SIS-CC
Statistical Information System
Collaboration Community
Key success factors and enablers for developing a successful open source community
Open Source, DevOps, Statistical Software, Collaboration, Community
siscc.org | @sisccomunity | gitlab.com/sis-cc/ | contact@siscc.org

Use Case: Statistical Information System
Collaboration Community
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A reference open source community for official statistics, focusing on product excellence and delivering concrete solutions to common problems through co-investment and co-innovation.
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The foundations
Component oriented architecture, standard driven, to enable reusability in multiple contexts and leveraging other open source projects.
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The foundations
User focus by developing the feedback loop, leveraging best in class UX and user research techniques.
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The foundations
A business model that enables a multi-tier approach through transparent knowledge sharing where public sector as well as private sector initiatives thrive and contribute back to the open source project.
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The foundations
With the ability to scale whenever additional funding becomes available, yet streamlining the irreducible fixed cost of maintaining the core software.
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a successful open source community

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1. Do your research
Analyse the possible paths to open source, engage external experts, and carry out a due diligence and 'as is' study of the source code repositories, operational aspects, and governance.

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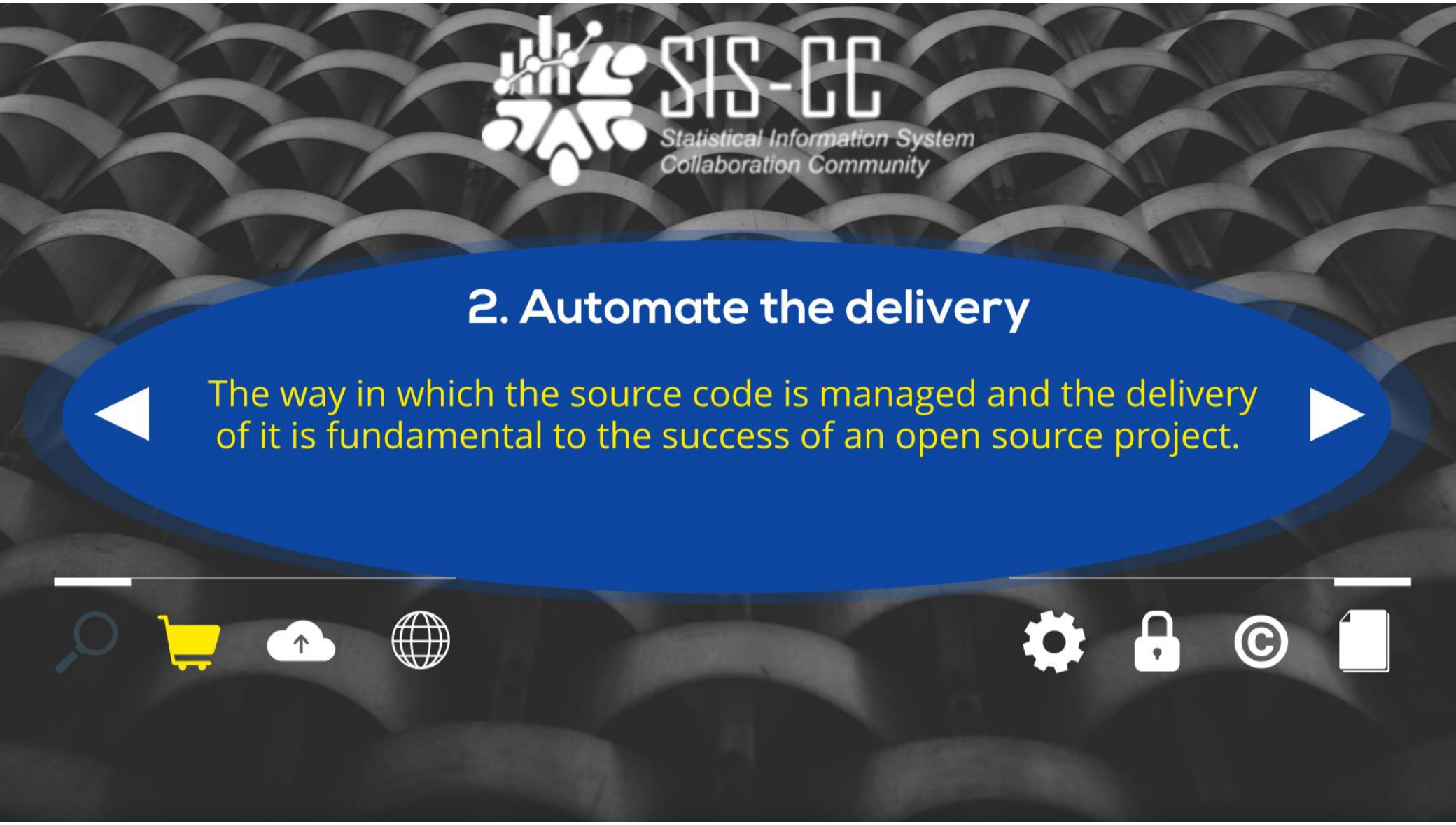
1. Do your research
Take inspiration from existing open source projects, including in other statistical offices, identifying key success factors and analysing their operational models.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2. Automate the delivery
The way in which the source code is managed and the delivery of it is fundamental to the success of an open source project.

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2. Automate the delivery
Continuous Integration (CI) - best practice to continuously develop a complex software with constant code checking to ensure new code does not break the existing code.

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Continuous Delivery (CD) - it is important to approach the question “How can we easily manage the release of the project?” This process can, and must be to a certain degree, automated to gain maximum efficiency.

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2. Automate the delivery
The overall operational mechanism can be referred to as DevSecOps, the set of practices that combines software development (Dev), Security (Sec), and IT operations (Ops).

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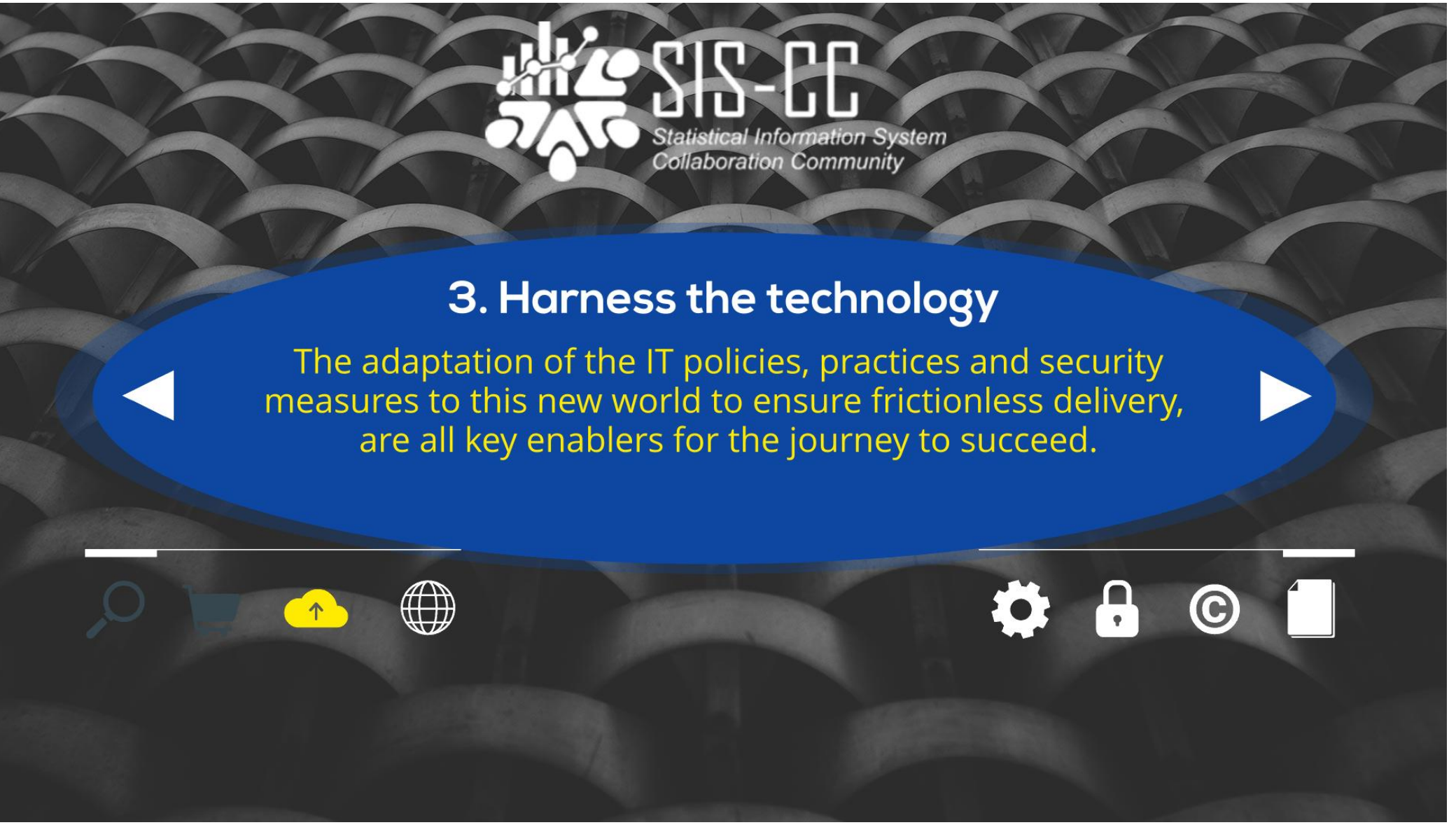
3. Harness the technology
Key success of the DevSecOps chain is the harnessing of 'container' technologies (Docker, Kubernetes) allowing for fluid provisioning (installation, update) of an integrated set of components constituting an application over the cloud.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3. Harness the technology
The adaptation of the IT policies, practices and security measures to this new world to ensure frictionless delivery, are all key enablers for the journey to succeed.

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4. Leverage other open source projects
Integrate third party components to leverage innovations
from other community's and avoid re-inventing the wheel.

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4. Leverage other open source projects
Key decision points for SIS-CC have been to rely on Eurostat sdmxsource project for the development of the SDMX API, on Apache SolR for the common search engine, and Facebook react.js as JavaScript development framework.

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5. Streamline the development process
The development process of an open-source project can be divided into 3 different perspectives:
Contributors; Users; Project maintainers.

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5. Streamline the development process
‘The project maintainers’ play a key role and are responsible for orchestrating the open source project.

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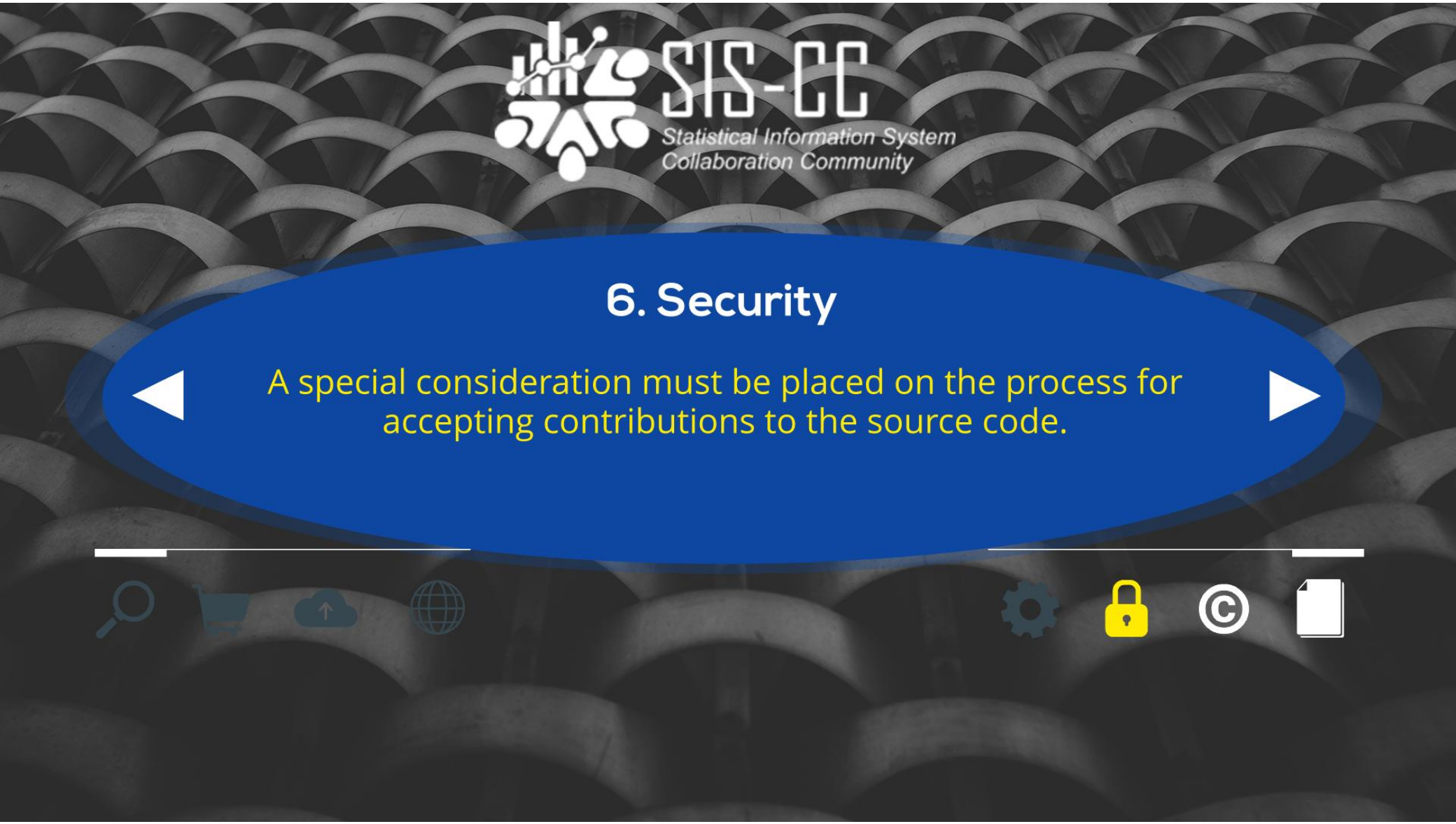
6. Security
Putting the right processes and safe guards in place early (automated code vulnerability checks, penetration tests) greatly reduces the risk of exposing the source code to potential malicious attacks.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6. Security
A special consideration must be placed on the process for accepting contributions to the source code.

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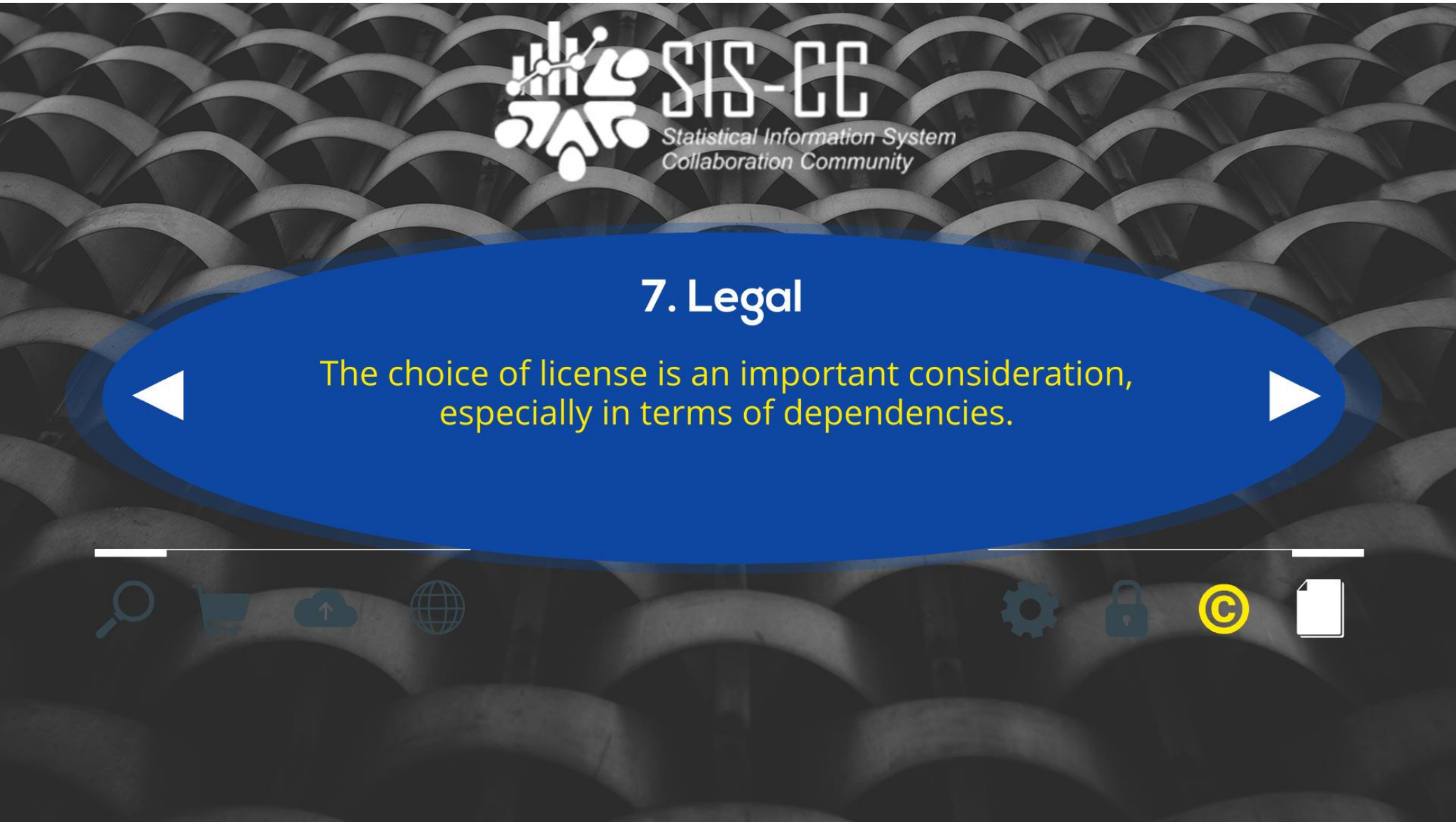
7. Legal
Engaging early with the legal team ensures they are on-board, going open source is not creating undue liabilities, and IP aspects are properly managed.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7. Legal
The choice of license is an important consideration,
especially in terms of dependencies.

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8. Documentation

An open source project greatest asset and key communication vehicle to ensure ease of adoption, ease of use, and ease of deployment.

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In June 2019 at the occasion of the
SIS-CC annual workshop, the Community launched
in full open source the .Stat Suite platform.

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Multiple initiatives have now taken shape:
In support of the global agenda (SDGs),
Sectorial organisations (ILO) in the dissemination of Labor Market statistics,
Implementation of .Stat Suite on the United Nations Global Platform
infrastructure to provide a low cost service (SaaS) offering.

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Join us and continue this journey together!
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