel<sup>a</sup>

---

### CORRESPONDING AUTHOR

If one of the authors is designated as a corresponding author, add a superscript comma and a **non**-superscript asterisk after the affiliation footnote symbol(s) for that author (e.g., Brent S. Abel<sup>a,\*</sup>) and set “\*Corresponding author” directly above the [contact information](#).

---

### DECEASED AUTHOR

If an author is deceased, add a superscript comma and a superscript dagger (†) after the affiliation footnote symbol(s) for that author (e.g., Brent S. Abel<sup>a,†</sup>) and set “†Deceased” directly above the [contact information](#).

## Affiliations

List affiliations directly after the author line at the top of the article. Identify each affiliation with a superscript, boldface, lowercase letter.

List affiliation components in the following order: division, department, school/college, primary institution, city, state/province/territory, country (**except** the United States), and postal code. Do **not** list street addresses, P.O. box numbers, or other mailing information.

**Note** The position of the postal code varies by country. See the [Universal Postal Union](#) for a comprehensive set of guidelines for international address formats.



Spell out [Australian states and territories](#), [Canadian provinces and territories](#), and [US states](#).

If any authors share an affiliation, do not repeat the affiliation for each author; assign one letter to the affiliation and assign that letter to each author who shares that affiliation.

The affiliations should reflect the location of each author at the time the paper was accepted; however, current affiliations may be listed at the request of the author.

**Example:**

Roger Thewlis,<sup>a</sup> Tonya Collins,<sup>b</sup> Allan Higgins,<sup>c</sup> Geraldine Fuchs,<sup>a</sup> Lisa Zetterlund<sup>d</sup>

<sup>a</sup>UQ Business School, University of Queensland, St. Lucia, Queensland 4072, Australia; <sup>b</sup>Cass Business School, City University London, London EC1Y 8TZ, United Kingdom; <sup>c</sup>Schulich School of Business, York University, Toronto, Ontario M3J 1P3, Canada; <sup>d</sup>Foster School of Business, University of Washington, Seattle, Washington 98195

Even if there is only one affiliation, include a superscript “a” before the affiliation and after all author names.

**Note** Virginia Polytechnic Institute and State University should be shortened to Virginia Tech (per the University’s policy).

**Note** Either University of Western Ontario *or* Western University is acceptable.

### Contact information

Contact information is preceded by the boldface heading **Contact** followed by a colon; it is run onto the same line as the heading. Include each author’s email address and initials (without periods) within parentheses; separate the information for each author with semicolons:

**Contact:** g.smith@warwick.ac.uk (GL); howej@ttu.edu (JSH); xw.zhang@missouri.edu (X-WZ)

If two authors share the same initials, include the first two letters of the first name:

**Contact:** j.smith@warwick.ac.uk (JoS); j.sanders@ttu.edu (JeS)

List only *one* email address per author. If no email address is provided for a given author, query the author to provide one; if more than one address is provided, query the author to select one address for inclusion.

**Note** If an author has an [ORCID](#) number, the compositor will add the ORCID logo and URL after the email address and before the author’s initials:

**Contact:** dennisarnow@gmail.com (DA); s.balachandran@yorku.ca (SB); swillems@utk.edu, <http://orcid.org/0000-0001-6340-1192> (SPW)

An ORCID number is *required* for the corresponding author; query if not provided. ORCID numbers are *not* required for non-corresponding authors, but query to provide them if available.

### Received, revised, and accepted dates

The received, revised, and accepted dates (month, day, year) are each set on their own line. Each date is preceded by a boldface heading followed by a colon; the date runs in with the heading:

**Received:** May 30, 2017  
**Revised:** September 13, 2017  
**Accepted:** September 14, 2017

Separate multiple revised dates with a semicolon:

**Received:** June 7, 2016  
**Revised:** May 30, 2017; September 13, 2017  
**Accepted:** September 14, 2017

### Online publication date

The online publication date is preceded by the boldface heading **Published Online in Articles in Advance** followed by a colon; the date runs in with the heading:

**Published Online in Articles in Advance:** May 2, 2017

### Subject classifications (MOOR and OPRE only)

Subject classifications are preceded by the requisite boldface heading, followed by a colon.

**MOOR:**  
**MSC2010 Subject Classification:** Primary: 90C25, 65K05  
**OR/MS Subject Classification:** Primary: Convex/programming/algorithms  
**OPRE:**  
**Subject Classifications:** finance: portfolio; simulation: applications, statistical analysis

### Area of review (OPRE only)

The area of review is preceded by the boldface heading **Area of Review** followed by a colon; it is run onto the same line as the heading:

**Area of Review:** Financial Engineering

### Article DOI

The article DOI is not preceded by a heading and is inserted by the compositor.

### Article summary (select titles)

The following INFORMS journals publish article summaries:

*Information Systems Research* (ISRE)      *Operations Research* (OPRE)

Article summaries will not appear in the article text when published; when an issue is compiled, the summaries for the articles in that issue will be compiled into a separate article.

## TOC blurb (select titles)

The following INFORMS journals publish a table of contents (TOC) blurb for each article:

*INFORMS Journal on Applied Analytics* (INTE)

*Marketing Science* (MKSC)

The TOC blurb will not appear in the article text when published; when an issue is compiled, the blurb will be placed beneath its respective article title in the TOC for that issue.

## Copyright line

The copyright line is preceded by the boldface heading **Copyright** followed by a colon and is run onto the same line as the heading; it is inserted by the compositor.

The year is the year the article first appeared on Articles in Advance:

Green option:

**Copyright:** © 2017 INFORMS

Gold option (IOO, ITED, STSY):

**Copyright:** © 2017 The Author(s)

**Note** All *INFORMS Transactions on Education* (ITED) and *Stochastic Systems* (STSY) papers will have the open access icon and will be licensed under CC BY.

**Note** Articles authored by U.S. government employees are in the public domain; (1) the copyright line should be replaced with “This article was written and prepared by U.S. government employee(s) on official time and is therefore in the public domain,” (2) the copyright should be removed from the running head, and (3) the Permissions tab should be removed online).

## Abstract

Abstracts are set as a single paragraph and are preceded by the boldface heading **Abstract** followed by a period, with the abstract text run in:

**Abstract.** We document that consistent patterns of high or low sales growth that are incongruent with underlying fundamentals are followed by significant stock price reversals. In contrast, no stock return reversals are found for firms that achieve the same level of sales growth in an inconsistent manner. Furthermore, future earnings announcement returns mimic the pattern of abnormal stock returns documented for...

**Deviation** In *Manufacturing & Service Operations Management* (MSOM), the abstract is also structured, with bold italic headings run in and followed by roman colons:

**Abstract. Problem definition:** We study the impact of credit ratings on operational and financial decisions of... **Academic/practical relevance:** We add a framework on who should finance inventories in the presence of... **Methodology:** Within a modified selling to the newsvendor Stackelberg game with the supplier as the leader, we derive... **Results:** We show there exists a threshold such that... **Managerial implications:** We provide insights into who should finance supply chain inventories and at what rates...

Abbreviations that are used in both the abstract and text should be defined at first mention in both places, and if an abbreviation is used only once in the abstract but is defined and used several times in the text, the abbreviation should be spelled out in the abstract.

Avoid mathematical expressions and notation in the abstract.

If an equation (in-line or display) is cited in the abstract, query the author to rewrite the abstract without the equation. (Single variables are permissible in the abstract.)

If a reference is cited in the abstract, query author to remove citation or recast sentence to avoid citation if possible. If the author insists that the reference be cited, the entire reference must be cited in square brackets.

**Note** Some (but not all) articles for IJOC will include a Summary of Contribution, which should be set as a single paragraph immediately below the abstract; for example:

**Summary of Contribution:** Based on the practical background of commercial apiculture industry, this paper proposes a new type of routing problem named the migratory beekeeping routing problem.


**Note** If a reference appears in an abstract in MOOR, do **not** include the [reference number](#).

## History line

The history line is preceded by the boldface heading **History** followed by a colon; it is run onto the same line as the heading.

**Note** History line requirements vary from title to title; see [Appendix A](#) for complete details regarding history line style.

## Open Access statement

The Open Access statement is preceded by the open access icon () and the boldface heading **Open Access Statement** followed by a colon and is run onto the same line as the heading; it is inserted by the compositor.

The text of the statement varies depending on the type of Creative Commons license the author has selected:

### ***CC BY License***

**Open Access Statement:** This work is licensed under a Creative Commons Attribution 4.0 International License. You are free to copy, distribute, transmit and adapt this work, but you must attribute this work as “*Management Science*. Copyright © 2017 The Author(s). <https://doi.org/10.1287/mnsc.2016.2593>, used under a Creative Commons Attribution License: <https://creativecommons.org/licenses/by/4.0/>.”

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## **Conflict of interest statement**

The conflict of interest statement is preceded by the boldface heading **Conflict of Interest Statement** followed by a colon; it is run onto the same line as the heading.

Text should be set as provided by the author; edit only for misspellings and egregious errors in grammar or punctuation.

**Note** It is unusual for an article to have a conflict of interest statement.

## **Funding**

Funding information is preceded by the boldface heading **Funding** followed by a colon; it is run onto the same line as the heading. Institution names are spelled out in full. Grant numbers appear within square brackets, preceded by the word “Grant”; omit the abbreviation “No.” or the number symbol (#). For example:

**Funding:** Financial support from the Social Science and Humanities Research Council of Canada and the National Science Foundation of China [Grant 71472131] is gratefully acknowledged.

If a specific author is cited in connection with funding support, list only the first initial(s) and surname:

**Funding:** J. B. Lee received financial support from the Canadian Natural Sciences and Engineering Research Council [Grant 386416-2010].

**Note** Funding from the NIH, the Wellcome Trust, the Howard Hughes Medical Institute, and the Research Councils UK and its agencies *cannot* be cited without a grant number.

### Supplemental material

A supplemental material statement is preceded by the boldface heading **Supplemental Material** followed by a colon; it is run onto the same line as the heading.

Supplemental material can include data files (i.e., data sets, instruction sets, survey instruments), online appendices (a.k.a. electronic companion, e-companion; follow author), or both data files and an online appendix. The description of the supplemental material in the footnote should match the corresponding citations in the article text; for example:

**Supplemental Material:** Data are available at <https://doi.org/10.1287/mnsc.2017.2860>.

**Supplemental Material:** The online appendix is available at <https://doi.org/10.1287/mnsc.2017.2860>.

**Supplemental Material:** Data and the online appendix are available at <https://doi.org/10.1287/mnsc.2017.2860>.

**Supplemental Material:** Supplemental material is available at <https://doi.org/10.1287/ited.2016.0168>.

### Keywords

Keywords are preceded by the boldface heading **Keywords** followed by a colon and run into the keywords themselves, which are boldface, separated by bullets, and set in lowercase except for proper nouns and abbreviations. Query the author to confirm that the keywords are correct as set.

#### *Example:*

**Keywords:** outside directors; deferred compensation; insider trading; SEC Rule 10b-5 plans

# Article Back Matter

The article back matter consists of the following components in the following order:

[Implications for Policy and Practice \(MNSC only\)](#)

[Acknowledgments](#)

[Appendices](#)

[Endnotes](#)

[References](#)

[Verification Letter \(INTE only\)](#)

[Author Biographies \(select titles\)](#)

## Implications for Policy and Practice (MNSC only)

Some accounting department papers in *Management Science* (MNSC) may contain an Implications for Policy and Practice paragraph preceded by the boldface heading **Implications for Policy and Practice**.

## Acknowledgments

Acknowledgments are preceded by the boldface heading **Acknowledgments** and should appear in the following order:

- ~ Acknowledgments to individuals
- ~ Equal contributions
- ~ Prior presentation
- ~ Dedications (placed in a separate paragraph)

### Example:

The authors thank Mark Ebers, Olga Badunenko, and Peter Bamberger for developmental feedback. Braden King and Arianne Szafarz contributed equally to the manuscript. Portions of this article were presented at the 2016 Annual Meeting of the Academy of Management in Anaheim, California.

This article is dedicated to Michael Ellis.

Acknowledgments to individuals should be written in the third person (e.g., “The authors thank...” **not** “We thank...”).

Avoid superfluous language (e.g., “The authors thank...” **not** “The authors *would like to* thank...”; “The authors are grateful...” **not** “The authors are *very* grateful...”).

**Deviation** In *INFORMS Transactions on Education* (ITED), acknowledgments should be written in the first person.

## Appendices

Appendix headings are boldface and [title case](#).

If an article has only one appendix, the heading begins with the singular **Appendix** followed by a period:

### **Appendix. Proofs**

If an article has only one appendix, and the appendix is a table, the table title follows the heading:

### **Appendix. Effects of Eggregiousness on Boycott Intensity: Robustness Checks**

**Note** If an article has only one appendix, any citations of the appendix should be lowercase (e.g., “appendix” *not* “Appendix”).

If an article has multiple appendices, the appendices should be assigned uppercase letters:

### **Appendix A. Proof of Propositions**

### **Appendix B. Additional Proofs**

Appendix figures, tables, and [enunciations](#) are numbered as A.1, A.2, A.3, B.1, B.2, B.3, etc. They should be cited in numerical order in the text if possible.

Appendix equations are numbered as (A.1), (A.2), (A.3), (B.1), (B.2), (B.3), etc.

## **Endnotes**

Endnotes are preceded by the boldface heading **Endnotes** (or the singular **Endnote** if there is only one endnote). They are numbered according to their appearance in the article text using superscript Arabic numerals.

In text, place endnote numbers outside all punctuation except em dashes (per [§14.26](#) of *The Chicago Manual of Style*). For example:

Customers were categorized simply by company name (e.g., Samsung Electronics).<sup>1</sup>

We used the five-item measure reported by Zaheer et al. (1998);<sup>4</sup> this measure has been replicated...

This interaction is a positive one<sup>8</sup>—similarly, the returns of an exact match...

If two or more endnotes are cited together (e.g., <sup>1,2</sup>), query the author to avoid this construction.

Endnotes should be written as complete sentences. For example:

<sup>1</sup>Treatments may be defined as a single exposure (e.g., an email) or a series of exposures (e.g., a digital media campaign).

<sup>2</sup>Although it would be ideal to observe sales and revenue for each visitor, this is not always possible. As a proxy, we assume for this example that profit is proportional to the number of clicks.

<sup>3</sup>An online sample size calculator is available at <https://testandroll.com>.

<sup>4</sup>See <https://mc-stan.org>.

**Note** Occasionally, an endnote will reference a previously published version of the article (e.g., “An earlier version of this article appeared in \_\_\_\_.”). In such cases, a production representative will follow up with the managing editor regarding copyright, etc.



## References

See [References](#).

## Verification letter (INTE only)

Some *INFORMS Journal on Applied Analytics* (INTE) articles may contain a verification letter that appears directly after the reference list and is preceded by the boldface heading **Verification Letter**.

The verification letter should be prefaced with the author's full name, title, and affiliation followed by "writes:" to introduce the letter:

### **Verification Letter**

Dr. Benno Keller, Head, Research and Policy Development, Zurich Insurance Company Ltd,  
Mythenquai 2, CH-8002 Zurich, Switzerland, writes:

"This letter is to confirm the implementation of the data analytics-driven approach to risk engineering at Zurich Insurance, described in the article, 'Zurich Insurance Uses Data Analytics to Leverage the Business Interruption Insurance Proposition.' In the era of globalized business and digitalization, Zurich Insurance is increasingly using data analytics to improve business intelligence and risk management capabilities of our customers. This approach involved accessing our proprietary Large Claims Database and extraction of novel insights concerning the trends in losses from business interruption. The statistical analysis conducted in this research project helped us to better manage our risk exposures and provided more granular information about industry-wide indicators such as average recovery times and increased cost of working. The results of this project helped us to develop an improved approach to risk assessment and customer segmentation. Ultimately, in the long term, this will lead to considerable savings for our organization and will also benefit our clients with improved risk management practices."

**Note** Verification letters should be copyedited minimally; edit only for (a) misspellings, (b) egregious errors in grammar or punctuation, and (c) matching the article title in the letter to the title of the accepted manuscript (query the author to confirm).

## Author biographies (select titles)

The following INFORMS journals contain author biographies at the end of each article:

*Decision Analysis* (DECA)  
*INFORMS Journal on Applied Analytics* (INTE)  
*Operations Research* (OPRE)  
*Organization Science* (ORSC)  
*Strategy Science* (STSC)

Author biographies appear at the end of the article after the references. The order of the biographies should follow the order of the [author line](#).

Author biographies are limited to 500 characters including spaces; if this limit is exceeded, query the author to shorten the biography.

Author names appear in boldface type. Academic degrees are presented without periods (e.g., PhD, DEng).

Capitalize professional titles only when preceding a personal name (e.g., Professor John Smith) or for named professorships (e.g., INFORMS Professor Emeritus of Applied Economics, McCurdy Professor of Operations Management); otherwise use lowercase (e.g., “John Smith is professor of applied economics”); see *The Chicago Manual of Style* §8.19.

***Example:***

**Samina Karim** is associate professor of entrepreneurship and innovation at the D’Amore-McKim School of Business, Northeastern University. She received her PhD from the University of Michigan at Ann Arbor. Her research interests include corporate restructuring and organization design, acquisitions and alliances, and innovation through reconfiguration and redeployment of resources and activities.

**Deviation** For *Operations Research* (OPRE), the author biography should include the author’s current position, research interests, and major awards. If an author holds an academic position or position in a research laboratory, the academic degrees should be omitted; include them only for authors who do not hold an academic/laboratory position, and even then include only the most advanced degrees. Honors and awards are included but not editorial positions, visiting appointments, or employment history.

The following INFORMS journals contain a compilation at the end of each issue that comprises the biographies of all authors featured in that issue:

*Information Systems Research* (ISRE): “About Our Authors”

*Marketing Science* (MKSC): “Focus on Authors”

These compilations are assembled at the issue stage by the production editor once it is known which authors are represented in a given issue.

**Note** Because the author biographies in ISRE and MKSC articles will be extracted before the page proofs are composed, if there is a query about a biography, the copyeditor should insert the entire biography into the query for the author to review.

# Abbreviations

Abbreviations must be spelled out at first mention in the abstract and in the text, with the abbreviated form appearing in parentheses. Thereafter, the abbreviation should be used without definition. Note, however, that the author may use the abbreviation and written-out form interchangeably after defining the abbreviation; follow copy. Latin abbreviations are standard and do not have to be defined; do not define standard notations in math copy (see [Table 12.2](#) and [Table 12.3](#) in *The Chicago Manual of Style*).

## Article title

Abbreviations should be spelled out in the article title **except** for “vs.” or well-known company names (e.g., IBM, UPS).

## Abstract

See [Abstract](#).

## Latin

See [Terminology/Latin terms](#).

## Plurals

Add an “s” to abbreviations other than units of measure to form a plural (e.g., CEOs, EMTs).

## Singulars

Use of the articles *a* and *an* with the singular form of an abbreviation should correspond with the sounding of the first letter of the abbreviation (e.g., a CEO; an EMT).

## Locations

### AUSTRALIAN STATES AND TERRITORIES

Spell out Australian states and territories in [affiliations](#) but abbreviate in publisher locations in [references](#).

ACT	Australian Capital Territory	SA	South Australia
NSW	New South Wales	TAS	Tasmania
NT	Northern Territory	VIC	Victoria
QLD	Queensland	WA	Western Australia

### CANADIAN PROVINCES AND TERRITORIES

Spell out Canadian provinces in [affiliations](#) but abbreviate in publisher locations in [references](#).

AB	Alberta	NU	Nunavut
BC	British Columbia	ON	Ontario
MB	Manitoba	PE	Prince Edward Island
NB	New Brunswick	QC	Quebec
NL	Newfoundland and Labrador	SK	Saskatchewan
NS	Nova Scotia	YT	Yukon Territory
NT	Northwest Territories		

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## UNITED STATES

Spell out US states in [affiliations](#) but abbreviate in publisher locations in [references](#).

AL	Alabama	IL	Illinois	MT	Montana	RI	Rhode Island
AK	Alaska	IN	Indiana	NE	Nebraska	SC	South Carolina
AZ	Arizona	IA	Iowa	NV	Nevada	SD	South Dakota
AR	Arkansas	KS	Kansas	NH	New Hampshire	TN	Tennessee
CA	California	KY	Kentucky	NJ	New Jersey	TX	Texas
CO	Colorado	LA	Louisiana	NM	New Mexico	UT	Utah
CT	Connecticut	ME	Maine	NY	New York	VT	Vermont
DE	Delaware	MD	Maryland	NC	North Carolina	VA	Virginia
DC	District of Columbia	MA	Massachusetts	ND	North Dakota	WA	Washington
FL	Florida	MI	Michigan	OH	Ohio	WV	West Virginia
GA	Georgia	MN	Minnesota	OK	Oklahoma	WI	Wisconsin
HI	Hawaii	MS	Mississippi	OR	Oregon	WY	Wyoming
ID	Idaho	MO	Missouri	PA	Pennsylvania		

Abbreviate “United States” as “U.S.” when modifying a noun (e.g., U.S. Food and Drug Administration) but spell out otherwise (e.g., technicians in the United States).

# Capitalization

Proper nouns are usually capitalized, as are some of the terms derived from or associated with proper nouns. For the latter, *The Chicago Manual of Style* advocates sparing use of capitals (see §8.1). If changes are made to capitalization, query the author to confirm.

An initial “the” as part of a proper noun (e.g., a country, institution, etc.) is lowercased in running text but capitalized in affiliations and references, except in city names that require an initial “the” (e.g., “The Hague”).

## Citations

Lowercase “figure,” “table,” and “appendix” when used in a nondesignative sense (e.g., “in the appendix” versus “in Appendix A”).

Use lowercase letters when citing sections, figures, tables, appendices, etc. of other work; cite the component directly after the publication year [e.g., “For example, see Smith (2006, section 4.1) for a summary of...”].

**Deviation** In *Mathematics of Operations Research* (MOOR), components of other work should appear directly after the [reference number](#) (e.g., “In Smith [15, theorem 4.1], the...”).

**Note** If components of other work had been uppercased in the original manuscript, insert the [requisite author query](#) to explain why lowercase letters have been used.

## Designators

Lowercase specific panel names or columns [e.g., panel A, column (1)] when used in running text.

Lowercase terms designating variables and a fixed item or a variable only (e.g., buyer 3 and buyer i).

If an article contains sections that are divided into studies, the study names are capitalized (e.g., Study 1).

Capitalize model names that appear in table column headings (e.g., Model 1).

If a numbered list uses the “Step” label (i.e., if the list items begin with “Step”), then any reference to a specific step would be capitalized.

**Note** The key is to aim for consistent capitalization within a given article.

## Title case

For article components that are set in title case ([article title](#), [headings](#), [figure captions](#), [table captions](#), and [appendix headings](#)), capitalize all words except for articles, conjunctions, and prepositions of ≤4 letters.

For hyphenated compounds, capitalize words that appear after hyphens except for articles, conjunctions, or prepositions of ≤4 letters (e.g., Under-the-Counter, Not-for-Profit). Do not capitalize words that appear after a hyphenated [prefix](#) unless they are proper nouns or uppercase abbreviations (e.g., Anti-inflammatory, Meta-analysis *but* Pre-Raphaelite, Pro-NAFTA). (See also §8.161 and §7.89 in *The Chicago Manual of Style*.)

# Figures

## Caption

Figure captions are set in [title case](#) and are preceded by a boldface figure number followed by a period; the caption should run in with the figure number. The caption does not end with a period. For example:

**Figure 1.** Example of Display Used in Experiment 2 Direct Valuation

If the figure is to appear in black and white in print but color online, include a parenthetical indicator at the beginning of the caption:

**Figure 1.** (Color online) Example of Display Used in Experiment 2 Direct Valuation

**Note** The article checklist will indicate whether a figure is to appear in color in print; therefore, if the checklist says “no” (i.e., if the figure will *not* appear in color in print), the “(Color online)” header should be added to the caption and the [requisite author query](#) should be added.

If the caption exceeds one sentence, set the second and any subsequent sentences as a figure legend preceded by the italic heading *Note* (for one sentence) or *Notes* (for two or more sentences).

If applicable, a copyright statement should appear as the first line in the figure legend preceded by the italic heading *Source*. [Query the author](#) to provide the appropriate documentation to confirm that permission has been received.

### Example:

**Figure 1.** Appointment Scheduling Models and Discrete Convexity

---

*Source.* China Statistical Yearbook.

*Note.* All objective functions were adjusted to reflect the minimization problem.

**Deviation** In *INFORMS Transactions on Education* (ITED), *Service Science* (SERV), and *Stochastic Systems* (STSY), the parenthetical indicator “Color online” should not be used because these titles do not print.

**Deviation** In *Mathematics of Operations Research* (MOOR), figure captions are set in sentence case, can contain multiple sentences, and end with a period; for example:

**Figure 1.** Schematic depiction of the symmetrized Markov chain. At each state, one choice lead back to the base, and the other goes to the right.

## Citations

Every figure must be cited in the article text in numerical order. Spell out the word “Figure(s)” in the text regardless of whether the figure is cited parenthetically:

(Figure 1)

(Figures 4–6)

(Figures 5 and 6)

As shown in Figure 1...

Figures 4–6 show...

As shown in Figures 5 and 6...

Figure panels should be labeled and cited as lowercase roman letters within parentheses. Follow copy regarding the placement of panels in relation to the figure number, but maintain consistency within a given article; for example, either of the following formats is acceptable:

Figure 2(a) shows...

In panel (a) of Figure 2,...

Use the singular form of “Figure” when citing multiple panel letters for the same figure; use a comma to offset the number from the panel letters:

Figure 2, (a) and (b)

*not*

Figures 2(a) and 2(b)

## Editing

Copyedit text in figures for style and consistency with article text (e.g., hyphenation, abbreviations, statistical and mathematical variables).

Fix missing/incorrectly matched locants.

Remove boldface from text that does not need to be bold (e.g.,  $x$  and  $y$  axis labels).

If a figure includes running text that is more appropriate for the figure caption, delete the text from the figure and add it as a [\*Note\*](#) in the caption.

# Headings

Headings may be numbered or unnumbered; follow the author, but ensure consistency within a given article, including sequential numbering (see also [Headings/Level 3 and 4 headings/Enunciations](#)).

If the headings are numbered, follow the number with a period (e.g., **1. Introduction**, **2. Literature Review**, **2.1. Software Diversity**, etc.).

If the headings are numbered and there is no **Introduction** heading, add it as the first heading and assign the number “1” to it (e.g., **1. Introduction**) and renumber all subsequent headings accordingly. If the headings are *not* numbered and there is no **Introduction** heading, it is not necessary to add it.

**Note** If one level of heading is numbered, *all* levels must be numbered (e.g., if level 1 headings are numbered but level 2 headings are not, assign numbers to the level 2 headings).

## Level 1 and 2 headings

Level 1 and 2 headings are set in boldface type and [title case](#); they appear on their own line above the subsequent text and are not followed by a period.

## Level 3 and 4 headings

Level 3 and 4 headings set in boldface type and [title case](#); they are run in with the subsequent text and are followed by a period.

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### ENUNCIATIONS

The following level 3 and 4 headings are considered *enunciations* and as such have special formatting and styling requirements.

Follow author numbering of enunciations, but ensure consistency within a given article. For example, either of the following numbering schemes is acceptable as long as the chosen scheme is used consistently:

**1. Introduction**

**2. Heading**

Proposition 1

Proposition 2

**3. Heading**

Proposition 3

Proposition 4

**4. Heading**

Proposition 5

Proposition 6

**1. Introduction**

**2. Heading**

Proposition 2.1

Proposition 2.2

**3. Heading**

Proposition 3.1

Proposition 3.2

**4. Heading**

Proposition 4.1

Proposition 4.2

Enunciations should be cited in numerical order in the text and in any [appendices](#); renumber if out of order and query the author for approval.

**Note** Do *not* abbreviate enunciation citations in text (e.g., do not abbreviate “Lemma 1” as “L1”); however, such abbreviations are acceptable in table headings to conserve space.



## ALGORITHMS

Algorithm headings should **not** be followed by a period (i.e., an exception to level 3 and 4 heading style).

## ASSUMPTIONS, AXIOMS, COROLLARIES, HYPOTHESES, LEMMAS, PROPERTIES, PROPOSITIONS, THEOREMS, CONDITIONS, AND PRINCIPLES

The numbered portion of these headings should be set in boldface type and [title case](#), followed by a period; the text should be set in lightface italic type and sentence case:

**Corollary 6.** *The solution complexity of the reformulated problem RM1-1 equivalent to M1 does not depend on the number  $|\Omega|$  of scenarios used to represent uncertainty.*

Parenthetical titles, if included, are set in lightface roman type and [title case](#):

**Lemma 3** (The Impact of Informativeness on Pricing Strategy). *When the informativeness ( $\gamma$ ) of online reviews increases, both firms are more likely to set higher prices in the second period than in the first period.*

**Note** Assumptions can be set as a numbered list rather than a level 3 heading; follow the author.

**Note** Numerical values and citations of numbered article components should appear in roman type; for example:

**Lemma 9.** *Under the assumptions of Theorem 1, the second term in Equation (4) has a finite moment generating function in the neighborhood of 0.*

However, numbers that are part of a larger abbreviation or term should be italic; for example:

**Proposition 6.** *Suppose B1 commits to publish its blacklist and its supplier's identity.*

## CASES AND STEPS

Cases and Steps can be set as level 3 or level 4 heads; follow the author, but ensure consistency within a given article.

## DEFINITIONS, EXAMPLES, OBSERVATIONS, PROBLEMS, AND REMARKS

The numbered portion of these headings should be set in boldface type and [title case](#), followed by a period; the text should be set in lightface roman type and sentence case:

**Remark 4.2.** It is interesting to formulate (77) in the canonical Fredholm form, as there exists a wide literature on numerical methods for this kind of nonlinear integral equation.

Parenthetical titles, if included, are set in lightface roman type and [title case](#):

**Definition 3** (Width-Restricted Hierarchies). By a cut for P we will sometimes collectively mean either a Gomory-Chvátal cut or an  $N_+$  cut.

## PROOFS

Proofs should conclude with “Q.E.D.” or the Halmos symbol ( $\square$ ) preceded by an em space. However, neither notation is necessary if the text states that the proof is complete (e.g., “...and the proof is complete” or “...what was to be proven”).

## RESULTS

Results can be set in the same style as [Theorems](#) or [Definitions](#) (i.e., italic or roman text); follow the author.

## Running head

The running head includes the following components:

**<Author Surnames>:** *<Short Title>*  
<Journal Title>, <year of publication>, <volume no.>, <issue no.>, <page range>, <copyright>

List up to the first three author surnames; if the article has more than three authors, list only the first author's surname followed by **et al.**

The short title should be ≤80 characters, including spaces and author surnames, and should be set in [title case](#). If the short title exceeds the 80-character limit, query the author to shorten it further.

Copyright should be assigned to INFORMS unless the article is an INFORMS Open Option paper, in which case copyright should be assigned to “The Author(s).”

### ***Examples:***

**Loomes and Pogrebna:** *Do Preference Reversals Disappear When We Allow for Probabilistic Choice?*  
Management Science, 2017, vol. 63, no. 1, pp. 166–184, © 2017 The Author(s)

**Temizkan, Park, and Saydam:** *Software Diversity for Improved Network Security*  
Information Systems Research, 2017, vol. 28, no. 4, pp. 828–849, © 2017 INFORMS

**Chen et al.:** *Cash Conversion Systems in Corporate Subsidiaries*  
Manufacturing & Service Operations Management, 2017, vol. 19, no. 4, pp. 604–619, © 2017 INFORMS

**Note** Titles for the MKSC “Frontiers” article type should begin with *Frontiers* followed by a colon (e.g., **Jones et al.:** *Frontiers: Secondary Market Options for the Future*).

# Hyphenation

In general, follow guidelines for hyphenation as outlined in [§7.81–§7.89](#) of *The Chicago Manual of Style*.

## Compounds

Hyphenate temporary compound terms serving as a single adjective before the noun:

1-minute exposures  
12-year-old boy

decision-making methods  
state-of-the-art equipment

Some compound words are hyphenated when used as nouns (e.g., cost-effectiveness, follow-up; consult *Merriam-Webster's Dictionary*).

Do **not** add hyphens between an adverb ending in -ly and an adjective (e.g., “privately owned”).

## Computational and mathematical terms

Follow the author regarding any computational and mathematical terms that contain hyphens (e.g., *k*-means, NP-complete, NP-hard).

## Prefixes

The following prefixes are typically **not** followed by a hyphen:

ante-  
anti-  
auto-  
bi-  
co-  
cross-  
de-  
dis-

extra-  
inter-  
intra-  
intro-  
macro-  
micro-  
mid-  
mono-

multi-  
non-  
post-  
pre-  
pro-  
proto-  
re-  
semi-

sub-  
super-  
trans-  
tri-  
un-

Retain the hyphen when used in reference titles or direct quotes, or where *Merriam-Webster's Dictionary* or *The Chicago Manual of Style* says to retain them.

# Mathematical Composition

## Algorithms

Follow alignment of text as shown in the PDF of the original manuscript. Line numbers can be followed by a colon, a period, or no punctuation; follow copy.

If an algorithm has been supplied as a figure, it should be processed and set as a figure.

## Editing math

In general, follow the author's wording for mathematical content. For example, do not change “with respect to” to “with regard to,” as the former phrase is common/standard usage in mathematical expressions (e.g., “It is the case, for instance, if  $\mu$  is absolutely continuous with respect to the Lebesgue measure...”).

Mathematical notation and expressions should be edited minimally, if at all. In general edit only for the following; otherwise, query the author:

- ~ Sentences should never begin with math; query the author to rewrite such sentences accordingly.
- ~ Ensure proper usage of punctuation at the end of an equation (see §12.18 in *The Chicago Manual of Style*).
- ~ Ensure that spaces appear around math operators and after punctuation online but are omitted in superscript/subscript components (see §12.16 in *The Chicago Manual of Style*); for example:

$$y = 0 \quad \text{but} \quad \pi_{(y=0)} \qquad i, t + 1 \quad \text{but} \quad \psi_{i,t+1}$$

- ~ Ensure grammatical flow of sentences containing mathematical expressions.
- ~ Ensure proper notation of [variables](#) and [vectors](#).
- ~ Ensure consistency for display equation variables that are defined in subsequent text.
- ~ If an asterisk (\*) has been used to indicate multiplication in a table, change it to a times symbol (×) both in the table and in the text.
- ~ Avoid sentences that begin with mathematical notations; reword or query the author to recast.

## Equations

All singular display equations are centered. Equation numbers are flush right in parentheses:

$$\sin(2a) = 2\sin(a)\cos(a) \qquad (1)$$

Not all display equations must be numbered, but those that are numbered must appear in numerical order throughout a given article; query the author if renumbering is required. (Not all numbered equations must be cited in the text; follow the author.)

Follow the author's equation numbering scheme (e.g., either 1, 2, 3... **or** 1.1, 1.2, 1.3... are acceptable); do not renumber unless there is an inconsistency that must be rectified.

If display equations are part of a sentence, punctuate them accordingly.

When cited in text, do not abbreviate “Equation” [e.g., Equation (4) **not** Eq. (4)].

Capitalize citations of mathematical expressions such as “Problem” and “Constraint” [e.g., Problem (1) **not** problem (4)].

Check to ensure equations and equation numbering match the original PDF, and query the author to confirm that all equations are correct.

**Note** Stacked equations are discouraged as inline equations within paragraph text. If an article contains inline stacked equations within paragraph text, insert the [requisite author query](#) at the first appearance of a stacked equation. (See §12.45 of the *The Chicago Manual of Style* for additional guidance.)

**Deviation** In *Mathematics of Operations Research* (MOOR), text is aligned on the equals sign for notation.

## Variables

Variables should appear in lightface italic font (unlike [vectors](#)), including in headings and captions (i.e., do **not** set variables in boldface font even if appearing in a boldface heading).

Ensure that all variables are defined in the text/tables and are set consistently throughout text and tables:

Variable	Description
<i>Safety</i>	Safety performance of car models

## Vectors

Vectors (e.g., **x**, **i**, **y**, etc.) should appear in boldface font (unlike [variables](#)). If a variable and a vector use the same character (e.g., [**b**] × [*b*] and [**i**] × [*i*]), follow the author but query if unclear.

**Note** In more abstract levels of math, vectors may never be set in boldface type. Query the author if in doubt.

# Numbers

Use Arabic numerals to express numbers  $\geq 10$  (e.g., 12 patients, 30 delivery trucks, 100 studies) except at the beginning of a sentence (e.g., “Twenty years ago...”). See also §9.7 in *The Chicago Manual of Style*.

Spell out numbers  $< 10$  except when used in direct relation with a mathematical operator; for example:

Indicator variable was set to one if the value of *Disc. Accruals*  $> 0$ , and zero otherwise.  
Values are multiplied by  $-1$ .

In a series of similar items that includes numbers  $< 10$  and  $\geq 10$ , always use numerals; for example:

The optimal schedule for a small group (five patients per provider) was not assessed.

**and**

The optimal schedule for a large group (15 patients per provider) was not assessed.

**but**

The optimal schedules for small (5 patients per provider), medium (10 patients per provider) and large (15 patients per provider) groups varied widely.

Include a placeholder zero before the decimal in all numerical values  $< 1$  (e.g.,  $p < 0.001$ ).

## Dates

Follow American format for dates (e.g., July 3, 2017 **not** 3 July 2017).

## Large numbers

For numbers of  $\geq 4$  digits, use a comma (e.g., 1,000; 10,000; 100,000).

## Percentages

See [Terminology/Signs and symbols/Percent](#).

## Ranges

Use an [en dash](#) for numerical ranges in the text, figures, and tables and for page ranges in the [reference list](#).

## Series

In general, follow copy regarding the use of letters or numbers for in-text series and lists, but always place the letters/numbers within parentheses; see §6.129 in *The Chicago Manual of Style* for examples.

**Note** Series letters should appear in roman type rather than italic type so that they are not misinterpreted as variables:

We calibrated the model according to (a) the real U.S. GDP rate, (b) the median of analyst forecasts of the same rate, (c) the 75<sup>th</sup> percentile of the 1-quarter-ahead analyst forecasts, and (d) the 25<sup>th</sup> percentile of the 1-quarter-ahead analyst forecasts.

For vertical lists, offset the letters or numbers with a period, not parentheses (see [§6.130](#) in *The Chicago Manual of Style*); for example:

***Letters:***

- a. This is the first item.
- b. This is the second item.
- c. This is the third item.

***Numbers:***

- 1. This is the first item.
- 2. This is the second item.
- 3. This is the third item.

# Punctuation

## Apostrophe

Use an apostrophe to form the plural of single lowercase letters, including Greek characters and math symbols (e.g., x's, y's, μ's, η's).

Omit the apostrophe when pluralizing capital letters used as words (e.g., Xs and Os), numerals used as nouns (e.g., the 1970s), and abbreviations without periods (e.g., CEOs) (see §7.15 of *The Chicago Manual of Style*).

## Brackets

Use brackets only for the following instances:

- ~ to indicate text that has been added or modified in a direct quote.
- ~ to indicate an original edition or language translation in references.

Otherwise, use [parentheses](#).

Do **not** alter usage of brackets in mathematical operations; follow copy.

## Colon

Capitalize the first letter of a word following a colon only if material introduced by the colon is more than one sentence, or is a formal statement, quotation, or speech in dialogue (see §6.63 of *The Chicago Manual of Style*).

Do not use a colon before a series that serves as the object of a verb (e.g., “The menagerie included penguins, cats, and newts” **not** “The menagerie included: penguins, cats, and newts”); see *Chicago Manual of Style* §6.67.

## Comma

Use serial commas.

## Ellipses

See §13.50–§13.58 in *The Chicago Manual of Style* for preferred usage of ellipses.

### Highlights:

- ~ Style is three spaced periods with a space both before and after the ellipsis (§13.50).
- ~ Add a period before an ellipsis to indicate the omission of the end of a sentence, unless the sentence is deliberately incomplete (§13.53).
- ~ Ellipses at the end of deliberately incomplete sentences within a quote should not include a space between the final dot and the ending quotation mark (§13.55).
- ~ Bracketed ellipses should not include space between the ellipsis and brackets (§13.58).



## En dash

Use an en dash for numerical ranges in the text, figures, and tables and for page ranges in the [reference list](#).

## Hyphen

See [Hyphenation](#).

## Parentheses

Always use parentheses for parenthetical text within parentheses; do not use square brackets. For example:

...as well as an immediate response of  $-0.07$  (90% ( $-0.12, 0.002$ )).

...in this study (however, Smith (2018) reported different results in a similar study).

Do **not** alter usage of parentheses in mathematical operations; follow copy.

## Quotation marks

Use quotation marks to offset direct quotes. If there is a direct quote, the author must include the page number; for example:

...he said, “It was in the summer” (Jones 1990, p. 34).

If the page number is missing, query the author to provide it. (See also [Quotations](#) and [Chapter 13](#) in *The Chicago Manual of Style* for additional information about quotations and dialogue.)

Quotation marks may be used to define a word or term that is being used ironically or out of its normal context, to offset slang, or to offset coined words and phrases. In such cases, use quotation marks only at first mention of the word, term, or phrase. Do **not** use quotation marks for emphasis (see also [§7.57–§7.62](#) in *The Chicago Manual of Style*).

Place periods and commas inside quotation marks; colons and semicolons, outside.

## Semicolon

Use a semicolon to separate elements of a complex series, particularly if any of the series items already include commas.

Use a semicolon to separate coordinate clauses joined by a conjunctive adverb (e.g., “I arrived late; however, I saw the entire movie”).

# Quotations

Place direct quotes within [quotation marks](#) when appearing in running text. If the text being quoted is 100 words or more, it should be set as a block quote.

Omit quotation marks from block quotes, which should be set in roman type.

If a block quote is from a source that **does not** appear in the reference list, offset the name of the person, publication, or institution being quoted with an em dash immediately after the quotation.

## **Examples:**

CEOs hate variance. It's the enemy. Variance in customer service is bad. Variance in quality is bad. CEOs love processes that are standardized, routinized, predictable. Stamping out variance makes a complex job a bit less complex. —Marcus Buckingham

Nothing in business excites so much interest in the wider world as the pay of top executives. —*The Economist*

Most of the students are very motivated and well informed about what they need to do, and they want to do a good job. Of course, there are always some slackers...and we had to push them extremely hard. But I would say 80% of the students or even higher are very motivated. —Worcester Polytechnic Institute Faculty Member

If a block quote is from a source that **does** appear in the reference list, include a parenthetical citation of the reference, including the page numbers, after the quote.

## **Example:**

Almost always the men who achieve these fundamental inventions of a new paradigm have been either very young or very new to the field whose paradigm they change. (Kuhn 1970, pp. 89–90)

**Note** If an article begins with a block quote, the quote should be placed **before** the **Introduction** heading.

# References

## Citations

Reference citations are Harvard (i.e., author/year) style; observe the following format:

**One author:** ...as described previously (Smith 2013).  
**Two authors:** ...as described previously (Smith and Jones 2013).  
**Three or more authors:** ...as described previously (Smith et al. 2013).

If the author(s) of a reference are mentioned in running text, place only the year in parentheses:

**One author:** ...as described by Smith (2013).  
**Two authors:** ...as described by Smith and Jones (2013).  
**Three or more authors:** ...as described by Smith et al. (2013).

**Deviation** In *Transportation Science* (TRSC), for three or fewer authors, list all three surnames and the year (e.g., Smith, Jones, and Brown 2010); for four or more authors, list the first surname followed by et al. (e.g., Smith et al. 2012).

**Deviation** In *Mathematics of Operations Research* (MOOR), references are alphabetized **and** numbered (see [Deviation](#)) and are thus cited by name **and** number in text, with numbers appearing within brackets (e.g., Smith [9]). Do **not** cite ranges; cite each reference separately (e.g., Smith and Jones [9], Lee et al.[10], Davis [11]). (See also [Capitalization/Citations.](#))

**Deviation** In *INFORMS Transactions on Education* (ITED), URLs that are cited in text should be hyperlinked in the article PDF, including those that are cited in conjunction with a reference citation; for example:

The chain-reaction puzzle is available on Andrea Gilbert’s website at <http://clickmazes.com> (Gilbert 1997).

For multiple citations in the same set of parentheses, order as follows: chronological, then alphabetical by first author, then number of authors; separate citations with commas. For example:

...as reviewed previously (Smith 2001, Adams et al. 2004, Jones et al. 2005, Brown 2007, Zwick 2007, Zwick and Jones 2007, Zwick and Smith 2007, Zwick et al. 2007).

For citations that include multiple citations with the same author name(s), list the author name(s) once followed by the years of the cited references separated with commas; separate author groups with semicolons. Base chronological order on the first year listed for each author. For example:

...as reviewed previously (Zwick et al. 2001a, b; Jones et al. 2005; Adams et al. 2007, 2008; Smith 2010, 2011, 2015; Lee et al. 2014, 2017).

If a reference is being cited in conjunction with a direct quote, include the page number(s) in the citation. For example:

This approach allowed the investigators to determine whether “the benefits of surgeon experience obtained at one hospital would be fully portable to the other” (Ramirez et al. 2017, pp. 541–542).

Always verify that (a) all references are cited in the text, (b) all citations have a matching reference in the list, and (c) the year of publication cited in text matches the year of publication in the reference list; query the author about any mismatches.

**Note** Avoid the possessive form of “et al.”; recast the sentence as necessary (e.g., change “Smith et al.’s proposition reveals...” to “The Smith et al. proposition reveals...”).

## Reference list

The reference list appears after the text and after any [endnotes](#) and is preceded by the boldface heading **References** (or the singular **Reference** if there is only one reference in the list).

References are listed in alphabetical order according to the first author’s surname. For multiple references with the same surname for the first author, order as follows: number of authors, then alphabetical, then chronological. For example:

Adams J (1979)  
Adams J, Smith C (1976)  
Adams J, Miller B, Smith C (1980a)  
Adams J, Smith C, Miller B, Davis G (1984)  
Adams J, Ward H, Miller B, Smith C (1980b)

**Deviation** In *Mathematics of Operations Research* (MOOR), the references are also numbered (see [Deviation](#)); for example:

[1] Adams J (1979)  
[2] Adams J, Smith C (1976)  
[3] Adams J, Miller B, Smith C (1980)  
[4] Adams J, Smith C, Miller B, Davis G (1984)  
[5] Adams J, Ward H, Miller B, Smith C (1980)

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## INSTITUTION LOCATIONS

If the name of a state or country appears in the name of an institution, do **not** include the state or country with the city (e.g., Arizona State University, Tempe **not** Arizona State University, Tempe, AZ).

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## JOURNAL TITLES

See [Appendix B](#) and <http://www.ams.org/msnhtml/serials.pdf> for common journal titles and abbreviations.

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## PUBLISHER CITIES AND COUNTRIES

Do **not** include the state with the following cities:

Atlanta	Denver	Milwaukee	Pittsburgh
Baltimore	Detroit	Minneapolis	St. Louis
Boston	Honolulu	New Orleans	Salt Lake City
Chicago	Houston	New York	San Diego
Cincinnati	Indianapolis	Oklahoma City	San Francisco
Cleveland	Los Angeles	Philadelphia	Seattle
Dallas	Miami	Phoenix	

Do **not** include the country with the following cities:

Amsterdam	Hong Kong	Montreal	Tokyo
Beijing	Istanbul	Moscow	Toronto
Berlin	Jerusalem	Ottawa	Vancouver
Brussels	London	Paris	Vatican City
Budapest	Luxembourg	Quebec	Vienna
Buenos Aires	Madrid	Rio de Janeiro	Warsaw
Copenhagen	Mexico City	Rome	Zurich
Geneva	Milan	Singapore	
Havana	Monaco	Stockholm	

### Reference style

List all author and/or editor names up to the first 10 names; for  $\geq 11$  names, list only the first 7 names followed by “et al.”

For all authors, list the surname first followed by the initial(s) (no periods or commas after initials); multiple authors are separated by commas. Patronyms (e.g., “Jr”, “III”, etc.) should follow initials (e.g., Makridakis SH Jr, Wheelwright AC III).

Query the author for any missing information that cannot be found easily online.

**Deviation** In *INFORMS Transactions on Education* (ITED), include a URL as a supplemental reference component when available. For example, for a reference to a [newspaper/magazine](#):

Leonhardt D (2000) A matter of degree? Not for consultants. *New York Times* (October 1), Sec. 3.1, <http://query.nytimes.com/gst/fullpage.html?res=9C0DEFDD173DF932A35753C1A9669C8B63>.

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### BOOKS

Lilien GL, Rangaswamy A (1998) *Marketing Engineering: Computer-Assisted Marketing Analysis and Planning* (Addison-Wesley, Reading, MA).

Makridakis S, Wheelwright SC, McGee VE (1983) *Forecasting: Methods and Applications*, 2nd ed. (John Wiley & Sons, New York).

**Note** The page count is not required when an entire book is referenced.

### ARTICLE OR CHAPTER IN AN EDITED BOOK

Martello S, Toth P (1979) The 0-1 knapsack problem. Christofides N, Mingozzi A, Sandi C, eds. *Combinatorial Optimization* (John Wiley & Sons, New York), 237–279.

**Note** The page range is required for the article or chapter; query if not provided.

#### BOOK WITH VOLUME

Van Zandt T (1999) Decentralized information processing in the theory of organizations. Sertel M, ed. *Contemporary Economic Issues, Economic Behavior and Design*, vol. 4 (Macmillan, London), 125–166.

#### BOOK IN A SERIES

Kolisch R, Meyer K (2006) Selection and scheduling of pharmaceutical research projects. Józefowska J, Weglarz J, eds. *Perspectives in Modern Project Scheduling*, International Series in Operations Research and Management Science, vol. 3 (Springer, New York), 321–344.

#### EDITED BOOK

Doyle P, Stern P, eds. (2006) *Marketing Management and Strategy*. 4th ed. (Prentice Hall, Upper Saddle River, NJ).

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#### CONFERENCE PROCEEDINGS, PUBLISHED

Hill RR (1996) An analytical comparison of optimization problem generation methodologies. Medeiros DJ, Watson EF, Carson JS, eds. *Proc. 21st Winter Simulation Conf. 1998* (Institute of Electrical and Electronics Engineers, Washington, DC), 609–615.

**Note** Use the city and state of the publisher, not the conference location; if only the location is used, set the location in italic type.

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#### DICTIONARIES AND ENCYCLOPEDIAS

Well-known dictionaries and encyclopedias should be cited as [endnotes](#); other reference works may be cited in the reference list (see §14.232–§14.234 in *The Chicago Manual of Style*).

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#### ELECTRONIC REFERENCES

##### CD OR DVD-ROM

Ailawadi K, Cesar J, Harlam B (2014) Quantifying and improving promotion profitability at CVS. Disc 05.01. *2005 Practice Prize Competition*. DVD. INFORMS, Catonsville, MD. [http://www.informs.org/site/ISM\\_DVD/article.php?id=4](http://www.informs.org/site/ISM_DVD/article.php?id=4).

##### WEB SITE

Federation of American Scientists. Resolution comparison: Reading license plates and headlines. Accessed March 29, 2006, <http://www.fas.org/irp/imint/resolve5.htm>.

Open Source Initiative (2006) The open source definition. Retrieved March 29, <http://www.opensource.org/>.

**Note** Websites and PDFs of reports are acceptable either as references or [endnotes](#).

##### WIKIPEDIA

Wikipedia. Probabilistic analysis of algorithms. Accessed February 20, 2017, [https://en.wikipedia.org/wiki/Probabilistic\\_analysis\\_of\\_algorithms](https://en.wikipedia.org/wiki/Probabilistic_analysis_of_algorithms).

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## INTERVIEW

Hunt H (1976) Interview by Ronald Schatz. Tape recording, May 16. Pennsylvania Historical and Museum Commission, Harrisburg.

**Note** Citations should include the names of both the interviewee and the interviewer; brief identifying information, if appropriate; the place or date of the interview (or both, if known); and, if a transcript or tape is available, where it may be found. Permission to quote may be needed; see [Chapter 4](#) in *The Chicago Manual of Style*.

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## JOURNAL ARTICLES

Flynn J, Gartska S Jr (1990) A dynamic inventory model with periodic auditing. *Oper. Res.* 38(6):1089–1103.

Garvin DA (1987) Competing on the eight dimensions of quality. *Harvard Bus. Rev.* 65(May–June):101–117.

Nau RA, Garvin DA, Whitt W (1995) Coherent decision analysis with inseparable probabilities and utilities. *J. Math. Econom.* 29(2):331–361.

## FORTHCOMING ARTICLE

Johnson RD, Marakas GM (2017) The role of behavioral modeling in computer skills acquisition: Toward refinement of the model. *Inform. Systems Res.* Forthcoming.

**Note** Always query the author to update a forthcoming publication. If the publication is an INFORMS journal, alert your production representative so that they may update the reference.

**Note** [Citations](#) of forthcoming articles should include the current year [e.g., Lee (2018) *not* Lee (forthcoming)].

## PUBLISHED AHEAD OF PRINT

Lu SF, Rui H (2017) Can we trust online physician ratings? Evidence from cardiac surgeons in Florida. *Management Sci.*, ePub ahead of print June 13, <https://doi.org/10.1287/mnsc.2017.2741>.

**Note** Always check online for a publication update.

**Note** If no URL is provided for a non-INFORMS journal, simply end the reference after the month and day.

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## NEWSPAPER/MAGAZINE

### PRINT

*Wall Street Journal* (1997) Robust demand leaves industry front-runner unafraid. (January 20), B2.

### ONLINE

Morrison M (2003) Herb Kelleher on the record, part 3. *Bus. Week Online* (December 23), <http://www.businessweek.com/stories/2003-12-23/herb-kelleher-on-the-record-part-3>.

Reaves J (2001) A weighty issue: Ever-fatter kids. Interview with James Rosen. *Time* (March 14), <http://www.time.com/time/nation/article/1234.html>.

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**PERSONAL COMMUNICATION**

Cummings JN (2005) Team configuration data provided via personal communication with the authors, January 4.

**Note** Query the author to include information about a transcript or tape of the personal communication if not provided.

**Deviation** In *INFORMS Transactions on Education* (ITED), additional information about a transcript or tape is not necessary; do not query if missing.

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**PREPRINT**

Bertsimas D, Gupta V, Kallus N (2013) Data-driven robust optimization. Preprint, submitted December 31, <https://arxiv.org/abs/1401.0212>.

**Note** For SSRN (Social Science Research Network) preprints, use the URL format that includes the DOI instead of the [www.ssrn.com](http://www.ssrn.com) format:

Babenko I, Choi G, Sen R (2018) Management (of) proposals. Preprint, submitted April 20, <https://dx.doi.org/10.2139/ssrn.3155428>.

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**PRESENTATION/LECTURE**

Haltiwanger J (2004) What do we know (and not know) about the contribution of young businesses to economic growth? Presentation, Entrepreneurship in the 21st Century Conference, March 26, Office of Advocacy, U.S. Small Business Administration, Washington, DC.

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**REPORT/WHITE PAPER/PRESS RELEASE**

U.S. Small Business Administration (2003) Self-employment and computer usage. Report, Office of Advocacy, U.S. Small Business Administration, Washington, DC.

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**SOFTWARE**

Rovio Entertainment. Angry Birds Transformers. V. 1.4.25. Rovio Entertainment, 2014. Android 4.0 or later. Soundtrack by Vince DiCola and Kenny Meriedeth.

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**THESIS OR DISSERTATION, UNPUBLISHED**

Yi Y (1998) Developing and validating an observational learning model of computer software training. Unpublished doctoral dissertation, University of Maryland, College Park.

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**WORKING PAPER****WITHOUT PUBLICATION NUMBER**

Balzer B, Schneider J (2018) Persuading to participate: Coordination on a standard. Working paper, University of Technology, Sydney, Australia.



*WITH PUBLICATION NUMBER*

Gross DP (2016) The ties that bind: Railroad gauge standards and internal trade in the 19th century U.S. Harvard Business School Working Paper No. 17-044, Harvard University, Boston.

*NATIONAL BUREAU OF ECONOMIC RESEARCH*

Catalini C, Gans JS (2019) Some simple economics of the blockchain. NBER Working Paper No. 22952, National Bureau of Economic Research, Cambridge, MA.

**Note** If only “working paper” appears, query the author to provide the institution and location of the first author.

**Note** If the author has provided a URL link to a working paper, delete it *unless* it is a link to a preprint server, in which case the [preprint](#) reference style should be followed.

**Note** Always query the author to provide an update for a working paper.

# Tables

## Caption

The table caption is set in [title case](#) and is preceded by a boldface table number followed by a period; the caption should run in with the table number. The caption does not end with a period. For example:

**Table 1.** Determinants of Director Equity Deferrals: Multiple-Board Directors

If the table caption is more than one sentence, set the subsequent sentences as a [note](#); do **not** allow footnotes to be appended to table captions.

**Deviation** In *Mathematics of Operations Research* (MOOR), table captions are set in sentence case, can contain multiple sentences, and end with a period; for example:

**Table 1.** Comparison of upper bounds and solution times of PL and LR. Both times are solved to 1% of optimality by linear programming.

## Headings, body, and rules

Headers are initial column flush left and subsequent headings centered. Table column and row headings are set in sentence case. Row subheadings are indented one em space.

Generally, a table has three rules: below the caption, below column headings, and below body of table. Set the fewest number of rules as possible.

Data in the table body are decimal-aligned. Em dashes, if present, should be centered.

Stylized findings	Received wisdom	Comparison between stylized finding and received wisdom	Novel theoretical implications
1. <i>SME owner-lenders are more likely to issue OTB loans than formal loans.</i>	Employers exercise power over employees through formal structural mechanisms including contracts and peonage that reduce uncertainty (Cook and Emerson 1978, Pfeffer and Salancik 1978).	In smaller firms, employers forsake control and peonage for informal agreements that expand ways employee obligations can be discharged.	Informal mechanisms, including loans, are a pervasive and attractive means of extracting goodwill from critical resource dependencies.
2. <i>Many employers issue both OTB loans and formal loans.</i>	More complete contracts that specify contingencies reduce uncertainty for employers (Hart and Moore 1988).	In smaller firms, employers are willing to forsake contractual protections in lending money to workers.	Strong patterns of employer loan choice indicate that employers utilize complex heuristics in the issuance of formal and informal loans.

Reason for loan	Min (\$)	Max (\$)	Mean amount (\$)	Overall frequency (no. and overall %)	OTB frequency (no. and % OTB)
Prosocial requests	50	11,500	1,337	146 (32%)	117 (80%)
Opportunistic/transactional requests	25	7,500	1,014	313 (68%)	145 (46%)

If a table is split into two or more parts, the panel letters should be uppercase roman (e.g., Panel A, Panel B). However, tables with multiple lettered parts should **not** be presented as multiple separate tables; renumber the tables in such cases (e.g., Table 1A and Table 1B **becomes** Table 1 and Table 2).

**Note** Horizontal and/or vertical rules may be reinserted at the author's request.

## Notes and footnotes

If the table caption is more than one sentence, set the subsequent sentences below the table and preceded by the italic header *Note* (for one sentence) or *Notes* (for two or more sentences).

Abbreviation definitions should appear in the *Note(s)*; if there are two or more notes, the abbreviations list should appear last. Separate each abbreviation from its definition with a comma, and separate definitions from each other with semicolons.

**Note** Follow copy regarding the order in which the abbreviations are listed; it is **not** necessary to alphabetize abbreviations lists that have not been alphabetized.

Footnotes are set below the *Note(s)*, each footnote on its own line, preceded by the applicable superscript footnote symbol, and indented one em space; set multiple *p*-values on the same line, separated by semicolons.

If applicable, a copyright statement should appear as the first line below the table and preceded by the italic heading *Source*. Notify your production representative or query the author to provide the appropriate documentation to confirm that permission has been received.

### **Example:**

#### **Table 1.** Appointment Scheduling Models and Discrete Convexity

*Source.* China Statistical Yearbook.

*Note.* All functions were adjusted to reflect the minimization problem. IHP, infinite horizon problem; CCM, consumer choice model; SPP, single-period problem; SD, standard deviation.

<sup>a</sup>Objective function assumed to be convex but not proven.

<sup>b</sup>Decision variables are continuous.

\**p* < 0.01; \*\**p* < 0.05; \*\*\**p* < 0.001.

## Citations

Every table must be cited in the article text in numerical order. Spell out the word "Table(s)" in the text regardless of whether the table is cited parenthetically:

(Table 1)

(Tables 4–6)

(Tables 5 and 6)

As shown in Table 1...

Tables 4–6 show...

As shown in Tables 5 and 6...

# Terminology

Term	Notes
asymptotically	a mathematical term; <b>not</b> a misspelling of <i>asymptomatically</i>
data set	two words
decision maker (n)	e.g., “Convince the decision makers to change the existing practices...”
decision-maker (adj)	e.g., “Decision-maker”
decision making (n)	e.g., “Decision making is an important component of any business...”
decision-making (adj)	e.g., “Decision-making policies should be established...”
email	deviation from <i>Merriam-Webster’s</i>
healthcare	deviation from <i>Merriam-Webster’s</i>
J-statistic	e.g., “Hansen’s J-statistic”
online	one word
internet	per <i>The Chicago Manual of Style</i> §7.80
max	abbreviate when “maximum” is meant; spell out when “maximize” is meant
min	abbreviate when “minimum” is meant; spell out when “minimize” is meant
p-value	hyphenate general references (e.g., “All p-values...”); “p” stands alone for specific values (e.g., $p < 0.01$ )
R <sup>2</sup>	<b>not</b> “R-squared”
s.t.	subject to; <b>always</b> include periods
supply chain	do not hyphenate as a unit modifier
the web	per <i>The Chicago Manual of Style</i> §7.80
web page	per <i>The Chicago Manual of Style</i> §7.80
website	per <i>The Chicago Manual of Style</i> §7.80
World Wide Web	per <i>The Chicago Manual of Style</i> §7.80

## Latin terms

Commonly used Latin words and abbreviations (e.g., *ex post*, *ad hoc*, *a priori*, etc.) should not be italicized or hyphenated (even if used as a modifier); however, retain hyphens if used in reference titles or direct quotes.

If the Latin term is in the dictionary, set roman; if it is not in dictionary, set italic. Aim for consistency throughout an article.

## Signs and symbols

### COPYRIGHT, REGISTERED, AND TRADEMARK SYMBOLS

Use these symbols only if the author has provided them, and only the first time used in text, tables, and figures. Do not use these symbols in headers or in titles.

### “LESS THAN” AND “GREATER THAN” SYMBOLS

Place a space on either side of the “less than” (<) and “greater than” (>) symbols in two-sided expressions (e.g.,  $p < 0.01$ ), but close up the space in one-sided expressions (e.g., the increase in cost was <20%). (See also §12.13 in *The Chicago Manual of Style*.)

### PERCENT

Use the percent symbol (%) with numerals; close up the symbol to the number. Repeat the symbol in ranges or series (e.g., 5%–20%; 5%, 10%, 20%, and 40%).

# Usage

## General usage

**above/below** Do *not* use to refer to article sections, equations, or [enunciations](#) that appear elsewhere in the paper; instead, refer to the specific component being cited.

**affect/effect** As a verb, *affect* means to have bearing or influence on something; *effect* means to cause something to happen. As a noun, *affect* refers to emotion; *effect* is the power to produce a consequence.

**although/though** Follow author usage.

**below/above** See [above/below](#).

**compare** compare (i.e., liken) to a standard; compare *with* a peer.

**compose/comprise** *compose* means to make up (“The soup is *composed* of many ingredients”); *comprise* means to encompass, to be made up of (“The whole *comprises* the parts”).

**data** The plural form of datum; the latter is rarely used. Never use “little data”; use “few data.”

**due to** Replace *due to* with *because of* when used adverbially (e.g., “Because of the parents’ negligence, the entire family suffered”). *Due to* is acceptable when it is being used as an adjective after the verb *to be* (e.g., “...if the effect was *due to* market participants not trading”). Always replace *due to the fact that* with *because*.

**effect/affect** See [affect/effect](#).

**e.g./i.e.** *e.g.* means “for example” and introduces a list of examples; *i.e.* means “that is” and introduces a restatement or definition. Use the (roman) abbreviated form in parentheses, but spell out in text.

**ensure/insure** To *ensure* means to guarantee or make sure; to *insure* means to assure against loss or to give, take, or procure insurance.

**in order to** Follow author usage; do not shorten to “to” unless absolutely necessary.

**insure/ensure** See [ensure/insure](#).

**Netherlands** Precede with the word “the” only when grammatically necessary in running text (e.g., “When visiting the Netherlands...”); omit the word “the” in [affiliations](#) and [references](#).

**on the other hand** It is acceptable to retain the terms “on the one hand” and “on the other hand” (i.e., do not replace “on the one hand” with “on one hand” and do not replace “on the other hand” with “in contrast” or “by contrast”).

**since** Use only in a temporal sense (e.g., “Since 1999, many studies have focused on...”); otherwise, use *because* (e.g., “Because our model did not yield satisfactory results...”).

**that/which** Use *that* to introduce restrictive (essential) clauses and *which* to introduce nonrestrictive (nonessential) clauses. A *which* clause can be, but is not always, set off by commas; *that* clauses never are.

**though/although** See [although/though](#).

**United Kingdom** Abbreviate as “UK” without periods when used as a modifier; spell out when used as a noun.

**United States** Abbreviate as “U.S.” with periods when used as a modifier; spell out when used as a noun.

**versus** Spell out in text but abbreviate as “vs.” in headings, figure/table legends, and titles.

**viz.** Latin for “namely”; it is permissible to use the abbreviation in parenthetical text, but spell out as “namely” in regular text.

**which/that** See [that/which](#).

**while** Use only in a temporal sense (e.g., “While the coffee brewed, I read the paper”); otherwise use *although* or *whereas* as appropriate (e.g., “Although it was raining, I was in a cheery mood”; “I prefer vanilla, whereas my husband prefers chocolate”).

### Gender-specific pronouns

Do not use *he/she*, *s/he*, *(s)he*, etc.; use *he or she* only after exhausting other options (see [§5.255](#) in *The Chicago Manual of Style*).

Do not use *they* as a singular pronoun.

### Italics

Italics may be used to offset a key term at its first mention, but the term should appear in roman type thereafter. Use italics for emphasis sparingly. (See also [§7.50](#) and [§7.53–§7.56](#) in *The Chicago Manual of Style*.)

### Passive vs. active voice

Minor edits to change passive to active voice are permissible; however, if extensive rewrites would be required, follow the author’s voice and refrain from making any edits. Always query the author to confirm any edits to passive/active voice.

# Appendix A: History Lines

History line information will be provided on the article checklist. Not all INFORMS journals publish history lines, and those that do use varying language and formats; refer to the following sections for details regarding specific titles.

**Note** Articles that are part of a special issue must *always* have a history line. Examples follow, but as a general rule use the wording that has been provided on the article checklist:

**History:** This paper has been accepted by Benjamin Lev and Grace Lin for the Special Issue on Operations Research Applications in the Energy Industry.

**History:** This paper has been accepted for the *Manufacturing & Service Operations Management* Special Issue on Interface of Finance, Operations, and Risk Management.

**History:** This paper was accepted through the *Marketing Science* Frontiers review process.

## DECA, IJO, MOOR, MSOM, OPRE, ORSC, STSC, TRSC, SERV, ITED

No history line unless the article is part of a special issue.

## IJOC

Accepted by <NAME>, Area Editor for <AREA>.

**History:** Accepted by Ram Ramesh, Area Editor for Knowledge Management and Machine Learning.

## INTE

Only has a history line if the paper was refereed.

**History:** This paper was refereed.

## ISRE

<NAME>, Senior Editor; <NAME>, Associate Editor.

**History:** Vijay Mookerjee, Senior Editor; Gautam Pant, Associate Editor.

## MKSC

<NAME> served as the senior editor and <NAME> served as associate editor for this article.

**History:** Yuxin Chen served as the senior editor and Anthony Dukes served as associate editor for this article.

<NAME> served as the editor-in-chief and <NAME> served as associate editor for this article.

**History:** K. Sudhir served as the editor-in-chief and Christophe Van den Bulte served as associate editor for this article.

## MNSC

Accepted by <NAME>, <DEPARTMENT>.

**History:** Accepted by Shivaram Rajgopal, accounting.



## Appendix B: Common Journal Abbreviations

### *Abbreviations used in journal titles*

Abstract/s	Abstr.
Academy	Acad.
Adaptive	Adapt.
Administrative	Admin.
Advances	Adv.
American	Amer.
Analysis	Anal.
Annals	Ann.
Applied, Applications	Appl.
Archives	Arch.
Association	Assoc.
Behavior	Behav.
Biology, Biological	Biol.
Bulletin	Bull.
Business	Bus.
Collection	Collect.
Combinatorial	Combin.
Communications	Comm.
Computer, Computation, Computing	Comput.
Conference	Conf.
Cuaderno/s	Cuad.
Document	Doc.
Dynamics	Dynam.
Economical, Economy, Economic	Econom.
Education	Ed.
Electrical	Electr.
Elements	Elem.
Engineering	Engrg.
Environmental	Environ.
European	Eur.
Experimental	Experiment.
Faculty	Fac.
Functional	Funct.
Historical, History	Hist.
Industry, Industrial	Indust.
Information	Inform.
Institute	Inst.
International	Internat.
Journal	J.
Learning	Learn.
Letters	Lett.
Logistics	Logist.
Mathematical, Mathematics	Math.
Mechanics, Mechanical	Mech.

Modelling	Model.
Natural	Natl.
Numerical	Numer.
Operations, Operational	Oper.
Optimization	Optim.
Organization, Organizational	Organ.
Perspective	Perspect.
Philosophical, Philosophy	Philos.
Physics	Phys.
Probability	Probab.
Proceedings	Proc.
Psychology, Psychological	Psych.
Publications	Publ.
Quantitative	Quant.
Quarterly	Quart.
Recherche	Rech.
Report/s	Rep.
Research	Res.
Review	Rev.
Royal	Roy.
Science, Scientific	Sci.
Section	Sect.
Series	Ser.
Social, Society	Soc.
Sociological, Sociology	Sociol.
Statistics, Statistical	Statist.
Study, Studies	Stud.
Symposium	Sympos.
Technical, Technology, Technological	Tech.
Telecommunications	Telecomm.
Theoretical	Theoret.
Transactions	Trans.
University	Univ.

## Full journal titles

Academy of Management Journal	Acad. Management J.
Academy of Management Review	Acad. Management Rev.
Accounting Horizons	Accounting Horizons
Acta Applicandae Mathematicae	Acta Applicandae Mathematicae
Acta Mathematica Vietnam	Acta Math. Vietnam
Administrative Science Quarterly	Admin. Sci. Quart.
Advances in Applied Probability	Adv. Appl. Probab.
Advances in Futures and Options Research	Adv. Futures Options Res.
Advances in Research on the Sociology of Organizations	Adv. Res. Sociol. Organ.
American Economic Review	Amer. Econom. Rev.
American Journal of Medicine	Amer. J. Medicine
American Journal of Sociology	Amer. J. Sociol.
American Political Science Review	Amer. Political Sci. Rev.
American Sociological Review	Amer. Sociol. Rev.
Annals of Applied Probability	Ann. Appl. Probab.
Annals of Statistics	Ann. Statist.
Annual Review of Sociology	Annual Rev. Sociol.
Applied Mathematics and Optimization	Appl. Math. Optim.
Archives of Internal Medicine	Arch. Internal Medicine
Banking Strategies	Banking Strategies
Bell Journal of Economics	Bell J. Econom.
Bell Journal of Economics and Management Science	Bell J. Econom. Management Sci.
Biological Cybernetics	Biol. Cybernetics
Business and Politics	Bus. Politics
Business Horizons	Bus. Horizons
Business Week	Bus. Week
California Management Review	Calif. Management Rev.
Computational Intelligence	Comput. Intelligence
Computational Optimization and Applications	Comput. Optim. Appl.
Computer Mathematics Applications	Comput. Math. Appl.
Computers and Operations Research	Comput. Oper. Res.
Decision Analysis	Decision Anal.
Econometrica	Econometrica
Economic Journal	Econom. J.
Economics and Politics	Econom. Politics
European Economic Review	Eur. Econom. Rev.
European Finance Review	Eur. Finance Rev.
European Financial Review	Eur. Financial Rev.
European Journal of Information Systems	Eur. J. Inform. Systems
European Journal of Operational Research	Eur. J. Oper. Res.
European Management Journal	Eur. Management J.
Expert Systems with Applications	Expert Systems Appl.
Finance and Stochastics	Finance Stochastics
Financial Analysts Journal	Financial Analysts J.
Games and Economic Behavior	Games Econom. Behav.
Harvard Business Review	Harvard Bus. Rev.
Hitotsubashi Journal of Commerce and Management	Hitotsubashi J. Commerce Management
Human Relations	Human Relations

Human Resource Management	Human Resource Management
IBM Journal of Research and Development	IBM J. Res. Development
IEEE Transactions on Engineering Management	IEEE Trans. Engrg. Management
Industrial and Corporate Change	Indust. Corporate Change
Industrial Management Review	Indust. Management Rev.
Industry and Innovation	Indust. Innovation
Information Systems Frontiers	Inform. Systems Frontiers
Information Systems Journal	Inform. Systems J.
Information Systems Research	Inform. Systems Res.
INFORMS Journal on Computing	INFORMS J. Comput.
Insurance, Mathematics and Economics	Insurance, Math., Econom.
International Journal of Flexible Manufacturing Systems	Internat. J. Flexible Manufacturing Systems
International Journal of Industrial Organization	Internat. J. Indust. Organ.
International Journal of Production Economics	Internat. J. Production Econom.
International Journal of Production Research	Internat. J. Production Res.
International Journal of Service Industry Management	Internat. J. Service Indust. Management
International Journal of Services, Technology, and Management	Internat. J. Services, Tech., Management
International Journal of Theoretical and Applied Finance	Internat. J. Theoret. Appl. Finance
International Options Journal	Internat. Options J.
International Transactions of Operational Research	Internat. Trans. Oper. Res.
Journal of Accounting Research	J. Accounting Res.
Journal of Applied Corporate Finance	J. Appl. Corporate Finance
Journal of Banking and Finance	J. Banking Finance
Journal of Business	J. Bus.
Journal of Business and Economic Statistics	J. Bus. Econom. Statist.
Journal of Business, Finance and Accounting	J. Bus., Finance, Accounting
Journal of Combinatorial Optimization	J. Combin. Optim.
Journal of Computational Finance	J. Computational Finance
Journal of Consumer Research	J. Consumer Res.
Journal of Cost Management	J. Cost Management
Journal of Derivatives	J. Derivatives
Journal of Econometrics	J. Econometrics
Journal of Economic Behavior and Organization	J. Econom. Behav. Organ.
Journal of Economic Dynamics and Control	J. Econom. Dynam. Control
Journal of Economic Perspectives	J. Econom. Perspect.
Journal of Economic Theory	J. Econom. Theory
Journal of Economics and Management Strategy	J. Econom. Management Strategy
Journal of Finance	J. Finance
Journal of Financial and Quantitative Analysis	J. Financial Quant. Anal.
Journal of Financial Economics	J. Financial Econom.
Journal of Fixed Income	J. Fixed Income
Journal of Global Information Management	J. Global Inform. Management
Journal of Global Optimization	J. Global Optim.
Journal of Industrial Economics	J. Indust. Econom.
Journal of Information Technology	J. Inform. Tech.
Journal of Intelligent Manufacturing	J. Intelligent Manufacturing
Journal of Interactive Marketing	J. Interactive Marketing
Journal of International Business Studies	J. Internat. Bus. Stud.
Journal of International Economics	J. Internat. Econom.
Journal of Law and Economics	J. Law Econom.
Journal of Law, Economics, and Organizations	J. Law, Econom., Organ.

Journal of Management Information Systems	J. Management Inform. Systems
Journal of Management Inquiry	J. Management Inquiry
Journal of Management Studies	J. Management Stud.
Journal of Marketing	J. Marketing
Journal of Marketing Management	J. Marketing Management
Journal of Marketing Research	J. Marketing Res.
Journal of Mathematical Analysis and Applications	J. Math. Anal. Appl.
Journal of Operational Research Society	J. Oper. Res. Soc.
Journal of Operations Management	J. Oper. Management
Journal of Optimization Theory and Applications	J. Optim. Theory Appl.
Journal of Organizational Behavior	J. Organ. Behav.
Journal of Organizational Computing	J. Organ. Comput.
Journal of Personality and Social Psychology	J. Personality Soc. Psych.
Journal of Political Economy	J. Political Econom.
Journal of Portfolio Management	J. Portfolio Management
Journal of Product Innovation Management	J. Product Innovation Management
Journal of Research and Development	J. Res. Development
Journal of Risk and Uncertainty	J. Risk Uncertainty
Journal of Service Research	J. Service Res.
Journal of Strategic Information Systems	J. Strategic Inform. Systems
Journal of the American Medical Association	J. Amer. Medical Assoc.
Journal of the Royal Statistical Society	J. Royal Statist. Soc.
Journal of Theoretical Biology	J. Theoret. Biol.
Knowledge and Process Management	Knowledge Process Management
Los Angeles Times	Los Angeles Times
Management Accounting	Management Accounting
Management Science	Management Sci.
Management Strategy	Management Strategy
Manufacturing and Service Operations Management	Manufacturing Service Oper. Management
Marketing Letters	Marketing Lett.
Marketing News	Marketing News
Marketing Science	Marketing Sci.
Mathematical Finance	Math. Finance
Mathematical Programming	Math. Programming
Mathematical Programming Study	Math. Programming Stud.
Mathematics of Operations Research	Math. Oper. Res.
Mathematische Annalen	Mathematische Annalen
McKinsey Quarterly	McKinsey Quart.
Medical Marketing and Media	Medical Marketing Media
MIS Quarterly	MIS Quart.
MIS Quarterly Executive	MIS Quart. Executive
Naval Research Logistics	Naval Res. Logist.
New York Times	New York Times
Numerische Mathematik	Numerische Mathematik
Operations Research	Oper. Res.
Operations Research Letters	Oper. Res. Lett.
Operations Research Practice	Oper. Res. Practice
Operations Research/Management Science Today	OR/MS Today
Organization Science	Organ. Sci.
Physical Review	Phys. Rev.
Proceedings of the National Academy of Sciences of the United	Proc. Natl. Acad. Sci. USA or

Production and Operations Management	Production Oper. Management
Programming Study	Programming Stud.
Quarterly Journal of Economics	Quart. J. Econom.
Rand Journal of Economics (RAND Journal of Economics)	RAND J. Econom.
Research Policy	Res. Policy
Review of Accounting Studies	Rev. Accounting Stud.
Review of Derivatives Research	Rev. Derivatives Res.
Review of Economic Studies	Rev. Econom. Stud.
Review of Economics and Statistics	Rev. Econom. Statist.
Review of Financial Studies	Rev. Financial Stud.
Review of Futures Markets	Rev. Futures Markets
Service Science	Service Sci.
SIAM Journal of Economic Computing	SIAM J. Econom. Comput.
Sloan Management Review	Sloan Management Rev.
Social Science and Medicine	Social Sci. Medicine
Stochastic Analysis and Applications	Stochastic Anal. Appl.
Stochastic Processes and Their Applications	Stochastic Processes Their Appl.
Stochastics and Stochastics Reports	Stochastics Stochastics Rep.
Strategic Management Journal	Strategic Management J.
Technology Analysis & Strategic Management	Tech. Anal. Strategic Management
Theory and Decision	Theory Decision
Theory of Probability and Its Application	Theory Probab. Its Appl.
Total Quality Management	Total Quality Management
Transportation Science	Transportation Sci.
Wall Street Journal	Wall Street Journal
Washington Post	Washington Post
World Development	World Development

## Appendix C: ITED Case Series

ITED Case Series are typically composed of three parts:

**Case Article** (usually a summary of the case)

**Case** (for students)

**Teaching Notes** (for teachers)

At least one of these three parts should contain a reference list, but not all parts may have a reference list.

The **Case Article** and **Case** are set as separate PDFs and have separate DOIs; for example:

10.1287/ited.1090.0028ca – Case Article

10.1287/ited.1090.0028cs – Case

The **Case Teaching Notes** (and/or Instructor Materials) are posted with the article in which they appear on the ITED website; they are not edited or typeset.

For an example of how a Case Series is set up, see ITED Volume 18, Issue 3.

# Appendix D: Standard Author Queries

The author queries in this appendix should be added to every INFORMS article in which they apply.

## **Article title, author names, affiliations, and contact information**

Please confirm that the article title, author names, affiliations, and email addresses are set correctly. If applicable, please provide author ORCID numbers.

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Please confirm that subject classifications are correct as set.

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Please confirm that keywords are correct as set.

## **Headings**

Please confirm that heading levels are correct as set.

## **Reference citations with article components**

Per journal style, if your paper includes any citations to specific figures, tables, appendices, sections, or enumerations from other publications, they are presented in lowercase to avoid confusion with citations to similar components of the current paper (which are capitalized). Please confirm throughout.



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