THE FUTURE OF EUROPEAN COMPANIES IN DATA ECONOMY

31 May 2019
Mikko Ulander, Meiju Ahomäki, Jenni Laukkanen / Innolink

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General information on the survey

- The purpose of the study was to gain insight on companies' awareness, attitudes, and commitment to business potential enabled by fair data economy.

- Data economy is commonly understood as an economy where different operators work in the same environment in order to ensure the availability and usability of data as well as make use of data and use it as a basis in the creation of new applications and services. In order to succeed in this, it is imperative that operators in the data ecosystems trade data with other operators in the ecosystem.

- The study was carried out as a part of Sitra's international IHAN project.

- The target population consisted of large enterprises and SMEs (excluding entrepreneurs) in the Netherlands, Germany, France, and Finland. The study is based on 1667 responses. This report presents the main findings of the study.

- The data collection method used was a business decisionmaker panel. Data collection was carried out in April and May of 2019. The survey was carried out by Innolink.

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Structure of the report

Principles of fair data economy
- How do companies view the principles of fair data economy?
- How willing are companies to commit to these in practice?
- Are there differences between these responses? If so, what kind?

Operative capabilities
- How well-prepared are companies to operate successfully in a data economy?

Potential of data economy to respondents
- Is the business potential enabled by trading data seen as relevant to the company's competitivity?
- If yes, on what scale?

Digital business models
- How do market operators' business models relate to data economy?
- How advanced are the digital business models and what are the segments like?

Two future scenarios

Challenges in European data economy

Practical example: Fair data label

Conclusion and observations

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Highlights: fair data economy today

ATTITUDES

"Sharing data with other operators is good". **3.8-3.9/5**

"Sharing data with other players is a good thing."
15 % 5/5 responses

CAPABILITIES

About **50%** identify some capabilities for utilizing data economy in the company.

A challenging signal may be that "We need customer data from others" and "GDPR had a positive impact on our company's opportunities to work in a data economy" were scored the lowest. **3.1/ 5**

STATUS

Gaps between attitudes and commitment to fair data principles are small, with the biggest gap being in the theme of "respecting individuals' privacy even at the expense of customer experience". **-0.29**

Every third **(33%)** of respondents say trading data has already given them a competitive advantage.

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Highlights: fair data economy tomorrow

CHALLENGES

31% of the respondents kept the biggest challenge to the creation of European services "American and Chinese competitors play by their own rules"

22% sees GDPR and other regulations as the biggest challenge .
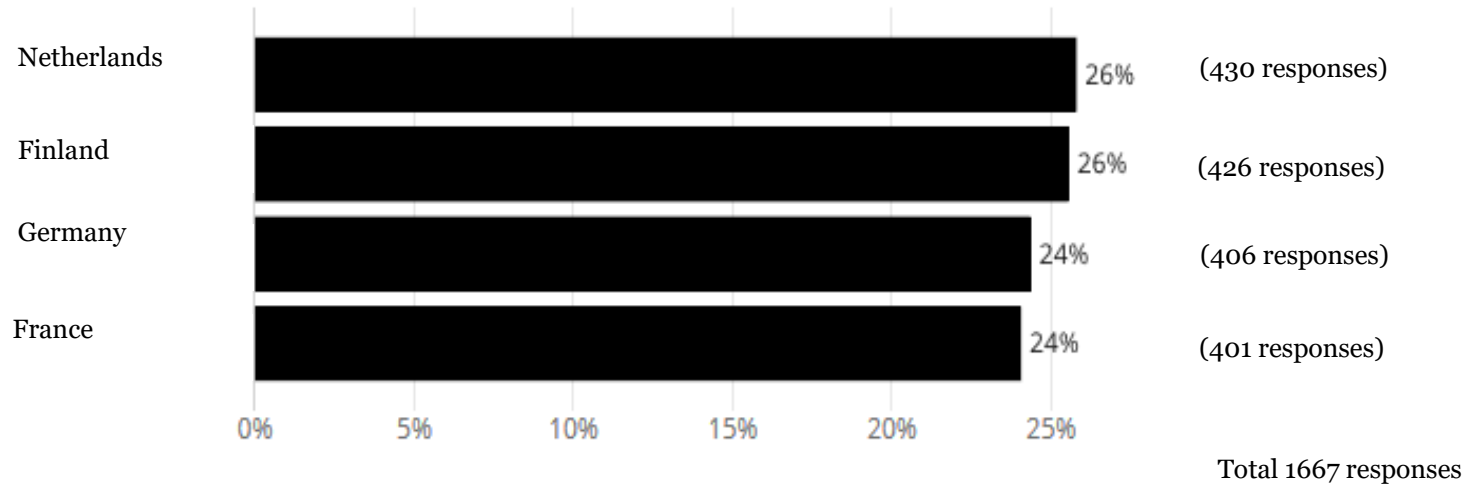
POTENTIAL

Organizations' data trading business potential is at good level. **3.3/5**

As a challenge to fair data economy's development potential, current state of things is seen as yielding stronger positive business benefits than either future scenario.
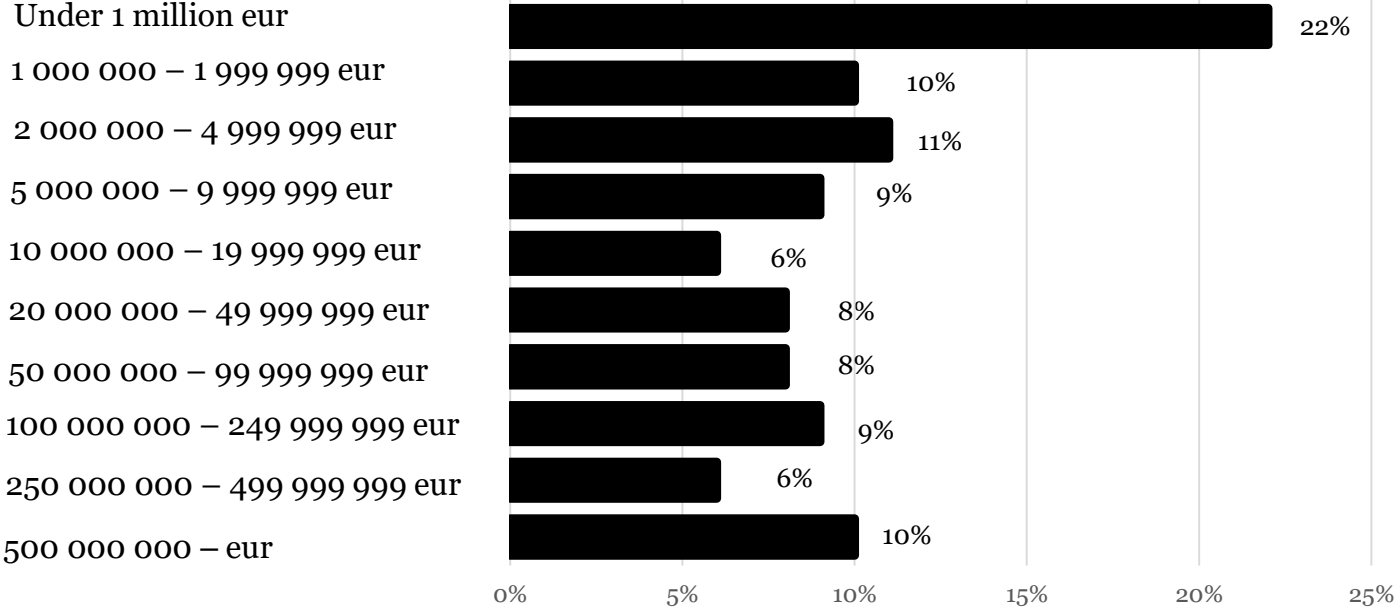
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BACKGROUND INFORMATION

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Background information, countries

Countries, 1667 responses

Netherlands	26%	(430 responses)
Finland	26%	(426 responses)
Germany	24%	(406 responses)
France	24%	(401 responses)

Total 1667 responses

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Background information, turnover

Countries, 1554 responses

Under 1 million eur	22%
1 000 000 – 1 999 999 eur	10%
2 000 000 – 4 999 999 eur	11%
5 000 000 – 9 999 999 eur	9%
10 000 000 – 19 999 999 eur	6%
20 000 000 – 49 999 999 eur	8%
50 000 000 – 99 999 999 eur	8%
100 000 000 – 249 999 999 eur	9%
250 000 000 – 499 999 999 eur	6%
500 000 000 – eur	10%

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Background information, turnover by country

Company turnover, 1554 responses
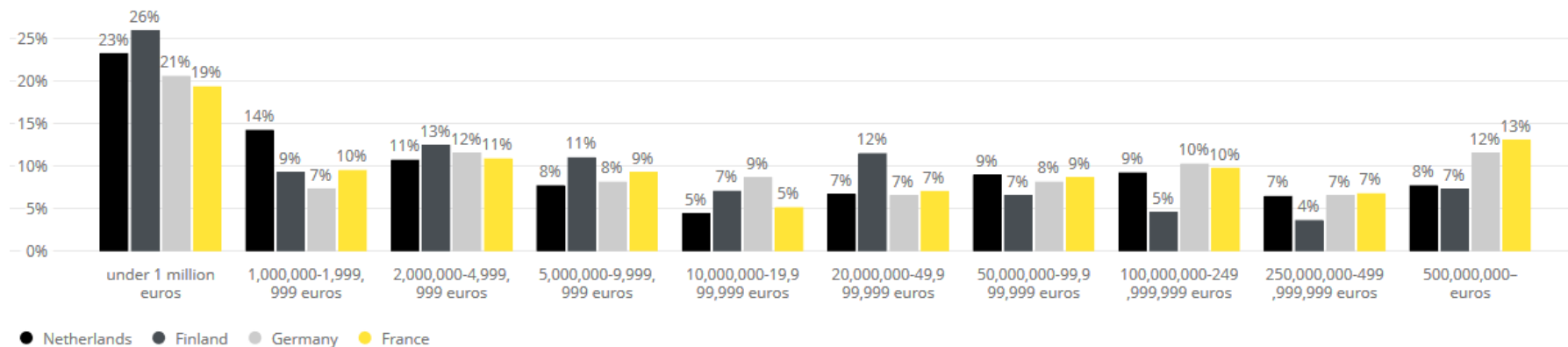
Background information, markets

Which of the following statements best describes your company? We mainly operate on...
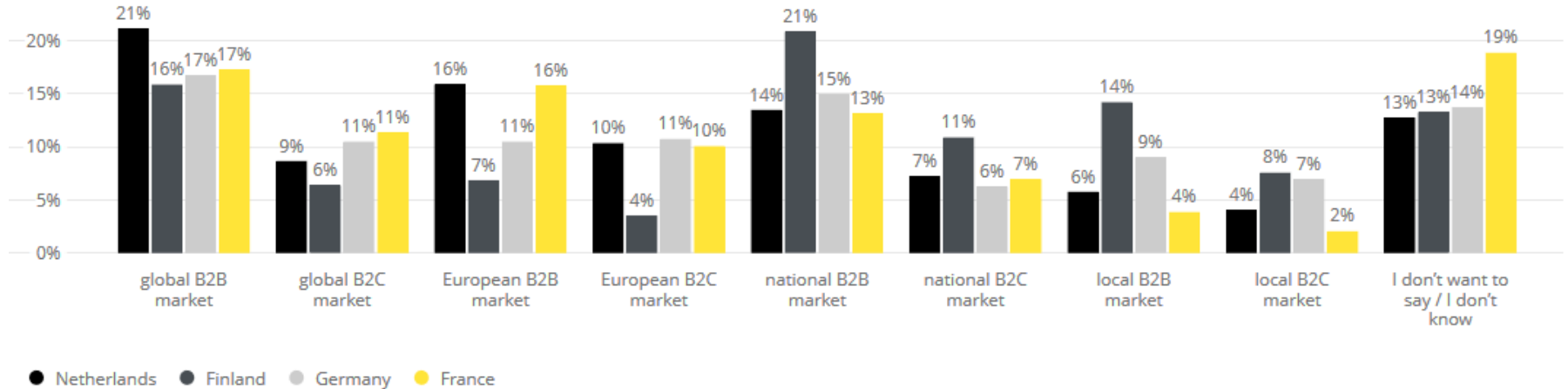1620 respondents

Market	Percentage
Global B2B markets	18%
Global B2C markets	9%
European B2B markets	12%
European B2C markets	9%
National B2B markets	16%
National B2C markets	8%
National B2B markets	8%
Local B2C markets	5%
I don't want to say / I don't know	15%

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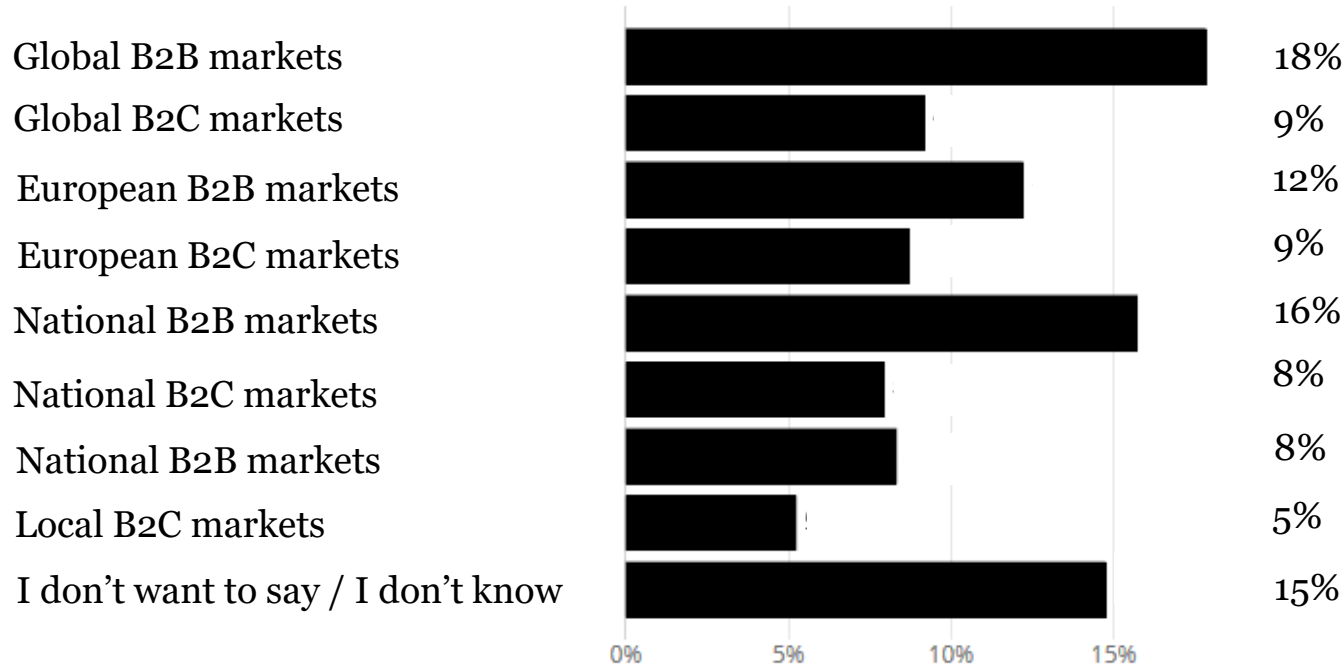
Background information, markets

Which of the following statements best describes your company? We mainly operate on...
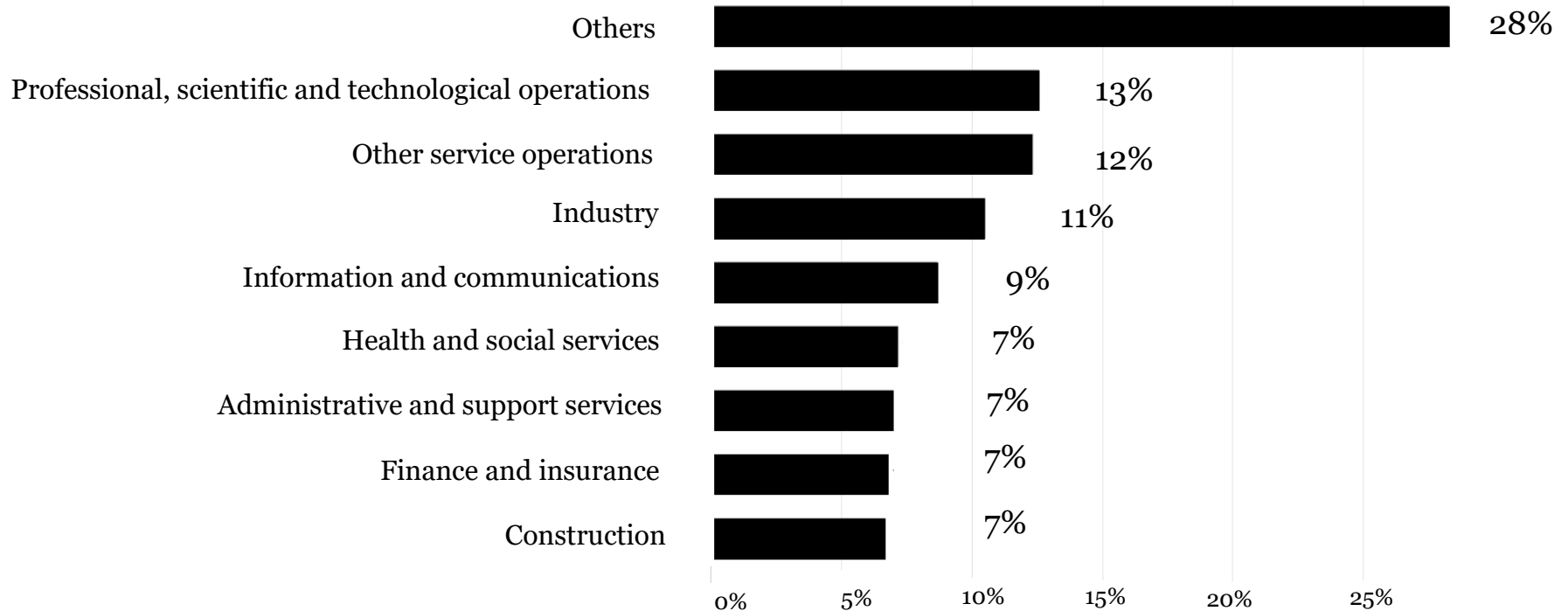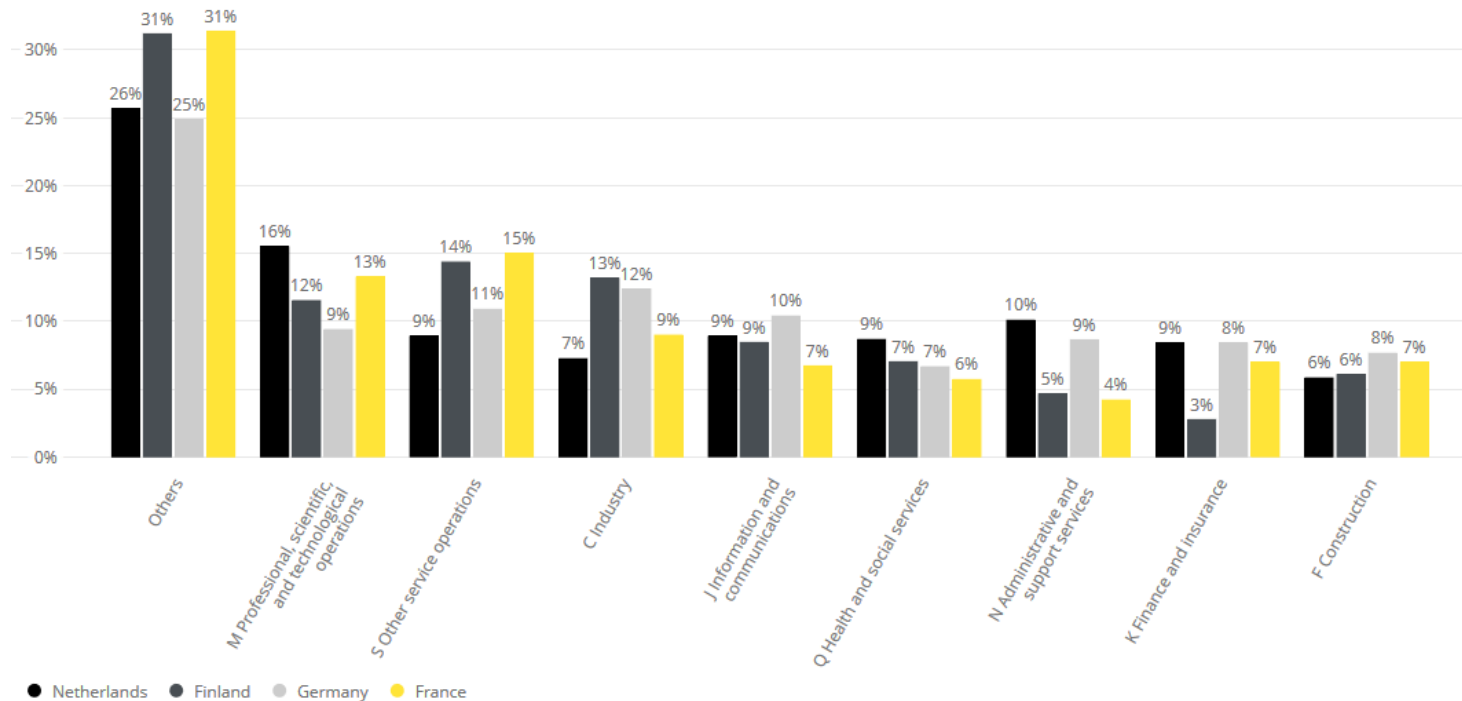1620 respondents

	B2B markets	B2C markets
Global markets	66%	34%
European markets	58%	42%
National markets	66%	34%
Local markets	61%	39%
I don't want to say / I don't know	100%	

● B2B markets   ● B2C markets

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Background information, markets by country

Which of the following statements best describes your company? We mainly operate on…
1620 respondents

Legend: ● Netherlands ● Finland ● Germany ● France

Background information, main business area

Main business area, 1647 respondents

Business area	Percentage
Others	28%
Professional, scientific and technological operations	13%
Other service operations	12%
Industry	11%
Information and communications	9%
Health and social services	7%
Administrative and support services	7%
Finance and insurance	7%
Construction	7%

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Background information, main business area by country

Main business area, 1647 respondents

Netherlands ● Finland ● Germany ● France

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HOW DO COMPANIES SEE THE PRINCIPLES OF FAIR DATA ECONOMY, AND ARE THEY WILLING TO COMMIT?

Fair data economy principles

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Fair data economy principles

What is your *view* of the following fair data economy principles? 1582 responses

The terms of service must be user-friendly

Using and collecting data must have ethical rules

An individual's privacy must be respected, even at the cost of customer experience

We must try to increase consumer confidence

The fact that utilising personal data is subject to licence is a good thing

Sharing data with other players is a good thing

Principle	N	Score
The terms of service must be user-friendly	N= 1509	3,9
Using and collecting data must have ethical rules	N= 1515	3,9
An individual's privacy must be respected	N= 459	3,9
We must try to increase consumer confidence	N= 459	3,9
The fact that utilising personal data is subject to licence is a good thing	N= 459	3,8
Sharing data with other players is a good thing	N= 1547	3,4
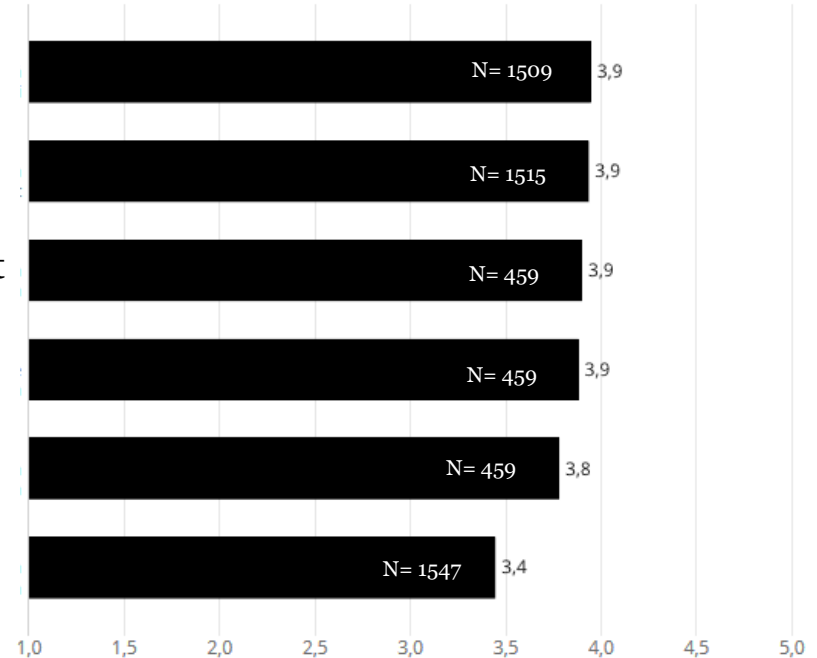
1,0 1,5 2,0 2,5 3,0 3,5 4,0 4,5 5,0

Scale: 1 = totally disagree … 5 = totally agree

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Fair data economy principles

What is your *view* of the following fair data economy principles? 1582 responses

Using and collecting data must have ethical rules	3% 5%	25%	29%	38%
The terms of service must be user-friendly	5%	25%	32%	36%
An individual's privacy must be respected, even at the cost of customer experience	6%	25%	34%	33%
We must try to increase consumer confidence	8%	24%	34%	32%
The fact that utilising personal data is subject to licence is a good thing	3% 7%	28%	33%	29%
Sharing data with other players is a good thing	7% 8%	34%	36%	15%

0%   20%   40%   60%   80%   100%

● 1   ● 2   ● 3   ● 4   ● 5

Scale: 1 = totally disagree ... 5 = totally agree

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Fair data economy principles

What is your *view* of the following fair data economy principles? By main business area, 1563 responses

Statement	Industry		Construction		Information and communications		Finance and insurance		Professional, scientific and technological operations		Others		Administrative and support services		Health and social services		Other service operations	
	Average	N	Average	N	Average	N	Average	N	Average	N	Average	N	Average	N	Average	N	Average	N
Sharing data with other players is a good thing	3.5	163	3.4	106	3.6	132	3.5	100	3.5	191	3.4	439	3.5	103	3.5	108	3.3	189
Using and collecting data must have ethical rules	3.9	156	3.9	105	3.9	132	3.8	97	4.0	192	4.0	432	3.9	96	4.0	106	3.9	183
The fact that utilising personal data is subject to lisence is a good thing	4.1	46	3.6	28	3.7	41	3.5	40	3.7	46	3.9	153	3.6	18	3.6	38	3.7	43
We must try to increase consumer confidence	4.2	46	3.9	29	4.0	40	3.6	41	3.6	43	3.9	152	3.8	18	3.9	38	3.8	44
The terms of service must be user-friendly	3.9	161	3.8	103	3.9	132	4.0	96	4.0	182	4.0	424	4.0	98	3.9	108	3.9	187
An individual's privacy must be respected, even at the cost of customer experience	4.0	46	4.0	28	3.9	41	3.8	41	3.9	45	3.9	152	3.7	19	3.6	37	4.0	43

Scale: 1 = totally disagree … 5 = totally agree

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Fair data economy principles

As a company, how ready would you be to *commit* to these principles? 1571 responses

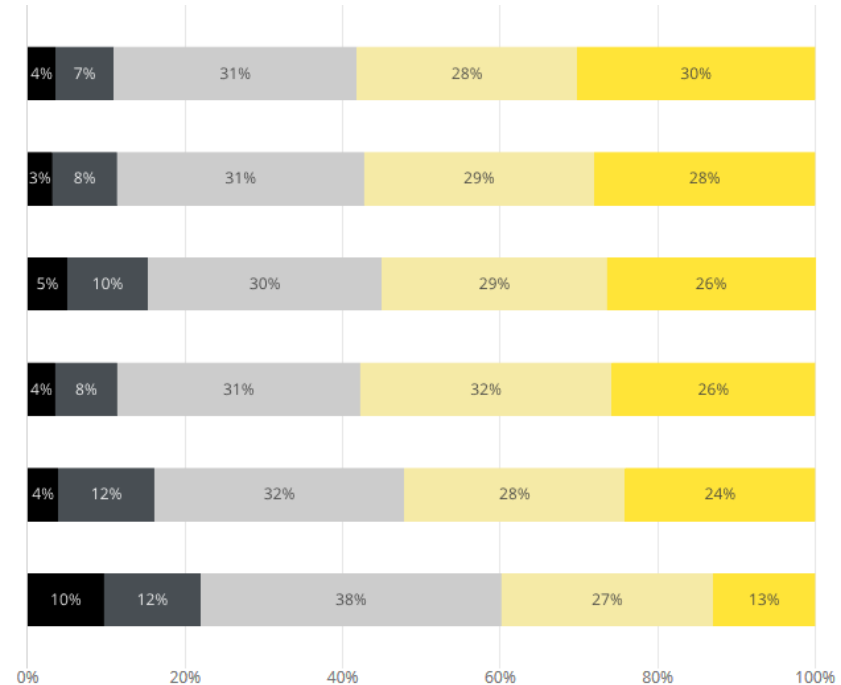Using and collecting data must have ethical rules — N= 1521 — 3.7

The terms of service must be user-friendly — N= 1507 — 3.7

We must try to increase consumer confidence — N= 457 — 3.7

An individual's privacy must be respected, even at the cost of customer experience — N= 458 — 3.6

The fact that utilising personal data is subject to licence is a good thing — N= 460 — 3.6

Sharing data with other players is a good thing — N= 1506 — 3.2

1.0 1.5 2.0 2.5 3.0 3.5 4.0 4.5 5.0

Scale: 1 = not at all committed ... 5 = totally committed

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Fair data economy principles

As a company, how ready would you be to *commit* to these principles? 1571 responses

Using and collecting data must have ethical rules

| 4% | 7% | 31% | 28% | 30% |

The terms of service must be user-friendly

| 3% | 8% | 31% | 29% | 28% |

An individual's privacy must be respected, even at the cost of customer experience

| 5% | 10% | 30% | 29% | 26% |

We must try to increase consumer confidence

| 4% | 8% | 31% | 32% | 26% |

The fact that utilising personal data is subject to licence is a good thing

| 4% | 12% | 32% | 28% | 24% |

Sharing data with other players is a good thing

| 10% | 12% | 38% | 27% | 13% |

0%   20%   40%   60%   80%   100%

● 1 ● 2 ● 3 ● 4 ● 5

Scale: 1 = not at all committed ... 5 = totally committed

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Fair data economy principles

Difference between view and commitment

Statement	View	Commitment	Difference
Sharing data with other players is a good thing	3.44	3.21	-0.23
Using and collecting data must have ethical rules	3.93	3.74	-0.20
The terms of service must be user-friendly	3.95	3.71	-0.24
We must try to increase consumer confidence	3.88	3.69	-0.19
The fact that utilising personal data is subject to license is a good thing	3.78	3.56	-0.22
An individual's privacy must be respected, even at the cost of customer experience	3.90	3.61	-0.29

Scale: 1 = totally disagree ... 5 = totally agree / 1 = not at all committed ... 5 = totally committed

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Fair data economy principles

The figures presented in the table, in order, are total scores for attitudes and commitment, and the difference of these two numbers:

In every country, it was **significantly harder to estimate** attitudes and commitment towards the principles of "increasing consumers' trust is desirable", "individuals' privacy should be respected even at the expense of customer experience", and "it is good that using personal data is subject to permission" (only a little over 100 respondents in each country answered these questions).

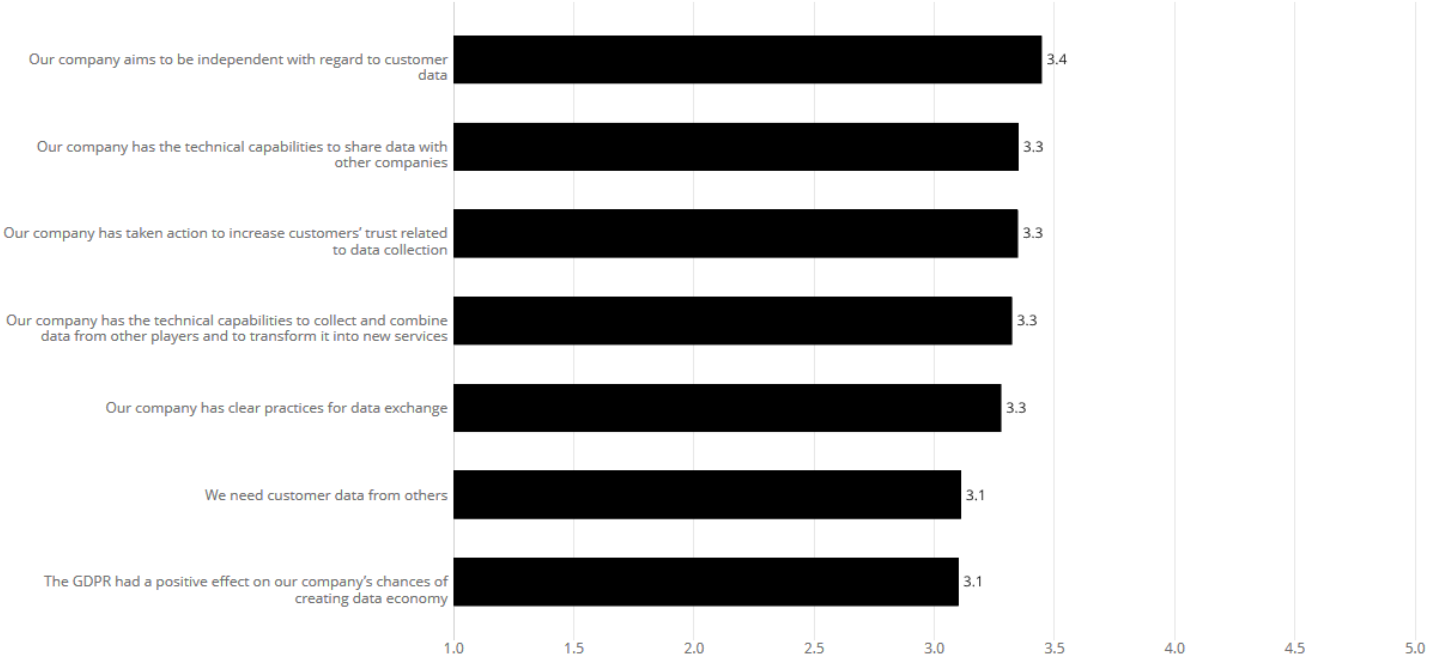| Statement	Netherlands (N=109-398)	Finland (N=108-406)	Germany (N=123-373)	France (N=106-377)
Sharing data with other players is a good thing	3.49 / 3.32 / -0.17	3.49 / 3.08 / -0.41	3.29 / 3.11 / -0.18	3.50 / 3.33 / -0.17
Using and collecting data must have ethical rules	3.84 / 3.68 / -0.16	4.10 / 3.86 / -0.24	3.85 / 3.67 / -0.19	3.95 / 3.76 / -0.19
The fact that utilising personal data is subject to license is a good thing	3.59 / 3.32 / -0.27	3.86 / 3.71 / -0.15	3.68 / 3.45 / -0.23	4.02 / 3.80 / -0.22
We must try to increase consumer confidence	3.62 / 3.43 / -0.19	4.18 / 3.97 / -0.21	3.74 / 3.59 / -0.15	3.98 / 3.81 / -0.17
The terms of service must be user-friendly	3.82 / 3.61 / -0.21	4.07 / 3.75 / -0.32	3.84 / 3.66 / -0.19	4.04 / 3.82 / -0.23
An individual's privacy must be respected, even at the cost of customer experience	3.61 / 3.24 / -0.37	3.92 / 3.75 / -0.17	3.87 / 3.63 / -0.24	4.20 / 3.84 / -0.37

Scale: 1 = totally disagree ... 5 = totally agree / 1 = not at all committed ... 5 = totally committed

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HOW READY AND ABLE ARE COMPANIES FOR FAIR DATA ECONOMY?

Fair data economy capabilities

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Data economy capabilities

Please evaluate the accuracy of the following statements that measure the maturity level of data economy in your company, 1660 responses
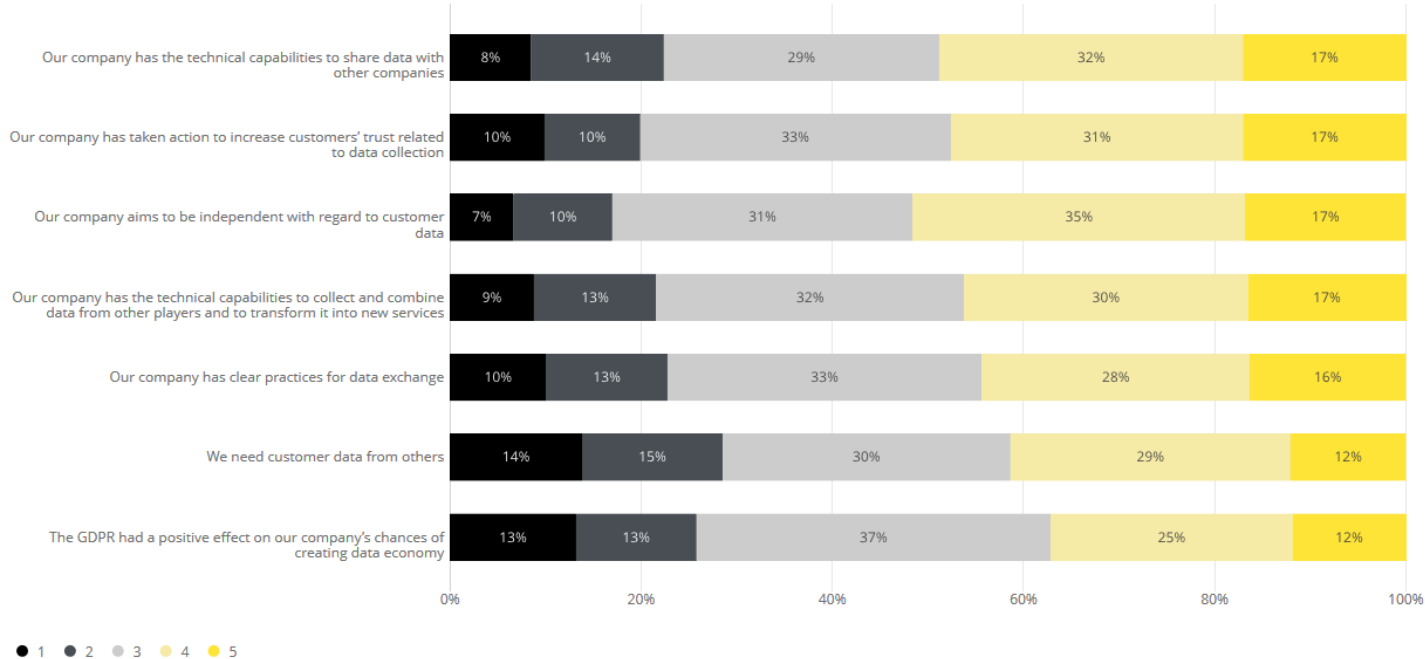

Statement	Value
Our company aims to be independent with regard to customer data	3.4
Our company has the technical capabilities to share data with other companies	3.3
Our company has taken action to increase customers' trust related to data collection	3.3
Our company has the technical capabilities to collect and combine data from other players and to transform it into new services	3.3
Our company has clear practices for data exchange	3.3
We need customer data from others	3.1
The GDPR had a positive effect on our company's chances of creating data economy	3.1

Scale: 1 = totally inaccurate ... 5 = totally accurate

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Data economy capabilities

Please evaluate the accuracy of the following statements that measure the maturity level of data economy in your company, 1660 responses

Scale: 1 = totally inaccurate ... 5 = totally accurate

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Data economy capabilities

Please evaluate the accuracy of the following statements that measure the maturity level of data economy in your company:

By country	Netherlands		Finland		Germany		France	
	Average	N	Average	N	Average	N	Average	N
The GDPR had a positive effect on our company's chances of creating data economy	3.2	423	2.7	419	3.1	402	3.4	397
We need customer data from others	3.2	423	2.9	417	3.1	401	3.3	396
Our company has clear practices for data exchange	3.3	423	2.9	423	3.4	403	3.5	395
Our company has taken action to increase customers' trust related to data collection	3.3	425	3.1	421	3.4	402	3.6	397
Our company has the technical capabilities to share data with other companies	3.4	427	3.1	424	3.4	404	3.5	400
Our company has the technical capabilities to collect and combine data from other players and to transform it into new services	3.4	426	3.1	421	3.4	404	3.4	398
Our company aims to be independent with regard to customer data	3.5	426	3.3	420	3.4	401	3.6	399

Scale: 1 = totally inaccurate … 5 = totally accurate

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Data economy capabilities

By main business area

Industry	N	The maturity level of data economy*
Total	173	**3.17**
Construction	110	**3.36**
Information and communications	143	**3.57**
Finance and insurance	112	**3.48**
Professional, scientific and technological operations	207	**3.38**
Others	461	**3.18**
Administrative and support services	113	**3.38**
Health and social services	117	**3.19**
Other service operations	203	**3.14**

*Average of all of the claims.

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WHAT ARE THE BENEFITS TO BUSINESS?

Effects and potential of fair data economy

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Data economy as a competitive edge

Could data economy produce competitive edge for your company? 1658 responses
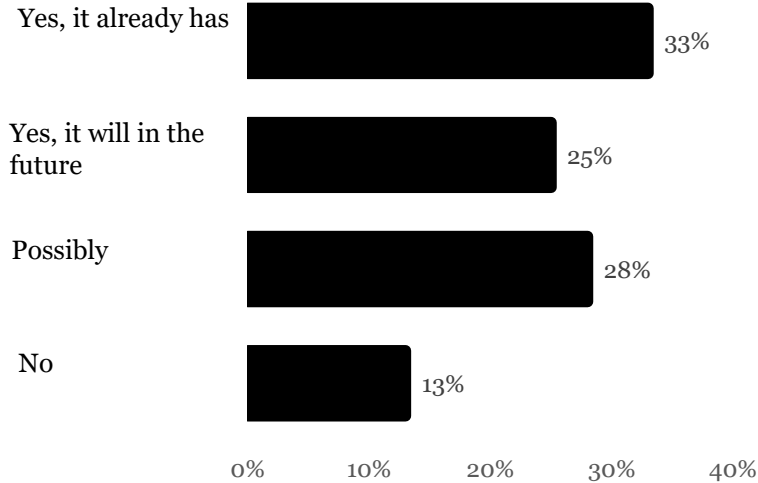
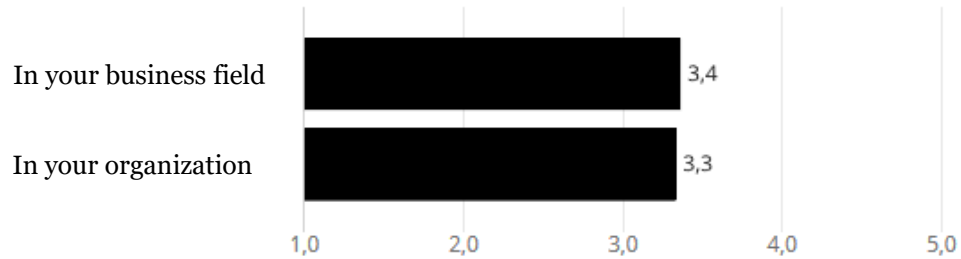| By country	Netherlands (N=425)	Finland (N=425)	Germany (N=405)	France (N=399)
Yes, it already has	35%	23%	**39%**	36%
Yes, it will in the future	28%	19%	21%	33%
Possibly	26%	40%	26%	18%
No	12%	**18%**	14%	13%

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Data economy as a competitive edge

Could data economy produce competitive edge for your company? By main business area,
1639 responses

	Yes, it already has	Yes, it will in the future	Possibly	No
Industry	32%	25%	33%	11%
Construction	34%	35%	17%	14%
Information and communications	51%	24%	19%	6%
Finance and insurance	36%	32%	25%	7%
Professional, scientific, and technological operations	42%	26%	21%	11%
Others	28%	25%	30%	17%
Administrative and support services	31%	23%	27%	18%
Health and social services	31%	21%	30%	19%
Other service operations	24%	20%	37%	18%

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Business potential

Please evaluate how much business potential you see in data exchange? 1657 responses

In your business field	3,4
In your organization	3,3

Scale on top chart: 1,0 — 2,0 — 3,0 — 4,0 — 5,0

	1	2	3	4	5
In your business field	8%	10%	33%	34%	15%
In your organization	9%	11%	33%	33%	14%

Scale on bottom chart: 0% — 20% — 40% — 60% — 80% — 100%
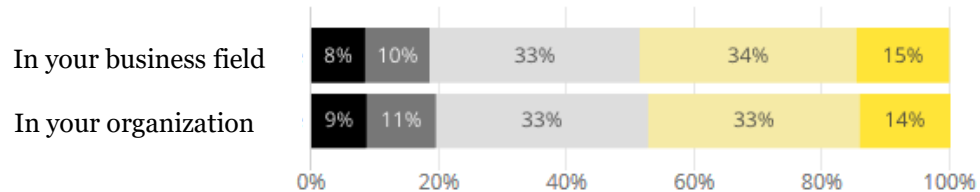
● 1 ● 2 ● 3 ● 4 ● 5

Scale: 1 = no potential ... 5 = very large potential

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Business potential

Please evaluate how much business potential you see in data exchange? 1657 responses

By country	Netherlands		Finland		Germany		France	
	Average	N	Average	N	Average	N	Average	N
In your business field	3.4	424	3.2	422	3.3	402	3.5	398
In your organisation	3.4	425	3.1	416	3.3	396	3.5	398

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Business potential

Please evaluate how much business potential you see in data exchange… By main business area, 1638 responses

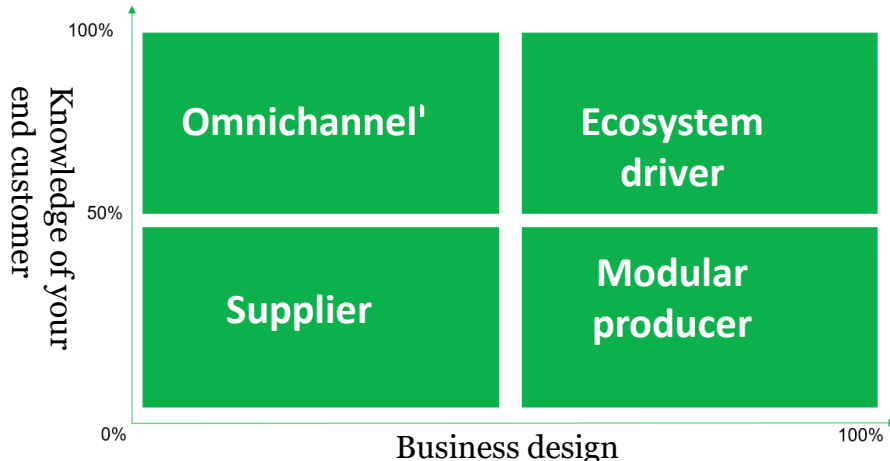| Field	N	In your organization / Keskitaso	N	In your business field / Keskitaso
Industry	170	**3,3**	173	**3,2**
Construction	109	**3,4**	109	**3,4**
Information and communications	141	**3,7**	140	**3,7**
Finance and insurance	110	**3,6**	112	**3,6**
Professional, scientific and technological operations	202	**3,5**	205	**3,5**
Others	459	**3,2**	460	**3,3**
Administrative and support services	114	**3,4**	114	**3,3**
Health and social services	115	**3,2**	117	**3,3**
Other service operations	200	**3,1**	201	**3,2**

Scale: 1 = no potential … 5 = very large potential

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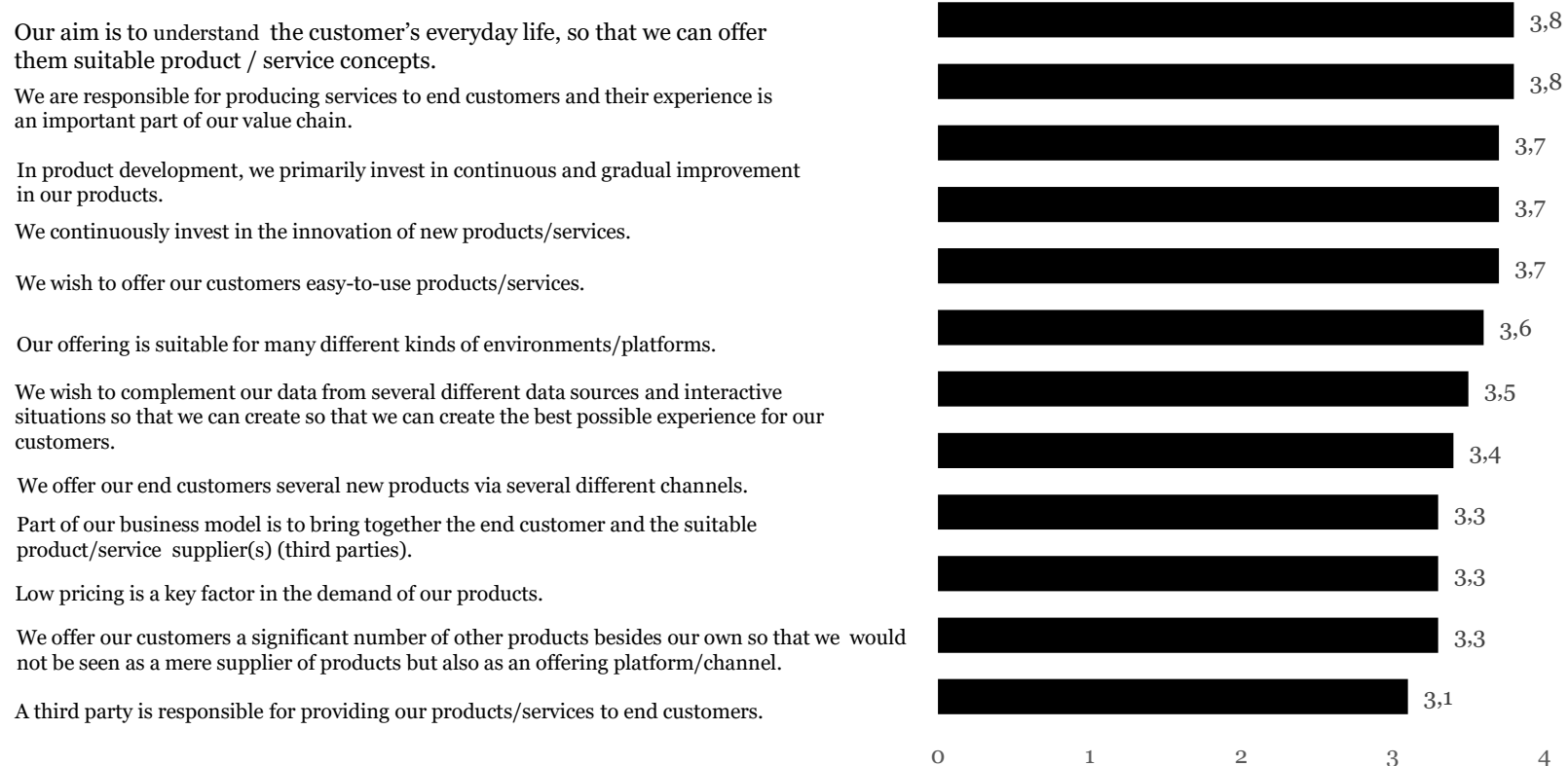# DIGITAL BUSINESS MODELS

Claims and comparison

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Company's current business operations

- The study included investigation of the nature of the respondent companies' digital business models.

- The analysis is loosely based on the MIT Sloan Center for Information System Research's (2017) division model (Weill & Woerner: What's Your Digital Business Model?: Six Questions To Help You Build The Next-Generation Enterprise, HBR Press 2018).

- Each of the four digital business profiles (below in a four square matrix) were converted to corresponding business claims on two axes: Y-axis: Maturity of creating and utilizing customer insight. X-axis: Refinement of digital business model.

- Next we will go over the results by claim and by country.

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Company's current business operations

From the following data economy related statements, choose how well they describe your company's current business, 1618 responses

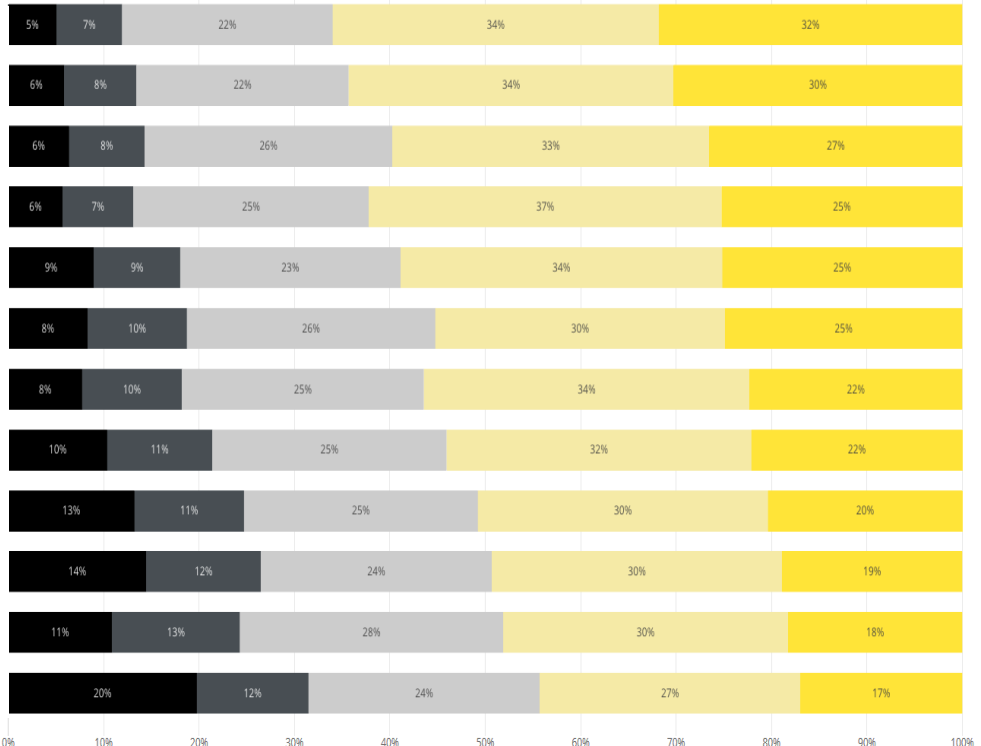| Statement	Score
Our aim is to understand the customer's everyday life, so that we can offer them suitable product / service concepts.	3,8
We are responsible for producing services to end customers and their experience is an important part of our value chain.	3,8
In product development, we primarily invest in continuous and gradual improvement in our products.	3,7
We continuously invest in the innovation of new products/services.	3,7
We wish to offer our customers easy-to-use products/services.	3,7
Our offering is suitable for many different kinds of environments/platforms.	3,6
We wish to complement our data from several different data sources and interactive situations so that we can create so that we can create the best possible experience for our customers.	3,5
We offer our end customers several new products via several different channels.	3,4
Part of our business model is to bring together the end customer and the suitable product/service supplier(s) (third parties).	3,3
Low pricing is a key factor in the demand of our products.	3,3
We offer our customers a significant number of other products besides our own so that we would not be seen as a mere supplier of products but also as an offering platform/channel.	3,3
A third party is responsible for providing our products/services to end customers.	3,1

0   1   2   3   4

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Scale: 1 = does not describe at all … 5 = describes very well

Company's current business operations

From the following data economy related statements, choose how well they describe your company's current business, 1618 responses

Statement	1	2	3	4	5
Our aim is to understand the customer's everyday life so that we can offer them suitable product / service concepts.	5%	7%	22%	34%	32%
We are responsible for producing services to end customers and their experience is an important part of our value chain.	6%	8%	22%	34%	30%
In product development, we primarily invest in continuous and gradual improvement in our products.	6%	8%	26%	33%	27%
We continuously invest in the innovation of new products/services.	6%	7%	25%	37%	25%
We wish to offer our customers easy-to-use products/services.	9%	9%	23%	34%	25%
Our offering is suitable for many different kinds of environments/platforms.	8%	10%	26%	30%	25%
We wish to complement our data from several different data sources and interactive situations so that we can create so that we can create the best possible experience for our customers .	8%	10%	25%	34%	22%
We offer our end customers several new products via several different channels.	10%	11%	25%	32%	22%
Part of our business model is to bring together the end customer and the suitable product/service supplier(s) (third parties).	13%	11%	25%	30%	20%
We offer our customers a significant number of other products besides our own so that we would not be seen as a mere supplier of products but also as an offering platform/channel.	14%	12%	24%	30%	19%
Low pricing is a key factor in the demand of our products.	11%	13%	28%	30%	18%
A third party is responsible for providing our products/services to end customers .	20%	12%	24%	27%	17%

● 1 ● 2 ● 3 ● 4 ● 5   Scale: 1 = does not describe at all … 5 = describes very well

Company's current business operations

Positioning in a digital business model. All the countries, 1663 responses

24% of respondents could not be classified due to either non-responses or repeated estimations

Positioning by country	Netherlands (N=334)	Finland (N=341)	Germany (N=289)	France (N=302)
Omnichannel	104 / 31%	160 / 47%	89 / 29%	98 / 32%
Supplier	61 / 18%	54 / 16%	59 / 20%	55 / 18%
Ecosystem driver	81 / 24%	43 / 13%	51 / 17%	58 / 19%
Modular producer	88 / 26%	84 / 25%	90 / 30%	91 / 30%

Netherlands:		France:		Germany:		Finland:	
31%	24%	32%	19%	29%	17%	47%	13%
18%	26%	18%	30%	20%	30%	16%	25%

There are most omnichannel organisations in Finland, but also a lot of ecosystem operators.
There are most ecosystem drivers in France and Germany.
There are product suppliers equally in all of the markets.

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WHERE DO WE GO FROM HERE? FUTURE SCENARIOS

Current situation, Scenario 1 and Scenario 2 + comparisons

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Company's current situation

Consider the following questions by thinking about **your company's current situation**, meaning your company's business operations today. (N=1596)

Effect of the data economy created by market digitalisation on your company's business in the current situation

Negative effect	No effect	Positive effect
7%	53%	40%

Effect of the digitalisation of your customer's behaviour while developing your company's customer understanding.

Negative effect	No effect	Positive effect
7%	49%	44%

0 %   20 %   40 %   60 %   80 %   100 %

■ Negative effect   ■ No effect   ■ Positive effect

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Company's current situation

| Current situation – By country	Netherlands (N=412)			Finland (N=406)			Germany (N=385)			France (N=392)		
	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect
Effect of the data economy created by market digitalisation on your company's business in the current situation	6%	55%	39%	9%	48%	43%	8%	54%	38%	7%	53%	40%
Effect of the digitalisation of your customers' behaviour while developing your company's customer understanding	7%	52%	41%	5%	47%	48%	9%	50%	41%	6%	49%	45%

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Portion of your company's turnover subject to business risk under current circumstances

Please evaluate, **under current circumstances**, what portion of your company's turnover digitalisation and data economy subject to business risk (business lost to competition or solutions created by digitalisation)? 1581 responses
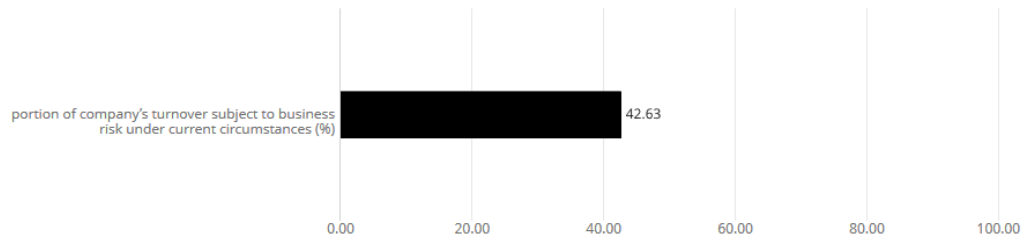
By country	Portion of company's turnover subject to business risk under current circumstances (%)	N
Netherlands	49.85	411
France	43.03	390
Germany	41.68	387
Finland	35.54	392

Scale: 0% - 100%

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FUTURE SCENARIO 1

- Digitalisation and data economy undergo strong development led by large global corporations
- There will be new platforms, but - just like today - operations focus on one platform per business field and there is no room for other options
- Consumers will not have genuine choice over or influence on how their collected data is used

- **How will your company's business look in 2025 if this scenario becomes reality?**

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Future scenario 1

Consider the following questions with **<u>future scenario described above</u>** in mind.
1601 responses

Effect of the data economy created by market digitalisation on your company's business in the current situation

Negative effect	No effect	Positive effect
16%	54%	30%

Effect of the digitalisation of your customer's behaviour while developing your company's customer understanding.

Negative effect	No effect	Positive effect
13%	50%	37%

0 %   20 %   40 %   60 %   80 %   100 %

■ Negative effect   ■ No effect   ■ Positive effect

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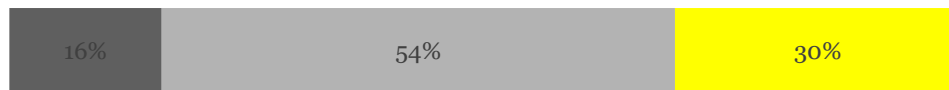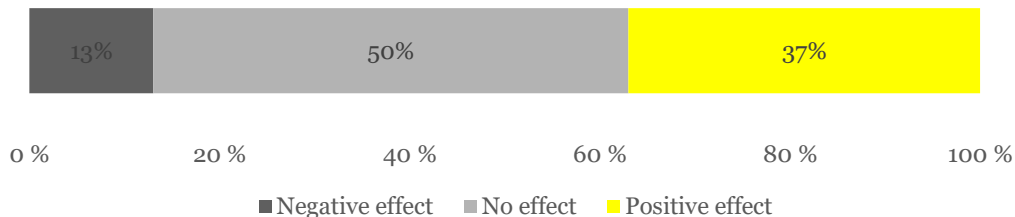
Future scenario 1

Consider the following questions with **future scenario described above** in mind.
1601 responses

Future scenario 1 – By country	Netherlands (N=413)			Finland (N=404)			Germany (N=390)			France (N=393)		
	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect
Effect of the data economy created by market digitalisation on your company's business in the current situation	12%	56%	32%	22%	50%	28%	18%	53%	29%	12%	55%	32%
Effect of the digitalisation of your customers' behaviour while developing your company's customer understanding	12%	47%	41%	15%	52%	33%	15%	55%	31%	12%	46%	42%

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Future scenario 1

Please evaluate, **in light of future scenario 1**, what portion of your company's turnover digitalisation and data economy subject to business risk (business lost to competition or solutions created by digitalisation)? 1559 responses
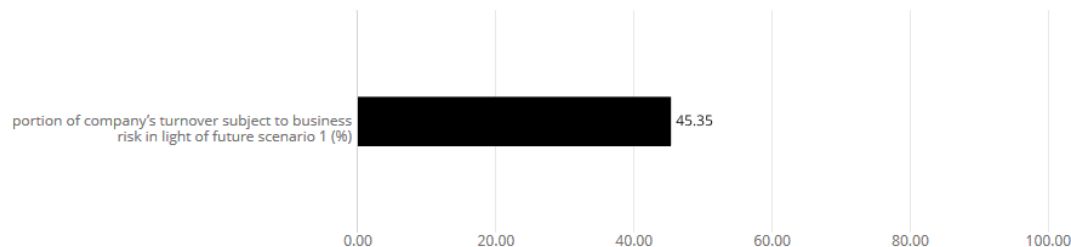
| portion of company's turnover subject to business risk in light of future scenario 1 (%) | 45.35 |

By country	Portion of company's turnover subject to business risk in light of future scenario 1 (%)	N
Netherlands	52.84	408
Germany	45.13	386
France	43.66	380
Finland	39.17	384

FUTURE SCENARIO 2

- In collaboration with companies, the EU will invest in creating principles and guidelines for fair data economy
  - The consumers' right to their data and its control will be strengthened
  - Companies will construct new kinds of value networks
  - Data provided by consumers/shared by companies will enable new, globally competitive service concepts and business models to be created
  - Consumers' right to their data and its control will be strengthened

How will your company's business look in 2025 if this scenario becomes reality?

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Future scenario 2

Consider the following questions with **future scenario described above** in mind.
1602 responses

Effect of the data economy created by market digitalisation on your company's business in the current situation

11%	52%	37%

Effect of the digitalisation of your customer's behaviour while developing your company's customer understanding.

9%	51%	40%

0%   20%   40%   60%   80%   100%

■ Negative effect   ■ No effect   ■ Positive effect

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Future scenario 2

Consider the following questions with **<u>future scenario described above</u>** in mind. 1602 responses

Future scenario 2 – By country	Netherlands (N=412)			Finland (N=406)			Germany (N=392)			France (N=391)		
	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect	Negative effect	No significant effect	Positive effect
Effect of the data economy created by market digitalisation on your company's business in the current situation	11%	53%	37%	9%	50%	41%	12%	54%	34%	12%	52%	37%
Effect of the digitalisation of your customers' behaviour while developing your company's customer understanding	10%	51%	39%	5%	52%	42%	11%	52%	36%	10%	46%	44%

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Future scenario 2

Please evaluate, **in light of future scenario 2**, what portion of your company's turnover digitalisation and data economy subject to business risk (business lost to competition or solutions created by digitalisation)? 1542 responses
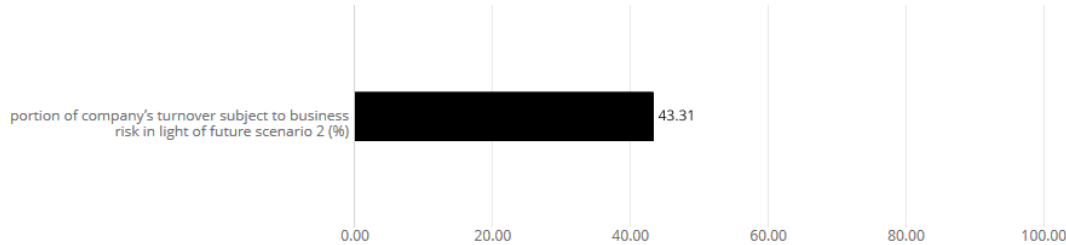
portion of company's turnover subject to business
risk in light of future scenario 2 (%)   43.31

By country	Portion of company's turnover subject to business risk in light of future scenario 2 (%)	N
Netherlands	50.10	400
France	43.16	383
Germany	42.77	382
Finland	36.73	376

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COMPARISON OF SCENARIOS

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Comparisons of scenario 1

The effect of the data economy created by market digitalisation on your company's business...

Scenario	Positive effect (% / 100%)	Negative effect (% / 100%)
Current situation	40%	7%
Scenario 1	30%	16%
Scenario 2 (fair data economy development)	37%	11%

Positive effect	Current situation (%)	Scenario 1 (%)	Scenario 2 (%)
Netherlands	39%	32%	37%
France	40%	32%	37%
Germany	38%	29%	34%
Finland	43%	28%	41%

The effect of the digitalisation of your customers' behaviour while developing your company's customer understanding...

Scenario	Positive effect (% / 100%)	Negative effect (% / 100%)
Current situation	44%	7%
Scenario 1	37%	13%
Scenario 2 (fair data economy development)	40%	9%

Positive effect	Current situation (%)	Scenario 1 (%)	Scenario 2 (%)
Netherlands	41%	41%	39%
France	45%	42%	44%
Germany	41%	31%	36%
Finland	48%	33%	42%

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Scale: 0 % - 100 %

Comparison of scenarios 2

Portion of company's turnover subject to business risk

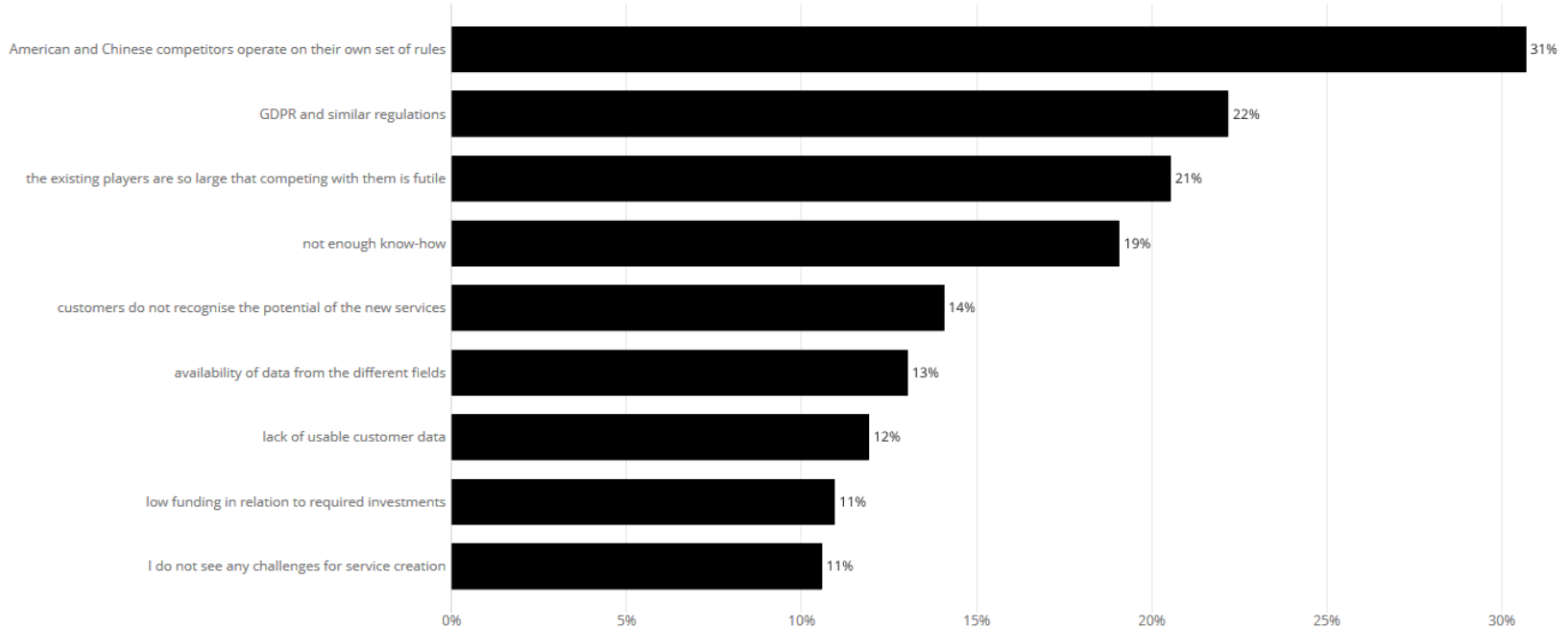| Scenario	Portion of company's turnover subject to business risk (% / 100%)
Current situation	**42,63 %**
Scenario 1	**45,35 %**
Scenario 2 (fair data economy development)	**43,31 %**

By country	Current situation (%)	Scenario 1 (%)	Scenario 2 (%)
Netherlands	**49,85**	**52,84**	**50,10**
France	**43,03**	**43,66**	**43,16**
Germany	**41,68**	**45,13**	**42,77**
Finland	**35,54**	**39,17**	**36,73**

Scale: 0 % - 100 %

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CHALLENGES OF EUROPEAN DATA ECONOMY

Claims and comparison

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Challenges

Which of the following do you see as the biggest challenges regarding the creation of new European services that utilise data? 1636 responses

Challenge	Percentage
American and Chinese competitors operate on their own set of rules	31%
GDPR and similar regulations	22%
the existing players are so large that competing with them is futile	21%
not enough know-how	19%
customers do not recognise the potential of the new services	14%
availability of data from the different fields	13%
lack of usable customer data	12%
low funding in relation to required investments	11%
I do not see any challenges for service creation	11%

Scale: 0 % - 100 %

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Challenges

Which of the following do you see as the biggest challenges regarding the creation of new European services that utilise data?

Statement	Netherlands (N=416)	Finland (N=420)	Germany (N=398)	France (N=398)
American and Chinese operate on their own set of rules	25%	32%	30%	34%
GDPR and similar regulations	19%	14%	34%	21%
The existing players are so large that competing with them is futile	20%	20%	18%	23%
Not enough know-how	18%	22%	16%	19%
Customers do not recognise the potential of the new services	10%	19%	12%	14%
Availability of data from the different fields	12%	13%	14%	12%
Lack of usable customer data	13%	12%	9%	13%
I do not see any challenges for service creation	10%	8%	13%	10%
Low funding in relation to required investments	10%	15%	8%	10%

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Challenges

Which of the following do you see as the biggest challenges regarding the creation of new European services that utilise data? By main business area, 1617 responses

Statement	Industry	Construction	Information and communications	Finance and insurance	Professional, scientific, and technological operations	Others	Administrative and support services	Health and social services	Other service operations
American and Chinese operate on their own set of rules	30%	34%	31%	32%	35%	30%	28%	18%	31%
GDPR and similar regulations	24%	23%	27%	34%	25%	20%	21%	14%	16%
The existing players are so large that competing with them is futile	25%	13%	25%	18%	18%	21%	23%	19%	16%
Not enough know-how	22%	26%	14%	11%	12%	20%	17%	27%	21%
Customers do not recognise the potential of the new services	12%	12%	14%	12%	15%	14%	15%	16%	12%
availability of data from the different fields	12%	15%	13%	12%	12%	11%	16%	18%	12%
Lack of usable customer data	19%	9%	11%	11%	10%	13%	11%	6%	10%
I do not see any challenges for service creation	6%	7%	10%	8%	11%	10%	9%	16%	16%
Low funding in relation to required investments	12%	8%	6%	16%	8%	12%	11%	13%	10%

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PRACTICAL EXAMPLE: FAIR DATA LABEL

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Fair data label

Consumer goods use the fair trade label for products that comply with the Fair Trade requirements. Do you think a similar fair data label would benefit your company?
1620 responses
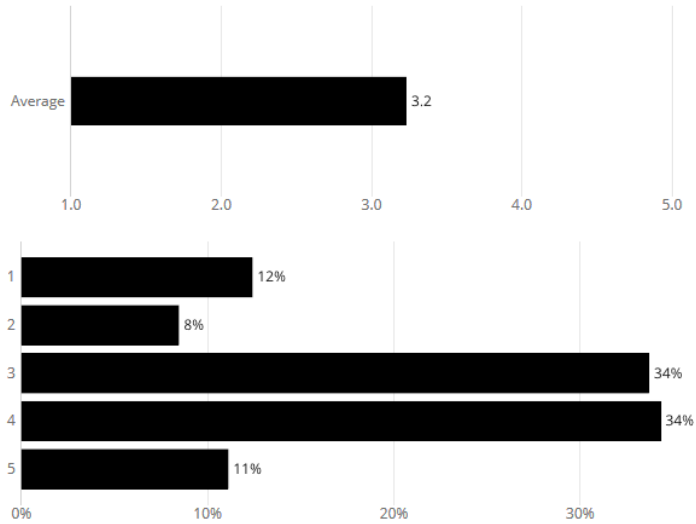
By country	Average	N
Netherlands	3.4	414
France	3.4	397
Germany	3.2	394
Finland	3.0	414

Scale: 1 = no benefit at all … 5 = very high benefit

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CONCLUSIONS

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Conclusions

- Principles of fair data economy
  – **The principles of the fair data economy project were viewed fairly positive** among respondents and were estimated likely to happen. However, the commitment to the principles was felt to be somewhat weaker.
  – Overall, the biggest difference between view and commitment in the principles of a fair data economy project was reflected in respect for individual privacy, even at the expense of customer experience.
  – The biggest differences between the views and the commitments of the principles were among the Finnish respondents, but Finnish respondents mostly rated their views towards the principles quite positively. France was also very likely to view the principles positively.

- Companies' current capability to operate in fair data economy
  – All in all, **French companies experienced claims of data-maturity to be more relevant to their organisations** than other respondents.
  – The most critical about their maturity level of data economy were the Finnish respondents.

- Business potential
  – More than half of all the respondents felt that the **data exchange has already formed or could form a competitive advantage** for its organisation in the future.
  – Data exchange was experienced to have a bit of a business potential in both the respondent's business field and the organisation. The greatest potential was experienced by French respondents, while the weakest potential was experienced by Finnish respondents.
  – German companies were a bit ahead of other countries in the formation of a competitive advantage, while Finnish companies experienced more often than other respondents that the data exchange could not be a competitive advantage.

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Conclusions

- Digital business models
  - In the digital business model, most of the respondent companies were classified as a omnichannel. More often than other respondents, omnichannels were Finnish companies.
  - Many respondents positioned themselves as modular producers, who were more often German and French companies.
  - The main business area, for example, had also an impact on the company's positioning and overall responses.

- Challenges in European data economy
  - **The biggest challenges regarding the creation of new European services that utilize data were that American and Chinese competitors operate on their own set of rules.**
  - This was seen as the biggest challenge in all other countries except in Germany, where the most challenging factor was GDPR and other similar regulations. In Finland, however, GDPR was seen as one of the smallest challenges.

- Fair data label
  - The label of fair data was not considered to give a great benefit to organisations among all the respondents.
  - Especially Finnish respondents rated the benefits of a fair data label lower than other countries.

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Conclusions

- Summary on scenarios

  - **In the current circumstances, the effect of the data economy created by market digitalization on respondent's company's business, and the effect of the digitalization of customers' behaviour while developing company's customer understanding, had the most positive impact in Finland.**

  - Finns also felt that their portion of company's turnover subject to business risk under current circumstances was the lowest compared to other countries. The Netherlands felt that the proportion subject to business risk was almost half, while it was only about 36% for Finns.

  - The scenarios did not affect the overall portion subject to business risk among the French respondents.

- Scenario 1

  - The Finns felt that the effects of scenario 1 had an impact on business and customer understanding more negatively than other countries, while France saw the effects most positively.

  - However, the Finns' estimated the portion of company's turnover subject to business risk only by a few percentage points higher under scenario 1 than under current circumstances; Netherlands estimated the proportion subject to risk the highest, 53%.

- Scenario 2

  - The Germans, on the other hand, felt that the effects of scenario 2 would affect business and customer understanding more negatively than other countries, when Finns felt that the effects were positive especially for business and French for customer understanding. Finns' estimation of the proportion subject to business risk decreased to almost the same level than it was in the current circumstances. Portion decreased also in the Netherlands.

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OBSERVATIONS

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FAIR DATA ECONOMY?

ATTITUDES

Attitudes towards the principles were generally quite positive (slightly under 4/5).
The biggest gap in commitment was found in the theme of respecting privacy if it happens at the expense of improving the customer experience. The gap is moderate (-0.29) but it may reflect the reality that engaging in data economy does not offer only benefits to companies.

OPERATIVE
CAPABILITIES

About half of the theme's responses indicate level 4-5 capabilities that can be seen as prerequisites for successful business in a data economy. It is clear that companies feel they already have relevant capabilities (varying slightly between countries). The clearest strategic challenge is caused by the attitude that only 15% rated sharing data with others as a 5/5 good thing.

RELEVANCE AND / OR
BUSINESS POTENTIAL

How much opportunities enabled by data economy show in the companies' business operations can be seen as surprisingly strong (a third states they have already gained competitive advantage), considering that the respondents' digital business models were quite unstructured (a fourth of the respondents were operating either multiple profiles or in between them). It is also somewhat surprising how weak / critical the responses were from certain industries that would presumably be consumer-led.

DEGREE OF USE

The main finding relating to the four digital business models examined was that a quarter of the companies did not clearly fall under any of these market operator profiles. This result is most likely caused by the fact that utilizing data economy is still so new in many companies that it happens organically in multiple ways at the same time, not as a result of strategic planning or management.

PREDICTION OF ADVANCES

The future scenarios pose a clear challenge to the development of fair data economy: Corporation-led development limiting consumers' rights and influence (scenario 1) is seen most clearly as a risk/threat, but the positive value creation it offers is still stronger than the negative image. Partly this reflects the challenges of being able to compete with American and Chinese companies, which was seen as the biggest challenge (31%).

EUROPEAN CHALLENGES
PRACTICAL EXAMPLE

Legislation needed for fair data economy (e.g. GDPR) is seen as a challenge for creating new services. Companies' reservations are also seen in their neutral attitudes towards the potential benefits of using the Fair Data Label (benefits scored at 3.2 / 5.0)

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"Sharing data with other operators is good"
-> relatively weak.

GDPR and other similar regulation is seen as a significant challenge.

Ethical principles are generally well-supported (approx. 3.9 / 5.0).

Digital business models are not wholly segmented, which is a sign of a market still in development?

Corporate-led scenario seen the strongest threat, but current state has the best benefits.

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RISE TO SHINE!