

LDT4SSC Project Methodology

Step 2: VALIDATE (Specifications)

Workshop: Lego® Serious Play: A Transversal Tool to Address and Overcome Data Governance Challenges

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Document History

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May 2026	v1	Marine Le Gall, Laura Riou, Sophie Houzet	First version adapted from the CAPACities program.

Workshop Overview

Title	Lego® Serious Play: A Transversal Tool to Address and Overcome Data Governance Challenges
Methodological step	Step 2: VALIDATE (Specifications)
Duration	2 hours and 45 mins
Number of Facilitators	1 lead facilitator + 1 facilitator per group of 4 to 5 people
Equipment Needed	Legos
Expected outputs	- Physical Lego models - Recorded presentations, photos/videos for reuse. - Summary note produced after the workshop, outlining key findings, solutions and next steps.

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This document is intended for the LDT4SSC consortium, pilot teams and the public use, providing guidance to support the consistent implementation of LDT4SSC pilot activities.



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1. Context and objectives

The **Lego® Serious Play** workshop is part of the **VALIDATE step (specification)** which bridges the gap between the project's initial idea and its practical implementation. It translates the use cases into **technical and functional requirements**, while accounting for real-world constraints such as interoperability, data, architecture, security, and putting the user's needs at the center.

More information on the objectives, prerequisites and stakeholders to involve in the IMPLEMENT step can be found on the LDT4SSC Knowledge Hub¹.

The workshop is designed to achieve the following objectives:

- **Overcome complex challenges** and **deepen understanding** of data governance challenges.
- Foster **creative problem-solving** and **stakeholder alignment**.
- Identify **gaps, risks, and unresolved issues** before project implementation.
- Co-create **concrete, user-oriented solutions** based on real challenges.

2. Workshop

2.1. Workshop phases overview

<i>Time spent</i>	<i>Phase</i>	<i>Description</i>
15 mins	0. Framing	Participants revisit the selected use case and project objectives to keep discussions grounded.
15 mins	1. Igniting Creativity through a Collaborative Lego Challenge	Participants start off with a short individual challenge aimed at (re)familiarising them with Legos, and then undertake a collective one to foster creativity and teamwork.
15 mins	2. Selecting Challenges and Forming Focused Working Groups	Participants, in subgroups, choose a LDT project-related challenge..
30 mins	3. Individual Prototyping of Solutions	Participants individually build their prototype solution to the challenge they chose using Lego bricks.
20 mins	4. Collectively Refining User-Centred Solutions	Participants regroup and debate on the best means and solutions to address their challenge, building on everyone's contributions from the previous phase.
30 mins	5. Presenting and Documenting Lego Models	Each subgroup presents the group their challenge, lego model, and the solutions they found to overcome it.

¹ https://knowledgehub.ldt4ssc.eu/resources_content/methodology/

30 mins	6. Connecting Models	Participants connect all the lego models from the different sub-groups across challenges to broaden the perspectives.
10 mins	7. Synthesising Insights and Defining Next Steps	The facilitator summarises the key findings and participants agree on the follow-up actions.

2.2. Workshop step by step guide

Phase 0: Framing (recommended allocated time: 15 mins)

The facilitator orients the participants **towards the selected use case** and the overarching project objectives. They list all **relevant project factors** such as: goals, stakeholders, budget. This initial phase ensures that the subsequent discussions remain grounded in a **clear and concrete context**. It also serves to **align all stakeholders** on the purpose, scope, and expected outcomes of the workshop, fostering a shared understanding before diving into deeper phases.

Phase 1: Igniting Creativity through a Collaborative Lego Challenge (recommended allocated time: 15 mins)

The objective of this phase is to **break the ice, stimulate creativity, and introduce Lego as a tool for collaborative thinking**. The method begins with a **5-minute individual exercise** where each participant is given a bag of Lego bricks and tasked with **building a bird**. This simple, creative task helps participants **warm up and engage with the material**.

The second part of the exercise, lasting **10 minutes**, shifts to a **collective challenge**: teams of 4-5 participants must **build the tallest tower possible** —but with a twist— **using only one hand each**. The team with the tallest tower wins, adding a playful competitive element to the activity.

To manage the workshop, facilitators should **place Lego bricks on the tables** and encourage small groups to **work quickly and collaboratively**. The facilitator's role is to **clearly explain the rules, manage the time, and energise participants**, ensuring everyone is engaged and having fun.

This exercise is designed to **foster playfulness, rapid iteration, and teamwork**, while also helping participants **become comfortable with prototyping and creative problem-solving**.

Phase 2: Selecting Challenges and Forming Focused Working Groups (recommended allocated time: 15 mins)

This phase aims to **focus participants on concrete, relevant challenges** that resonate with their current priorities and LDT project needs.

The method involves **asking participants to select one challenge** to work on collaboratively from a predefined list that the facilitator has built drawing from those identified in previous workshops.

The facilitators build groups of 4-5 people that will each work on a different challenge. Each group picks a preferred challenge. **Multiple teams may address the same challenge**, fostering diverse perspectives and solutions. A **facilitator is assigned to each group** to

take notes, guide the discussion, and ensure that the conversation remains productive and aligned with the challenge’s objectives.

Here are some **frequently encountered challenges** that participants may choose from:

- **Challenge #1:** Organise governance for your specific use case –refer to the workshop [2.2.1 Understanding Data Governance and Setting the Goal: From Vision to a First Actionable Roadmap](#).
- **Challenges #2 and #3:** Establish or refine internal data governance structures, and/or develop data governance frameworks with external partners –see workshop [2.2.3 Designing your Data Governance Roadmap: From Data Officer Mission Statement to Action](#) and/or [2.2.5 Refining your Legal Framework for Data Governance: Deep dive into legal and contractual requirements](#).
- **Challenge #4:** Collaboratively build your **Local Digital Twin (LDT)** to address field needs, support decision-makers, or respond to citizens’ concerns, while taking into account interoperability from the start –see [2.3 Inventorying your LDT Projects’ Data: Unlocking Interoperability, Listing and committing to share data among partners](#).
- **Challenges #5 and/or #6:** Implement or revise an **end-to-end internal workflow** to handle business use cases with consistency and efficiency, while emphasizing on data –refer to workshops [2.2.2 Mapping Stakeholders’ Legitimacy and Authority to act in Data Governance: Understand Roles, Responsibilities, and Hierarchical Influence](#) and/or [2.2.4 Complementing your Data Governance Roadmap with a Legal Framework: From Mapping Legal Phases to Action](#).
- **Challenge #6:** Create a **use case demonstrator** based on the ‘ideal user journey’ to showcase potential solutions –see workshop [4.2 Designing a Structured Action Plan: From Ideas to Execution for Your Use Case](#).
- **Challenge #7:** Deploy an ‘**action plan**’ to train, acculturate, and onboard all agents and elected officials, ensuring widespread adoption and understanding –see workshop [4.1 Onboarding & Acculturation in Digital Projects: Engaging Stakeholders, Defining Training Paths, and Building a Sustainable Adoption Plan](#).

This phase ensures that the workshop remains **relevant, needs-based and participant-driven**, as it allows individuals to **choose challenges that align with their priorities**, thereby fostering a sense of **ownership and engagement** throughout the session.

Phase 3: Individual Prototyping of Solutions (recommended allocated time: 30 mins)

The goal of this phase is to **design concrete, user-oriented solutions** through an **iterative prototyping process**, enabling participants to explore their challenge in a hands-on and collaborative manner.

Participants begin by **individually constructing their conception** of the challenge using Lego bricks. This phase encourages **personal reflection**, allowing each participant to develop an initial model based on their understanding of the problem and potential solutions.

In this phase and in the following ones, all lego models must be **designed with the end-user as the central focus**, ensuring that the solutions then developed are **fully aligned with the actual needs of those who will use the LDT**.

The use of **physical Lego** allows participants to **visualise and physically manipulate concepts, workflows, dependencies, links and structures** in a way that **verbal discussion alone cannot achieve**. This hands-on approach **enhances shared understanding** of the challenge, **reveals its potential blind spots**, and **fosters innovative solutions**. It is a great tool for collaborative problem-solving.

Phase 4: Collectively Refining User-Centred Solutions (recommended allocated time: 20 mins)

The goal of this phase is to **imagine concrete, user-oriented solutions to the challenge**.

Participants working in each group come back together to **connect and collaboratively adapt their individual models**. This phase enables participants to integrate diverse perspectives into a more comprehensive model and by doing so identifying solutions to it. They debate, discuss, and finally **come together around a concrete, user-oriented solution** made possible through this process.

Each group is also tasked with **defining one or more personas from the cities and communities involved in the project**. Personas are **fictional yet realistic representations of end users**. These personas serve as a **concrete reference point** for designing the solution. They must represent the personas with legos in their model.

Phase 5: Presenting and Documenting Lego Models (recommended allocated time: 30 mins)

Each group presents its **Lego model** in a **3–5 minute presentation**, which is **filmed for documentation and later review**. These presentations provide participants with the opportunity to **articulate their thought processes**, explain the **solutions they've developed**, and **justify the design choices** behind their lego models. By capturing these presentations on film, the session ensures that **insights, debates, and creative solutions** are preserved for future reference, enabling participants to **reflect on their work** and **refine their approaches** after the workshop. During the presentations, participants should **emphasise how their solutions address the needs of the cities or communities** in the project and end user **personas**, demonstrating how the **local context and user-centric design** shaped their final prototype.

After each presentation, a **brief question-and-answer session** allows participants to **clarify elements** and **explore potential improvements** based on feedback from their peers.

By the end of this phase, participants will have **not only a documented prototype** but also a **clearer vision of how to move forward**.

The facilitator **coordinates the filming of presentations** and ensures that **all models and discussions are thoroughly documented**. This documentation serves as a **valuable record** for future reference.

Phase 6: Connecting Models (recommended allocated time: 30 mins)

The final phase involves **connecting all the lego models from the different sub-groups across challenges**. Participants discuss **links, dependencies, and potential overlaps** between their lego models, identifying **shared themes, governance structures, and blind spots** that may not have been identified yet.

Phase 7: Synthetising Insights and Defining Next Steps (recommended allocated time: 10 mins)

The facilitator **synthesises the workshop's key findings**, addressing any outstanding questions from participants to ensure clarity and alignment on next phases / steps. Finally, the session concludes by **defining responsibilities, timelines, and follow-up actions**, ensuring accountability and momentum as the project progresses.

2.3. Recommendations for Workshop facilitation

To ensure the workshop's effectiveness, facilitators are advised to adopt the following approach:

Frame the Discussion with Open-Ended Questions

At the outset of the session, facilitators should **pose open-ended and thought-provoking questions to frame the discussion and clarify the challenge** under consideration. These questions must be **designed to stimulate creativity**. They must encourage participants to **explore diverse perspectives and uncover underlying assumptions**. For instance : “*What are the primary obstacles our organisation encounters in developing innovative solutions?*”.

Encourage Tangible Expression Through Model Construction

Participants should be **invited to use Lego bricks to construct models** that visually represent their **ideas, concepts, or visions** in response to the challenge. These models can serve as **metaphors for abstract concepts**—such as collaboration, innovation, or systemic challenges—or as **concrete representations of potential solutions**. For example, a participant might build a bridge to **symbolise the need for stronger interdepartmental collaboration**, thereby transforming intangible ideas into **tangible, discussable artefacts**.

Facilitate Storytelling to Deepen Understanding

A key aspect of the facilitator's role is to **encourage storytelling**, prompting participants to **articulate the narrative behind their lego model**. This involves explaining **how their solutions address the identified challenges and meet the needs of the users**, thereby making the thought process and rationale behind each model clear and compelling to all stakeholders.

Once the models are complete, each participant should **present and explain their construction** to the group. This involves **describing the meaning behind the model, the choices made during its creation, and the ideas it conveys**.

Keep the User at the center of the discussions

The facilitator also ensures that **user needs remain at the heart of the discussion**, preventing the process from becoming **overly technical or detached from practical**

realities. By keeping the focus on the end user, the facilitator helps maintain the **relevance and accessibility** of the solutions being developed.

3. Next steps

You are done with the VALIDATE workshops. You may now have a look at the DEFINE step:

- *3.1 Prototyping your Use Case with a Context Broker: A Step-by-Step Technical Guide for LDT4SSC Pilots*

Although we do advise you go through the abovementioned resource, you may also start the workshops for the IMPLEMENT step:

- *4.1 Onboarding & Acculturation in Digital Projects: Engaging Stakeholders, Defining Training Paths, and Building a Sustainable Adoption Plan*
- *4.2 Designing a Structured Action Plan: From Ideas to Execution for Your Use Case*
- *4.3 Designing a Sustainable Business Model: Funding, Valuation, and Deployment Strategies for Your Project*
- *4.4 Refining the Business Model: Designing, Testing, and Refining Your Strategy with a Canvas*
- *4.5 Completing your Data Cooperation Canvas (DS4SSCC): Developing Multi-Stakeholder Data Cooperation*

Next Methodology steps:

- *Done: Complete the EXPLORE workshops*
- *Done: Complete the VALIDATE workshops*
- Complete the DEFINE workshops
- Complete the IMPLEMENT workshops

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