

# Modules for training science shops' staff

Science Shops: the Basics



ENHANCING THE RESPONSIBLE AND SUSTAINABLE EXPANSION OF THE SCIENCE SHOP ECOSYSTEM IN EUROPE



UNIVERSITÄT HOHENHEIM



socialinių inovacijų institutas



uc3m | Universidad Carlos III de Madrid



UNIVERSITY OF BRESCIA



Universiteit Leiden  
The Netherlands



# Structure of the presentation

- 1. What is a Science Shop?**
- 2. General overview of Science Shops**
- 3. Science Shops and Public Engagement in Science**
- 4. Science Shops and RRI**
- 5. How does a Science Shop work?**
- 6. Benefits of Science Shops to various stakeholders**
- 7. Steps to establish a Science Shop**
- 8. Life cycle of Science Shops**
- 9. Challenges and recommendations**

# 1. What is a Science Shop? (1)

**Science Shop is a small organisation that carries out scientific research in a wide range of disciplines.**

**Science Shops respond to civil society's needs for expertise and knowledge. This way science shops combine research with service to society.**

# 1. What is a Science Shop? (2)

## **The Living Knowledge Network explains that Science Shops seek to:**

- provide civil society with knowledge and skills through research and education;
- provide their services on an affordable basis;
- promote and support public access to, and public influence on, science and technology;
- create equitable and supportive partnerships with civil society organizations;
- enhance understanding among policymakers and education and research institutions of the research and education needs of civil society;
- enhance the transferable skills and knowledge of students, community representatives and researchers.

## **2. General overview of science shops**

**The first Science Shop was established in 1973 at the chemistry faculty in Utrecht (the Netherlands).**

**Since then more Science Shops were established in the US, Germany, France, Denmark, Belgium, Austria, Spain, the UK, Israel, Romania, Lithuania, Latvia, Poland, South Africa, Canada, South Korea, etc.**

### 3. Science Shops and public engagement in science (1)

**Science Shops is one approach to close the gap between traditional scientific research and the needs of communities**

**Public engagement is multifaceted and can take many forms**

**Ideally, it should be a two-way process:**

“Simply trying to educate the public about specific science-based issues is not working. We need to move beyond what too often has been seen as a paternalistic stance. We need to engage the public in a more open and honest bidirectional dialogue about science and technology.” – AAAS Chief Executive Officer Alan Leshner, Science 2003

## 3. Science Shops and public engagement in science (2)

### Importance of public engagement:

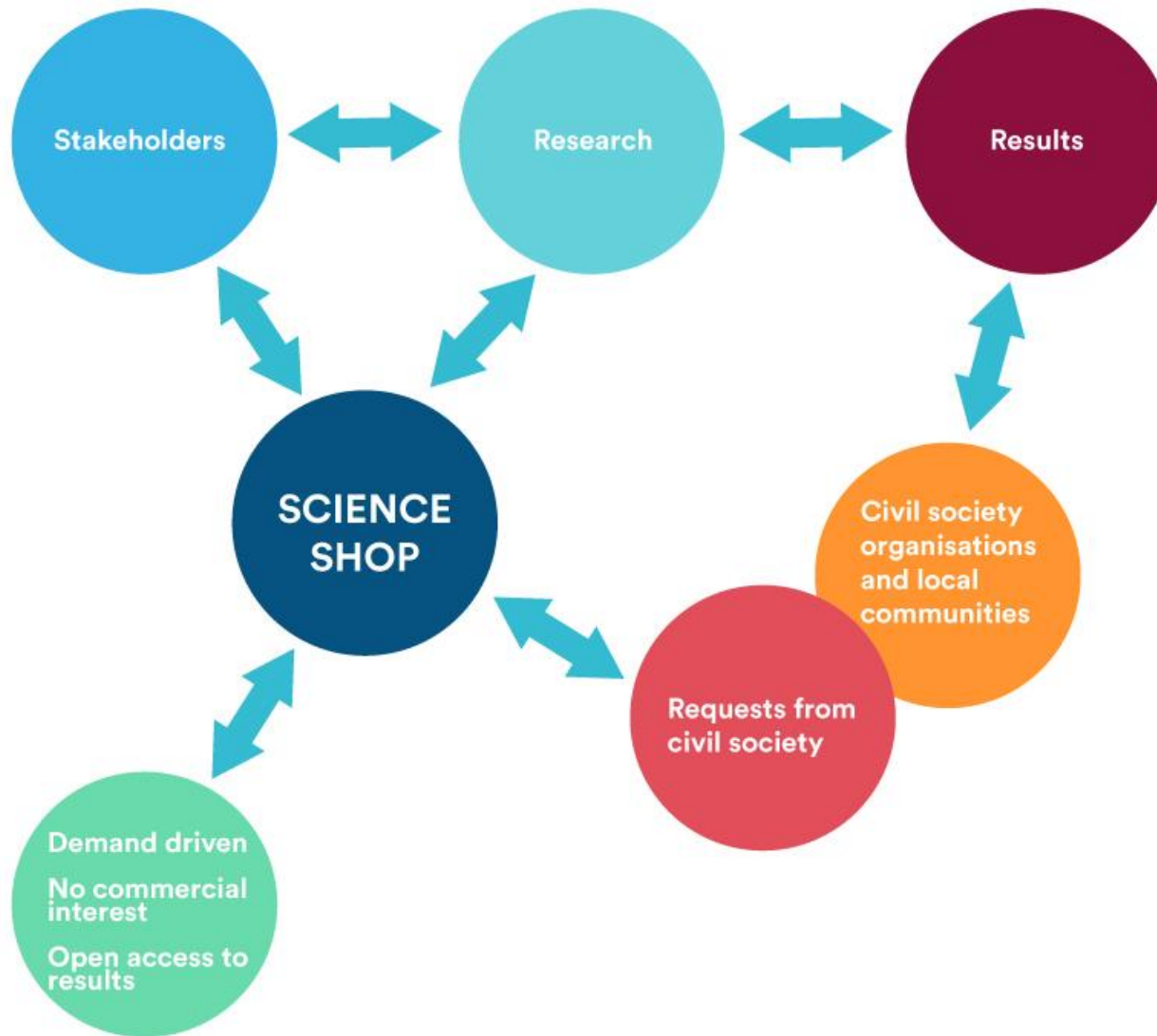
- Answerability
- Trust
- Relevance
- Responsiveness

## 4. Science Shops and RRI





## 5. How does a Science Shop work?



Based on the [SPARKS Handbook](#)

## 6. Benefits of science shops to various stakeholders (1)

### **Universities:**

- Problem-based learning
- Contribution to the development of university curricula and research
- PR and social responsibility (improved image)
- “Third mission”

### **Students:**

- Enhanced learning
- New skills (e.g. joint problem definition, project-based working, communicating, planning) and employability
- Credits for courses

## 6. Benefits of science shops to various stakeholders (2)

### **Researchers:**

- Case materials for either future publication or further theoretical analysis
- Networking
- PR and social responsibility
- Science communication

### **Society:**

- New products, services, ways of organisation
- Informed and engaged public
- Empowerment
- Media/public attention

## 6. Benefits of science shops to various stakeholders (3)

### **Policy makers:**

- Informed decisions
- Adequate funding for scientific research
- Appropriate regulations

## 7. Steps of establishing and running a science shop (1)

### **Establishing a science shop**

- Survey the territory
- Build alliances
- Inform

### **How to generate research requests?**

- Introduce the science shop to your local community groups
- Develop new tools for collecting questions
- Introduce the science shop through your local communication channels

## 7. Steps of establishing and running a Science shop (2)

### Tasks of the staff of a Science Shop:

- Organise a first meeting with clients to understand the problem and collect relevant questions/problems
- Do the preliminary research
- Transfer client's question into a research question
- Organise a second meeting with the client together with relevant experts and local stakeholders
- Find a suitable supervisor for the research project
- Find students or researchers who will be working on the research project
- Maintain communication between client and research group
- Prepare a presentation of results
- Support client in implementing results and recommendations
- Make inventory of follow-up research or research themes
- Do the project evaluation

## 8. Life cycle of Science Shops

**Development of Science Shops is not linear: possible periods of growth and decline**

**Science Shops need to respond and adapt to internal changes and changing environment**

## 9. Key challenges and recommendations for sustainability of science shops

- Funding
- Difficulties to get requests from civil society organisations
- Matching research requests with resources
- Working with a diverse range of stakeholders
- Loss of science shop's key persons



# Thanks For Your Attention!

# SciShops



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