

Journal of the Association for Information Systems

J AIS 

Style Guide

Journal of the Association for Information Systems Style Guide

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Overview

This style guide is for authors who intend to submit papers to the Journal of the Association for Information Systems (JAIS). It covers general style issues and common errors. Please check with this guide before you submit your manuscript to JAIS. While we encourage authors to adopt the style indicated in this document please note that doing so is not mandatory.

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1. Tense and Voice

1.1. Active Voice

Use active voice wherever possible. Historically, publications have eschewed using “I”, “we”, and other such words to maintain objectivity. However, this is no longer the case, and *JAI/S* prefers that authors use “I”, “we”, and so on because such phrases produce clearer and more succinct sentences.

Table 1. Active Voice

Passive	Active (preferred)
...was analyzed.	We / I analyzed...
...are presented in Table 1.	Table 1 presents / shows / summarizes...

Authors should avoid awkward phrases such as “the researchers” and “the authors”. Instead, use “I”, “we”, and so on, or recast the sentence. When dealing with sentences that do not use pronouns, make the subject as clear as possible.

Table 2. Active Voice

Passive	Active (preferred)
Three theoretical implications can be derived from our study.	We can derive three theoretical implications from our study.

1.2. Tense

This section provides several guidelines to ensure that authors use the appropriate tenses in their manuscripts. Authors should recognize that there is a difference between discussing a paper and discussing research or a study (see Section 1.2.1). Generally, information systems papers use three tenses: present, present perfect, and past.

1.2.1. Present Tense

Use present tense when discussing what your or someone else’s paper does. However, take note to treat the sentence’s subject as the authors, not the paper itself (see second last example in Table 3). In other words, do not refer to “Holsapple and Axel (1996)” as though it were the name of a paper. Academic writing attributes ideas to people, not to texts (unless phrased specifically to do so; see last example in Table 3).

Table 3. Present Tense

This paper explores ...
We define this as...
This paper provides an extensive...
In Section 1, we summarize ...
Holsappe (1995) discusses how decision context...
Holsapple and Axel (1996) discuss [not discusses] how decision context influences decision making.
Holsapple and Axel’s (1996) paper “On decision context influences” discusses how...

Use present tense when **reporting on** the results or findings of a study (i.e., discussing what your study’s results mean). Please note the distinction between **reporting on a study’s findings** and **describing a paper’s results/methodology** (Section 1.2.3).

Table 4. Present Tense

The data **suggest** that...

This result **suggests** that managers do not ...

Use present tense when discussing models and hypotheses.

Table 5. Present Tense

The model **proposes** how the exercise of strategic choice and institutional forces impact the antecedents and consequences of board IT governance.

In particular, our model **explains** how and why business benefits are achieved.

1.2.2. Present Tense, Present Perfect Tense, and Signal Phrases

Use present (or, in some cases, present perfect tense) with signal phrases. Signal phrases “tell readers who a source is and what to expect...as when introducing an explanation, interpretation, or other commentary” (Fowler & Aaron, 2012, p. 646). In other words, a signal phrase is a phrase, clause, or sentence that explains or introduces a quotation, paraphrase, and so on. They “indicate the boundary between your words and the source’s words” (Hacker, 2005, p. 487).

Table 6. Present Tense – Signal Phrases

LeBrocq (1967) broadly **describes** linguistics as the study of human languages.

John Simmons (2007) **notes** that “information systems is a complex field” (p. 10).

“Lin (1999) **suggests** that preschooling may significantly affect children’s academic performance through high school (pp. 22-23)” (Fowler & Aaron, 2012, p. 646).

Also use present tense when discussing contributions to knowledge.

Table 7. Present Tense – Contributions to Knowledge

First, this study **contributes** to the existing literature...

Second, this study **extends** the extant knowledge in this field...

In some cases, present tense will not be appropriate. In these instances, use present perfect tense. Note that some authors may in general be more familiar with using present perfect tense in signal phrases (as in Table 8), which is completely acceptable. This style guide does not have the scope to venture into the differences between the present tense and present perfect tense. As such, if you are unsure about which tense to use with signal phrases, either option will be appropriate. We ask only that you be as consistent as possible (i.e., don’t use present tense in signal phrases in one section, and then present perfect tense in the next section without significant cause to do so).

Table 8. Present Perfect Tense – Signal Phrases

LeBrocq (1967) broadly **has described** linguistics as the study of human languages.

John Simmons (2007) **has noted** that “information systems is a complex field” (p. 10).

“Lin (1999) **has suggested** that preschooling may significantly affect children’s academic performance through high school (pp. 22-23)” (Fowler & Aaron, 2012, p. 646).

The practioner and academic literature **has paid** increased attention to the practice of information technology (IT) governance by boards of directors.

First, this study **has contributed** to the existing literature...

Second, this study **has extended** the extant knowledge in this field...

1.2.3. Past Tense

Use past tense with signal phrases that relate to studies, which includes your own. A paper's methodology and results sections will typically be in past tense.

Table 9. Past Tense – Signal Phrases, Methodology, and Results

"In an exhaustive survey of the literature published between 1990 and 2000, Walker (2001) **found** 'no proof, merely a weak correlation, linking place of residence and rate of illness' (p. 121)" (Fowler & Aaron, 2012, p. 646)

We **conducted** the review to identify publication outlets, theoretical foundations, methodological approaches, sampling, and topic areas for e-government research.

"To test the model, we **conducted** interviews and a survey. Because the model comprises measured and latent variables, we first **conducted** an exploratory factor analysis (EFA) on the latent variables to analyze the sets of items that measure those constructs. Next, we **used** ordinary least squares multiple regression to analyze the results. We also **asked** the respondents to identify some information about themselves. We first **asked** respondents to identify their current role(s) on the board" (emphasis added) (Jewer & McKay, forthcoming).

We **found** that having a happy climate has a positive influence on individuals' worth perceptions of all knowledge mechanisms.

Use past tense when explicitly using words and/or phrases that indicate they happened in the past.

Table 10. Past Tense – Past Phrases

In 1990, Smith **coined** the term...

1.2.4. Other Tense Points

When discussing your paper in the introduction and conclusion, take care to not to use the future tense (introduction) or the past tense (conclusion). See Table 11 for examples.

The sense of the present tense in these situations is more accurately called the "universal present tense", which refers to a continuous state of being. Once completed, a paper does not suddenly stop summarizing a concept at some time in the future. As long as it exists, it always summarizes that concept. In other words, the summary, or analysis, or any other activity that the paper performs lasts forever. To indicate this, we use the universal present tense.

Table 11. Tense in Introductions and Conclusions

Incorrect: (introduction):	In Section 1, we will summarize ... After that, we will analyze ...
Incorrect: (conclusion):	In Section 1, we summarized ... After that, we analyzed ... In Table 1, we analyzed ...
Correct: (introduction and conclusion):	In Section 1, we summarize ... In Table 1, we analyze ... In this paper, we analyze how...

2. Quotes

All direct quotes require a page reference.

2.1. Quote Format

All quotes use double quotation marks in the first instance.

Table 12. Quotes

“Remember to use double quotation marks for quotes” (LeBrocq, 2012, p. 10).

For quotes in quotes, use single quotation marks.

Table 13. Quotes in Quotes

“Adam introduced the term ‘quotes’ in his seminal 2012 work” (LeBrocq, 2012, p. 10).

2.2. Indented quotes

Quotes longer than 40 words or more should be indented. Do not indent quotes under 40 words. Indented quotes are introduced by dependent and independent information. The punctuation for each differs. Dependent sentence fragments should use a colon; independent sentence fragments should use a period. The reference information in an indented quote (Author, year, page number) should not be italicized.

2.2.1. Dependent Quote

John Simmons said that they:

Carried out the pilot test in two phases. In the first phase, five academics with significant expertise in the area of KM reviewed the four knowledge sourcing types and origins and six items that measured firm performance. Based on their comments, we carefully modified items for knowledge sourcing types and removed one item from firm performance. In the second phase, we collected data from 32 firms that had implemented enterprise-wide KM initiatives, and then checked the reliability and validity of the firm performance items (Simmons, 2005, p. 5).

2.2.2. Independent

John Simmons thought that this was incorrect. He explains his approach in his 2004 paper *Knowledge management*.

We carried out the pilot test in two phases. In the first phase, five academics with significant expertise in the area of KM reviewed the four knowledge sourcing types and origins and six items that measured firm performance. Based on their comments, we carefully modified items for knowledge sourcing types and removed one item from firm performance. In the second phase, we collected data from 32 firms that had implemented enterprise-wide KM initiatives, and then checked the reliability and validity of the firm performance items (p. 5).

2.3. Other Quote Points

Quote marks should always appear before a period. While we realize many authors will be more familiar with the reverse of what’s stated below, JAIS uses the final period to clearly demarcate the end of a sentence. This usage is commonly referred to as the “logical style” (as opposed to British or American style).

Table 14. Quote Marks and Periods

“I am an example of where to put a period at the end of a quote”.

Similarly, commas and other marks (such as footnotes) should always occur outside of quotation marks, not in them, and occur before the period.

Table 15. Quote Marks and Commas

Correct:	I am introducing the words “xylo,” “oxy,” and “cthulu” ¹ .
Incorrect:	I am introducing the words “xylo,” “oxy,” and “cthulu.”

The one exception to this rule is parenthetical statements that are their own sentence. (This is an example of a parenthetical statement as its own sentence.)

3. Common Stylistic Problems

3.1. Equivocation

Equivocation is an entrenched style in academic writing, and authors typically equivocate in introductions and conclusions.

Table 16. Equivocation Example

This study **aims to** explore the role of meta-ethics in information systems.

This sentence leaves it unclear as to whether you actually explore the role of meta-ethics in information systems or not. For an academic paper in which you pass on knowledge, this is inappropriate. An academic paper is accepted for publication because it does something (e.g., adds knowledge), not because it might do something.

The style pervades because of the need to be impartial and scientific. However, equivocation is not impartial – it is noncommittal. If your study explores meta-ethics in information systems, simply say that. For example: “This study explores the role of meta-ethics in information systems”.

3.2. That and Which

JAIS upholds a distinction between “that” and “which”. That is, the two words are not synonymous and should not be used interchangeably. Choosing to use either that or which depends on whether the information they introduce is “essential” or “nonessential” (i.e., necessary to the meaning of the sentence or not). Essential elements do not use punctuation; nonessential elements do.

3.2.1. Essential

Table 17. Essential Information

The company **that is located in Oklahoma** has twelve employees.

In Table 17, the bold element cannot be omitted or placed between commas “without leaving the meaning of ... [the company] too general” (Fowler & Aaron, 2012, p. 449). This sentence refers to a specific company that is located in Oklahoma (i.e., it is the company in Oklahoma that has twelve employees, not the one in New York). Thus, the bold element uses “that” and has no punctuation.

3.2.2. Nonessential

Table 18. Nonessential Information

The company, **which is located in Oklahoma**, has twelve employees.

In Table 18, the bold element is not essential to the meaning of the sentence and so must use “which” and be placed between commas. That is, “it does not limit the word to a particular individual or group” (Fowler & Aaron, 2012, p. 449). This sentence refers to the company with twelve employees (you know what company the speaker means). The fact that it is located in Oklahoma may be useful information, but you understand what company the speaker means irrespective of the fact that it is in Oklahoma.

3.3. Use and Utilize

“Use” and “utilize” are the two most commonly confused words in manuscripts submitted to *JAIS*. Importantly, “*utilize* is not an elegant variation of the word *use*” (Cheney, 1983, p. 232). Most commonly, authors use “utilize” when they simply mean “use”. Utilize is not a more academic word.

Various sources provide alternate meanings for “utilize”, which include “to make do with something not normally used for the purpose” (Cheney, 1983, p. 232) (e.g., you **utilize** a fork when a screwdriver isn’t around to **use**) or to “make good/effective use of” (“Utilize”, 2012) (this second meaning is common in scientific writing; for example, “Vitamin C helps your body **utilize** the iron present in your diet” (“Utilize”, 2012). Thus, unless you are aware of and explicitly mean to use “utilize”, use “use” exclusively.

Table 19. Use and Utilize

Correct:	The study considered the individual’s use of the information system
Incorrect:	The study considered the individual’s utilization of the information system.
Correct:	Constituent use of e-government initiatives is increasing in diverse ways.
Incorrect:	Constituent utilization of e-government initiatives is increasing in diverse ways.

3.4. Misplaced and Dangling Modifiers

“A modifier is **misplaced** if readers can’t easily relate it to the word it modifies. Readers tend to link a modifying word, phrase, or clause to the nearest word it could modify: *I saw a **man in a green hat***” (emphasis in original) (Fowler & Aaron, 2012, p. 381). Table 20 illustrates common forms of misplaced and dangling modifiers in manuscripts submitted to *JAIS*.

Table 20. Misplaced and Dangling Modifiers

Incorrect:	The vandalism was visible passing the building.
Correct:	Passing the building, I noticed that the vandalism was visible.
Incorrect:	We describe information systems in this manner to better understand how they influence organisations, including management information systems and decision support systems.
Correct:	We describe information systems, including management information systems and decision support systems, to better understand how they influence organisations.
Incorrect:	The report was controversial, and some distinguished computer scientists demanded that it be withdrawn, arguing that attention to applications would weaken the field’s focus on basic research.
Correct:	The report was controversial, and some distinguished computer scientists , arguing that attention to applications would weaken the field’s focus on basic research, demanded that it be withdrawn.

3.3.1. Limiting Modifiers

“Limiting modifiers include *almost, even, exactly, hardly, just, merely, nearly, only, scarcely, and simply*. In speech, these modifiers often occur before the verb, regardless of the words they are intended to modify. In writing, however, these modifiers should fall immediately before the word or word group they modify to avoid any ambiguity” (Fowler & Aaron, 2012, p. 383).

Table 21. Limiting Modifiers (adapted from Fowler & Aaron, 2012, p. 383).

Unclear:	She only found that fossil on her last dig.
Clear:	She found only that fossil on her last dig.
Clear	She found that fossil only on her last dig .

Table 22. Limiting Modifiers

Sentence	Meaning
He is the only one I like.	Out of everyone, I only like him.
He is the one only I like.	I like him, but nobody else likes him.

3.6. Ofness and Andness

Sentences that use excessive “ofs” and/or “ands” should be avoided because they hinder readability. Table 23 illustrates a sentence and a modified version that is easier to read.

Table 23. Ofness and Andness

Hard to understand:	It might be employed in a number of ways – for instance, evaluation of the capabilities of an enterprise system or formulation of queries on data warehouses.
Easier to understand:	It might be employed in a number of ways – for instance, to evaluate an enterprise system’s capabilities or to formulate queries on data warehouses.

See also Section 4.10.

3.7. Because and As

Use “because”, not “as”, when you mean the former. While “as” can and does have the same meaning as “because”, “because” is easier to understand because it only has one meaning, whereas “as” has both temporal and cause meanings. Table 24 illustrates the problem, and Table 25 illustrates usage.

Table 24. Because and As

He went to the shop as he cried.	This sentence could mean that he went to the shop while crying, or that he went to the shop because he cried. In more complex sentences, it is often impossible to distinguish which usage the author means.
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Table 25. Because and As

Use:	The framework will be of use to practitioners because it provides a systematic way of understanding and explaining how and why business benefits have or have not been achieved”.
Do not use:	The framework will be of use to practitioners as it provides a systematic way of understanding and explaining how and why business benefits have or have not been achieved.

Note that there should never be a comma before because. That is, do not separate because (or as or since) from the sentence it modifies if it comes at the end of the sentence.

Table 26. Because and As

Correct:	It is reasonable to assume that responders knew this because 79 percent answered...
Incorrect:	It is reasonable to assume that responders knew this, because 79 percent answered...

If / whether / because fragments (i.e., “because of that”, “whether he knew or not”, “if this is the case”), are generally only separated from the sentence with a comma when they appear at the beginning of the sentence.

Table 27. Because and As

Correct:	Because 79 percent answered, it is reasonable to assume that responders knew that...
Incorrect:	Because 79 percent answered it is reasonable to assume that responders knew that...

3.8. Possessives

JAIS uses an apostrophe to create possessives with words that end in an “s”. Do not use “s” in these situations.

Table 28. Plurals

Correct:	<i>The New York Times</i> ’ John Slatter states that this isn’t the case.
Incorrect:	<i>The New York Times</i> ’s John Slatter states that this isn’t the case.
Correct:	Stavros’ (2008) “knowledge management” idea is...
Incorrect:	Stavros’s (2008) “knowledge management” idea is...

3.9. Compound Modifiers

“When two more more words serve together as a single modifier before a noun, a hyphen or hypens form the modifying words clearly into a unit” (Fowler & Aaron, 2012, p. 565).

Table 29. Compound Modifiers (adapted from Fowler & Aaron, 2012, p. 565).

She is a well-known actor .
The conclusions are based on out-of-date statistics .
Some Spanish-speaking students work as translators.

Note, however, that *-ly* adverbs do not need a hyphen.

Table 30. Compound Modifiers (adapted from Fowler & Aaron, 2012, p. 566).

They are clearly defined terms.
That is a swiftly moving train .

Also note that, when a “compound adjective follows a noun, hypens are unnecessary” (Fowler & Aaron, 2012, p. 566).

Table 31. Compound Modifiers (adapted from Fowler & Aaron, 2012, p. 566).

The actor is well known .
The statistics were out of date .
Many students are Spanish speaking .

Finally, note that this rule is typically not followed in well-recognized phrases.

Table 32. Compound Modifier Exceptions

Correct:	The Information Systems Department
Correct:	The behavioral decision making literature
Correct:	Decision support systems
Incorrect:	The Information-Systems Department
Incorrect:	The behavioral decision-making literature
Incorrect:	Decision-support systems

3.10. Ellipses

Ellipses (“...” with no spaces) should only be used in the middle of a sentence when information is omitted, or with a single space (“... ”) to end a sentence and begin a new one. Do not use ellipses at the beginning or end of quotes – they are unnecessary.

Table 33. Ellipses

Correct:	LeBrocq (2002) said that “referencing...differs from field to field”.
Correct:	LeBrocq (2012) states that “this isn’t the case... We must stay resolute”.
Incorrect:	LeBrocq (2012 states that “...this isn’t the case”.
Incorrect:	LeBrocq (2012 states that “We must stay resolute...”

3.11. Sexist Language

While many publications agree that sexist language is inappropriate, they differ in their approach to eliminate it. One particular area of controversy surrounds “their” and “they” in a singular usage. *JAIS*’s style is to use “they”, “their”, and so on in their singular usage **except when it introduces awkwardness**. That is, do not use **he/she**, **s/he**, **he or she** or other similar constructions to refer to both men and women, subjects of indeterminate sex, or humankind in general. Table 27 illustrates this.

Table 34. Sexist Language

Incorrect:	A good child never crosses his parents
Correct:	A good child never crosses their parents
Correct:	Good children never cross their parents.
Correct:	“A person can’t help their birth ,” Risalind replied with great liberality (Thackeray, 1848, n.p.).

JAIS advises authors to recast sentences that they feel are awkward as a result of using “they” in a singular usage. Typically, this requires changing the sentence’s subject to the plural case (see third example in Table 33). Using “one” is acceptable, but, if used, should be used consistently throughout a paper. Also, “avoid using man or words that contain man to refer to all human beings” (Fowler & Aaron, 2012, p. 531). Table 31 lists alternatives.

Table 35. Sexist Terms (adapted from Fowler & Aaron, 2012, p. 531)

Sexist	Non-sexist
Businessman	Businessperson
Chairman	chair, chairperson
Mankind	humankind, humanity, people
Salesman	salesperson

3.12. Emphasis

Do not use bold or italic type to emphasize text. When emphasizing words or phrases in quotes, bold type is acceptable, but “(emphasis added)” must be added at the end of the quote. If a quote originally has its own emphasis, then use “(emphasis in original)” before the citation.

In other limited circumstances, bold type may be also used to draw attention. For example:

With hypotheses:

H1b: Hypothesis here.

With other miscellaneous uses:

“From problem solving and behavioral decision making literature (constructs are bolded):

- As the proportion of **inference** [conscious, abstract reasoning] in one’s **mental representation** of a problem increases, the likelihood of **miscalibration** increases (Waggenaar, 1988).
- The proportion of inference to **memory** [direct recall of information] used to formulate a mental representation is one determinant of **problem novelty**. The more novel the problem, the more inference is required (Kaufmann, 1985)” (Kuechler & Vaishnavi, 2012, p. 409).

However, such uses should only be used if absolutely necessary.

4. Other JAIS Style

The points here are listed alphabetically.

4.1. Abbreviations

Abbreviations should always be spelt out when first used. For example, when first introducing the term information systems.

Table 36. Abbreviations	
First mention of term:	The information systems (IS) discipline, in so far as it is interested in the social and organizational role of information technology...
Subsequent mentions:	One can ask what exactly the relevance is of normative issues, ethics, and morality for the IS discipline

Common abbreviations are, however, exempt from this (i.e., US, UK, etc). *JAIS* does not require periods between each letter in an abbreviation (U.S.A., U.K., etc). The only exception to this is when the abbreviation serves as a prefix; for example, “The U.S. Government”.

4.2. Capitalization

Capitalize “Appendix”, “Section”, “Table”, and “Figure” when referring to a specific section / item (e.g., Figure 1, Function 1). Don’t use brackets around the figure: “Figure (1)”. Instead, use “Figure 1”.

Do not capitalize models, theories, laws, or statistical procedures. Exceptions to this include those models, theories, laws, and so on that include a proper name.

Table 37. Models, Theories, Laws, Hypotheses	
Incorrect	Correct
Partial Least Squares (PLS)	partial least squares (PLS)
Self-Determination Theory	self-determination theory (SDT)
Structural Equation Modeling (SEM)	structural equation modeling (SEM)
Technology Acceptance Model (TAM)	technology acceptance model (TAM)
chronbach’s alpha	Chronbach’s alpha

4.3. Commas

JAIS uses the serial, or Oxford, comma. That is, in a series (three or more items), each should be separated by a comma. Table 34 illustrates this.

Table 38. Serial Comma

Correct:	The cat hates turnips, lettuce, and rice.
Incorrect:	The cat hates turnips, lettuce and rice.

Also, as Section 2.3 mentions, take care that the commas do not occur inside quotation marks.

Table 39. Commas and Other Punctuation

Correct:	I went to the “park”, “house”, and “shop”.
Incorrect:	I went to the “park,” “house,” and “shop.”

4.4. Consistency

Don't refer to “the information systems field” on page one, and then refer to it as “the information systems discipline” later on without specific cause to do so. That is, choose a term and use it consistently. Changing between different terms when you mean the same thing creates ambiguity. Using two, three, or more terms for the same concept is sometimes referred to as “elegant variation”.

Table 40. Elegant Variation

“The Emperor received yesterday and today General Baron von Beck... It may therefore be assumed with some confidence that the terms of a feasible solution are maturing themselves in **His Majesty's** mind and may form the basis of further negotiations with Hungarian party leaders when the **Monarch** goes again to Budapest” (Fowler & Fowler, 1908, p. 178).

Fowler notes that “the effect is to set readers wondering what the significance of the change is, only to conclude that there is none” (Fowler, H. W., 2009, n.p.).

4.5. En Dashes (–) and Hyphens (-)

JAIS uses spaced en dashes – like this – to set off auxiliary information. Do not use a hyphen (-) for this purpose – they are not the same size. To insert an en dash, hold alt and type 0150 on your number pad, or use your software's “insert symbol” command.

4.6. Footnotes

The superscript number that denotes a footnote should be placed before periods but after other punctuation such as quotation marks. In the actual footnote, the footnote numbers and text should be 8pt Arial. The number should be in superscript. *JAIS* does not use endnotes.

Table 41. Footnotes

I went to the shop ¹ , but the “cat was gone” ² .
However, what information systems includes is a debated subject ¹ .

4.7. I.e., E.g., and Etc

Do not use “e.g.”, “i.e.”, or “etc” outside of parentheses. Instead, spell the terms out: “for example”, “that is”, and “and so on”. A comma should follow every instance of “e.g.” or “i.e.” in parentheses (e.g., like this).

4.8. It is / There are

Where possible, avoid beginning sentences with “it is” and “there are”. A sentence is often more clearly expressed with its proper subject.

Table 42. It Is and There Are

Say:	A sentence is often more clearly expressed with its proper subject.
Don't say:	It is often clearer to express a sentence with its proper subject.
Say:	Also, several other reports, such as the Interactive Advertising Bureau's (IAB) annual report, call it a display ad.
Don't say:	It is also called a display ad in several other reports such as the Interactive Advertising Bureau's (IAB) annual report.
Say:	No single stream of reasoning can fully explain why organizations choose to outsource their IS functions.
Don't say:	There is no single stream of reasoning that can fully explain why organizations choose to outsource their IS functions.

Note, however, that using “it is” or “there are” constructions is not incorrect; using them is sometimes unavoidable, and authors should not aim to remove an “it is” or “there are” if it introduces awkwardness or ambiguity.

4.9. Key Terms

Key terms, words, and phrases should be in quotation marks when they are first introduced. Thereafter, they should not be distinguished in any way. In the example in Table 43, the key word hybrid systems appears in quotation marks the first time it appears. After that, no further emphasis is required.

Table 43. Key Terms

In this study, we focus on whether “hybrid systems” affect how a person interprets the world around them. Hybrid systems are...

4.10. Nominilizations

Nominilizations (itself a nominilization) are nouns formed from verbs, adjectives, or adverbs. Many end with the -ion suffix. They usually result in longer sentences that are harder to understand.

Table 44. Nominilizations

Sentence with unnecessary nominilizations:	It might be employed in a number of ways – for instance, in the evaluation of the capabilities of an enterprise system or in the formulation of queries on data warehouses.
Sentence without nominilizations:	It might be employed in a number of ways – for instance, to evaluate an enterprise system's capabilities or to formulate queries on data warehouses.
Sentence with unnecessary nominilizations:	Perceptions of organizational climate guide individuals' interpretation of events, prediction of possible outcomes, and judgments of the appropriateness of their subsequent actions.
Sentence without nominilizations:	The way in which individuals perceive their organizational climate guides how they interpret events, predict possible outcomes, and judge the appropriateness of their subsequent actions.

Note that, in some cases, nominilizations are preferred, such as with “information”. Changing this word to “inform” is usually incorrect.

See also Section 3.6.

4. 11. Numbers

Numbers under 10 (not including 10) are spelled out except if they begin a sentence. For example, note what is spelled out in this sentence with 5, twenty, and one hundred. Five, however, starts this sentence, so it is spelled out.

4.11.1. Percent

In the main text, use “percent”, not “per cent” or “%”. In tables and figures, use “%”.

4.12. Parallelism

“Parallelism gives similar grammatical form to sentence elements that have similar function or importance” (Fowler & Aaron, 2012, p. 420). Parallelism improves readability, and makes sentences easier to understand. Table 45 illustrates common problems and how to fix them. Due to the frequency with which we see this error, we strongly recommend authors check for this problem before submitting their paper to *JAIS*.

Table 45. Parallelism

Correct:	First , we define “information systems”. Second , we review the literature. Third , we present our methodology.
Correct:	Firstly , we define “information systems”. Secondly , we review the literature. Thirdly , we present our methodology.
Incorrect:	First , we define “information systems”. Secondly , we review the literature. Thirdly , we present our methodology.
Correct:	“Three reasons why steel companies kept losing were inefficient plants, high labor costs, and increasing foreign competition ” (Fowler & Aaron, 2012, p. 421).
Incorrect:	“Three reasons why steel companies kept losing money were that their plants were inefficient, high labor costs, and foreign competition was increasing ” (Fowler & Aaron, 2012, p. 421).
Correct:	“Given training, workers can acquire the skills for and interest in other jobs” (Fowler & Aaron, 2012, p. 421).
Incorrect:	“Given training, workers can acquire the skills and interest in other jobs [Skills and interest require different prepositions, so both must be stated]” (Fowler & Aaron, 2012, p. 421).

4.12.1. Not Only...But Also

The “not only...but also” sentence structure is common in academic writing. Unfortunately, authors often incorrectly use it. Table 46 illustrates common incorrect and correct usages for this sentence structure.

Table 46. Not only...but also

Incorrect:	Information systems scholars analyze not only information but also study computer systems.
Correct:	Information systems scholars not only analyze information but also study computer systems [they analyze information and study computer systems].
Correct:	Information systems scholars analyze not only information but also computer systems [they analyze both information and computer systems].

4.13. Spelling

JAIS uses American spelling.

Table 47. Spelling

organization	emphasize	realize	analyze
italicize	symbolize	recognize	capitalization
summarize	color	personalize	behavior

4.14. Very

Avoid using meaningless intensifiers such as “very”. They are hyperbolic and unnecessary. For example, consider the following sentence: “The motivation theory should be very useful for studying system-use behavior for several reasons”. The “very” here adds nothing to the sentence. Thus, remove it: “The motivation theory should be useful for studying system-use behavior for several reasons”. However, “very” is acceptable when introducing defined gradients (i.e., “very bad, bad, mediocre, good, very good”) should such a need arise.

4.15. Vagueness

JAIS does not accept vague language; be specific and concrete wherever possible. This will help readers to comprehend your paper.

Table 48. Vagueness

Specific:	In Section 1 , we review the literature. In Section 2 , we explore information systems. In Section 3 , we present the findings. In Section 4 , we discuss contributions to knowledge.
Vague:	In Section 1, we review the literature. Next , we describe our methodology. After that , we present the findings. Following that , we discuss contributions to knowledge.
Specific:	The paper concludes by illustrating how increased emphasis on normative issues enhances IS practice and research, deepens empirical insights on technology use, and improves the IS discipline’s ethical status.
Vague:	The paper concludes by suggesting how such work further s [this is vague – further how?] information systems.

Additionally, words such as “several”, “a few”, and so on can better be explained by saying the precise number. If you make three contributions, say “three” instead of “several”.

5. Preferred Word List

Table 49. Preferred Word List

Use	Don't use	Why?
contemporary	modern	Contemporary and modern are not synonymous. Contemporary applies to the current time (e.g., the last ten or so years), whereas modern refers to a much larger time period; for example from the early 20 th century to today. As such, take care not use modern when you mean contemporary.
20 th century	20 th Century / 20th century / 20th Century / twentieth century / etc	<i>JAIS</i> style
use	Utilize / utilization	See Section 3.3.

Table 49. Preferred Word List (cont.)		
Use	Don't use	Why?
enquiry	inquiry	Usage of “enquiry” or “inquiry” depends on the desired meaning: use enquiry when you mean to suggest the general notion of “asking”; use “inquiry” when you mean to refer to a more serious investigation (e.g., the police inquiry into name’s death).
percent	Per cent	JAIS style
coordination	co-ordination	JAIS style
ecommerce	e-commerce	JAIS style
email	e-mail	JAIS style
artifact	artefact	JAIS style.
website / webpage	web site / site / web page / Web Site / Website	JAIS style.
paper	article	When referring to one’s own paper, use “paper” instead of “article” or other terms. Use article when referring to newspaper articles.
Like	Such as	Do not use “like” when giving examples. This is incorrect. Use “such as”. Use like when you mean that something is <i>similar</i> . Right: I like animals such as cats and dogs. Wrong: I like animals like cats and dogs. But: I hate cats like George’s cat (cats similar to George’s cat).
Within	in	“Within” is a pompous form of “in”. In usually suffices.
Internet	internet	JAIS style.
comprises / includes	Consists of	Avoid “consists of” where possibly – use “includes” or “comprises”. Comprises is exhaustive (“The list comprises milk, salt, and butter” – there is nothing else on the list). Includes is not exhaustive (there may be other things on the list).

6. Referencing

All references should follow the *American Psychological Association* (6th ed.) guide. This section contains examples for all types of referencing. Note that this style does not capitalize every word in a text’s title. In references, only the initial word and proper nouns should be capitalized. The only exception to this rule is with sources cited in conference proceedings. In these cases, the conference’s name should be fully capitalized. The following section provides examples for common reference types. The only major difference between APA and JAIS style is that JAIS does not use Digital Object Identifiers (DOIs).

6.1. Examples

6.1.1. Journal Articles¹

Burton-Jones, A., & Straub, D. W., Jr. (2006). Reconceptualizing system usage: An approach and empirical test. *Information Systems Research*, 17(3), 228-246.

¹ Note the position of “Jr.” in this reference.

6.1.2. Magazine Articles

Ackerman (2007). The perfect blend. *Consumer Goods Technology Magazine*. Retrieved January 20, 2013, from <http://consumergoods.edgl.com/media/publicationsarticle/art-mar07-6.pdf>

6.1.3. Books

Hare, R. M. (1981). *Moral thinking: Its levels, method, and point*. Oxford: Clarendon Press.

Fred, Y. P., Johns, A. B., & Jafferson, J. A. (1981). *Example title: Example*. New York: Bloomsbury.

6.1.4. Chapters / Sections in Books

Keren, G. (1990). Cognitive aids and debiasing methods: Can cognitive pills cure cognitive ills? In J. Caverni, J. Fabre, & M. Gonzalez (Eds.), *Cognitive biases* (pp. 523-555). Amsterdam, North Holland: Elsevier.

6.1.5. Conference Proceedings

Forget, A., Chiasson, S., & Biddle, R. (2007). Persuasion as education for computer security. In T. Bastiaens & S. Carliner (Eds.), *Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2007* (pp. 882-82). Chesapeake, VA: AACE.

Jones, D., & Gregor, S. (2006). *The formulation of an information systems design theory for e-learning*. Paper presented at the First International Conference on Design Science Research in Information Systems and Technology, Claremont, CA.

6.1.6. Working Papers

Acha, V. (2004). *Technology frames: The art of perspective and interpretation in strategy* (SPRU Electronic Working Paper No. 109). Brighton: University of Sussex.

6.1.7. Wikipedia References

When sourcing information from Wikipedia, use the following format:

Title of entry. (Year). In *Wikipedia*. Retrieved Month Day, Year, from www.URL.com

Make sure that there that there is no period after the URL. For example:

Abductive reasoning. (2010). In *Wikipedia*. Retrieved August 16, 2010, from http://en.wikipedia.org/wiki/Abductive_reasoning

When citing Wikipedia articles in text, use the format ("page title", year, para. #). For example: ("Abductive reasoning", 2010, para. 2). Because Internet sources typically have no page numbers, use "para." (paragraph) when quoting text.

6.2. In-Text Citations

JAIS follows APA's author-date system. This section clarifies common errors. More comprehensive information is available from the *Concise Rules of APA Style* (6th ed), pages 178-208.

6.2.1. Alphabetical Order

In-text citations should be alphabetically ordered by the first author's name. Do not order in-text citations by the year of publication. For example:

The information security literature largely disagrees with this point of view (Biggs & Smith, 2006; Cayle & Rogers, 2004; Venkatesh, Hayle, & Rogers, 1998).

6.2.2. Ampersand

Use the ampersand (&) in **parenthetical citations** with two or more authors; do not use "and". For example, "(Cayle & Rogers, 2008)" and "(Cayle, Rogers, & Smith, 2008)".

Use “and” in citations **that are a part of a sentence**. For example, “Cayle and Rogers (2008) found that managers typically evaluate their staff on an ad hoc basis”.

Additionally, when first citing a text with two to five authors, include all their names in the citation. For example:

- **Initial citation in parentheses:** (Cayle, Rogers, George, & Smith, 2008). Thereafter, use “(Cayle et al., 2008)”, or “Cayle et al. (2008) note that...” for citations as part of a sentence.
- **Initial citations as part of a sentence:** “Cayle, Rogers, George, and Smith (2008) believe that...” Thereafter, use “Cayle et al. (2008) note that...” or “(Cayle et al., 2008)” for parenthetical citations.

If the text has six or more authors, use the “et al.” versions exclusively.

7. Conclusion

Following these guidelines will ensure that your paper is better understood in the review process and, should it be accepted, published as quickly as possible. If you are unsure of any point in this style guide before submitting your paper, or if you have any questions, please feel free to contact *JAIS* at jais@anu.edu.au. We look forward to seeing your best work.

References

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