



How to publish *design science* work in entrepreneurship & management journals

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Key ideas on design science

DS is, first and foremost, a mindset:

- ✓ It draws on a “can do” (problem-solving) mindset

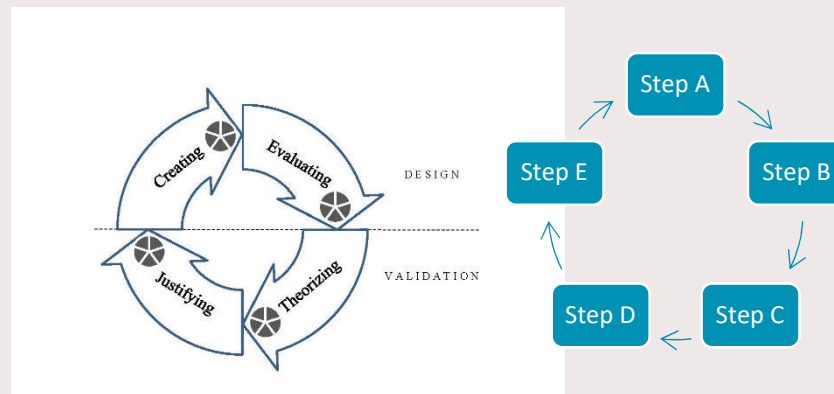
DS can also be conceived as a generic research methodology:

- ✓ that includes creative design methods as well as many (social) science methods
- ✓ is widely used in engineering and related disciplines
 - A large number of DS applications in field of entrepreneurship & innovation demonstrates how various (e.g. case study, experimental, intervention-oriented, survey and other) methods can be used in DS

Key ideas on design science

Plurality of DS methodology:

- ✓ There is *no single methodological standard* in DS
- ✓ In fact, developing *your own take* on DS is highly recommended and allows you to develop a Method section (or dissertation chapter) that perfectly matches the, often highly iterative, research cycle you've actually used



Publication strategies

For many editors and reviewers, trained as social scientists, DS is often unknown ‘foreign territory’

Whether DS is *not/concisely/extensively explained* in your manuscript, largely depends on whether your key audience (incl. reviewers & editors) has a problem-solving mindset and/or is familiar with DS



Publication strategies: examples

Example of **not** explaining DS:

Talmar et al. (2020), Mapping, analyzing and designing innovation ecosystems: The Ecosystem Pie Model. *Long Range Planning*, 53(4): 101850 <https://doi.org/10.1016/j.lrp.2018.09.002>

- This article describes the development & design of EPM tool, *without any* method section/paragraph whatsoever
- The initial paper submitted to LRP did contain a short DS section, but the editor observed that ‘methodology’ is of no interest to LRP’s (academic & practitioner) audience

Publication strategies: examples

Example of **concisely** explaining DS:

Meulman et al. (2018), Searching for partners in open innovation settings: How to overcome the constraints of local search. *California Management Review*, 60(2): 71–97

<https://doi.org/10.1177/0008125617745087>

- This paper on the development & testing of a partner search tool describes the DS approach adopted in a **single endnote**
- This endnote refers to Simon and provides references to a substantial number of other DS-based studies

Publication strategies: examples

Example of **extensively** explaining DS:

Van Burg et al. (2008), Creating university spinoffs: A science-based design perspective. *Journal of Product Innovation Management*, 25: 114-128 <https://doi.org/10.1111/j.1540-5885.2008.00291.x>

This study of (re)designing an infrastructure for university spinoff creation:

- introduces DS in the Introduction section (building on Simon), and
- also includes an extensive method section

Publication strategies: examples

Another example of **extensively** explaining DS:

Gilting et al. (2010), Policy principles for the creation and success of corporate and academic spin-offs. *Technovation*, 30(1): 12-23

<https://doi.org/10.1016/j.technovation.2009.07.004>

This article about design principles for regional policy that fosters technology entrepreneurship:

- introduces the DS notion in the Intro section and
- includes an extensive Method section on DS

Publication strategies

- For doctoral **dissertations**, the same variety applies: some dissertations only have a short section on DS in the Introduction chapter, while others include a separate chapter on DS

Additional tips & tricks

Reviewers may have major objections to the “dirty” (hands-on) problem-solving nature of DS work, raising fundamental questions about e.g. inductive/deductive nature of good scholarship

Here, it's helpful to refer to **pragmatism** as the philosophical foundation of DS:

- Best source on pragmatist foundations: Warfield, J. (1990), [A Science of General Design](#). Salinas: Intersystems Publishers
- Concise treatments of pragmatism are available in [Romme \(2003\)](#) and [Romme et al. \(2015\)](#)

Additional tips & tricks

A proven strategy to overcome resistance among reviewers & editors:

“Simon trick” = explicitly draw on Herbert Simon’s *The Sciences of the Artificial*, to enhance the legitimacy & credibility of using DS



Other examples / sources

At ResearchGate, we've created a project folder with a large number of DS articles in entrepreneurship & innovation domain:

<https://www.researchgate.net/project/Design-science-research-methodology-in-entrepreneurship-and-innovation-studies>

Summary

DS is, first and foremost, a *mindset*; but it can also be conceived as a *research methodology* that:

- ❖ draws on (“can do”) pragmatism
- ❖ is plural in nature
- ❖ can be explained in more/less extensive ways in publications

Publication opportunities in *Technovation*

- [Technovation](#): established journal covering all facets of “technological innovation”, including *technology-driven entrepreneurship*
- Citation impact: top 10% journal (based on AIS metrics) in JCR category “Industrial Engineering”
- *Open access journal* (with APC, possibly covered in agreement your institution has with Elsevier)
- I’ve been area editor “*Design science and technology-driven innovation*” since 2020

Publication opportunities in *Technovation*

- If you want to explore a potential submission: feel free to send me (a.g.l.romme@tue.nl) an Abstract/Paper, for informal feedback, before actually submitting
- Any DS paper on entrepreneurship-related topics is welcome, if it has a substantial “technological” component
- Author guidelines available at:
<https://www.elsevier.com/journals/technovation/0166-4972/guide-for-authors>