

Call for Case Studies

i-com is an international scientific journal in the domain of Human-Computer Interaction (HCI). Since Volume 23 (2023) i-com is Golden Open Access (https://doaj.org/toc/2196-6826) with free publication options sponsored by the German HCI community. Its Scopus Cite Score currently is 4.3.

Beyond "classical" research articles (which typically include sections on related work, methods, analysis as well as theoretical and practical implications) we also publish other formats such as position papers and case studies.

Case studies are a particularly well-suited format for HCI research. Understanding how humans interact with technology and how technology is introduced and appropriated requires a deep appreciation of the specific contexts in which these interactions and the appropriation occur. Case studies, by design, emphasize context, capturing the complexities of real-world environments and providing rich, situated insights that are often crucial for understanding user behavior, system adoption and appropriation, and emergent practices.

Case studies can have specific focus on the design of specific IT applications in practice. For instance, a design case study links empirical findings to the creation of an innovative IT artefact and its appropriation in a specific field of application.

Case studies uncover problems, explore solutions, help understand cause and effect, identify patterns, clarify possible target groups and environments for usage, and highlight successes and failures, making them invaluable for businesses, educators, researchers, and professionals across various fields of application.

Case studies can be used for different purposes, e.g.

- Inform practitioners (give examples for how others have designed and introduced IT systems and what worked in which way)
- Help students teaching case studies (show how experts address a given situation)
- Provide researchers with examples and insights from practice to inform research / to create research questions

Submission

Case studies from the field of HCI can be submitted to i-com for publication any time (just select "case-report" as type on the first page of the submission workflow).

All submissions must be in English and should represent the original work of the authors with a length of 5.000-10.000 words. Substantially improved or extended versions of papers previously published in conference proceedings are welcome, provided that no copyright limitations exist.

For information about how to submit manuscripts, see https://i-com-journal.org/calls/ – Regarding Article Processing Fees, the publisher is calling for published articles: We have

some sponsoring for this available – so if your institution does not pay for APCs in Golden Open Access journals, do not hesitate to contact the Editor in Chief for support.

Notes for authors

Case studies for i-com should focus on HCI topics – from collaboration software to mobile devices and XR systems and beyond.

Case studies for i-com should focus on "solutions" (the case) - i.e. design or introduction and appropriation of devices, user interfaces, process models and methods that give new quality to products or that support new technology averse user groups.

You can find more information and examples on what we are looking for to make case studies acceptable for publication in i-com on the following pages.

You may also contact the editors of i-com (E-Mail to <u>michael.koch@unibw.de</u>) to check if an idea is suitable in advance to submitting a manuscript.

What is a case study (that could be published in i-com ...)

A case study is "an empirical enquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (Yin 1994, p. 13).

Case studies often use multiple sources of evidence and data collection techniques such as interviews, observation, questionnaires, and document and text analysis. Although both qualitative and quantitative data collection and analysis methods may be used, case study research is most often concerned primarily with qualitative data. Within the information systems research community many studies take place in a case study context (Orlikowski and Baroudi 1991).

According to the potential "users" of case studies one can distinguish business case studies (practitioners), teaching case studies (students) and research case studies (researchers).

Case studies usually do not focus on formal evaluation, but more on creative ideas and narratives.

Case studies mainly consist of written text – but might be annotated with other media suitable to describe the case – so, there might be video added to the paper – or more screenshots and process diagrams than usually in journal papers. If not part of the final manuscript such material could be added to the de Gruyter Digital Library upon publication.

All types of case studies have in common:

- "N=1" it is a report about ONE particular solution in ONE particular organization if needed, the organization can be anonymized, however all relevant context information for judging the solution should be included
- Provide detailed information about context
- Requirements / goal (for the organization)
- Way to achieve the goal
- What happened (during introduction, appropriation, use ...) Learnings

Differences between different types of case studies are, if part of the description is a formal evaluation, if (re-)design is covered intensively, if there is a large body of methodology and

related work (not needed for a pure case study) and a discussion of what can be learned from the case description.

Another difference between case studies is if it is a long-term observation of a development or just a short-term observation. While short-term observations can provide interesting insights, we prefer long-term observations.

Regarding the topic, case studies for i-com have to focus on HCI (problems / solutions) — We will not publish pure E-business case studies. So, the core of the case study might or should be to design or introduce artefacts in practice.

In writing up the case study, you need to bring together all the relevant aspects to give as complete a picture as possible of the subject (context).

Some notes on writing case studies

- Write in the past tense
- The opening paragraph should make clear:
 - Who the main protagonist is
 - Who the key decision maker is
 - What the nature of the problem or issue is
 - When the case took place, including specific dates
 - Why the issue or problem arose
- The body of the case should:
 - Tell the whole story usually in a chronological order
 - Typically contain general background on environment, company background, and the details of the specific issue(s) faced by the company
 - Tell more than one side of the story
- The concluding paragraph should:
 - Provide a short synthesis of the case to reiterate the main issues, or even to raise new questions

Literature:

Yin, R.K. (2009). Case Study Research: Design and Methods (fourth Edition). Sage Publications.

Orlikowski, W. J., & Baroudi, J. (1991). Studying Information Technology in Organisations: Research Approaches and Assumptions. Information Systems Research, 2, 1-28. https://doi.org/10.1287/isre.2.1.1

Teaching Case Studies

"[..] the purpose of the "teaching case" is to establish a framework for discussion and debate among students. The criteria for developing good cases for teaching—usually of the single and not the multiple-case variety—are different from those doing research [...] Teaching case studies need not be concerned with the rigorous and fair presentation of empirical data; research case studies need to do exactly that." (Yin 2009)

They identify and establish an issue/problem which can be used to teach a concept or theory

Research Case Studies - Design Case Studies

A particular type of research case studies are "design case studies".

A design case study links empirical findings to the creation of an innovative IT artefact and its appropriation in a specific field of application.

Design Case Studies usually follow the following structure:

- Empirical phase present / understand context
- Design phase build solution
- Appropriation how does the solution change work practices
- Adapt insights to related cases

See for more discussion on the topic

- Stevens, G., Rohde, M., Korn, M., & Wulf, V. (2018). Grounded design: A research paradigm in practice-based computing. In *Socio-Informatics: A Practice-Based Perspective on the Design and Use of IT Artifacts* (pp. 139–176). https://doi.org/10.1093/oso/9780198733249.003.0002
- Wulf, V., Müller, C., Pipek, V., Randall, D., Rohde, M., & Stevens, G. (2015). Practice-Based Computing: Empirically Grounded Conceptualizations Derived from Design Case Studies. In *Designing Socially Embedded Technologies in the Real-World* (pp. 111–150). https://doi.org/10.1007/978-1-4471-6720-4

Example:

- Kotthaus, C., Vitt, N., Krüger, M., Pipek, V., & Wulf, V. (2023). Negotiating Priorities on the Shopfloor: A Design Case Study of Maintainers' Practices. *Computer Supported Cooperative Work: CSCW: An International Journal*, 32(1), 141–210. https://doi.org/10.1007/s10606-022-09444-5

Research and Business Case Studies – Enterprise 2.0 Case Study Network

"Less scientifically" than the design case studies described before are the case studies from the Enterprise 2.0 Case Study Network:

- https://dl.gi.de/collections/a68efd58-6438-44a9-b41d-f45431c82356

In 2010 the researchers from the network have collected some ideas for a case study template – and have used this template to compile several case studies in the field of Enterprise 2.0 (implementing / adapting collaboration systems in enterprises). While the topic Enterprise 2.0 is not perfectly aligned to what we are looking for i-com, the case study template provides some good ideas what a case study should include and how it should be structured, i.e.

In the context of business engineering, important questions have emerged that should be answered in a case study (according to Senger and Österle 2004):

- Who is the company?
- What was the problem?

- What was the "old" approach?
- How was the new solution introduced (project)?
- What does the new approach look like? What has changed?
- Which goals were achieved? Which were not?
- What principles can be derived? (Lessons learned)

The case studies are intended to provide practitioners with transferable examples of how social software can be successfully introduced in companies, as well as providing a basis for the further scientific development of the field - i.e. material for case study research - and providing teachers with material to support their teaching.

See for more discussion on the type of case studies:

- BECS case study methodology of the Institute of Information Systems at the University of St. Gallen (Senger and Österle 2004)
- eXperience case study methodology of the University of Applied Sciences Northwestern Switzerland and the University of Koblenz Landau (Schubert and Wölfle 2006, 2007).

Literature:

Schubert, Petra; Wölfle, Ralf (2007): The eXperience Methodology for Writing IS Case Studies, in: Proceedings of the Thirteenth Americas Conference on Information Systems (AMCIS), 2007.

Schubert, Petra; Wölfle, Ralf (2006): eXperience-Methodik zur Dokumentation von Fallstudien, in: Wölfle, Ralf; Schubert, Petra (Hrsg.), Prozessexzellenz mit Business Software, S. 19-30, München, Wien: Hanser Verlag, 2006.

Senger, Enrico und Österle, Hubert (2004): PROMET - Business Engineering Cases Studies (BECS). Arbeitsbericht BE HSG / BECS / 1, Institut für Wirtschaftsinformatik, Universität St. Gallen, Juni 2004.