

# **Development phase of data-driven ecosystems and networks 2023**

Henrik Sievers, Mikko Ulander, Ina Helkala, Simo Saari  
**Innolink**

# Contents

1. General information about the study
2. Ecosystem details
3. Phases of data usage
4. Data sharing in an ecosystem
5. Ecosystem capacity
6. Principles of fair data economy in an ecosystem
7. Background details of the organisation
8. Summary

# **General information about the study**

# Aim and implementation of the study

- The purpose of the study was to map the development phase of data-driven ecosystems and networks in Finland and to obtain an overview of their development.
- The study investigated:
  1. how data-utilising Finnish ecosystems and networks operate, and their development phases and needs
  2. the benefits network or ecosystem partners obtain from data sharing
  3. the value created by data ecosystems or networks
  4. the governance model of the ecosystems and networks
- The target group comprised companies and organisations operating in a data-sharing network or ecosystem.
- The study was implemented by means of an e-mail survey and telephone interviews in May–June 2023. The study consisted of 111 responses, 64 of which were via telephone interviews.
- The following definition was used while implementing the study: **A data ecosystem or network is a network of several collaborating partners, comprising a minimum of three organisations with the common goal and share data among each other.**

# **Ecosystem details**

# What ecosystem do you mainly operate with or spend the most time on? N=109

A total of six ecosystems were mentioned more than once.

The most frequently mentioned ecosystems included those related to geospatial data, traffic and health (such as city-specific health ecosystem networks) as well as Business Finland's lead projects and the ecosystems related to them.

## **Ecosystems mentioned more than once in the survey:**

- Traffic data ecosystems
- Geospatial data ecosystems
- Lead
- Oulu Health
- DigiOne
- CEGO (Circular economy goes east and west)

Respondents included diverse organisations from various sectors, sizes and geographic areas, covering a wide range of different types of ecosystems.

# Why was the ecosystem established? N=105

## Excerpts from open-ended responses:

- Industrial need.
- To ease collaboration between companies, to act as a marketing agent for this area of expertise.
- We identified a need to bring together partners to create new innovations and ideas.
- Developing new services and products for the needs of health care by utilising data.
- To increase collaboration in RDI and training activities in the health sector.
- I believe it was for promoting the sector and practices. For a fair working life and to prevent a grey economy.
- To increase impact
- To improve the energy efficiency and sustainability of buildings. To make data more readily accessible and improve its quality and timeliness. To harmonise different systems in order to align different systems to manage and optimize the overall setup.
- We can see that the Finnish data economy still resembles a newborn child. There is still much to gain.
- So that we could offer IT services catering to different business processes in as wide a range as possible, and to collect data on those processes.

- Ecosystems have been established for many different needs.
- Those needs include innovation, collaboration, and societal impact.
- Utilising data was also mentioned as a reason for establishing an ecosystem.

# What are the goals of your organisation in the ecosystem? N=106

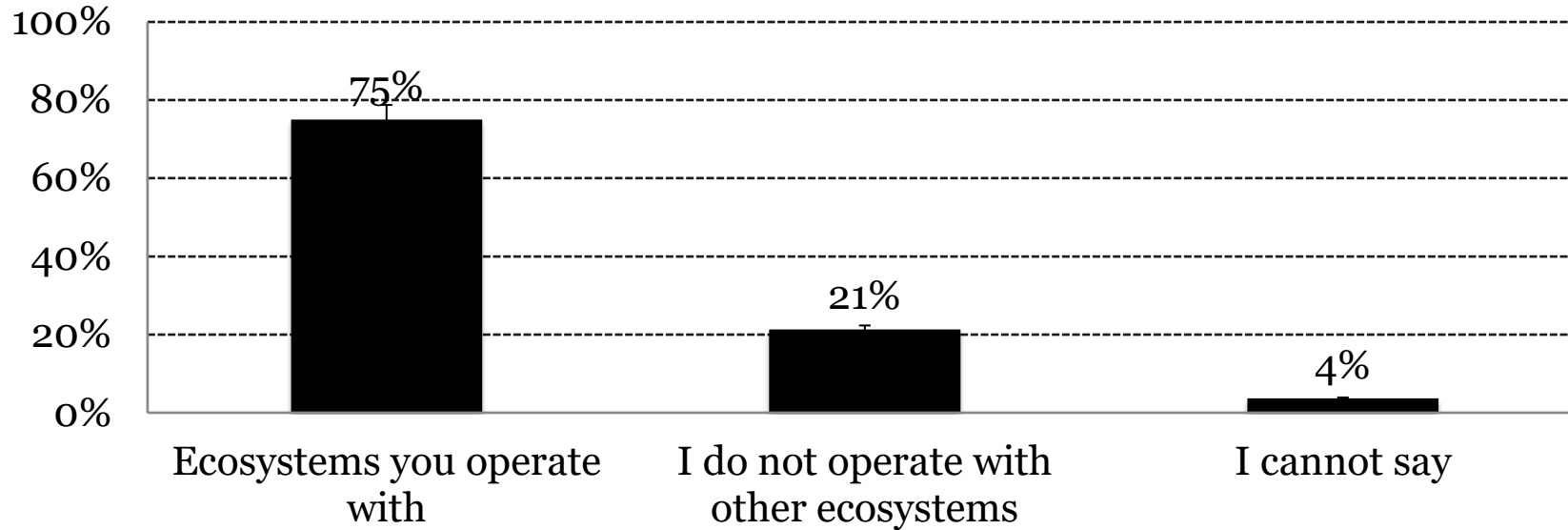
## Excerpts from open-ended responses:

- New ventures and projects, new kinds of collaboration, new ideas and plans.
- Collaboration with companies and research institutes.
- To get the public sector, research institutes and companies to operate together.
- We enhance the generation of new solutions by organising meetings and bringing together the operators in the sector.
- To enhance the sustainable digitalisation of the built environment.
- To promote digital healthcare and social welfare reform as well as to strengthen Finland's efficient participation in EU and international projects.
- Business growth.
- Generating new information.
- Networking and collaboration for transboundary digitalisation trials and developing skills.
- Increasing research, the use of new technologies and solutions, business, and the number of companies.
- Increasing Finnish competitiveness.

- Organisations have highly ambitious and multifaceted goals
- The goals are related to aspects such as RDI (research, development, innovations), collaboration, promoting digitalisation, and commercialisation of research.



# What other ecosystems do you operate with? N=108



- Organisations are also networked with other ecosystems (75% of the respondents).
- The respondents were very familiar with the role of their own ecosystem (only 4% of the respondents could not say whether they operate with other ecosystems).

## Most frequently mentioned ecosystems:

**ITS Finland**  
**Area-specific Health ecosystems**  
**Fintraffic**  
**The EDIH network**  
**MyData Global**  
**Company digital economy**

# Stages of data usage

# The data economy has four stages 1/2

1

The organisation only uses its own **internal data**

2

In addition to internal data, the organisation also uses **external data sources and open data**

3

The organisation forms an **informal data-sharing network** with other partners

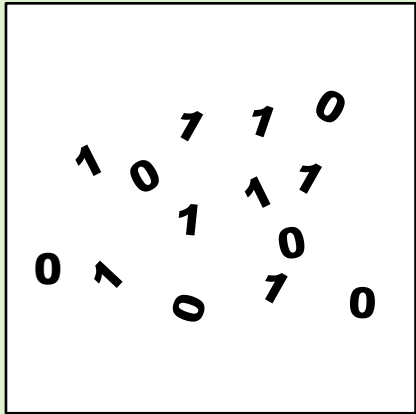
4

The organisation operates as an integrated part of a **data ecosystem** with **explicit common services, rules and agreements** as well as **procedures**, which jointly provides a seamless service to the end customer

# The data economy has four stages 2/2

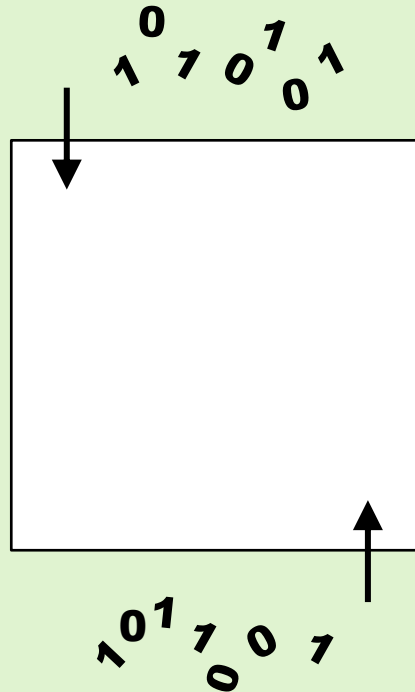
## Stage 1

The organisation only uses internal data



## Stage 2

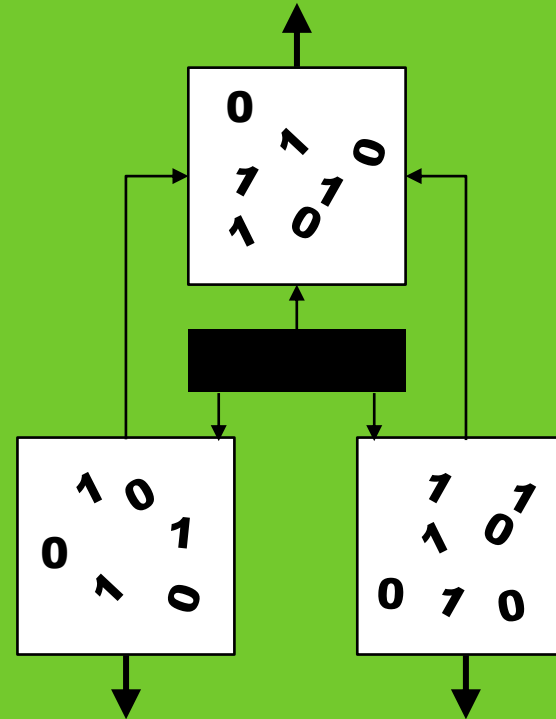
The organisation uses external and open data



The information seller dictates the rules

## Stage 3

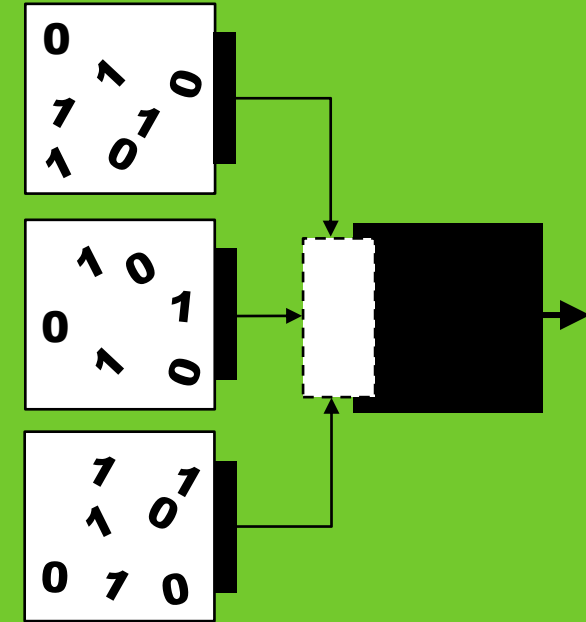
Sharing information



A loose network of organisations needs rules and services

## Stage 4

Data-based common services

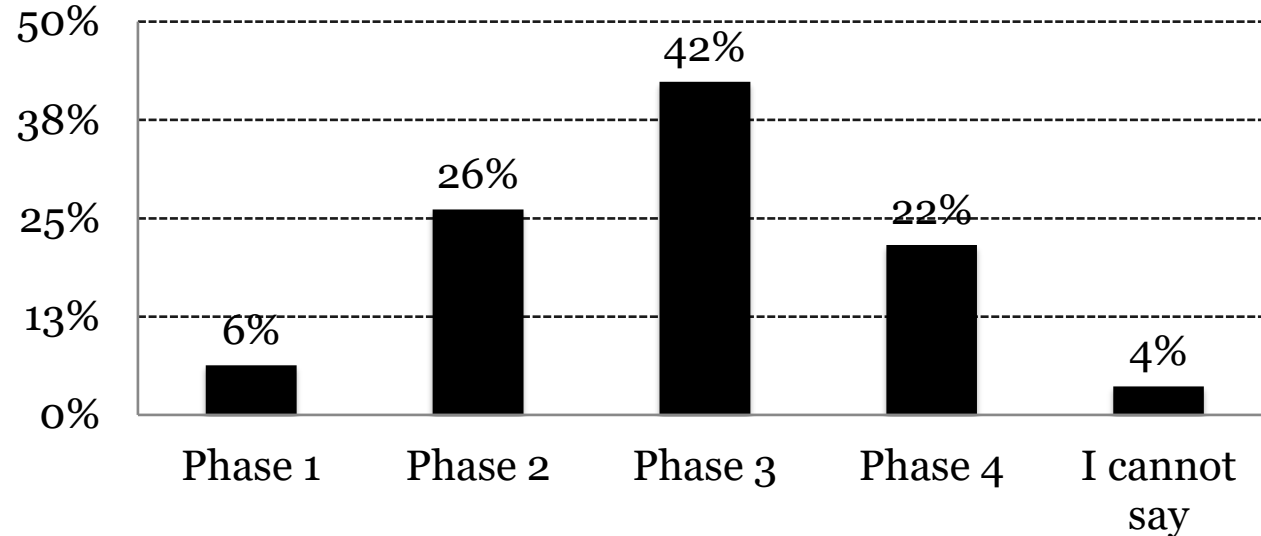


Common services, rules and policies for data networks

**No ecosystem activity**

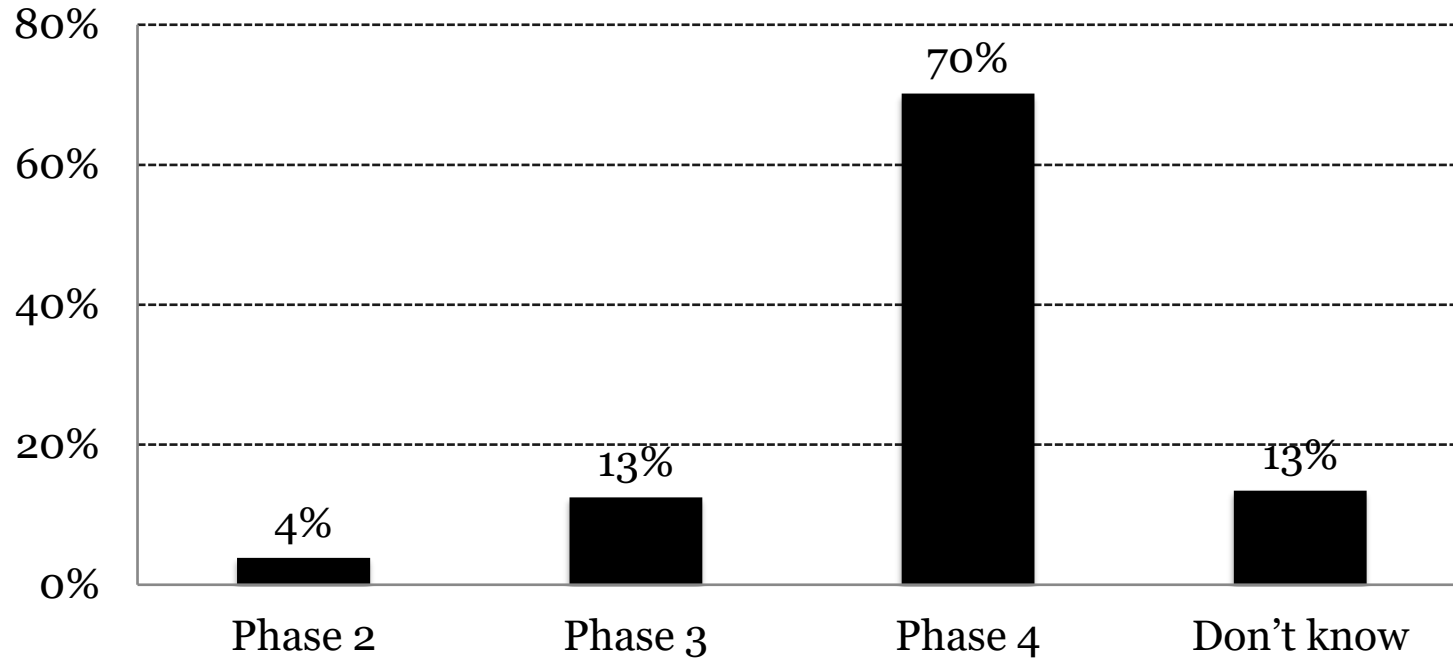
**Ecosystem activity**

# At what stage of using data and partnerships are you? N=111



- 64% of the respondents either form a data-sharing network or develop joint data-based services
- 4% of the respondents could not say whether data was shared in their ecosystem
- 6% of the respondents only used internal data of their own organisation
- 26% of the respondents also used external and open data
- Stages 1 and 2 occur within the organisation. Stages 3 and 4 involve the development of the ecosystem.

# What phase are you aiming for? N=111

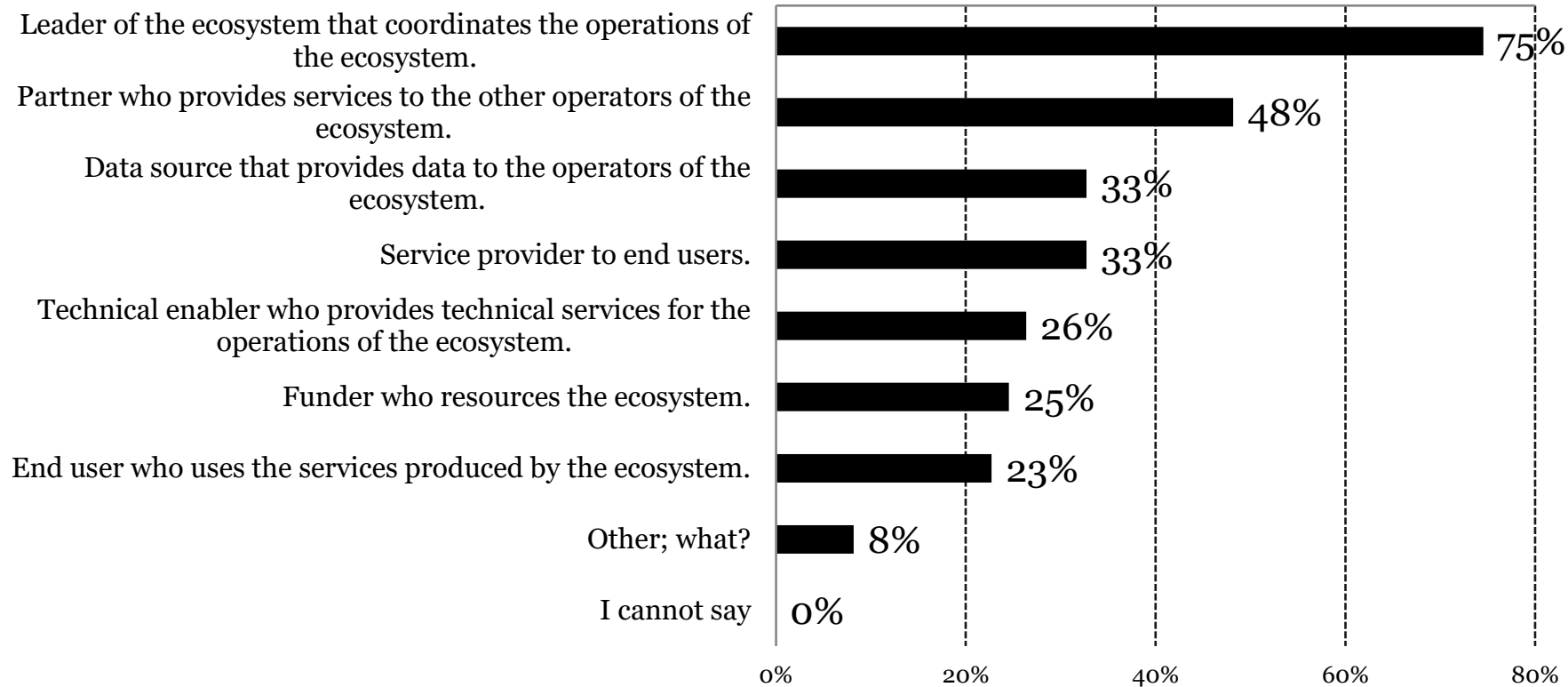


- The respondents have ambitious goals for data sharing in their ecosystems. 70% of the respondents aim to develop joint data-based services
- As many as 13% of the respondents do not know what phase of data sharing in their ecosystem they aim for

# **Data sharing in an ecosystem**

# The main role of your organisation in the ecosystem you mentioned? N=110

*(You may choose multiple options)*



- The respondents represented a comprehensive range of different roles in the ecosystems
- The most frequent role among the respondents was that of ecosystem leader
- Other frequent roles included partner, data source and service provider for the end user

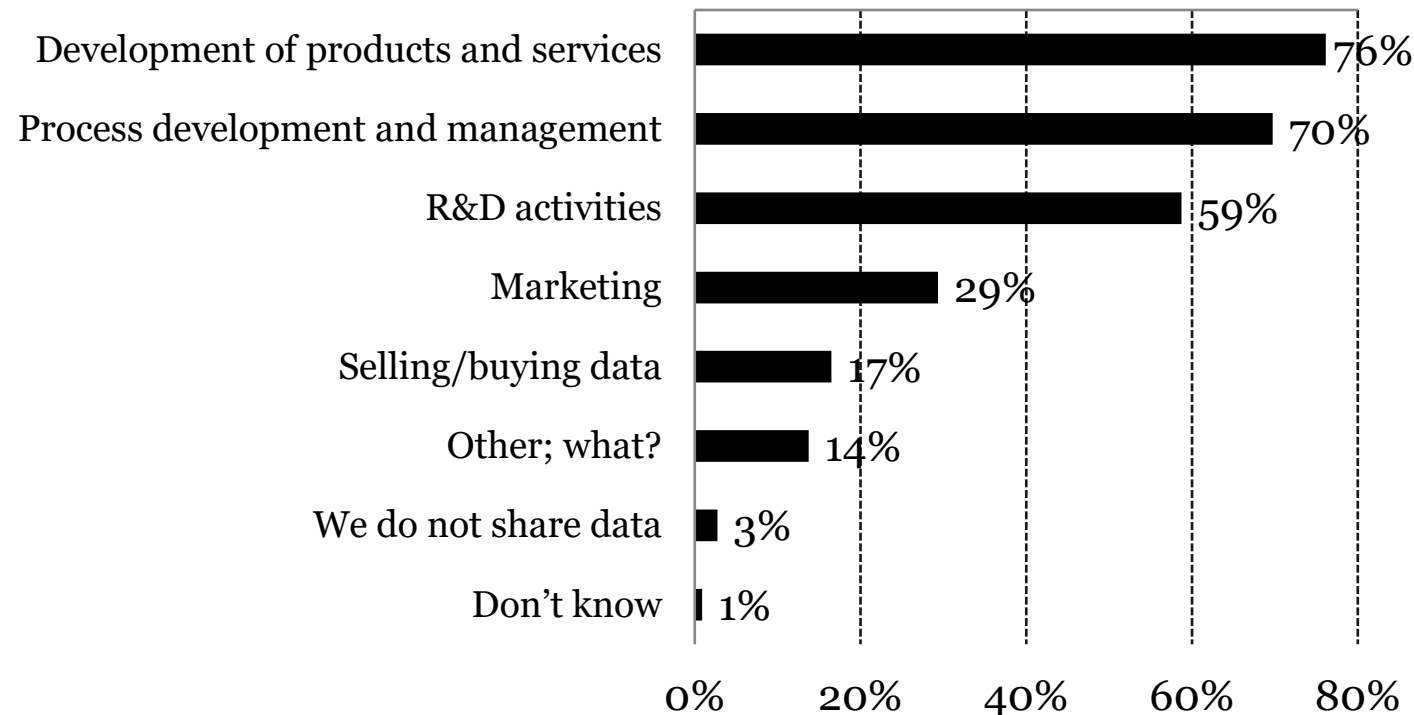
## Other; what?

Research collaboration  
Sparring  
Other collaborating partner  
Trainings  
Communications



# Reasons for data sharing in the ecosystem? N=109

*(You may choose multiple options)*

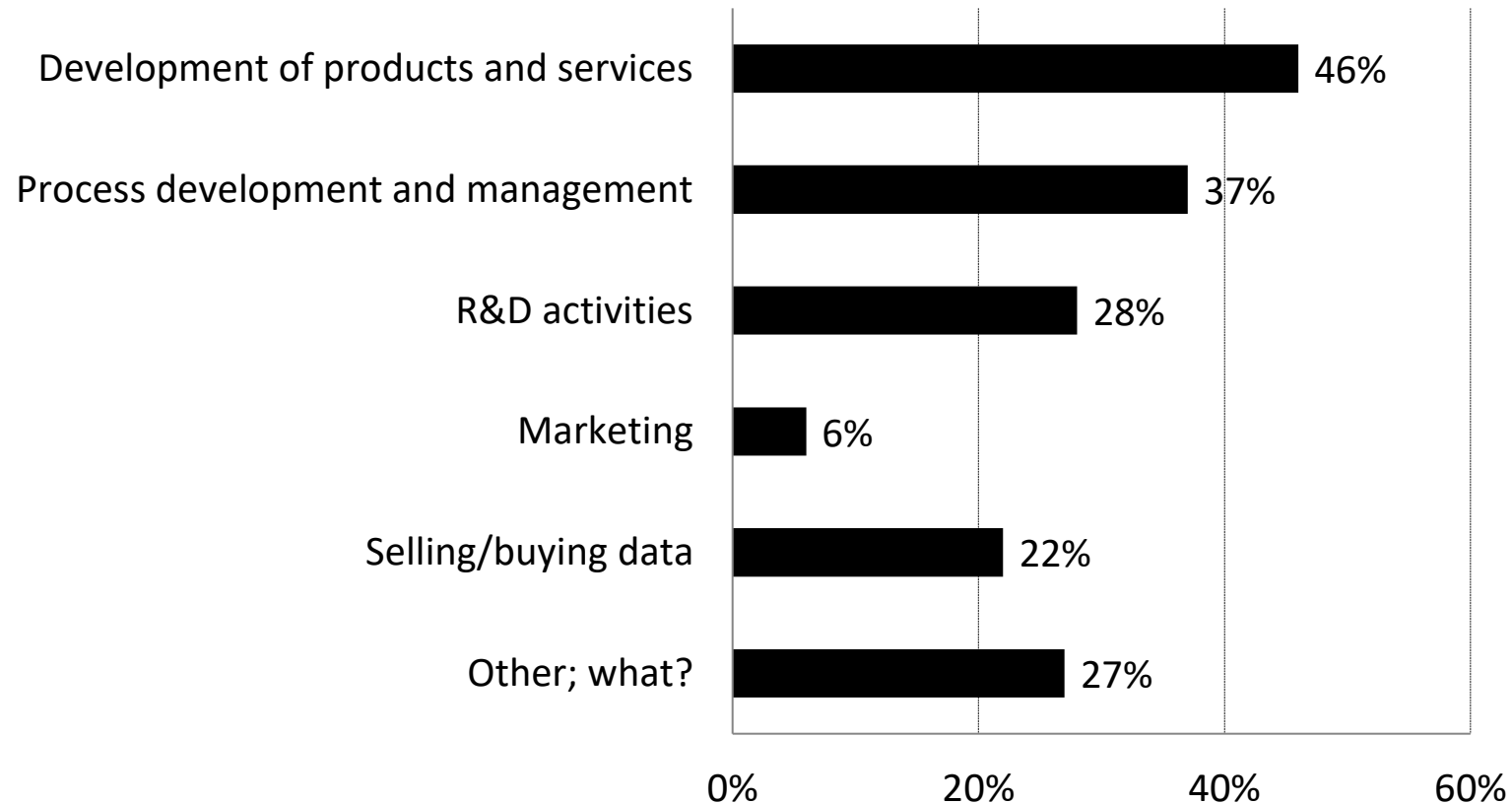


- Reasons for data sharing illustrate the different roles of different ecosystems
- The most frequently occurring roles among the respondents included product development, process development and research activities
- Selling/buying data was also seen as a separate reason for data sharing

## **Other; what?**

Knowledge-based influencing and management  
Societal impact  
Systemic change in value chain  
Increasing knowledge and trust

# Which of the aforementioned is your main reason for data sharing? N=94

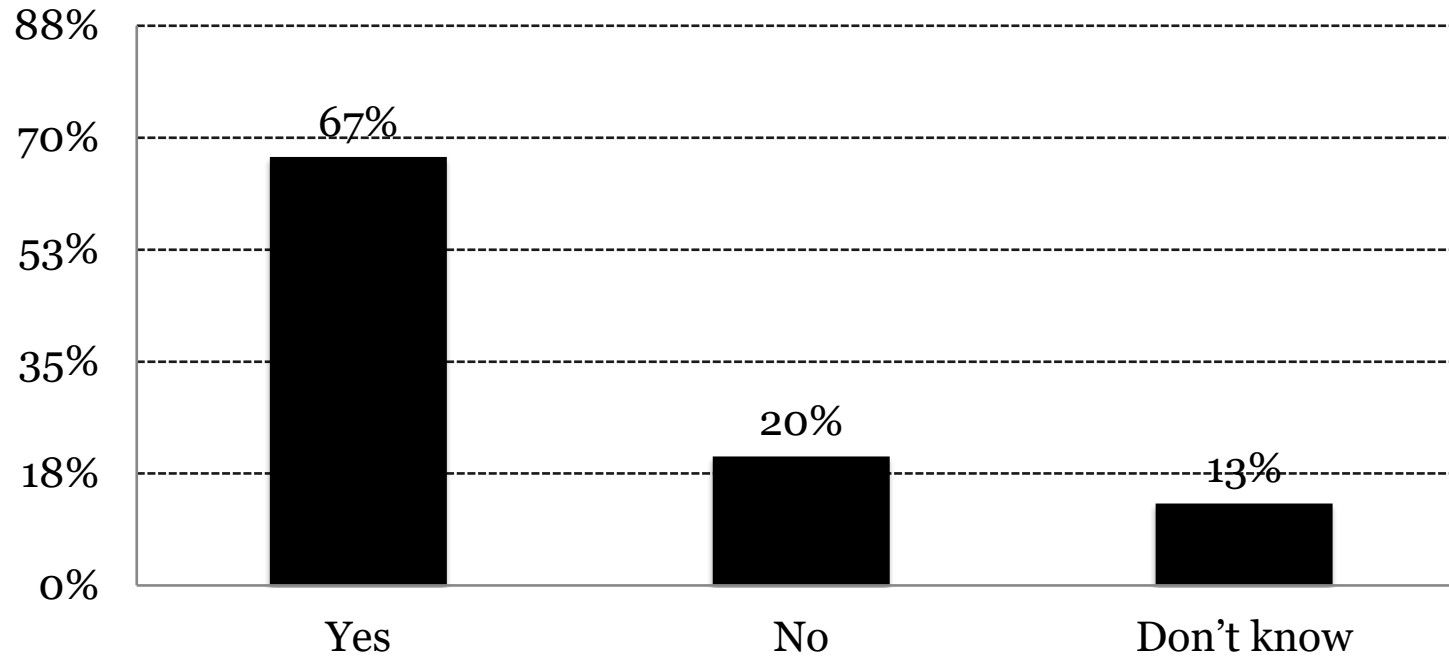


- The main individual reasons for data sharing included product development, process development, research activities, and selling/buying data

**Other; what?**  
Knowledge-based influencing and management  
Societal impact  
Systemic change in value chain  
Increasing knowledge and trust

*The percentage indicates the share of those who selected this reason and also consider it the main reason. (Reason selected as the main reason divided by the total number of those who selected the said reason).*

# Has data sharing generated any results/concrete business benefits? N=109



- Data sharing was seen as having many benefits (67% of the respondents)
- On the other hand, a large share (33%) of responses also stated uncertain/ negative results

# What kind of results/concrete business benefits have been generated by data sharing?

## Excerpts from open-ended responses:

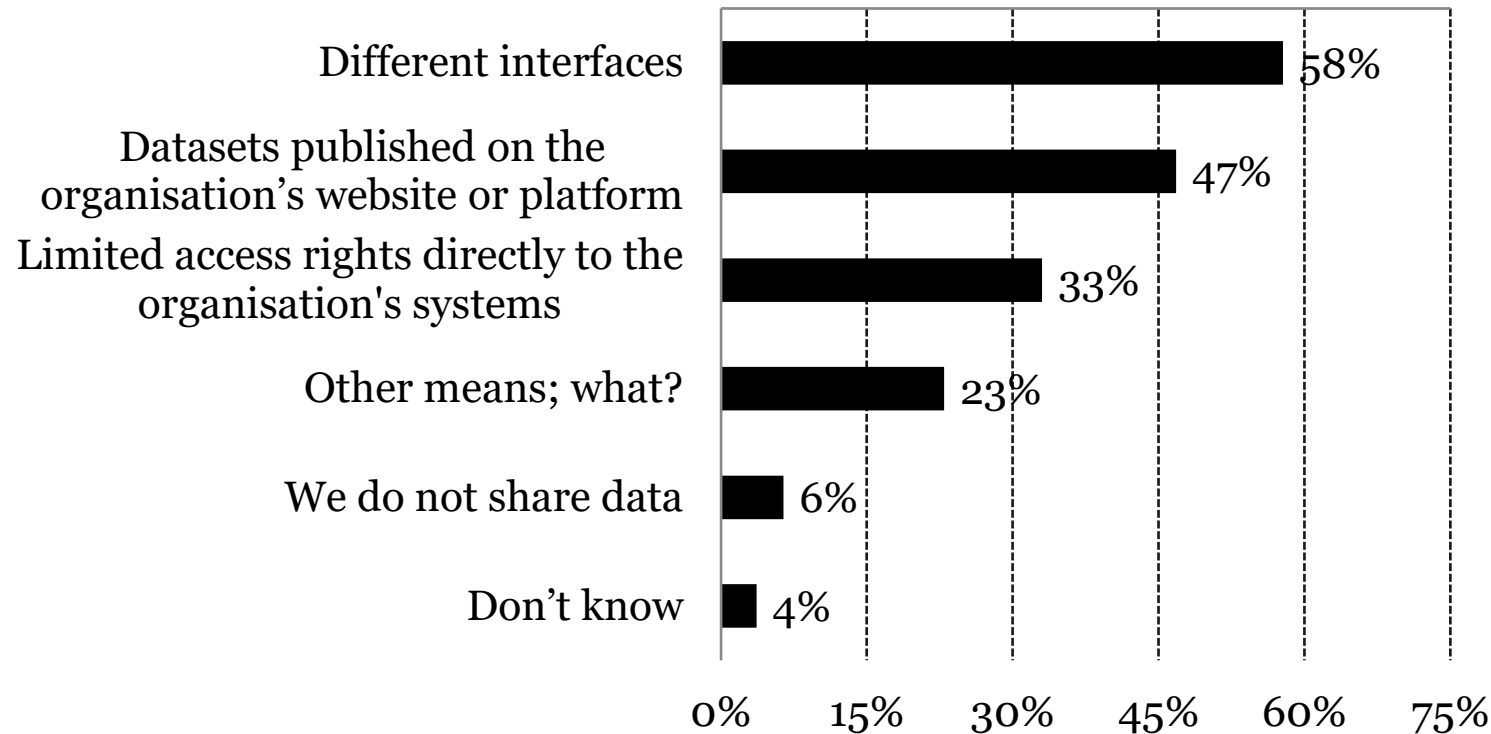
- We have gained new customers and partnerships.
- Development of new services.
- Generated business.
- Generated large amounts of new information and understanding.
- Streamlining of processes, better service, more precise diagnostics.
- Increased my knowledge and understanding.
- Concrete pilots and projects.
- Finding new business opportunities and partners.
- Revenue and profits
- New operators have entered the sector. We are developing new services. We have promoted knowledge-based management. It is likely that we will not see the most important business benefits until after some years.
- Introducing new data sources, generating data based on joint guidelines, joint R&D projects with different organisations

- Data sharing was considered to generate many benefits, such as new customerships, opportunities to develop services, and the development of processes
- Importantly, it was found that data plays a role in generating new business; as an independent factor of production

# What technical means are used for data sharing?

## N=109

*(You may choose multiple options)*

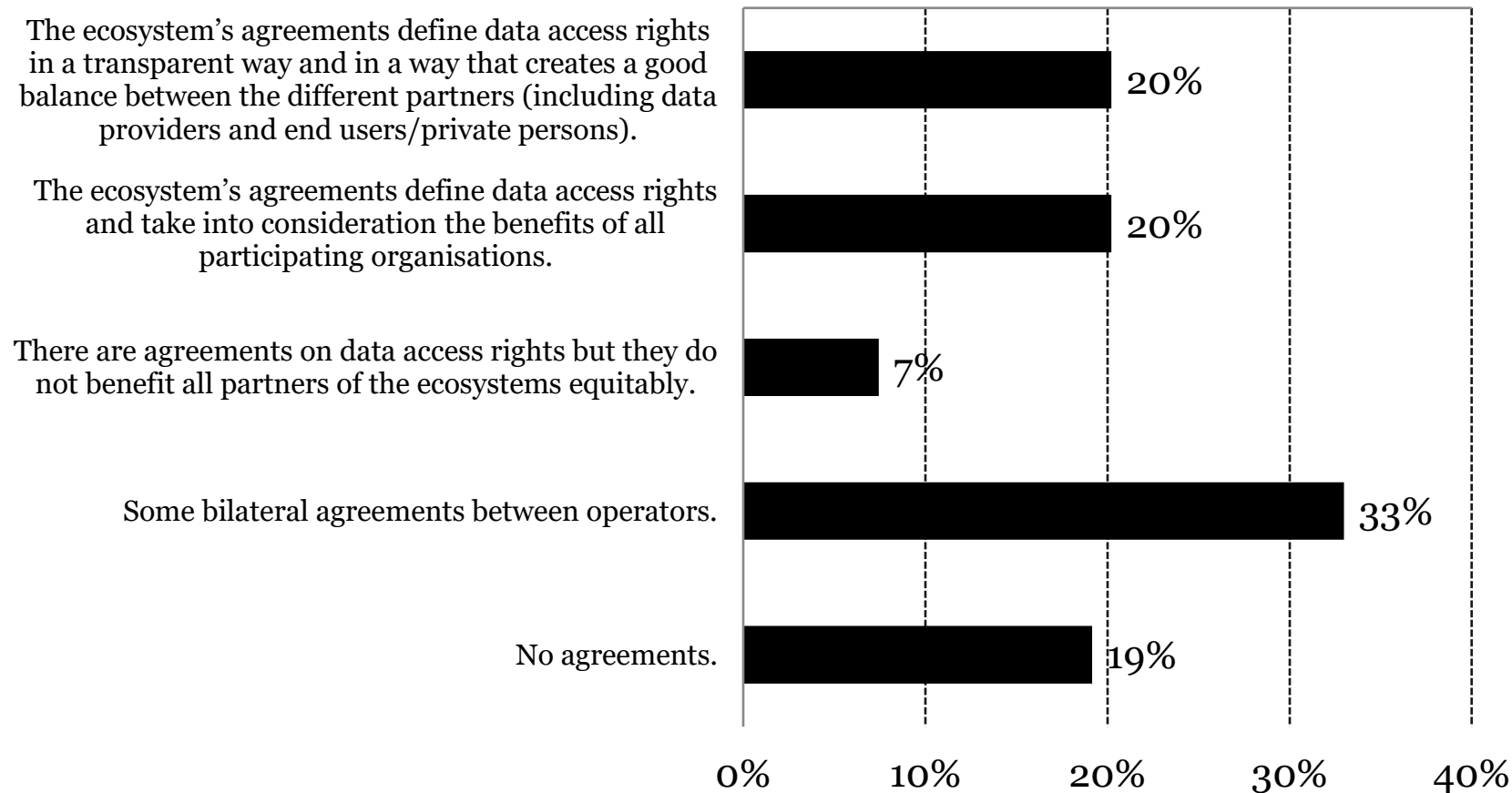


- Data sharing occurs by many different technical means
- Different interfaces were used by 58% of the respondents; 47% used datasets published on the organisation's website or platform; 33% granted limited access rights directly to the systems of their own organisation

### **Other means; what?**

Joint customer data system  
Own servers  
Joint RDI projects  
Person-to-person  
E-mail

# What types of agreements steer the use, sharing and re-use of data in the ecosystem? N=94

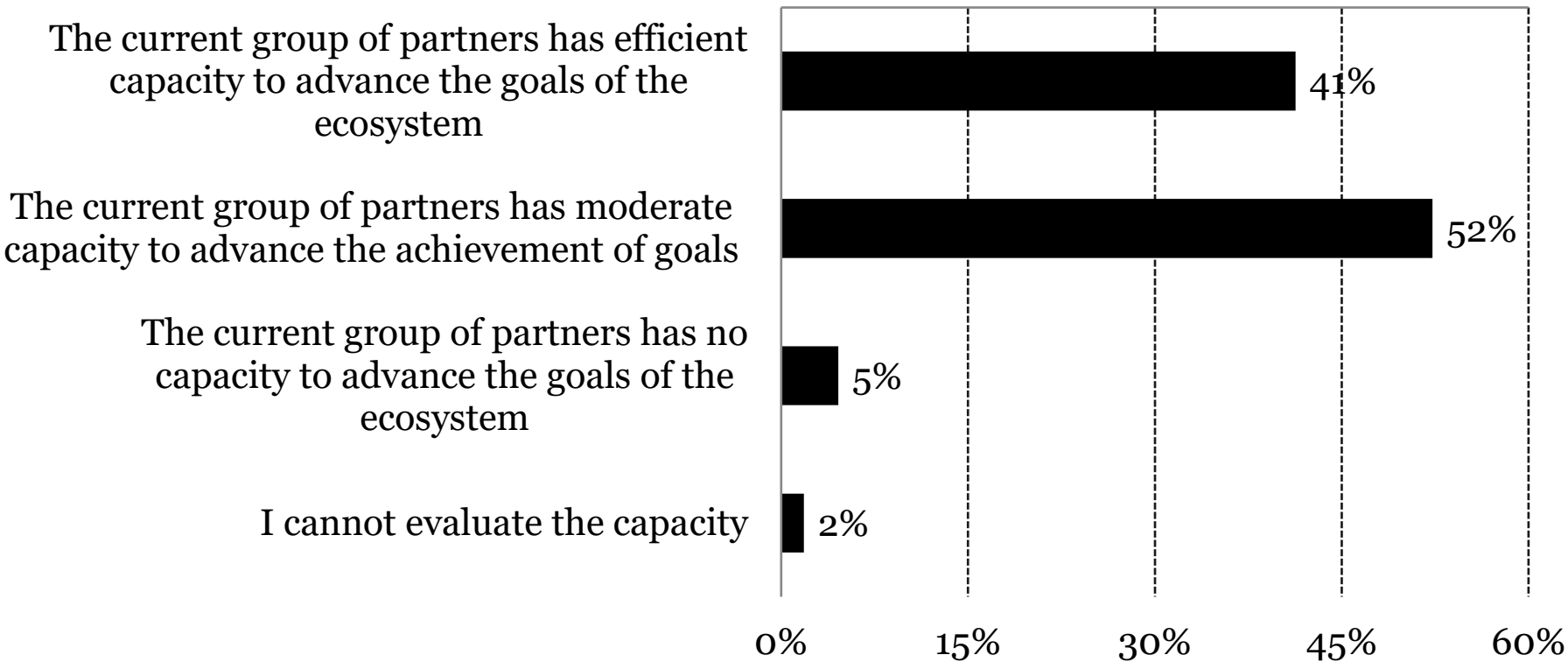


- There were several types of agreements that were used to steer data sharing
- 26% of the respondents did not have any agreements, or the agreements were seen as inequitable towards the partners
- The most frequent response types were bilateral agreements
- 40% of the respondents considered their agreements to be fair and comprehensive

# **Ecosystem functionality**

# Evaluate the capacity of the ecosystem

## N=94

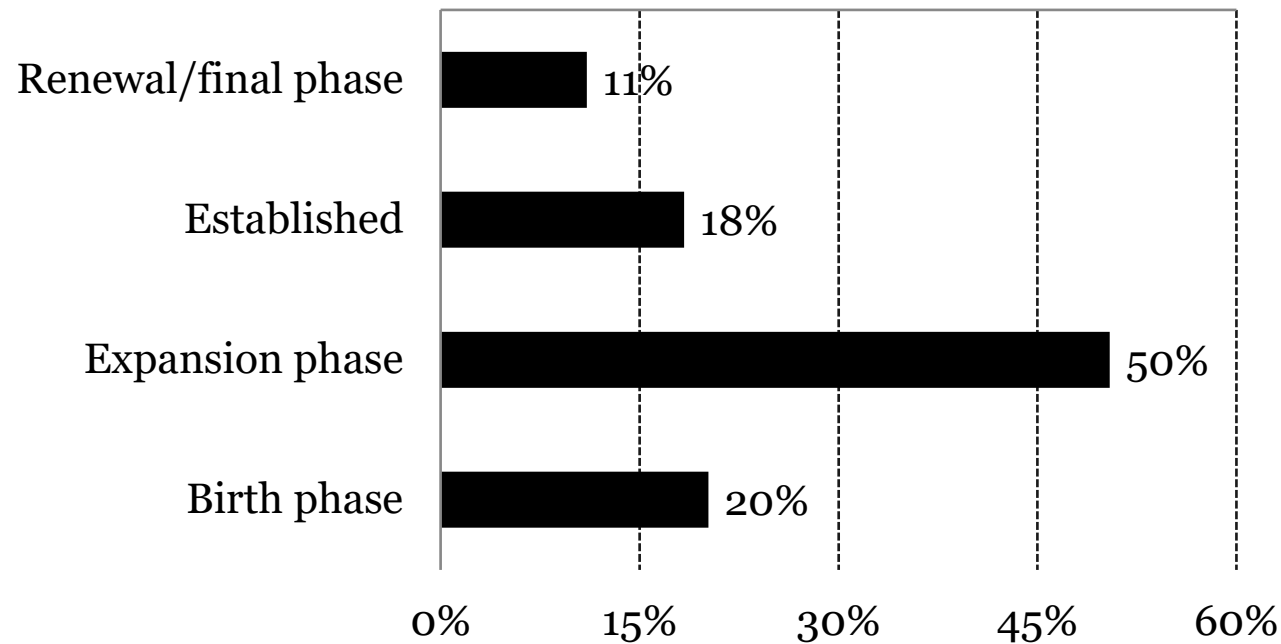


- Overall, the respondents considered the capacity of the ecosystem to be good
- The respondents evaluated the capacity of their ecosystem as efficient (41% of respondents), moderate (52% of respondents), or weak (5%)



# At what phase do you think your ecosystem is?

## N=109



- Ecosystems represent various phases of development
- The most frequently-mentioned phase was the expansion phase (50%)
- Birth-phase ecosystems constituted 20%, established ecosystems 18%, and renewal/final-phase ecosystems 11%

# **What are the main challenges to the development of your ecosystem? (1–3 key challenges)**

## **1<sup>st</sup> mentioned:**

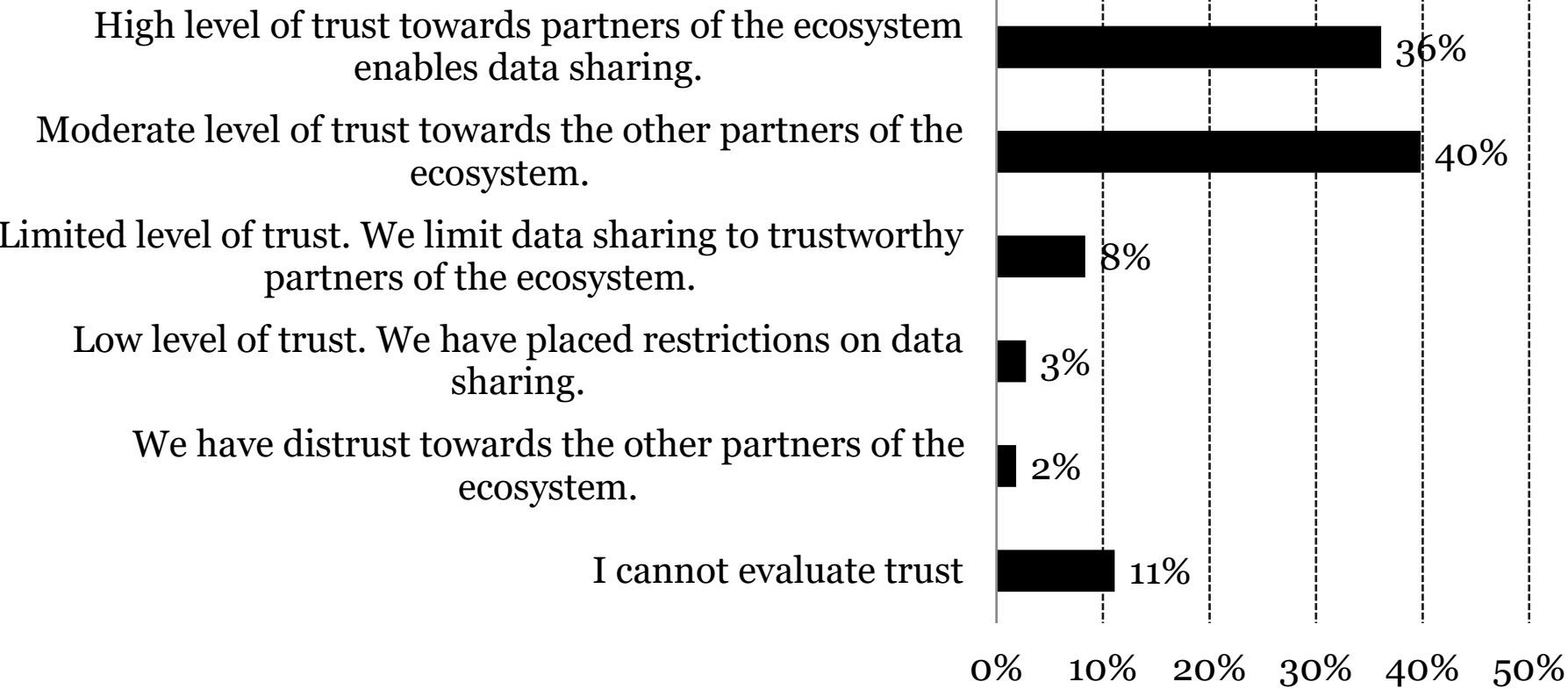
- 1. Funding and lack of it**
- 2. Challenges related to data, its sharing and quality**  
(mentioned 5 times)
- 3. Resources**
- 4. Conflicts of interest**

## **All instances mentioned (combined 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> places):**

- 1. Funding and lack of it**
- 2. Challenges related to data, its sharing and quality**
- 3. Challenges related to legislation**
- 4. Conflicts of interest, lack of understanding and of resources**

- The main challenges to the development of ecosystems are the governance model, data sharing and conflicts of interest related to value creation
- Funding was seen as a frequent shortcoming

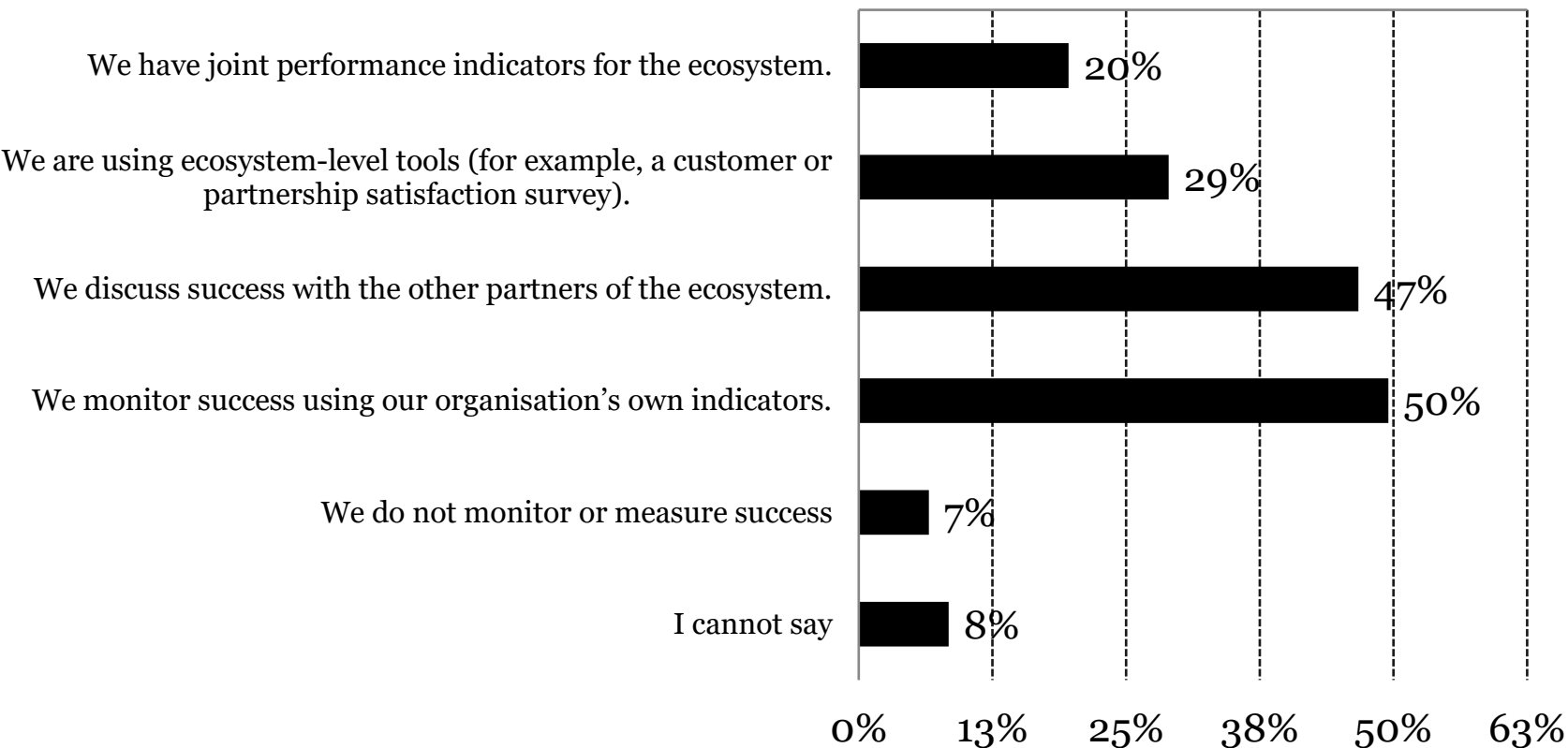
# What is your experience of trust in the ecosystem? N=108



- A major part of the respondents had either a high (36%) or moderate (40%) level of trust towards the partners of the ecosystem
- 24% of the respondents experienced a low level of trust or could not evaluate trust

# How do you monitor or measure success in the ecosystem? N=107

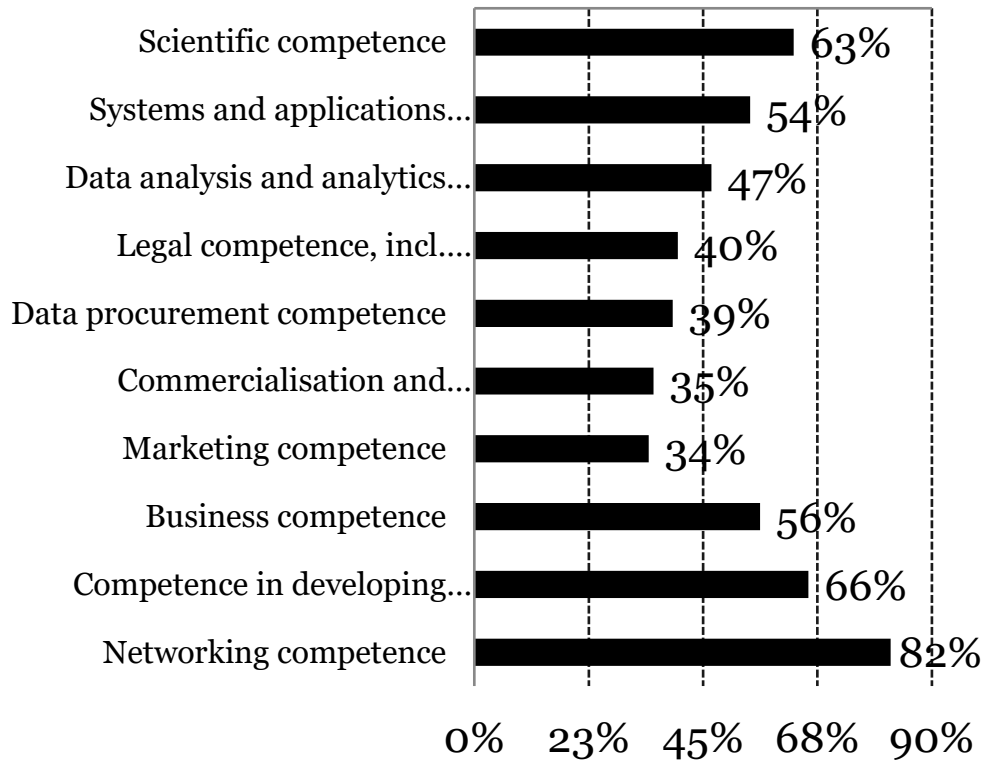
*(You may choose multiple options)*



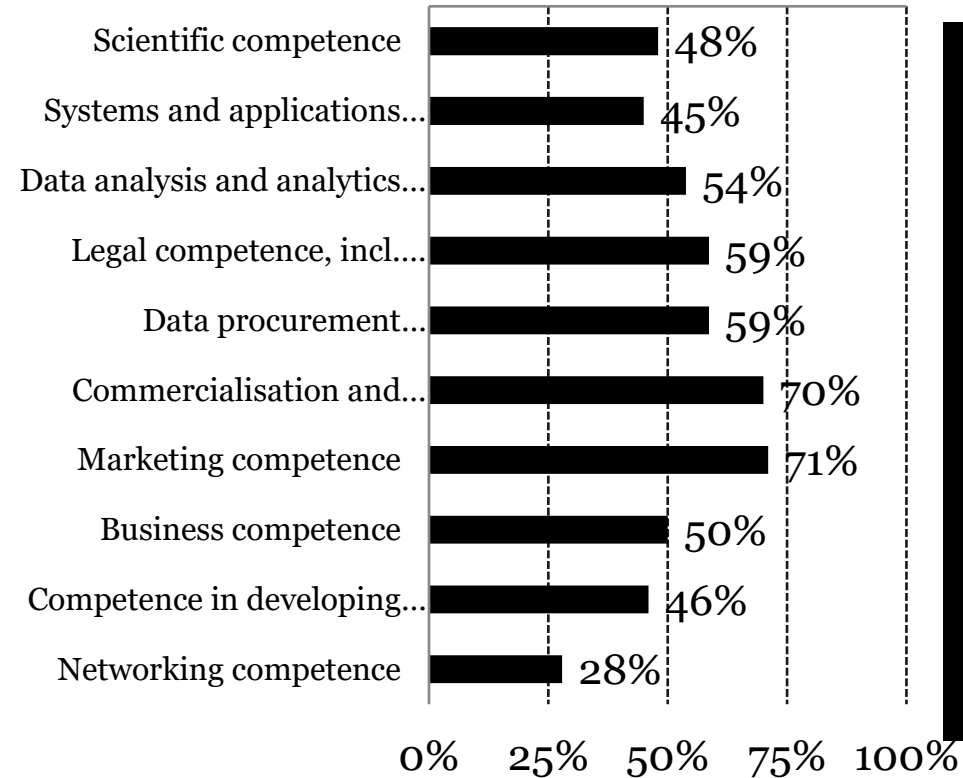
- Most frequently, the respondents only monitored success within their own organisation (50%)
- 47% of the respondents discussed success with other partners
- 29% of the respondents used ecosystem-level tools
- More advanced operators used joint performance indicators
- On the other hand, a large part (15%) of the respondents could not say anything about measuring or did not monitor success

# Evaluate the following competence factors from the perspective of your ecosystem: what are your strengths, and which ones need improving? You can also select both at the same time.

**Strengths, N=105**

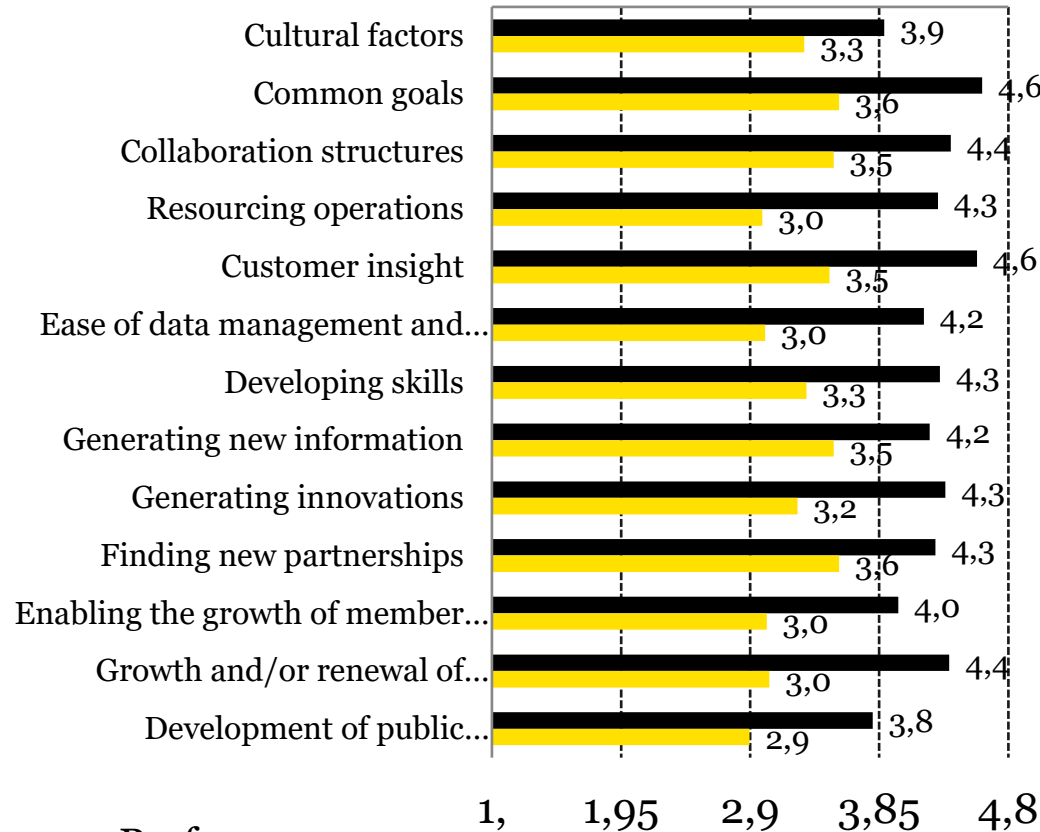


**Needing improvement, N=103**

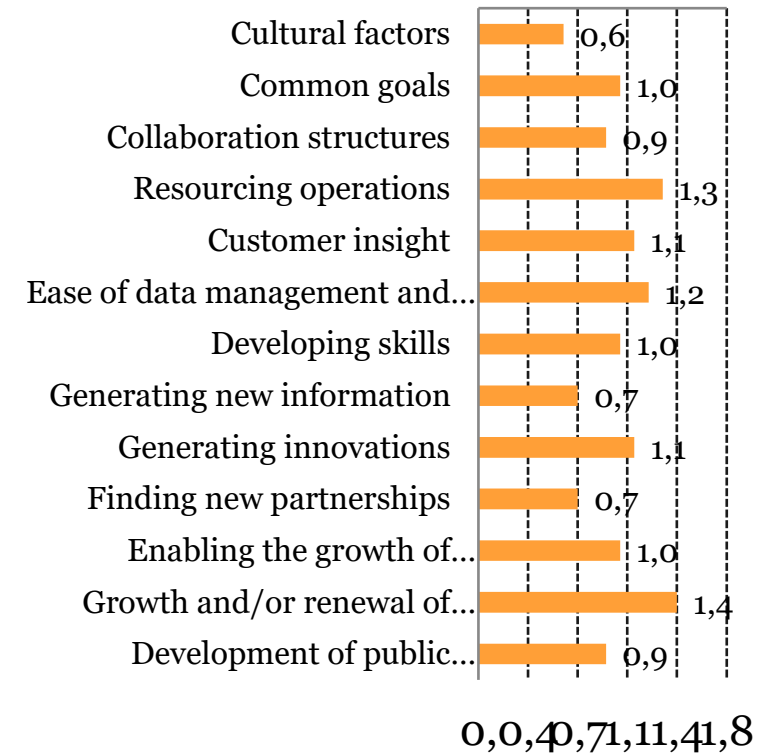


- There was a high degree of disparity for both the strengths and the competence factors needing improvement
- The top 3 strengths were networking skills, competence in developing customer-oriented services, and scientific skills
- Marketing and commercialisation were considered the main factors needing improvement

# How important do you consider the following factors for the functioning of your ecosystem, and how would you evaluate their current performance level?



## Difference between importance and performance



■ Importance ■ Performance

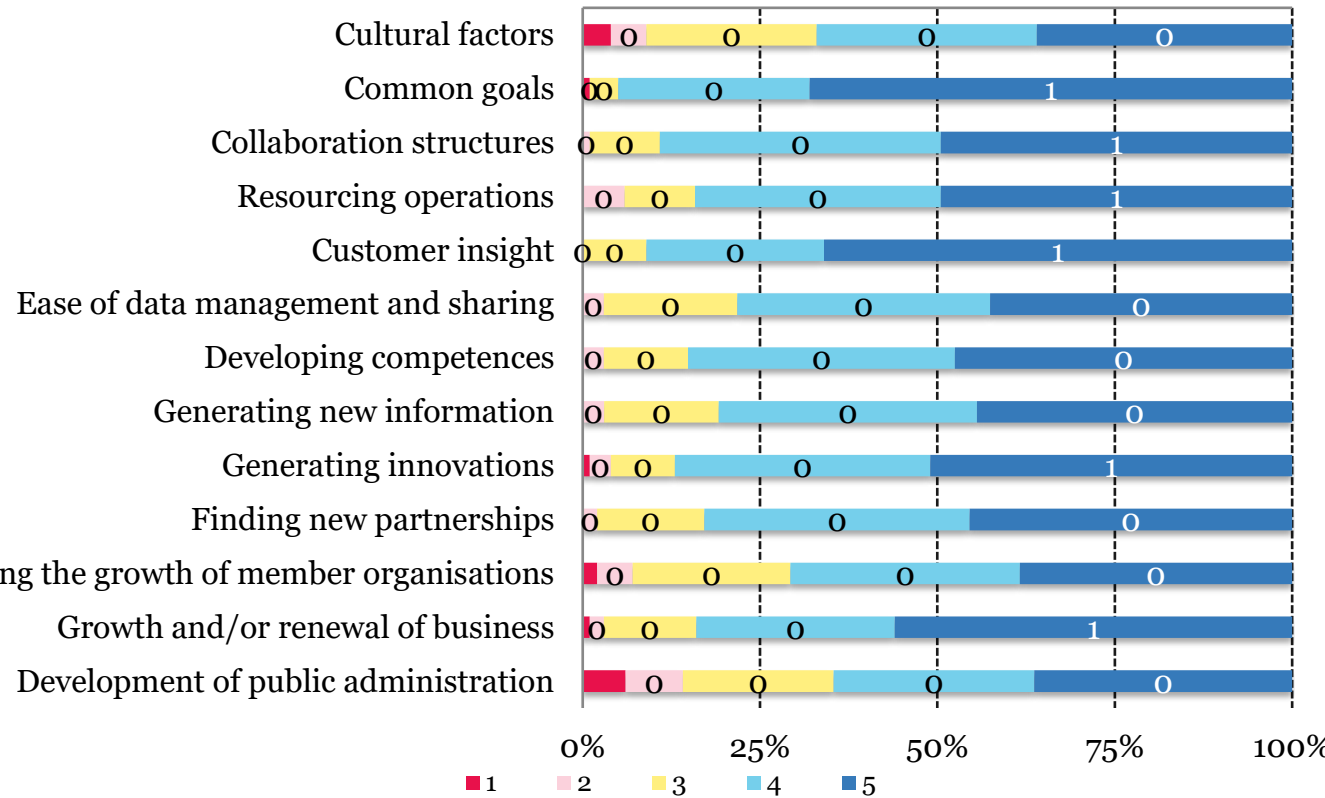
Scale (importance): 1=not important at all...5=very important

Scale (performance): 1=very poor...5=very good

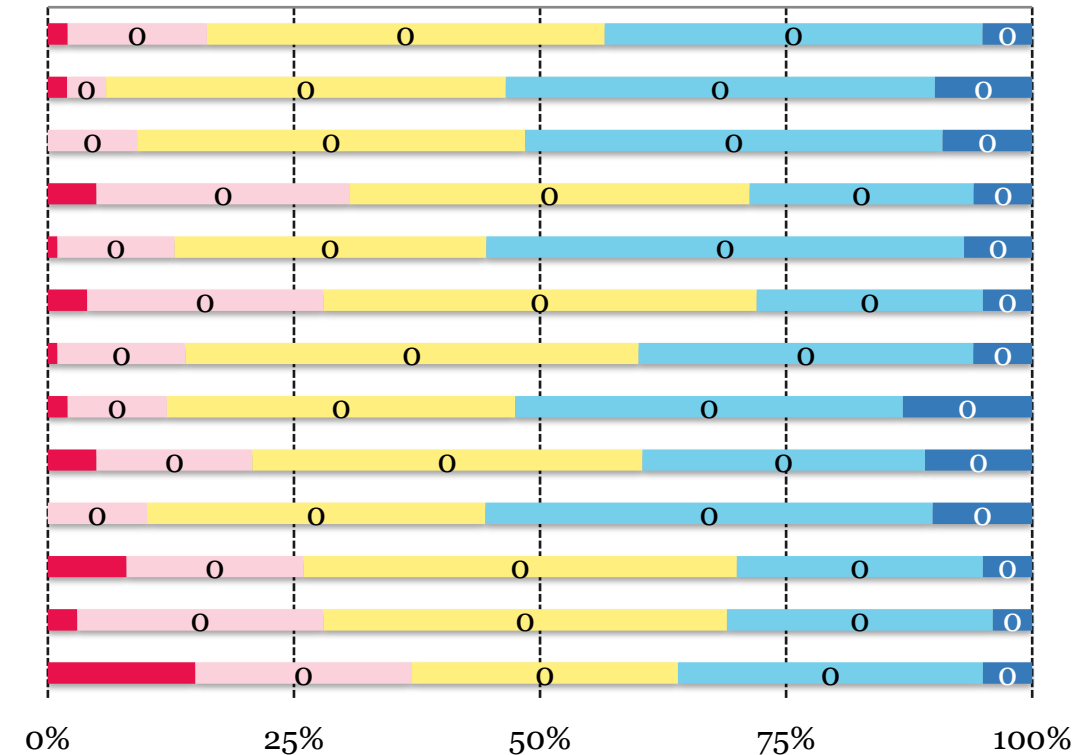
• The top 3 aspects of the ecosystem needing improvement were business growth, resourcing operations, and data management/sharing. A difference of more than 1 between importance and performance constitutes a significant difference.

# How important do you consider the following factors for the functioning of your ecosystem, and how would you evaluate their current performance level? Distributions

## Importance



## Performance



Scale (importance): 1=not important at all...5=very important

Scale (performance): 1=very poor...5=very good

## How important do you consider the following factors for the functioning of your ecosystem, and how would you evaluate their current performance level? Importance

By region:	Uusimaa		Others	
	mean	N	mean	N
Common goals	4.7	58	4.5	43
Growth and/or renewal of business	4.4	54	4.4	41
Ease of data management and sharing	4.3	57	4	43
Developing skills	4.3	58	4.2	42
Cultural factors	3.9	55	3.9	42
Collaboration structures	4.4	57	4.4	43
Resourcing operations	4.3	59	4.2	43
Enabling the growth of member organisations	3.9	51	4	42
Finding new partnerships	4.2	55	4.3	43
Generating innovations	4.4	57	4.3	43
Customer insight	4.6	58	4.6	43
Development of public administration	3.8	52	3.8	43
Generating new information	4.2	55	4.3	43



# How important do you consider the following factors for the functioning of your ecosystem, and how would you evaluate their current performance level? Importance

Statistical significance  
Large v. small company

- Ease of data management and sharing
- Developing skills

By size of organisation:	micro (1–10 persons)		small (11–50 persons)		middle-sized (51–250 persons)		large (over 250 persons)	
	mean	N	mean	N	mean	N	mean	N
Common goals	4.6	18	4.8	25	4.8	10	4.5	49
Growth and/or renewal of business	4.4	16	4.4	25	4	10	4.4	45
Ease of data management and sharing	4	17	3.9	24	4.4	11	4.3	49
Developing skills	3.8	17	4.2	25	4.5	11	4.5	48
Cultural factors	4.1	17	4	24	3.7	10	3.8	47
Collaboration structures	4.5	18	4.4	24	4.4	10	4.3	49
Resourcing operations	4.1	18	4.1	25	4.3	11	4.4	49
Enabling the growth of member organisations	4.1	17	4	23	3.6	9	4	45
Finding new partnerships	4.1	17	4.4	25	4.2	10	4.3	47
Generating innovations	4.1	17	4.2	25	4.3	11	4.5	48
Customer insight	4.6	18	4.5	24	4.4	11	4.6	49
Development of public administration	3.8	17	3.5	22	4.2	11	3.8	46
Generating new information	4	17	4.1	24	4.3	10	4.3	48

## How important do you consider the following factors for the functioning of your ecosystem, and how would you evaluate their current performance level? - Importance

By region:	Uusimaa		Others	
	mean	N	mean	N
Cultural factors	3.3	54	3.3	42
Generating innovations	3.4	57	3.1	43
Resourcing operations	3.2	57	2.8	43
Development of public administration	3.1	51	2.6	43
Finding new partnerships	3.5	55	3.6	43
Enabling the growth of member organisations	3.1	50	2.9	42
Customer insight	3.5	57	3.4	43
Growth and/or renewal of business	3.2	54	2.9	41
Collaboration structures	3.6	55	3.4	43
Generating new information	3.6	55	3.4	43
Developing skills	3.3	58	3.3	43
Ease of data management and sharing	3.2	56	2.8	43
Common goals	3.6	57	3.4	43

# How important do you consider the following factors for the functioning of your ecosystem, and how would you evaluate their current performance level? -Performance

Statistical significance  
Large v. small company

- Generating new information

By size of organisation:	micro		small		middle-sized (51–250 persons)		large (over 250 persons)	
	(1–10 persons)		(11–50 persons)					
	mean	N	mean	N	mean	N	mean	N
Cultural factors	3.4	17	3.3	24	3.3	8	3.3	48
Generating innovations	2.8	17	3.2	25	3.2	10	3.4	49
Resourcing operations	2.9	17	3	25	3.4	10	2.9	49
Development of public administration	3.1	17	2.5	22	2.7	10	3.1	46
Finding new partnerships	3.5	17	3.5	25	3.9	9	3.6	48
Enabling the growth of member organisations	2.8	17	3.1	23	3.1	8	3	45
Customer insight	3.4	17	3.5	24	3.6	10	3.5	50
Growth and/or renewal of business	3	16	3.1	25	3	9	3	46
Collaboration structures	3.5	17	3.6	24	3.8	9	3.4	49
Generating new information	3.5	17	3.1	24	3.6	9	3.7	49
Developing skills	3.1	17	3.3	25	3.4	10	3.4	50
Ease of data management and sharing	3.1	17	2.8	24	3.5	10	3	49
Common goals	3.4	17	3.5	25	4	9	3.5	50

# Crosstabulation of the ecosystem's functionality and phase

Phase	Capacity							
	I cannot evaluate the capacity		The current group of partners has no capacity to advance the goals of the ecosystem		The current group of partners has moderate capacity to advance the achievement of goals		The current group of partners has efficient capacity to advance the goals of the ecosystem	
	%	N	%	N	%	N	%	N
Don't know	0%	-	20%	1	4%	2	2%	1
Phase 1	0%	-	20%	1	9%	5	2%	1
Phase 2	50%	1	0%	-	39%	22	13%	6
Phase 3	0%	-	40%	2	39%	22	47%	21
Phase 4	50%	1	20%	1	11%	6	36%	16

• More advanced data sharing was associated to the capacity of the ecosystem

# **Fair data economy principles in an ecosystem**

# How important for the success of the ecosystem do you consider the six principles of the fair data economy? N=105

**Trustworthiness** – A trustworthy ecosystem can prove that it collects and uses data legally and in compliance of ethical principles, and has a set of ethical guidelines for constructing and using algorithms and AI.

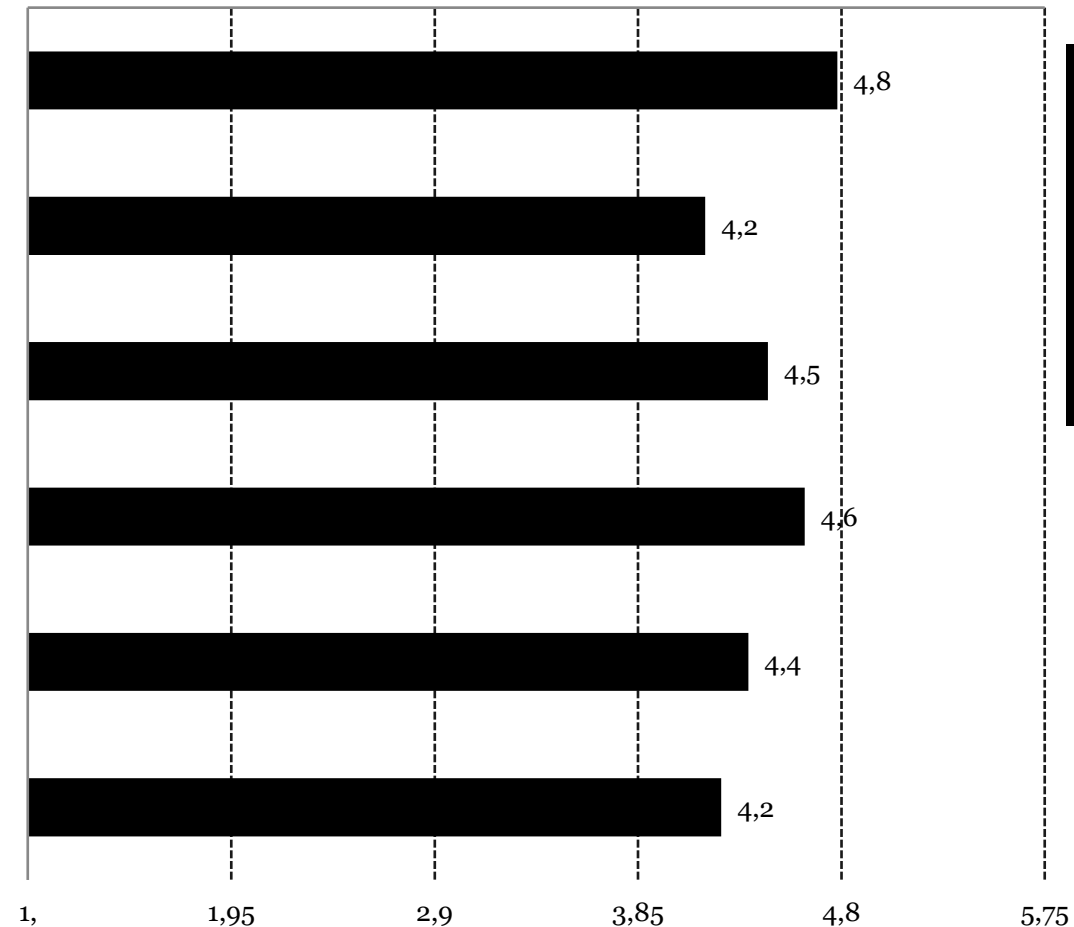
**Availability** – A fair ecosystem grants its customers and partners (including private persons) access to data collected of them and provides them with well-functioning tools for data management.

**A human- and customer-centred approach** – Is visible as an insight into the needs of individuals and organisations, and as customer-centred development of services. Customer insight is regularly...

**Value creation** – A fair ecosystem creates value through data – via its own operations (value for all partners of the ecosystem) and, additionally, for its customers and the society as a whole.

**Competence** – Continuous development of competences and a culture of experimentation play a vital role in the management of an ecosystem's operators.

**Sharing** – Partners of an ecosystem share data in accordance with jointly constructed rules. The ecosystem's rules, well-balanced structure and open administration take into consideration the...



- The respondents considered all six principles of fair data economy to be important for the success of the ecosystem
- Trustworthiness was emphasised as the main factor

Scale (importance): 1=not important at all...5=very important

# How important for the success of the ecosystem do you consider the six principles of fair data economy?

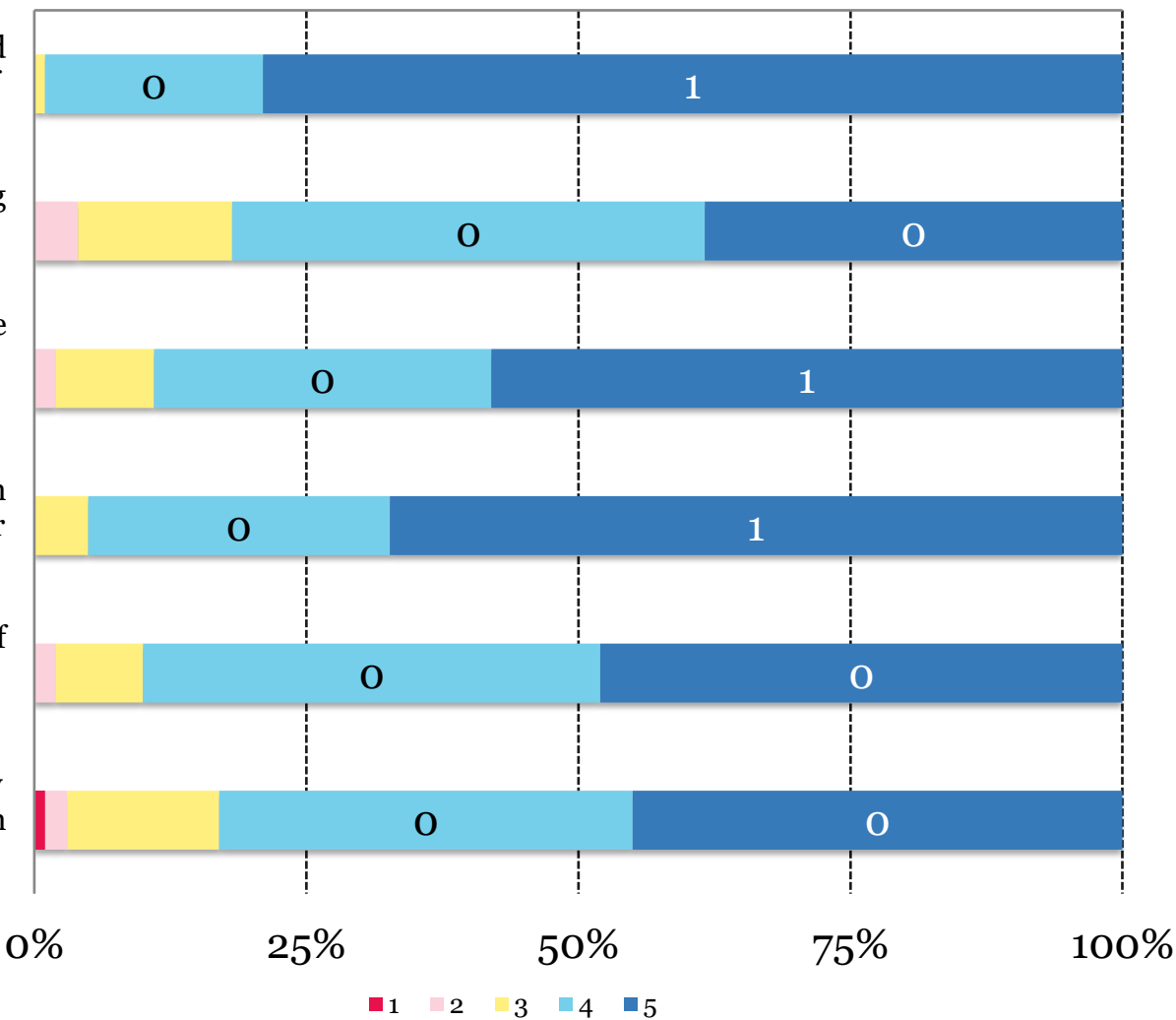
Statistical significance  
Large v. small company  
• Data sharing

By size of organisation:	micro (1–10 persons)		small (11–50 persons)		middle-sized (51–250 persons)		large (over 250 persons)	
	mean	N	mean	N	mean	N	mean	N
Value creation – A fair ecosystem creates value through data – via its own operations (value for all partners of the ecosystem) and, additionally, for its customers and society as a whole.	4.6	18	4.7	26	4.6	11	4.6	48
Sharing – partners of an ecosystem share data in accordance with jointly constructed rules. The ecosystem's rules, well-balanced structure and open administration take into consideration the benefits of all parties.	4	18	4	26	4.3	11	4.4	48
Trustworthiness – A trustworthy ecosystem can prove that it collects and uses data legally and in compliance of ethical principles, and has a set of ethical guidelines for constructing and using algorithms and AI.	4.9	18	4.8	26	4.8	11	4.7	48
Competence – Continuous skills development and a culture of experimentation play a vital role in the management of an ecosystem's partners.	4	17	4.3	26	4.5	11	4.4	48
Availability – A fair ecosystem grants its customers and partners (including private individuals) access to data collected about them and provides them with well-functioning tools for data management.	4.3	18	3.8	25	4.1	11	4.3	48
A human-centred and customer-centred approach – Is visible as an insight into the needs of individuals and organisations and as a customer-centred development of services. Customer insight is regularly increased in the customer interface.	4.7	18	4.3	26	4	11	4.5	48

*Scale (importance): 1=not important at all...5=very important*

# How important for the success of the ecosystem do you consider the six principles of fair data economy? – distributions

- Trustworthiness – A trustworthy ecosystem can prove that it collects and uses data legally and in compliance of ethical principles, and has a set of ethical guidelines for constructing and using algorithms and AI.
- Availability – A fair ecosystem grants its customers and partners (including private persons) access to data collected of them and provides them with well-functioning tools for data management.
- A human- and customer-centred approach – Is visible as an insight into the needs of individuals and organisations, and as customer-centred development of services. Customer insight is regularly increased in the customer interface.
- Value creation – A fair ecosystem creates value through data – via its own operations (value for all operators of the ecosystem) and, additionally, for its customers and the society as a whole.
- Competence – Continuous development of competences and a culture of experimentation play a vital role in the management of an ecosystem's operators.
- Sharing – Operators of an ecosystem share data in accordance with jointly constructed rules. The ecosystem's rules, well-balanced structure and open administration take into consideration the benefits of all parties.

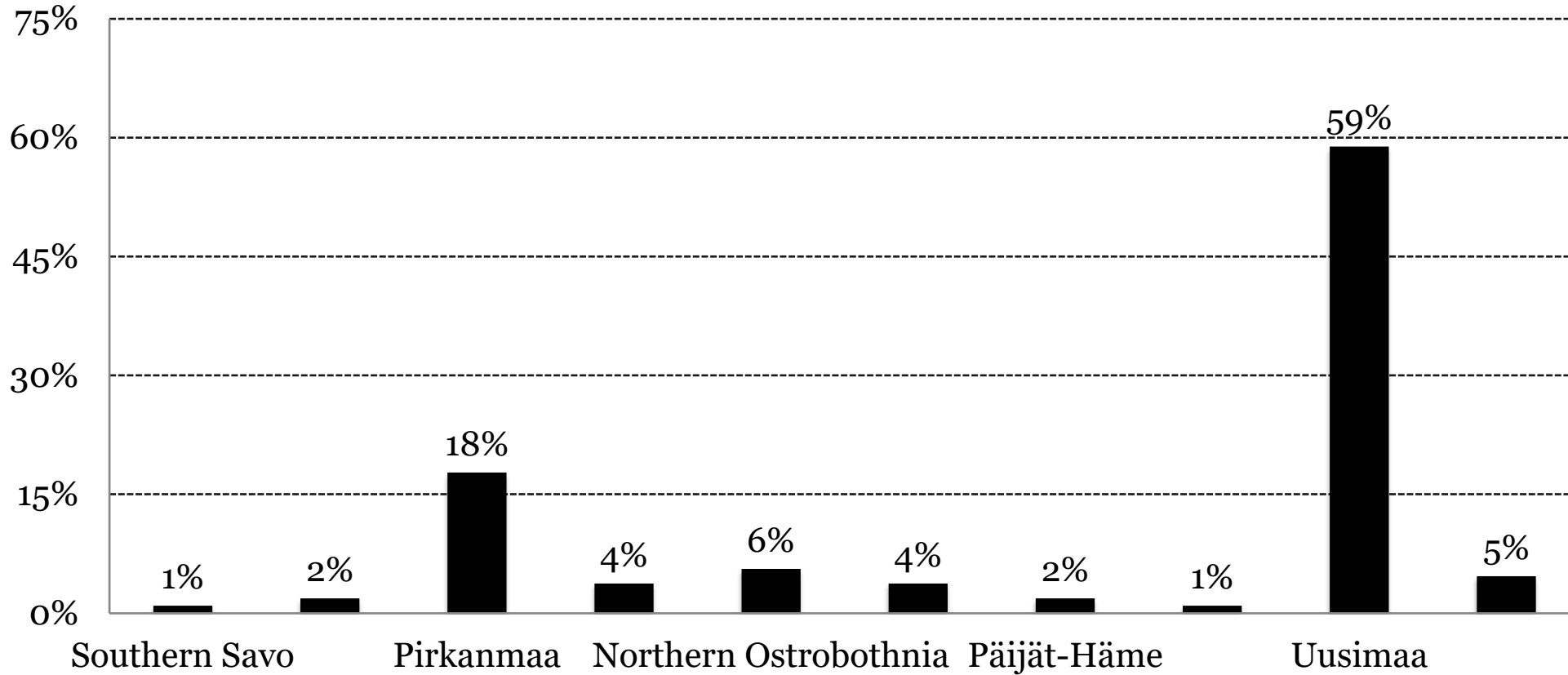


Scale (importance):  
 1=not important at all...5=very important



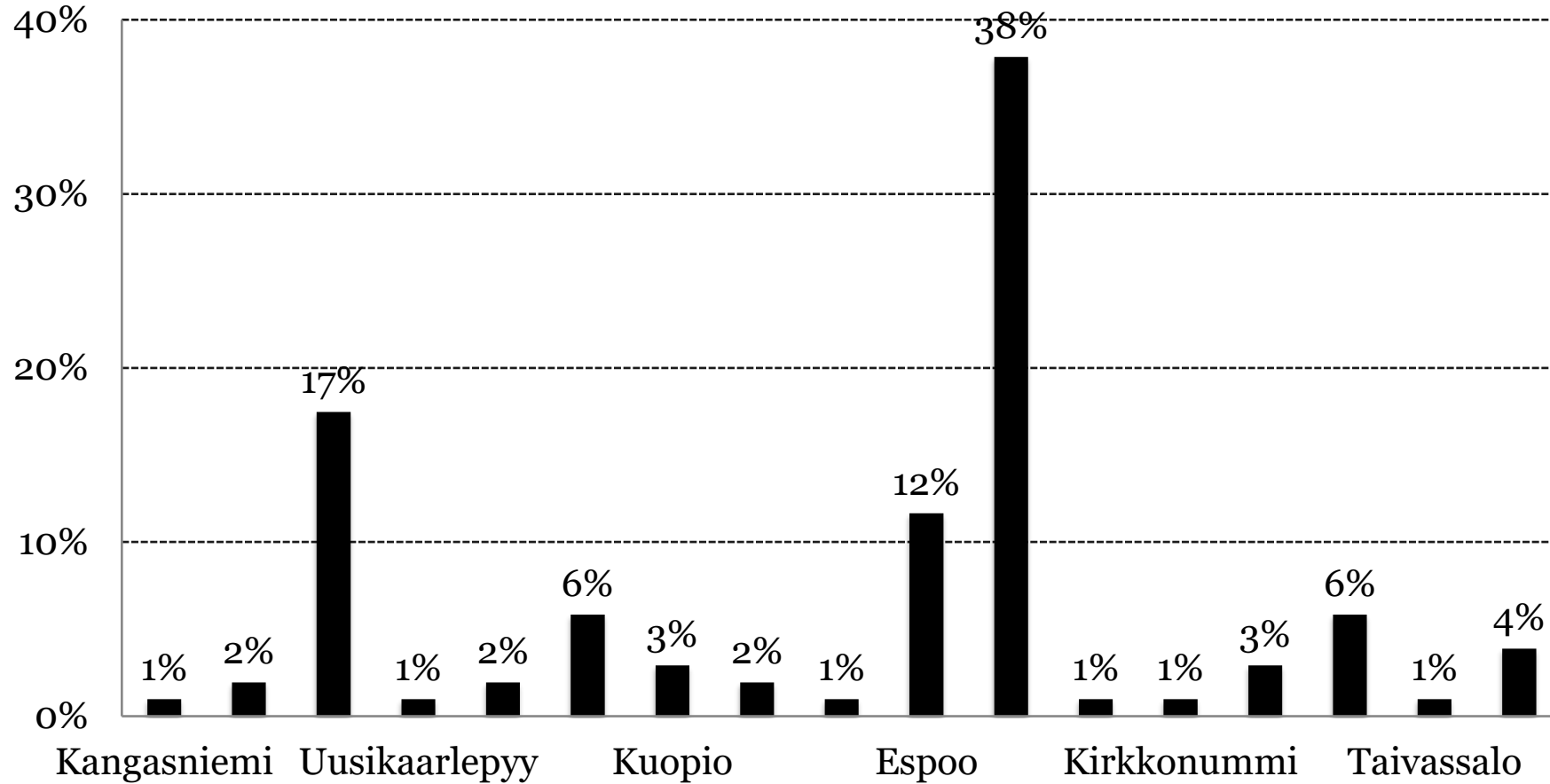
# **Background information about the organisation**

# Region N=109



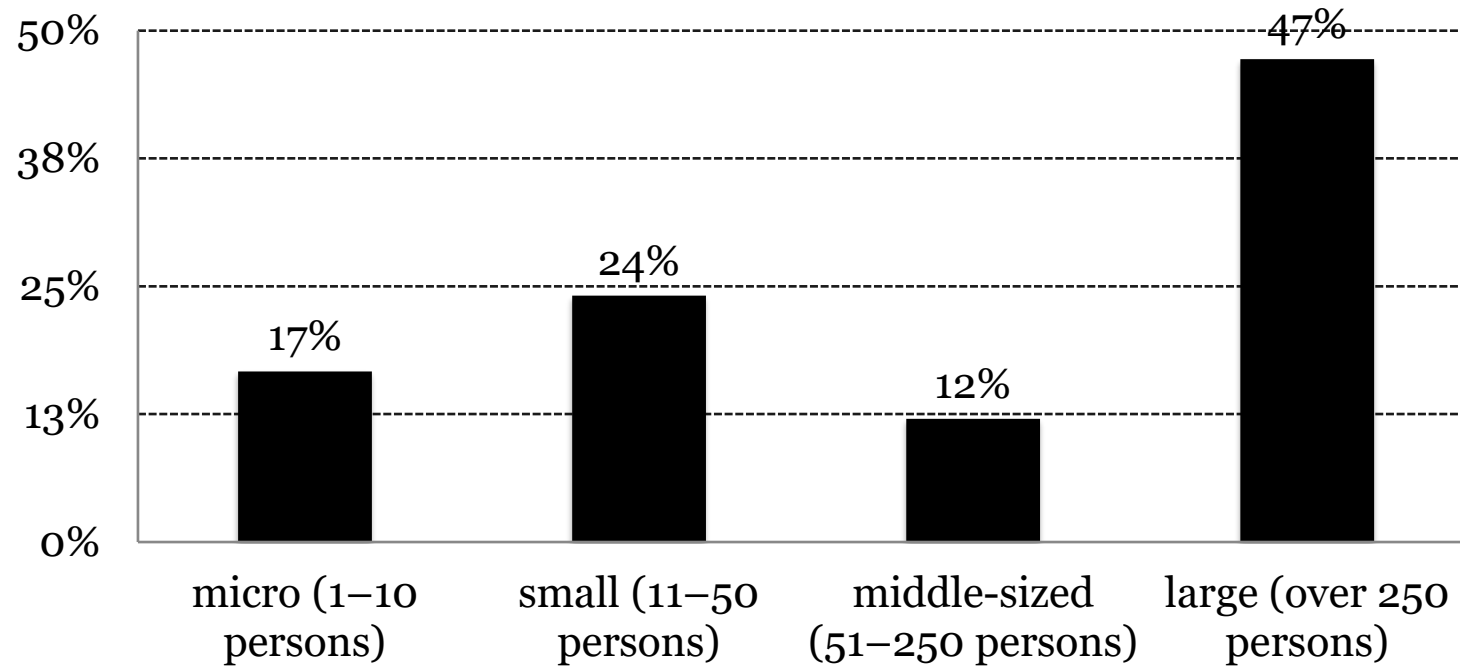
- Uusimaa and Pirkanmaa were predominant among the respondents

# Municipality N=103



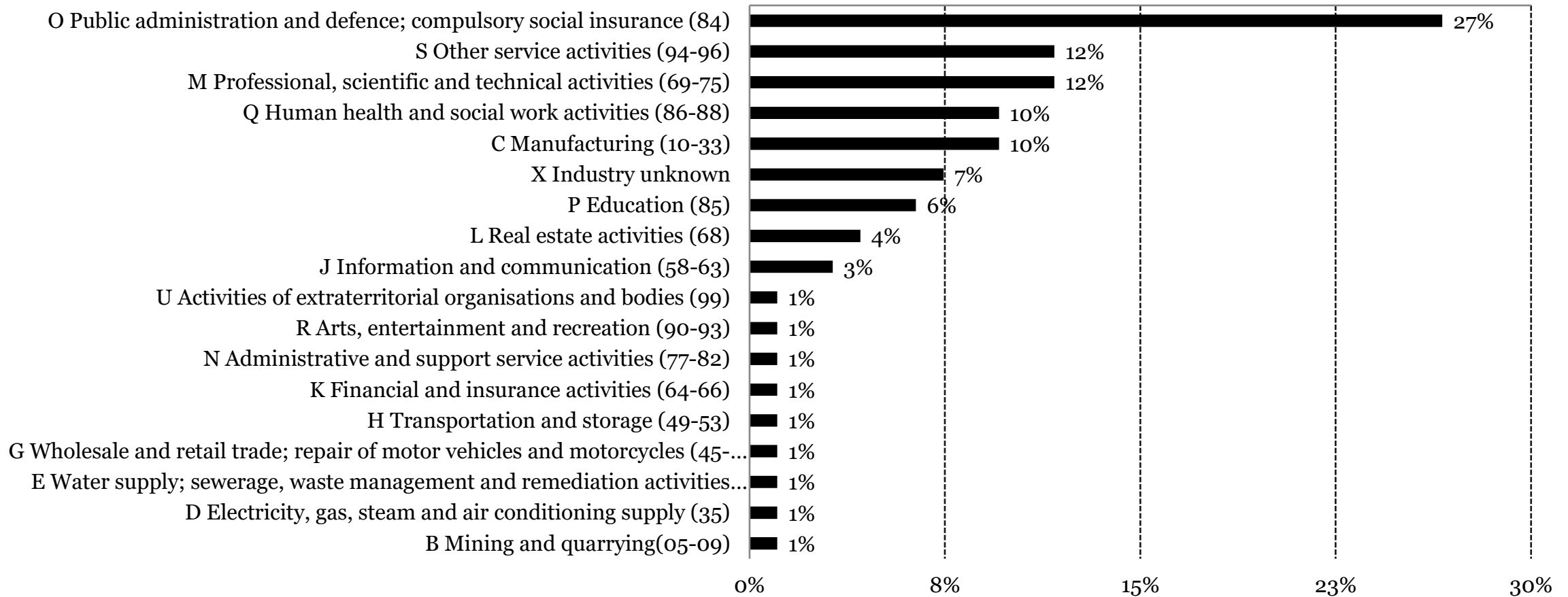
- Helsinki and Tampere were predominant among the respondents

# Organisation size N=110



- 47% of the respondents were from large organisations; otherwise, there was an even distribution but with an emphasis on small organisations

# Classification of industries N=94



# Summary

# Summary 1 (4)

## **Ecosystem details**

- The respondents had a good level of networking (75% were operating in other networks in addition to their own).
- Ecosystems were seen as natural ways for data sharing to enable operations (traffic and health ecosystems).
- The reasons for establishing an ecosystem were comprehensive and highlighted the principles for a well-functioning ecosystem: data sharing, a good governance model, and joint value creation. Organisations also had ambitious goals for their ecosystem activities.
- The respondents had a broad range of roles in ecosystems, all of which were essential for the ecosystem to function. The most frequent role was that of ecosystem orchestrator.

## **Phases of data usage and role of data sharing:**

- Data sharing was at a comparably advanced level in the ecosystems, and the goals were even higher (joint data-generated business). Data sharing was also able to be designated as an independent aspect of doing business in an ecosystem. Data sharing was seen to be highly beneficial, though some respondents (33%) were more doubtful and either failed to see the benefit of data sharing or were unable to evaluate it.
- The results indicate that advanced data sharing may be associated with the capacity of an ecosystem.
- The main reasons for data sharing were clear: product development, process development and research.

# Summary 2 (4)

## About the governance model and capacity of ecosystems

- Agreements, data sharing models and joint ecosystem indicators represent the maturity of an ecosystem's governance model. There was a certain degree of disparity in the agreement practices, but a large part (40%) also had ecosystem-level agreements. Data sharing showed even larger disparities, but here too the more advanced operators had adopted practices for smooth access to data from other organisations. Half of the organisations monitored their success using only their own indicators.
- Ecosystem capacity was considered good (41% evaluated it as 'efficient' and 52% as 'moderate').
- Respondents also stated that they had a good level of trust in ecosystem partners, although some disagreed (24% reported the level of trust as low).

## Value creation and growth

- 50% of the ecosystems were in the growth phase.
- According to the respondents, the strengths of the ecosystems were networking skills, skills in developing customer-oriented services, scientific skills, systems and app design skills, and business skills.
- Challenges to the development of ecosystems were perceived to be a lack of joint value creation, data sharing and governance model. Lack of funding was highlighted as a separate factor.
- When asked about the elements of importance for the functioning of ecosystems, the three main areas in need of improvement were: business growth, resourcing operations and data management/sharing.



# Summary 3 (4)

## **Principles of the fair data economy:**

- The respondents considered all six principles of fair data economy to be important for the success of the ecosystem.
- Trustworthiness was emphasised as the most important factor.

## **Ecosystem phase**

- 70% of the respondents stated that their organisation was in the birth or expansion phase.

## **About the study in general:**

- The respondents had a fairly positive response experience and considered the topic to be an important discussion starter, and there was a definite wish to develop collaboration in ecosystems. It was also a wish for a strong, active player in society to adopt a leading role in societal impact. On the other hand, the topic was seen as difficult to respond to, and some of the views stated that 1) data sharing is not common in ecosystems due to weak incentives, and 2) there are no real data ecosystems in Finland.

# Summary 4 (4) SWOT analysis

## Strengths

### Analysis

- The respondents understand the benefits of data sharing and 2/3 have successfully used it for concrete business benefits
- Ambitious goals have been set for data sharing and ecosystem development
- Data sharing has been identified as an independent business area in the operation of an ecosystem
- Clear competence strengths in networking, developing customer-oriented services and scientific competence

## Weaknesses

### Analysis

- The success of an ecosystem as a whole is not being monitored
- The main areas in need of improvement are the growth/renewal of business, resourcing operations, and data management/sharing

## Opportunities

### Analysis

- Many ecosystems are in the growth phase
- Problems with the governance model of ecosystems have been identified
- All of the principles of fair data economy were considered important
- Increasing trust in ecosystems

## Threats

### Analysis

- Lack of societal leadership and societal impact
- Lack of or rigidity in funding for ecosystems
- The focal points for developing ecosystems are too diverse
- Currently, the geographical emphasis is on Helsinki and Tampere

# **Annexes**

# Importance and performance, response rates by factor

Performance – factor	N
Development of public administration	95
Cultural factors	97
Enabling the growth of member organisations	93
Ease of data management and sharing	100
Generating new information	99
Finding new partnerships	99
Resourcing operations	101
Developing skills	102
Generating innovations	101
Growth and/or renewal of business	96
Collaboration structures	99
Customer insight	101
Common goals	101

Importance – factor	N
Development of public administration	96
Cultural factors	98
Enabling the growth of member organisations	94
Ease of data management and sharing	101
Generating new information	99
Finding new partnerships	99
Resourcing operations	103
Developing skills	101
Generating innovations	101
Growth and/or renewal of business	96
Collaboration structures	101
Customer insight	102
Common goals	102

**RISE TO  
SHINE!**

