

International Journal of Design Sciences and Technology

Design Sciences, Advanced Technologies and Design Innovations

Towards a better, stronger and sustainable built environment

Aims and scope

Today's design strongly seeks ways to change itself into a more competitive and innovative discipline taking advantage of the emerging advanced technologies as well as evolution of design research disciplines with their profound effects on emerging design theories, methods and techniques. A number of reform programmes have been initiated by national governments, research institutes, universities and design practices. Although the objectives of different reform programmes show many more differences than commonalities, they all agree that the adoption of advanced information, communication and knowledge technologies is a key enabler for achieving the long-term objectives of these programmes and thus providing the basis for a better, stronger and sustainable future for all design disciplines. The term sustainability - in its environmental usage - refers to the conservation of the natural environment and resources for future generations. The application of sustainability refers to approaches such as Green Design, Sustainable Architecture etc. The concept of sustainability in design has evolved over many years. In the early years, the focus was mainly on how to deal with the issue of increasingly scarce resources and on how to reduce the design impact on the natural environment. It is now recognized that "sustainable" or "green" approaches should take into account the so-called triple bottom line of economic viability, social responsibility and environmental impact. In other words: the sustainable solutions need to be socially equitable, economically viable and environmentally sound.

IJDST promotes the advancement of information and communication technology and effective application of advanced technologies for all design disciplines related to the built environment including but not limited to architecture, building design, civil engineering, urban planning and industrial design. Based on these objectives the journal challenges design researchers and design professionals from all over the world to submit papers on how the application of advanced technologies (theories, methods, experiments and techniques) can address the long-term ambitions of the design disciplines in order to enhance its competitive qualities and to provide solutions for the increasing demand from society for more sustainable design products. In addition, IJDST challenges authors to submit research papers on the subject of green design. In this context "green design" is regarded as the application of sustainability in design by means of the advanced technologies (theories, methods, experiments and techniques), which focuses on the research, education and practice of design which is capable of using resources efficiently and effectively. The main objective of this approach is to develop new products and services for corporations and their clients in order to reduce their energy consumption.

The main goal of the International Journal of Design Sciences and Technology (IJDST) is to disseminate design knowledge. The design of new products drives to solve problems that their solutions are still partial and their tools and methods are rudimentary. Design is applied in extremely various fields and implies numerous agents during the entire process of elaboration and realisation. The International Journal of Design Sciences and Technology is a multidisciplinary forum dealing with all facets and fields of design. It endeavours to provide a framework with which to support debates on different social, economic, political, historical, pedagogical, philosophical, scientific and technological issues surrounding design and their implications for both professional and educational design environments. The focus is on both general as well as specific design issues, at the level of design ideas, experiments and applications. Besides examining the concepts and the questions raised by academic and professional communities, IJDST also addresses the concerns and approaches of different academic, industrial and professional design disciplines. IJDST seeks to follow the growth of the universe of design theories, methods and techniques in order to observe, to interpret and to contribute to design's dynamic and expanding sciences and technology. IJDST will examine design in its broadest context. Papers are expected to clearly address design research, applications and methods. Conclusions need to be sufficiently supported by both evidence from existing research (reference to existing design research knowledge) as well as strong case-studies from any design discipline. A paper must contain at least one chapter on research questions, methodology of research and methods of analysis (the minimum length is 1500 words). The concluding chapter (the minimum length is 1000 words) will summarise the paper and its results. The concluding chapter also examines and discuss applications, advantage, shortcomings and implications of the investigation for both professional and educational design communities as well as for the people and the society. Also authors are also encouraged to include in this chapter a discussion of the possible future research that is required or is possible in order to enhance the research findings.

The papers considered for IJDST cover a wide range of research areas including but not limited to the following topics: Design research, design science, design thinking, design knowledge, design history, design taxonomy, design technology, design praxeology, design modelling, design metrology, design axiology, design philosophy, design epistemology, design pedagogy, design management, design policy, design politics, design sociology, design

economics, design aesthetics, design semantics, design decision-making, design decisions, design evaluation, design sustainability, design logic, design ontology, design logistics, design syntaxis, design ethics, design objective, design responsibility, design environment, design awareness, design informatics, design organization, design communication, design intelligence, design evaluation, design education, design theories, design techniques, design methods, design operations, design processes, design products, design users, design participation, design innovation, design inspired by nature, design case studies, design experiments, etc.

International Journal of Design Sciences and Technology is devoted to further exploration of all themes and issues that are directly or indirectly relevant to the exploration, introduction, discussion of design sciences and technology, cross referencing domains and any other themes emerging in the future.

Instructions for Authors and Review Process

Pre-review Stage (Editor Global Review): Papers can only be considered for review when they deal with a subject relevant to the content of the journal. In addition all papers submitted must follow the journal's paper structure and Author Instructions before they can be considered for review. **These instructions also affect the content of the paper.** Authors can choose to submit a short paper (about 5000-8000 words). The preferred size of a paper (monograph) is about 10000 words (maximum 15000 words). The title must not be longer than seven words. Subtitles are not permitted. The maximum length of the abstract is 150 words. All papers must contain an introductory chapter with extensive literature review of similar research. The paper devotes at least one chapter to detailed discussion of research questions, research analysis and research methods. The conclusion will summarise the research and its results. In addition this chapter includes a detailed discussion of applications, advantage, shortcomings and implications of the investigation as well as future research for both design professionals and the design education. Submit a paper at this stage as PDF.

Review Stage (Peer Review): Only papers meeting all IJDST requirements can be considered for review. All papers are blind-reviewed by at least two expert reviewers. The main author of a reviewed and accepted paper will be notified with instructions to resubmit the paper. All reviewed and accepted papers have to be resubmitted, implementing reviewers and editors comments and/or suggestions. Only accepted papers conforming to instructions will be considered for publication in the International Journal of Design Sciences and Technology. A paper should follow the IJDST paper structure. The review process will be repeated until all requirements are met.

The first page of the paper must contain the full title of the paper as well as the Name (no initials) & Surname, affiliation, address, telephone, fax and email of the corresponding author to whom all correspondence to be directed. If applicable please also mention the Name (no initials) & Surname, affiliation, postal address, telephone, fax and email of the co-author(s).

The second page contains the full title of the paper (maximum 7 words), the sub-title is not permitted, an abstract of about 50 to 150 words summarising the content of the paper and 3-5 keywords for the purpose of indexing (the use of references in the abstract is discouraged). The length of a short paper is about 5000-800 words. The preferred size of a paper (monograph) is about 10000 words (maximum 15000 words). The use of Footnotes is permitted (maximum length is about 50 words). Footnotes should be numbered consecutively. For instance: [[17 A 'footnote' reflects additional information, a reference or the URL of a website]].

The paper will be written in the UK English. It will be single-spaced with 30 mm margins on all sides (paper size A4). Use Times New Roman for the main body of text (size 10), figures (size 8) or tables (size 8). The use of Bold, Italics, ALL CAPS, SMALL CAPS, etc. is discouraged. All chapters should be numbered consecutively (more than two level sub-headings is discouraged). All Figures and Tables with their respective captions should be numbered consecutively. They should each, be placed on a separate page, at the end of the paper. Give an approximate insertion point for figures and tables, between double square brackets. For instance: [[insert Figure 5]]. You will be asked to resubmit tables, figures and images if necessary. **The paper must be submitted in plain text.** Do not layout your paper. Do not use any styles or any automatic layout system. Please do not use 'Track Changes'.

All tables should be clearly referred to in the main body of text as Table 1, Table 2, etc. All Figures should be clearly referred to in the main body of text as Figure 1, Figure 2, etc. Line drawings should be of good quality. Use light background if possible (white is preferred). Photographs and screen-shots should also be submitted separately as JPEG files (use high resolution for better results). Authors should prepare high quality figures and drawings. The use of colours in your illustrations is permitted although the hardcopy of the journal is not published in colour. Maximum width and height of a figure are respectively 150 mm and 190 mm. Maximum width and height of a table are respectively 115 mm and 170 mm. All Equations will be numbered consecutively and should be clearly mentioned in the main body of text.

All references will appear at appropriate places in the main body of text. References are collected at the end of the paper and are arranged in alphabetical order (numbered consecutively) by the first author's surname, followed by initials. All authors should be mentioned. Dates will appear between brackets after the authors' name(s). This is followed by the title of the book, name of the publisher, place of publication and page numbers (if applicable). To refer to a journal paper, add the full title of the journal followed by Volume:Number and page(s).

The number of references to the author's own previous publications will not exceed 5% of the total number of references. References that are not mentioned in the main body of text are not allowed. Examples of references to a book, a journal or a website are shown below:

- [1] **Beckett K L** and **Shaffer D W** (2004) Augmented by Reality: The Pedagogical Praxis of Urban Planning as a Pathway to Ecological Thinking, University of Wisconsin, Madison
- [2] Blackman, D A (2001) Does a Learning Organisation Facilitate Knowledge Acquisition and Transfer? Electronic Journal of Radical Organization Theory, 7:2 [www.mngt.waikato.ac.nz/Research/ejrot/Vol7_1/Vol7_1articles/blackman.asp]
- [3] **Buxton, W** (1997) Living in Augmented Reality: Ubiquitous Media and Reflective Environments. In: Finne K, Sellen A and Wilber S eds, Video Mediated Communication, Erlbaum, Hillsdale N.J., 363-384
- [4] **Dixon, N M** (2000) Common Knowledge: How companies thrive by sharing what they know, Harvard Business School Press, Boston, MA
- [5] **Djenidi H, Ramdane-Cherif A, Tadj C** and **Levy N** (2004). Generic Pipelined Multi-Agents Architecture for Multimedia Multimodal Software Environment, Journal of Object Technology, 3:8, 147-169
- [6] Gorard, S and Selwynn, N (1999) Switching on to the learning society? Questioning the role of technology in widening participation in lifelong learning, Journal of Education Policy, 14:5, 523-534
- [7] **World Bank** (2002) Social assessment as a method for social analysis, World Bank Group [www.worldbank.org/gender/resources/assessment/samethod.htm]

The definitive paper is submitted as plain text MS Word file for the PC (MS Word RTF format for the Macintosh). In addition, a formatted version of the paper (including images and tables at their approximate places) will be submitted in PDF format (to be used as a guideline for the layout). All figures must be submitted separately in high resolution jpg format. Submit your paper as an email attachment addressed to the Editor-in-Chief [Submit2IJDST@Gmail.com].

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A paper can be rejected at any stage if the requirements are not met. The decision of the Editor-in-Chief on all matters related to the International Journal of Design Sciences and Technology including the review process, publication of papers, etc. is final and cannot be disputed.

There is no deadline for the publication of an accepted paper that will be published online within one to four months after the final re-submission is accepted. The hardcopy book of the volume will be published when 8 papers are published online. The corresponding author of a paper published in the International Journal of Design Sciences and Technology will receive a digital copy of the author's paper free of charge. Hard copies of any individual paper (minimum 100 copies) and the hardcopy of the IJDST Volume (containing 8 papers published online) can be purchased from the publisher (ask for an invoice from the publisher IJDST@europia.org).

IJDST requirements for resubmission of conference papers

- 1. IJDST encourages submitting an extended and revised version of quality papers already submitted and presented at conferences.
- 2. The paper will be **rewritten** and **extended** based on comments received during the conference. Authors can choose to submit a short paper (about 5000-8000 words). The preferred size of a paper (monograph) is about 10000 words (maximum 15000 words). The title must not be longer than seven words. Subtitles are not permitted. The maximum length of the abstract is 150 words. All papers must contain an introductory chapter with extensive literature review of similar research. The paper devotes at least one chapter to detailed discussion of research questions, research analysis and research methods. The conclusion will summarise the research and its results. In addition, this chapter includes a detailed discussion of applications, advantage, shortcomings and implications of the investigation as well as future research for both design professionals and the design education. As much as possible the COPE regulations must be taken into account (http://publicationethics.org).
- 3. The paper conforms **IJDST Author Instructions** regarding the <u>content</u>, <u>structure</u>, <u>style</u> and <u>format</u> (http://europia.org/IJDST/Instruction.pdf).
- 4. The paper will be written in UK English.
- 5. The title is maximum 7 words.
- 6. The abstract is maximum 150 words.
- 7. There are 3-5 keywords.
- 8. Chapter One contains a literature review of the subject.
- 9. The paper devotes at least one chapter to research questions, research analysis and research methods as well as positive and negative research contributions and implications for both professional and educational settings.
- 10. The conclusion chapter summarizes the research and its results. This chapter includes a discussion of applications, advantage, shortcomings and implications of the research as well as future research for both design professionals and the design education.
- 11. There will be an acknowledgment with full bibliographical reference e to the original conference paper.
- a. All papers submitted to IJDST are subject to double peer-review.
- b. The review process can be repeated until all requirements are met.
- c. There is no deadline for resubmission of a paper for a regular issue. The paper will enter the publication process as soon as the paper meets IJDST requirements and will be published within one to four months. Papers submitted for special issues may have a deadline that will be given by the Guest Editor(s).
- d. All enquiries can be directed to the Editor-in-Chief [editorial4ijdst@gmail.com].
- e. Papers can be submitted to submit2ijdst@gmail.com

IJDST Paper Structure

Topic	Remarks
Title [times new roman 14 bold]	Maximum 7 words
Authors [Times New Roman 10 Bold]* Name1 Surname1, Name2 Surname2 and Name3 Surname3 * Affiliation, Country. Email 1: * Affiliation, Country. Email 2: * Affiliation, Country. Email 3:	Initials are not allowed. Only use one affiliation (e.g. university) For more than 3 authors continue in the footnote.
Abstract [times new roman 8 italics]	Length limit 50-150 words
Keywords [times new roman 8 italics]	3 – 5 keywords
1 Introduction [Times New Roman 10 Bold] Chapter Introductory text of minimum 15 words [Times New Roman 10]	First Chapter Heading [Do not use automatic indentation] The preferred length of the Introduction chapter is about 1000 words.
1.1 Sub-heading title [level 1] [Times New Roman 10 Bold] Text [Times New Roman 10]	First level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
Sub-heading title [level 2] [Times New Roman 10 Bold] Text [Times New Roman 10]	Second level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
1.2 Sub-heading title [level 1] [Times New Roman 10 Bold] Text [Times New Roman 10]	First level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
Sub-heading title [level 2] [Times New Roman 10 Bold] Text [Times New Roman 10]	Second level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
idem for the rest of this chapter	
Follow the same instructions for the remaining chapters using consecutive numbers. Assign the last number to the Concluding chapter based on the following instructions.	
# Conclusions and Recommendations [Times New Roman 10 Bold] Introductory text summarising research [Times New Roman 10] # is the number of the last chapter	Conclusion Chapter Heading Do not use automatic indentation The preferred length of the Conclusions chapter is about 1000 words.
#.1 Conclusions [level 1] [Times New Roman 10 Bold] text [Times New Roman 10]	First level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
Sub-heading title [level 2] [Times New Roman 10 Bold] text [Times New Roman 10]	Second level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
#.2 Implications [level 1] [Times New Roman 10 Bold] Text [Times New Roman 10]	First level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
Sub-heading title [level 2] [Times New Roman 10 Bold] Text [Times New Roman 10]	Second level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
#.3 Future Research [level 1] [Times New Roman 10 Bold] Text [Times New Roman 10]	First level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
Sub-heading title [level 2] [Times New Roman 10 Bold] Text [Times New Roman 10]	Second level chapter sub-heading [Maximum 7 words] Do not use automatic indentation
Do not number Acknowledgements and References	
Acknowledgements [Times New Roman 10 Bold] Text [Times New Roman 8]	If any [maximum 100 words]
References [times new roman 10 bold] [1] Reference [times new roman 8] [2] Reference [times new roman 8]	Conform IJDST Reference Format
[n] Reference [times new roman 8]	

Files to submit for the final version of an accepted paper (add the paper reference number to the title of all files):

- Paper (MS Words file)
- Paper (PDF file)
- Figures, Tables and illustrations with respective captions each on separate pages
- Figures and illustrations as separate files (jpg format)

Publication Process

The review process will be repeated until all requirements are met. There is no waiting list for the publication of an accepted paper and each paper will be published individually (online) within one to four months after the final paper is accepted. There is no specific deadline to (re)submit a paper but the sooner it is (re)submitted the sooner it can be published.

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