



**Institut Mines-Télécom
Business School**

Digital Social Innovation

Exploring an Emerging Field

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ISIRC 2018
Heidelberg, September 3-5

Outline

- What is DSI?
- Data and methodology
- A typology of DSIs in Europe
- How do largest DSIs scale up? Main findings
- What is next?

What is DSI?

Digital social innovations use digital technologies to increase the capacity of civil society to address problems, empower people and tackle challenges in areas such as education, healthcare, democracy, transparency, social inclusion and environment. (ex. DSI4EU reports)

fluicity homepage about us you are discover the app en sign in sign up

Connected democracy!
Fluicity aims to realize the citizens' projects and ideas

GET IT ON Google Play Download on the App Store

1-boycott.org

Marineland : Ensemble, libérons les orques !

opencorporates

The largest open database of companies in the world

Search 163,608,373 companies All jurisdictions

TRACK A TREE

Freegle
Don't throw it away, give it away!

wheelmap.org

Mit Wheelmap.org kannst Du rollstuhlgerechte Orte finden und markieren - weltweit und kostenlos! Ergebnisse auf der Karte nach Rollstuhlgerechtigkeit filtern Kategorien filtern

Das Ampelsystem zum Markieren der Rollstuhlgerechtigkeit:

- Voll Rollstuhlgerecht**
Eingang stufenlos, alle Räume sind stufenlos erreichbar.
- Teilweiser rollstuhlgerecht**
Eingang hat eine Stufe mit max. 7 cm Höhe (3 inches), die rollstuhlgerechte Räume sind nicht zugänglich.
- Nicht Rollstuhlgerecht**
Eingang hat höhere oder mehrere Stufen, Räume sind nicht zugänglich.
- Status unbekannt**
Hilf mit und markiere den Toiletten-Status!

OLIO LISTINGS ABOUT FOOD WASTE

Marineland d'Antibes

VOIR LA C

Smile
Partagez, économisez, positivez
Votre réseau collaboratif de voisinage

Street Support Network

Find Help Give Help

Informationsfreiheit
+
FragDenStaat.de

Do-it for good

Start volunteering Find volunteers Search

Volunteering made easy

Join the food sharing revolution

1%club
Do-good crowdfunding

Working Together to End Homelessness

Find support services near you, and see how you can help.

Spacehive Create Discover Partner About Search

CareToShare

Bringing People Together To Share Their Skills And Tasks!

Ruuti

nolotiro.org
don't dump it, give it to y

Social To Crowd

Plataforma de solidaridad directa entre organizaciones y personas.

GOTEO

Make your local area better

Spacehive is the UK's dedicated crowdfunding platform for places

Premium Features Catalog Helpdesk Blog

Create your own online course

Simple, secure & free forever

Aim of Research

- Different organisations and events to support DSIs, like Social Innovation Competition, DSI4EU, Social Good Week, Ouishare Fest....
- While significant time, effort, and resources are spent, academic research is lagging and scattered across different disciplines.
- A systematic study on different types of platforms, and different means of civic participation is lacking (a necessary step for indicators)

Disciplinary frames

- To study the nature of DSIs, we need to make use of different frames.
- **Innovation studies:** The ways in which they are generated, their structural differences with other conventional innovations
- **Social innovation literature:** the ways in which they contribute to solving social and environmental problems, social entrepreneurship, policy implications, etc.
- **Media and communication studies:** the use of ICTs in daily lives of people...
- **Science and technology studies:** the way they shape, and are being shaped by society, their power for sustainable transitions
- **Economics of geography:** Geography, localisation aspects

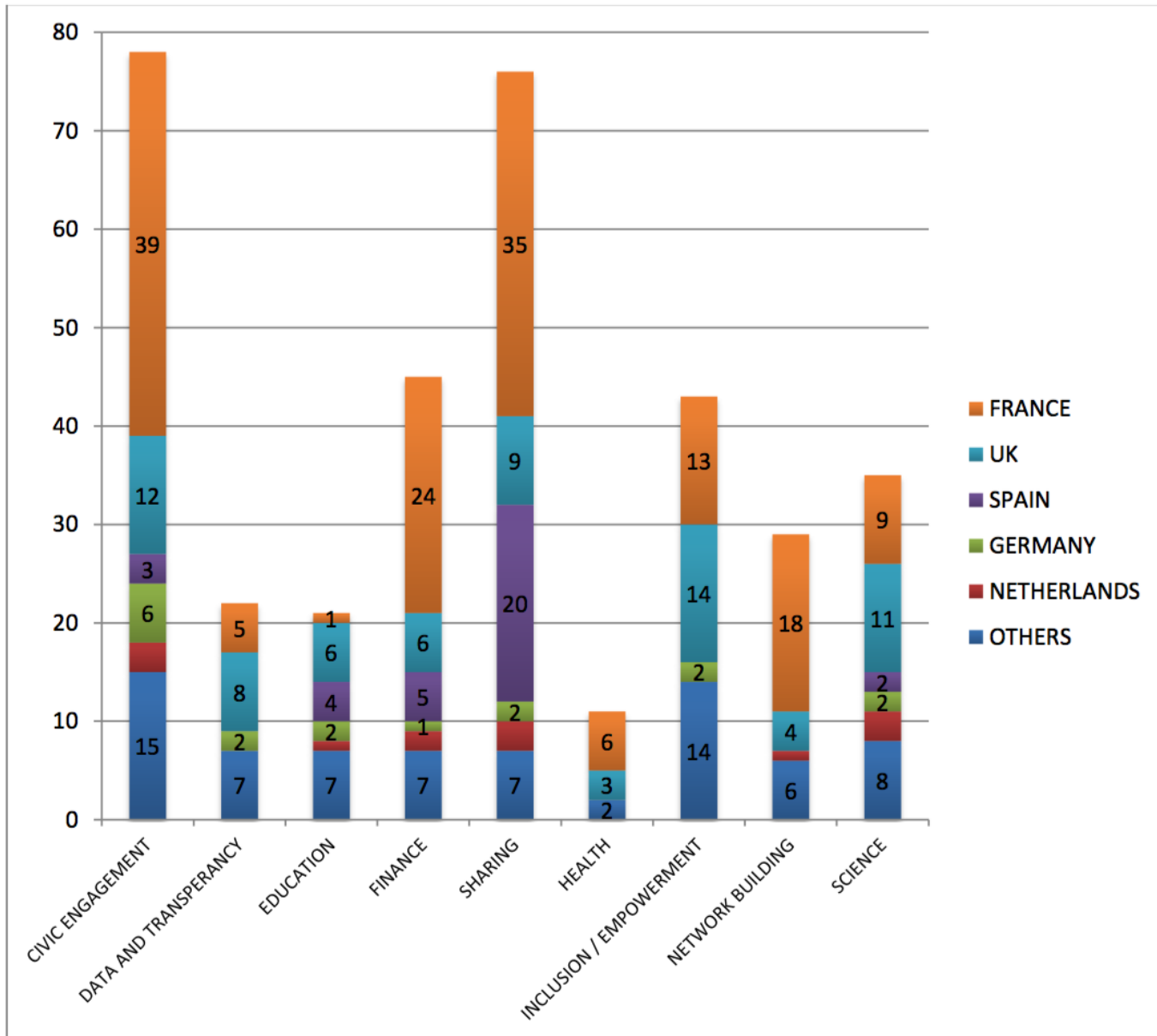
Methodology

- Step 1: Constructing a typology of DSI based on diverse cases in Europe using k-means clustering analysis
- Step 2: How do they scale-up social impact in each type? Analysis of the websites of 40 largest platforms

Data

- Problem-led search of media, academic and non academic literature (magazines, websites of sponsors, journals, online websites focusing on the digital sector and social entrepreneurship, prize nominations, sources like public and private organisations active in social economy, and digital economy)
- 360 DSI cases in Europe (innovations by non profits, for profits, public sector, movements, alliances, individuals)
n year of foundation, alexa ranking, etc

Figure 1. Distribution of DSI cases per country and domain



How does the “digital” makes things different?

- 1. Geography:** Drastic changes of speed and scale that ICT can provide to overcome the barriers of distance to access information, support, resources.
- 2. Type of user engagement:** a wider spectrum of possibilities for engagement, make engagement cheaper, easier...

Variables in cluster analysis

Variable	Explanation
GEOG	The role of geographical location of the user
COLLAB	The extent to which platform forms collaborative and strong links between users
LOCAL	Does the platform facilitate formation of local links
GLOBAL	Does the platform facilitate formation of global links
EXIST	The role of internal social capital in user engagement
OPEN	Is the platform based on open source?
SOC_MOV	Participation in awareness raising, social movements
KNOWB	Knowledge brokerage
MATCH	Matching
INFOC	Information collection
CROWD	Crowdsourcing

Results of cluster analysis

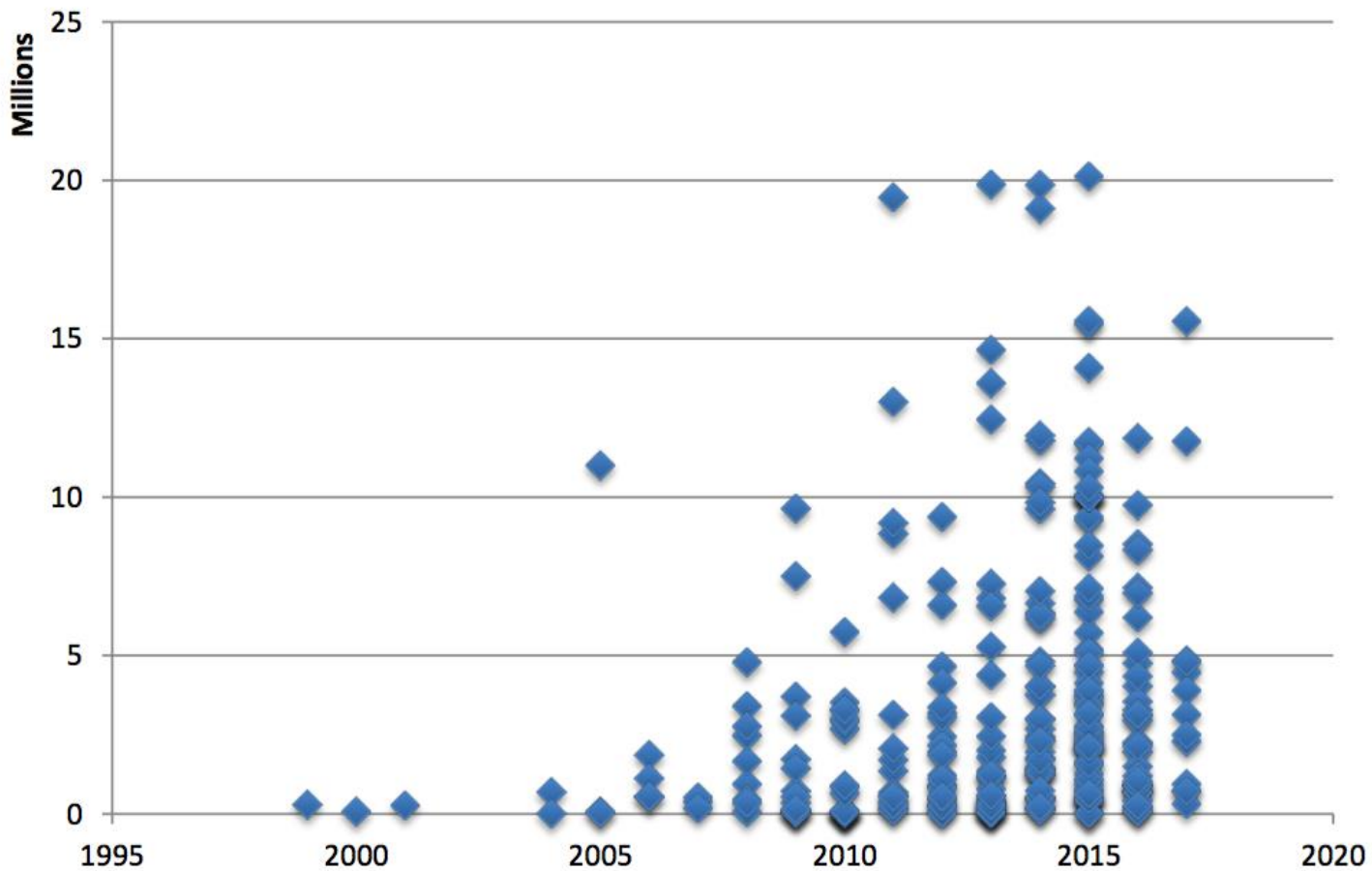
Variable		Cluster 1 Crowdsourcing	Cluster 2 Sharing	Cluster 3 Virtual communities	Cluster 4 Geographic Information Systems
No of observations GEOG LOCAL GLOBAL COLLAB EXIST MATCHING KB IC C		85	127	72	72
		0.012	0.929	0.028	0.944
		0.071	0.874	0.055	0.083
		0.047	0.086	0.708	0
		0	0.661	0.958	0
		0.811	0	0.111	0
		0	0.913	0.138	0
		0	0.125	0.930	0.083
		0	0.016	0.013	0.916
		1	0.024	0.125	0.055

Figure 3. The four types of DSI

GLOBAL	<p><u>TYPE III:</u></p> <p><u>Crowd platforms</u></p> <p><i>Example:</i> e-petitions, civic crowdfunding, some open data systems</p>	<p><u>TYPE II:</u></p> <p><u>Virtual communities</u></p> <p><i>Example:</i> virtual communities, online patient-researcher networks, online volunteering platforms</p>
	<p><u>TYPE IV:</u></p> <p><u>Virtual geographic information platforms (VGI)</u></p> <p><i>Example:</i> citizen science, urban signaling platforms</p>	<p><u>TYPE I:</u></p> <p><u>Sharing platforms</u></p> <p><i>Example:</i> time banks, event organisations, neighbourhood information, exchange and recycling platforms</p>
LOCAL	INDIVIDUALIST	COLLABORATIVE

Scaling-Up

Year of foundation and Global Alexa ranking



How do (prominent) DSIs scale-up?

- We analysed the characteristics of 40 highest growing DSIs.
- Based on past literature on strategic niche management and sustainability transitions (Kemp, 1998; Kemp et al., 2007; Geels and Schot, 2008), we distinguished three broad action fields of scaling up

Three Scaling-up action fields

Managing expectations

- Providing information and resources about their cause, by reducing the uncertainties perceived by users, as well as communicating these effectively to the targeted audiences.

Activating community agency

- Alvord et al. (2004) : empowering communities to solve societal problems by using their own resources and skills,

Network management

- Three levels of network management
 - among the actors of the platform's audience;
 - between the platform and its audience; and
 - at the level of the platform's ecosystem.

Activity of the DSI	Managing expectations	Activating community agency	Network management	Description	Examples
<ul style="list-style-type: none"> • <i>Blogs and Broadcasting knowledge</i> • <i>Trainings</i> 	LEARNING	—	—	<ul style="list-style-type: none"> • Improving internet skills of audience, promoting learning about their causes through diffusing information in blogs • Offer online and offline training not only for digital skills, but also around their cause 	Olioex.com Open street map
<ul style="list-style-type: none"> • <i>Assigning intermediaries</i> 	DEEPENING TRUST	COMMUNITY ENGAGEMENT	BETWEEN PLATFORM AND AUDIENCE	<ul style="list-style-type: none"> • Intermediaries are individual actors that advocate a DSI in their respective community, often through volunteering, and act as bridges between their community and the platform. ("ambassador", "city captain", "social hero", "champion") 	Artportalen.se, WhatDoTheyKnow.org
<ul style="list-style-type: none"> • <i>Publishing user reputation</i> • <i>Open-source</i> 		—	—	<ul style="list-style-type: none"> • Mechanism to drive out bad behaviour, deepen trust 	Freelywheely, Smiile
<ul style="list-style-type: none"> • <i>Online voting</i> 		INDIVIDUAL ENGAGEMENT	—	<ul style="list-style-type: none"> • Deepen trust through transparency 	Goteo.org, FixMyStreet, Wheelmap
<ul style="list-style-type: none"> • <i>Information entry</i> 			—	<ul style="list-style-type: none"> • Users voting for each others' projects, ideas, etc. • Empowerment of user, user enters information about information she is capable to provide ("each user is valuable") 	Nolotiro, Wemove.eu Openstreetmap, Artportalen, Wheelmap
<ul style="list-style-type: none"> • <i>Rewarding active users</i> 	—	MOBILISING, COMMUNITY ENGAGEMENT	—	<ul style="list-style-type: none"> • Reward mechanisms to incentivise intermediaries (announcing the "bests") 	Babyloan, Brainly
<ul style="list-style-type: none"> • <i>Social movements and awareness rising</i> 	—		SYSTEM LEVEL	<ul style="list-style-type: none"> • Engaging people to be part of broader social movements to change existing practices and question established frames 	Open source DSIs

	Mgmt exp	Activating community agency	Network management	Description	Examples
<ul style="list-style-type: none"> • Online cafes and forums 	-	SHARING IDEAS OPINIONS	BETWEEN AUDIENCE	Online chats between users (or use other platforms for chat, like FB, Whatsapp, etc)	Open street map
<ul style="list-style-type: none"> • Offline matching/ strong ties 				Collaborative, time and effort requiring exchanges between users	Diffuz.com
<ul style="list-style-type: none"> • Offline matching/ weak ties 	-			One spot, short exchanges between users	Grainesdetroc.fr
<ul style="list-style-type: none"> • Invite audience networks 				Make use of the social networks of users	Nearly all crowdfunding... GrainesdeTroc.fr
<ul style="list-style-type: none"> • Alliances with other platforms 	-	-	INTER ORGANISATIONAL	<ul style="list-style-type: none"> • leverage complementarities in services (e.g. sharing economy and insurance), • increasing the legitimacy of the platform, • help access backbone data of services • different types of cross-sectoral alliances are also formed so as to build advocacy and obtain support from diverse stakeholders. 	Eliademy <i>Writetothem.org</i> provided by <i>Goveval</i> . <i>Miimosa.com</i> alliance with <i>Airbnb</i>
<ul style="list-style-type: none"> • Local partnerships 	-	-		<ul style="list-style-type: none"> • Alliances with local organisations to introduce system in that locality 	Tousbenevoles
<ul style="list-style-type: none"> • Adding new sides 	-	-	NETWORK EFFECT STRATEGY	<ul style="list-style-type: none"> • Make use of network externalities (more on one side, more on the other, and vice versa....) 	<i>toogoodtogo.com</i> <i>Whatdotheyknow.org</i> ,.

	Managing expectations	Activating community agency	Network management	SHARING (12 cases)	VIRTUAL COMM (11 cases)	CROWD (13 cases)	GIS (6 cases)
1. Blogs and Broadcasting knowledge	LEARNING			0.42	0.82	0.92	0.83
2. Trainings				0.33	0.45	0.54	1.00
3. Customising services	ADDRESSING NEEDS			1.00	1.00	1.00	0.83
4. Assigning intermediaries	DEEPENING TRUST	COMMUNITY ENGAGEMENT	BETWEEN PLATFORM AND AUDIENCE	0.83	1.00	0.69	1.00
5. Publishing user reputation				0.75	0.27	0.38	0.50
6. Open-source				0.17	0.36	0.23	0.83
7. Online voting				0.33	0.18	0.92	-
8. Information entry		INDIVIDUAL ENGAGEMENT		-	0.27	0.15	1.00
9. Rewarding active users				0.50	0.36	0.69	0.67
10. Social movements and awareness rising		MOBILISING, COMMUNITY ENGAGEMENT	SYSTEM LEVEL	0.42	0.82	0.23	1.00
11. Online cafes and forums		SHARING IDEAS OPINIONS	BETWEEN AUDIENCE	0.42	0.55	0.54	0.67
12. Offline matching/ strong ties				0.58	0.27	0.23	0.33
13. Offline matching/ weak ties				0.75	0.36	0.46	-
14. Invite audience networks				0.58	0.27	0.92	0.50
15. Alliances with other platforms			INTER ORGANISATIONAL	0.42	0.73	0.62	1.00
16. Local partnerships				0.83	0.36	0.46	0.83
17. Adding sides for creating network effects			NETWORK EFFECT	0.83	0.91	0.92	1.00

Final Remarks and Questions for future Research

- High rate of entrepreneurial activity, high rate of failure
- Duplication too high
- Open source platforms have a high rate of growth and transformative power, but small number of “open” platforms
- Engagement is limited (internet skills, digital (skill) exclusion...)
- Sector specific bubbles with no interaction between them
- Low rate of interactions between offline and online organisations (dsi bubble)
- Limited data on users for future research (****)
- Journals?

Note

- Blog DSI: <https://digitalsocinno.wp.imt.fr>
- Data is open (additions? Access?) contact us...

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Thank you!

- Thank you