

**INNOVATIVE
BUSINESS
MODELS**



**CRAFT
IT 4 SD**

Crafts Research Institute
EUROPEAN COMMISSION
EUROPEAN UNION
EUROPEAN PARLIAMANT
EUROPEAN COUNCIL

**CRAFTS AND
EMERGING
TECHNOLOGIES**



**CRAFT
IT 4 SD**

Crafts Research Institute
EUROPEAN COMMISSION
EUROPEAN UNION
EUROPEAN PARLIAMANT
EUROPEAN COUNCIL

**WARDROBE FOR
SUSTAINABILITY**



**CRAFT
IT 4 SD**

Crafts Research Institute
EUROPEAN COMMISSION
EUROPEAN UNION
EUROPEAN PARLIAMANT
EUROPEAN COUNCIL

**EMPOWERING
CONSUMERS**



**CRAFT
IT 4 SD**

Crafts Research Institute
EUROPEAN COMMISSION
EUROPEAN UNION
EUROPEAN PARLIAMANT
EUROPEAN COUNCIL

Participatory methodologies: How CRAFT-IT4SD built a collective approach for researching and innovating sustainable transitions in the European CCSI

Author/editors: Rune Thorbjørn Clausen & Simon Peter Larsen, VIA University College

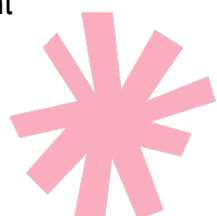
Collaborating partners: AU, OAMK, TUIASI, REGINNOVA, MODACC, VTT, FIC, 3WALKS

How do you generate knowledge about a sector as diverse, fragmented, and practice-rich as the European cultural and creative industries (CCSI) while also making that knowledge useful, transferable, and capable of informing sustainable policy and business innovation across regions? This question sits at the heart of CRAFT-IT4SD where we seek to transform the CCSI toward the green transition by exploring and activating craft and design heritage in fashion via innovative technologies, digital tools and lab environments, and by engaging consumers, artisans and SMEs through co-design. The recently published Method Playbook (final) makes a case that is easy to overlook: That methodological work and how knowledge is produced, coordinated, and made transferable is not just a technical back-end of innovation but a shared and collective resource.

CRAFT-IT4SD is united by a single shared ambition: to revitalise craft and creative heritage traditions in the European fashion and clothing sector, and to renew them as active resources in combination with innovative technologies for the green transition. What makes the project distinctive, besides this shared aim, is the multiplicity of actors and perspectives brought to bear on it. Depending on role and positioning, this core ambition is pursued through the development and testing of innovative emerging technologies for design and consumer engagement, the exploration of sustainable production processes through digital fabrication and lab-based experimentation, the building of new business models for small and micro enterprises, or the assessment of environmental impact through life cycle analysis. These are not competing agendas but rather different angles of approach to the same underlying challenge. Each perspective brings with it distinct methods, forms of evidence, and standards for what counts as valid knowledge or what the sociologist Karin Knorr-Cetina (1999) calls epistemic cultures: the differentiated ways in which disciplines and professional communities produce, validate, and give meaning to what they know.

“We argue that this diversity is not a complication to be solved but a methodological resource to be nurtured because different dimensions of the CCSI sustainability challenge then can be examined simultaneously, in relation, rather than in isolation”.

In CRAFT-IT4SD, epistemic cultures ranging from embodied craft knowledge and design practice to qualitative social science, software engineering, business development, and consumer research, among others, are not simply co-present

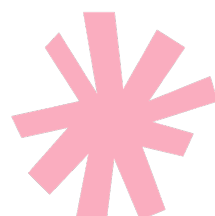


but are in active dialogue. We argue that this diversity is not a complication to be solved but a methodological resource to be nurtured because different dimensions of the CCSI sustainability challenge then can be examined simultaneously, *in relation*, rather than *in isolation*. What requires careful attention is therefore not how to reduce this diversity, but how these different ways of knowing are combined, coordinated, and made to speak to one another in practice across pilots, work packages, and disciplinary boundaries.

Two orientations, one project

To navigate this diversity, the Method Playbook presents two intersecting dimensions that together structure how knowledge and innovation are produced and coordinated across the project. The first dimension concerns research and innovation practices. Here we distinguish between *research and innovation through and with practice*, where action happens through making, prototyping, co-creation, immersive experimentation, and hands-on testing of digital tools and technologies and then *research and innovation on and about practice*, where action happens from a degree of analytical distance through interviews, ecosystem mapping, life cycle assessment, policy analysis, and documentary review. The second dimension concerns the nature of knowledge. Here we distinguish between *tacit*, embodied, and experiential knowing, which is the kind of knowledge carried in skilled hands, material sensitivity, and situated judgement and the *explicit*, codified, and comparable forms of evidence that more easily travel across contexts.

Taken together, these two dimensions produce a methodological space rather than a simple either/or. In CRAFT-IT4SD, we occupy different positions within this space, and the project is designed so that the full range is represented. For example, key activities particularly in the pilot ecosystems in Oulu, Central Jutland, and Iași tend toward practice-near engagement, generating knowledge through situated work with materials, technologies, co-creation formats, and user interaction. Others including work in the Catalonia pilot and across the work packages addressing data platforms, business model innovation, and ecosystem facilitation tend toward emphasis on analytical distance, engaging with regulatory contexts, data infrastructures, and systemic sustainability pathways. But these are not fixed positions as most pilots and work packages move across this space as their work evolves and in fact the movement between positions is not incidental because the very movement is what allows CRAFT-IT4SD to connect locally grounded, experiential insights with broader policy-relevant and industry-relevant knowledge.



Five lenses for researching and innovating in the CCS

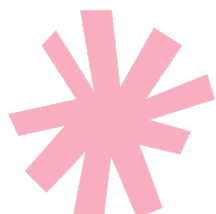
The Method Playbook distils five analytical lenses from the project's methodological experience. Each lens reflects how CRAFT-IT4SD approached a different dimension of research and innovation in practice and each carries forward as an orientation for others working at the intersection of culture, creativity, heritage, digital technologies, and sustainability within the CCSI:

Materials, objects, and artefacts. Material and digital artefacts need not be treated merely as outputs of research and innovation. CRAFT-IT4SD's experience shows that they can function as epistemic devices in their own right: prototypes that mediate collaboration between craftspeople and engineers, digital samples that make tacit knowledge visible, immersive technology demonstrations that enable consumers and designers to explore sustainable scenarios together. Working through materials and technologies gives access to forms of knowledge that are sensory and embodied, which are central to understanding how sustainability is enacted in creative practice.

Processes, experiences, and doings. Whether in a co-creation workshop, a gamified consumer engagement session, or in living lab experimentations, knowledge and innovation emerge through doings, interactions, and iterations rather than prior to them (Schön, 1992). CRAFT-IT4SD's commitment to participatory and co-creative formats reflects a lesson that carries broadly: that learning and innovation in the CCSIs are most generative when developed *with* actors rather than only *about* them (Ingold, 2013).

Tacit versus explicit knowledge. CCSI value creation depends substantially on forms of expertise such as embodied skill, aesthetic judgement, cultural sensitivity that cannot be fully formalised without losing their depth (Sennett, 2008). At the same time, addressing the green transition requires knowledge that can be codified, compared, and communicated: LCA data, business model frameworks, and regulatory compliance assessments. CRAFT-IT4SD's experience suggests that the most productive orientation is not to choose between these forms, but to pursue both deliberately, treating the tension between them as generative rather than problematic.

Proximity and distance. Much of what is most valuable in CCSI research and innovation happens through co-presence: researchers, practitioners, businesses, technologists, and consumers sharing the same workshop, the same iteration, the same design sprint. CRAFT-IT4SD's iterative pilot structure unfolding across three successive phases over approximately 18 months demonstrates how



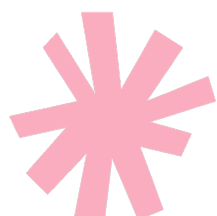
building in temporal layering enables observation of learning and adaptation over time: how digital tools are adopted, how consumer behaviour shifts, how business models evolve. Attending to both proximity and duration strengthen the credibility and depth of what can be claimed.

Zooming in and zooming out. Sustainable transitions cannot be addressed on one scale alone. CRAFT-IT4SD's architecture demonstrates how designing for movement between scales or between micro-level insight into situated practices and macro-level analysis of ecosystems, value chains, and regulatory frameworks allows depth and breadth to coexist and inform one another. For future initiatives, this suggests the value of thinking about methodological composition across a consortium, programme or organization, rather than expecting any single site or partner to cover the full range.

Replicability as adaptation, not repetition

One important key takeaway is the rethinking of what replicability means in CCSI-oriented research and innovation. Working across four regional ecosystems with diverse cultural heritage contexts, institutional settings, and technological infrastructures, the project found that exact replication of methods is neither feasible nor meaningful. What can travel across contexts is not the literal procedure of a method, but its epistemic function: to generate practice-near insight through co-creation, to connect local experimentation with systemic goals, to enable collective reflection across sectors and scales. This has practical implications for how future initiatives are designed. Rather than asking "can this method be repeated?", the more relevant question is "can the intent and logic of this approach be re-enacted in a new context?" Answering that question requires methodological transparency: making visible the decisions about method choice, adaptation, sequencing, and combination that are often treated as background work. By documenting these decisions explicitly, the Method Playbook foregrounds this work to enable researchers, businesses, and policymakers to understand how methodological logics were enacted in CRAFT-IT4SD and to adapt those principles to new contexts with different materials, technologies, or institutional conditions.

*Rather than asking "can this method be repeated?",
the more relevant question is "can the intent and
logic of this approach be re-enacted in a new
context?"*



The Method Orientation Framework

The Method Playbook concludes by introducing the Method Orientation Framework, which is a practical and reflexive reference tool for sustainability-oriented research and innovation in the CCSIs. Rather than a checklist or protocol, the framework is a layered model that brings together the two elements developed across the project: the epistemic mapping of methods along the two shared dimensions of research and innovation practices and nature of knowledge, and then four guiding principles for research and innovation in practice:

1. Navigating scale through methodological composition by combining practice-near inquiry with approaches that support a systemic perspective.
2. Balancing engagement levels by integrating immersive, hands-on approaches with structured documentation and codified methods.
3. Extending inquiry across time by attending to trajectories rather than only bounded moments.
4. Reflexive monitoring by documenting methodological choices and adaptations to maintain alignment between objectives and enacted practices.

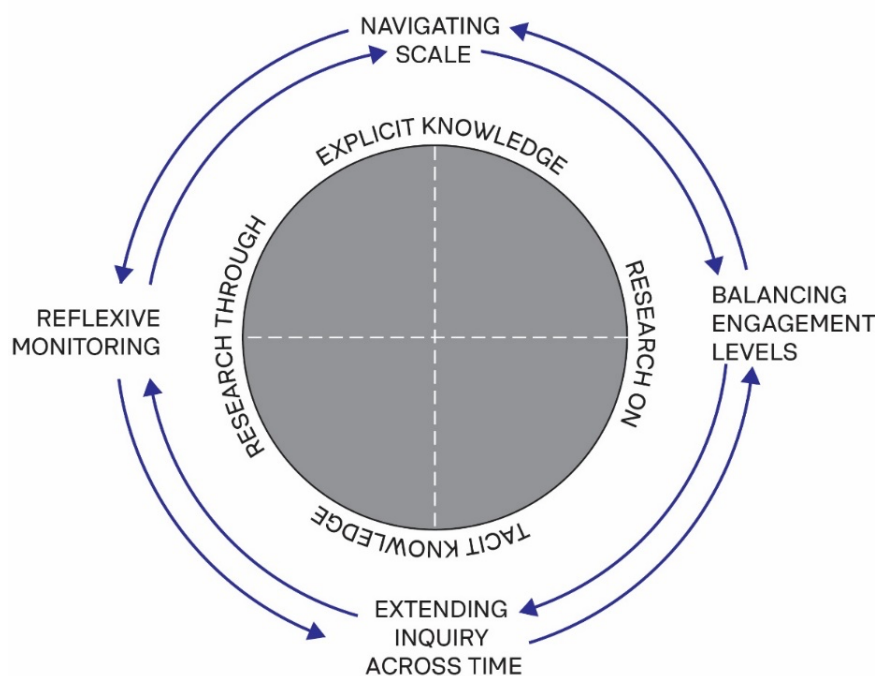
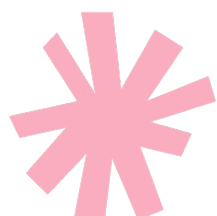


Figure 1: Method Orientation Framework. Source: CRAFT-IT4SD (Visualisation by Malene Harsaae, VIA)



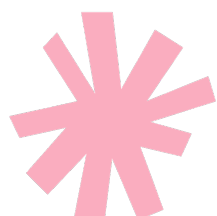
What makes the framework useful, we argue, is not that it tells you what exactly to do and to use, but how it supports reflection on the ways methods are working together and where the balance might need adjusting. It is designed to be picked up and used by others: by research teams building new CCSI projects, by innovation intermediaries coordinating across partners, by SMEs and smaller creative enterprises navigating sustainability transitions with limited resources, and by policymakers seeking to understand how place-based experimentation and systemic analysis can be made to speak to one another. In a sector as diverse and dynamic as the European CCSI, that kind of shared orientation may matter as much as any individual method or tool.

Implications for the CCSI sector

The insights developed in the Method Playbook are not addressed to researchers alone. For practitioners, designers, technology developers, and SMEs, the playbook offers a language for understanding how experimentation, co-creation, digital tools, and data-driven approaches can be meaningfully combined and why the choices made about how to combine them matter. For intermediaries, clusters, and associations, it provides a framework for coordinating diverse innovation activities across ecosystems in ways that remain coherent without becoming rigid. For policymakers, it clarifies how place-based, heritage-informed experimentation enriched by immersive technologies, environmental assessment, and consumer research can be aligned with regulatory and strategic goals without reducing creative practice to purely technical metrics.

The deeper argument of the playbook is that methodological work is not a technical back-end of innovation. It is a shared and collective resource, which shapes what can be known, what can be claimed, and what can be transferred across the diverse ecosystems that make up the European CCSI landscape. In making this work visible, CRAFT-IT4SD demonstrates that sustainable transformation at the intersection of culture, creativity, digital technology, and environmental responsibility depends not only on new tools and practices, but on a thoughtful, reflexive approach to how we come to understand them and how we build the conditions for others to do the same.

The full Method Playbook (D2.2) is available to download at www.craft-it4sd.eu/results



References

- Cetina, K. K. (1999). *Epistemic cultures: How the sciences make knowledge*. Harvard University Press
- Ingold, T. (2013). *Making: Anthropology, Archaeology, Art and Architecture*. Routledge
- Schön, D.A. (1992). *The Reflective Practitioner: How Professionals Think in Action*. Routledge
- Sennett, R. (2008). *The Craftsman*. Yale University Press



**Funded by
the European Union**

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

