

Webinar: European Digital Innovation Hubs (EDIH): Towards a service hub network for transformation

23 June 2020



Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet

Welcome to the webinar on

European Digital Innovation Hubs

Petri Räsänen, Development Director



Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet

How to maximise the impact of investments on European Digital Innovation Hubs for Finland and Europe?



Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet

DESI 2020



CONNECTIVITY



HUMAN CAPITAL



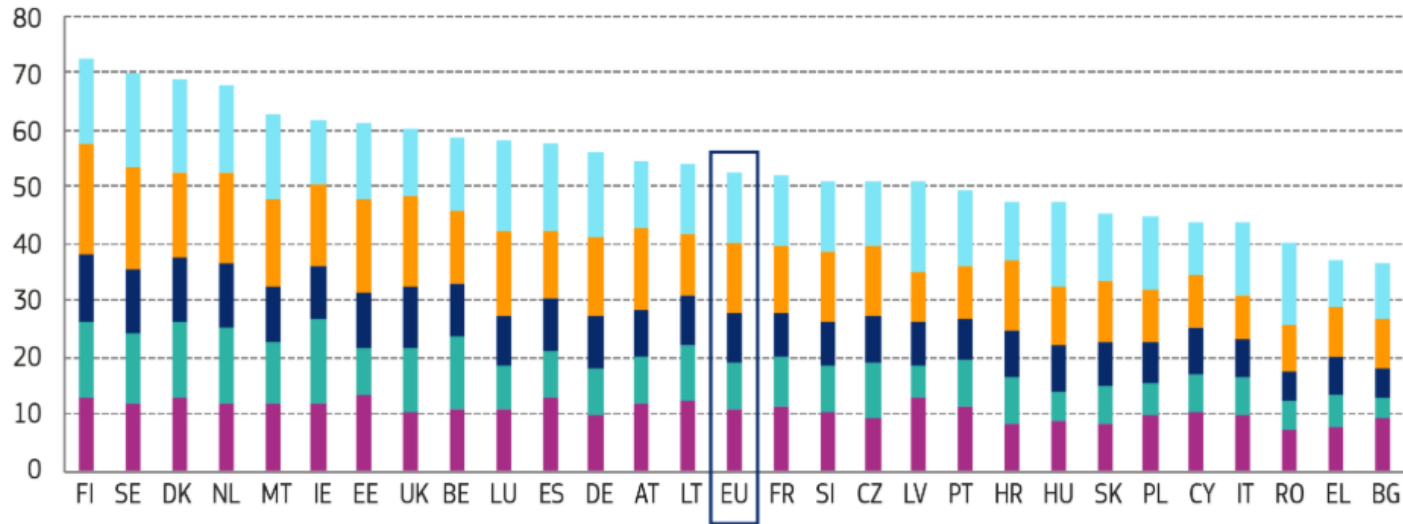
USE OF INTERNET SERVICES



INTEGRATION OF DIGITAL TECHNOLOGY



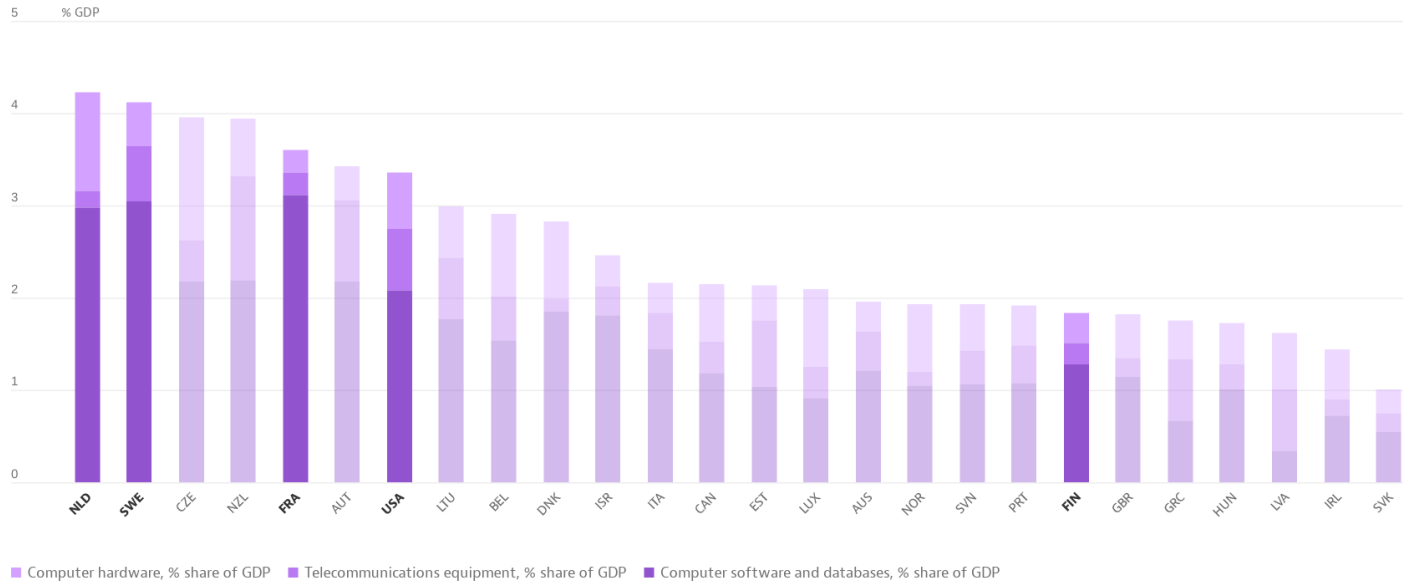
DIGITAL PUBLIC SERVICES



ICT investment as a percentage of GDP

ICT investment as a percentage share of GDP. This indicator provides a measure of ICT diffusion throughout the economy. ICT investment refers to gross fixed capital formation (GFCF) of "information and communication equipment" and "computer software and databases", as defined by the System of National Accounts 2008 (SNA08).

For more information on this indicator visit <https://goingdigital.oecd.org/en/indicator/30/>



Source: OECD, National Accounts Statistics; Eurostat, National Accounts Statistics and national sources.

The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.



The Finnish context of digital transformation



- **Finland performs very well in human capital, infrastructure and public services, but not equally well in digital renewal of businesses and value creation**
- **Investments in ICT are at a comparatively low level → negative impact on prospects of productivity and employment**
- **Recovery from Covid-19 crisis calls for an accelerated digital transformation of businesses**
 - EU: Green Deal + Europe Fit for Digital = Twin Transition → Green and Digital Recovery
- **Roadmap for increasing RDI investments (4 % GERD) in place**
- **No overall strategy for the 4th industrial revolution in place**



Technology

AI, IoT,
5G,
AR/VR,
Block
chain,
Quantum

Materials,
Robotics,
3DP,
Photonics

Data and
platform
economy

AI 4.0

Development
program for
sustainable 4th
industrial
revolution

Societal challenges

Innovation
environment

Value creation

Business models

Circular
economy

Climate

AI 4.0 Objectives



- **Improve productivity and sustainability by accelerating investments in digital transformation**
- **Create more versatile data-driven business ecosystems in industrial and service sectors**
- **Promote Finland's participation in European initiatives for digital sovereignty**



Welcome!

Question 1



Are digital innovation hubs now more relevant than before COVID-19?

Yes / No

Join at
slido.com
#2072





Digital Innovation Hubs in Digital Europe Programme – Current Status

European Digital Innovation Hubs (EDIH):
Towards a service hub network for transformation
23 June 2020

Arian Zweegers

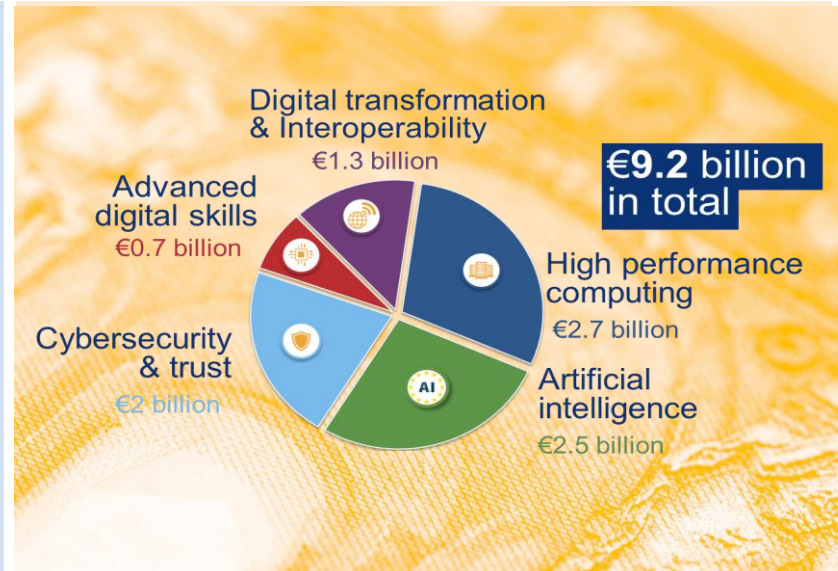
Digital Europe Programme

building strategic digital capacities and large-scale deployment of digital technologies

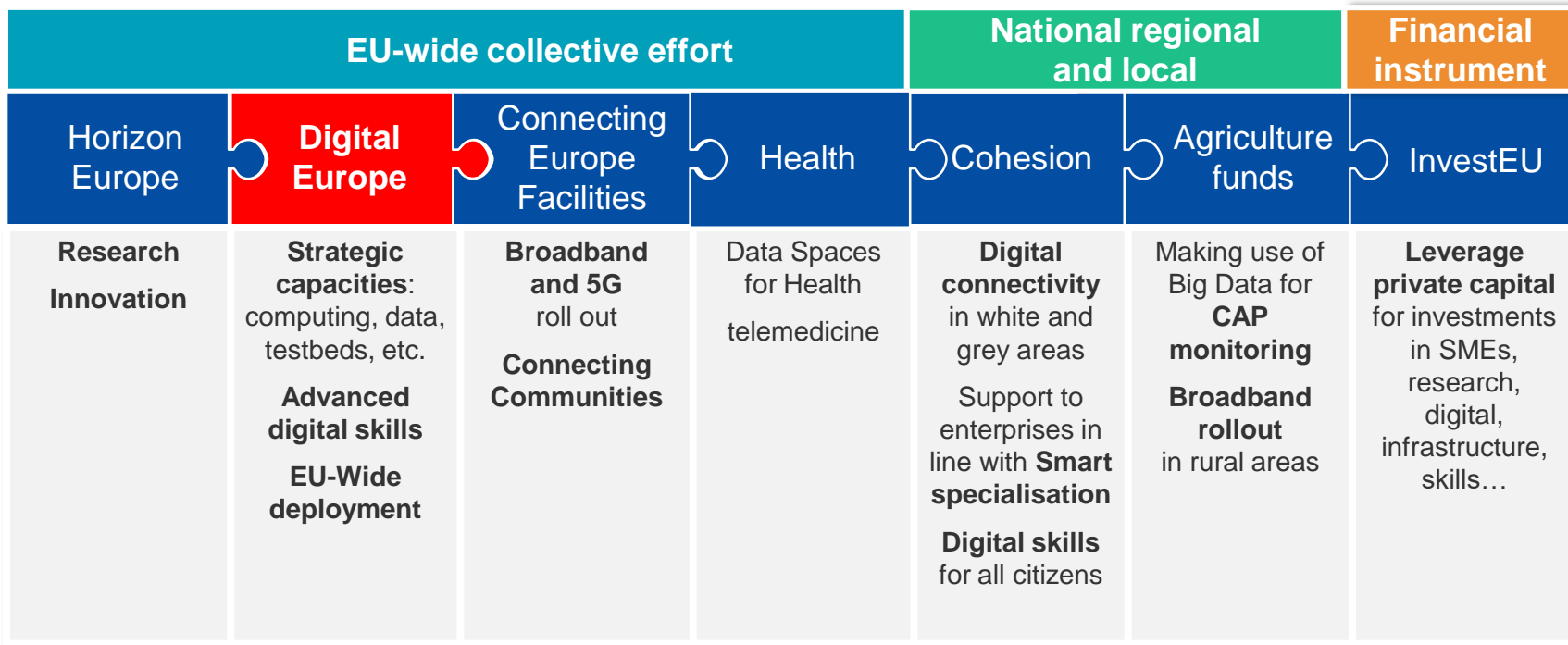
Why

- Compete globally
- Achieve scale through collective co-investments
- Regain control over Europe's value chains and ensure Europe's technological sovereignty
- Better address Europe's economic and societal challenges
- Ensure broad take-up of digital technologies across all regions of EU
- Support SMEs to acquire/access latest technologies and skills

What



Programmes are complementary



Building essential digital capacities

High-performance computing

Artificial intelligence

Cybersecurity

Advanced digital skills

European digital innovation hubs

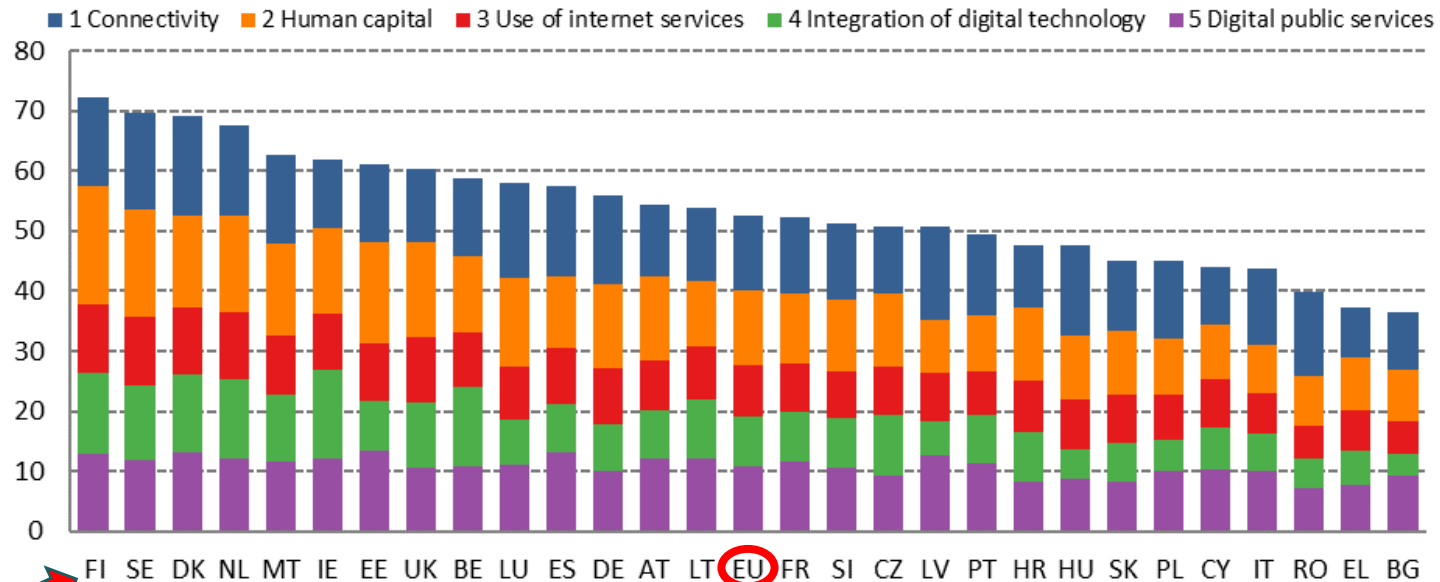
Deployments



Where do we stand today?

European companies are not making the most of digital opportunities

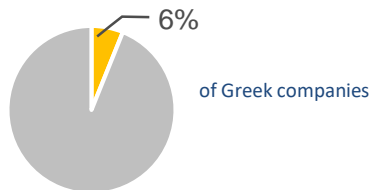
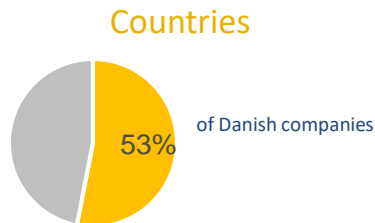
Digital Economy and Society Index (DESI) 2020 ranking



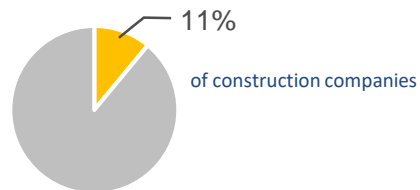
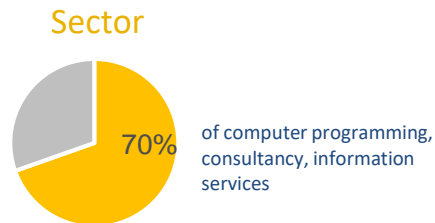
Where do we stand today?

(section 1.1)

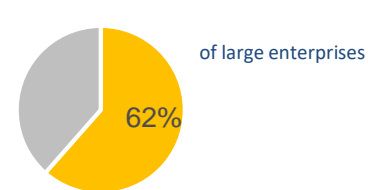
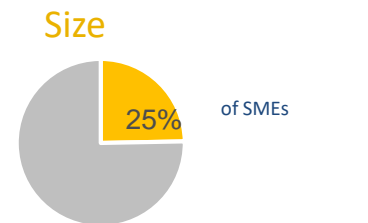
Highly digitised companies across countries, sector, and size



In Finland:
52% of companies



In Finland:
78% in Professional, scientific, and technical activities vs 28% in Construction



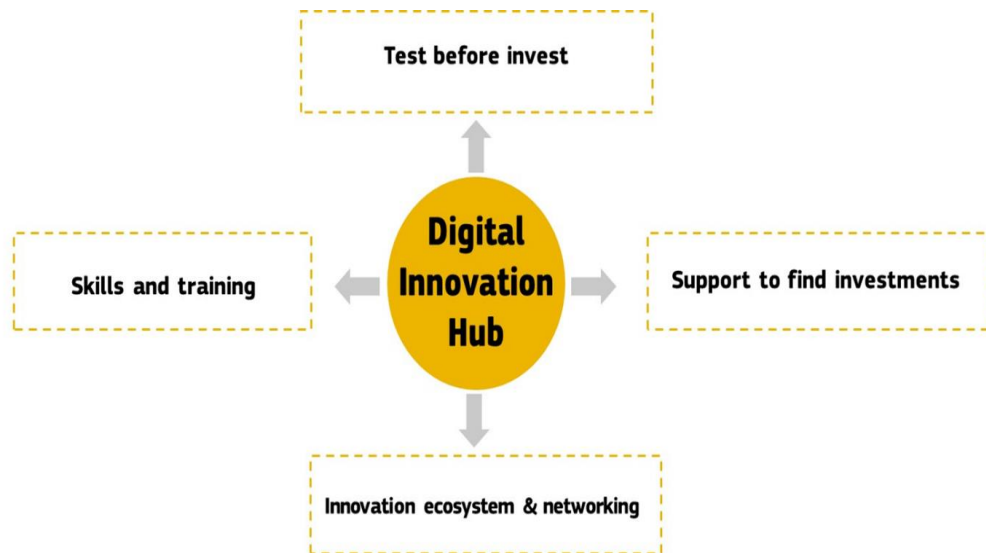
In Finland:
51% of SMEs vs 92% of large enterprises



European Digital Innovation Hubs

(sections 1.3, 1.4)

A European Digital Innovation Hub is a single organisation or a coordinated group of organisations with complementary expertise, with a not-for-profit objective that provides technological expertise and experimentation facilities to enable the digital transformation of industry and the public sector.



- Typical participants:
 - Research and Technology Organisations, Technical Universities
- In collaboration with:
 - Industry associations
 - Clusters
 - Enterprise Europe Network
 - Accelerators/Incubators
 - Innovation agencies
 - Vocational training institutes
- A geographically spread network of up to 240 EDIHs

EDIH – What's new

(summary)



EU support for roughly one
DIH per region



Co-investment with Member
States and Regions



Supporting industry and public
services



Focused on HPC, AI,
Cybersecurity, Digital Skills



A strong European network of DIH

EDIH Focus

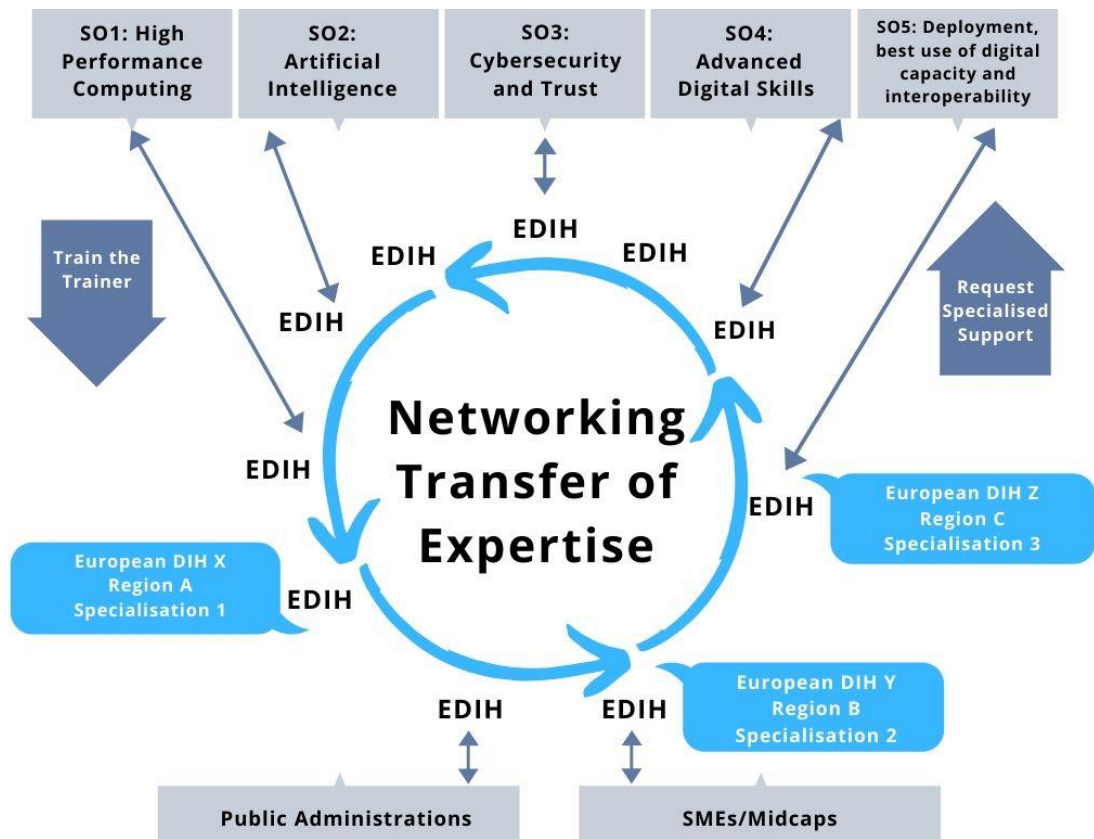
(section 2.5)

Based on existing strengths and addressing future needs of local industry and/or public sector organisations

DEP	Other Technologies	Application areas	Sector
AI, HPC, or Cybersecurity	Simulation Supply chain integration Blockchain, Advanced Materials, ...	Industry 4.0 Circular economy	Manufacturing
	Remote sensing, Photonics, Life-Science Technologies, ...	Precision farming	Agri-food
	Robotics, Simulation, ...	Exo-skeletons, Automated building	Construction
	Digital solutions for governments Blockchain, ...	Services for citizens, once- only principle	Public administration
...

Network of EDIHs

(section 2.6)



Capacity building of EDIHs

- Grant for facilities and people to work in the hub, 50% co-funded by EU, and by MS or regions (ERDF may be used)
- Access to European capacities for digital transformation in HPC, AI, Cybersecurity
- Access to knowledge and facilities of other EDIHs
- Supported by “**Digital Transformation Accelerator**”, a central node that animates the network
 - Community building events
 - Training the hubs
 - Best practice sharing
 - Interactive catalogue of EDIHs
 -

Performance monitoring: KPIs

(section 2.7)

- Number of businesses and public sector entities that have used the services of the European Digital Innovation Hub
- Number of Collaborations with other EDIHs and stakeholders outside the region at EU level
- Number of Infrastructures jointly shared / joint investments
- Digital maturity evolution of the entities that have been supported by the European Digital Innovation Hub

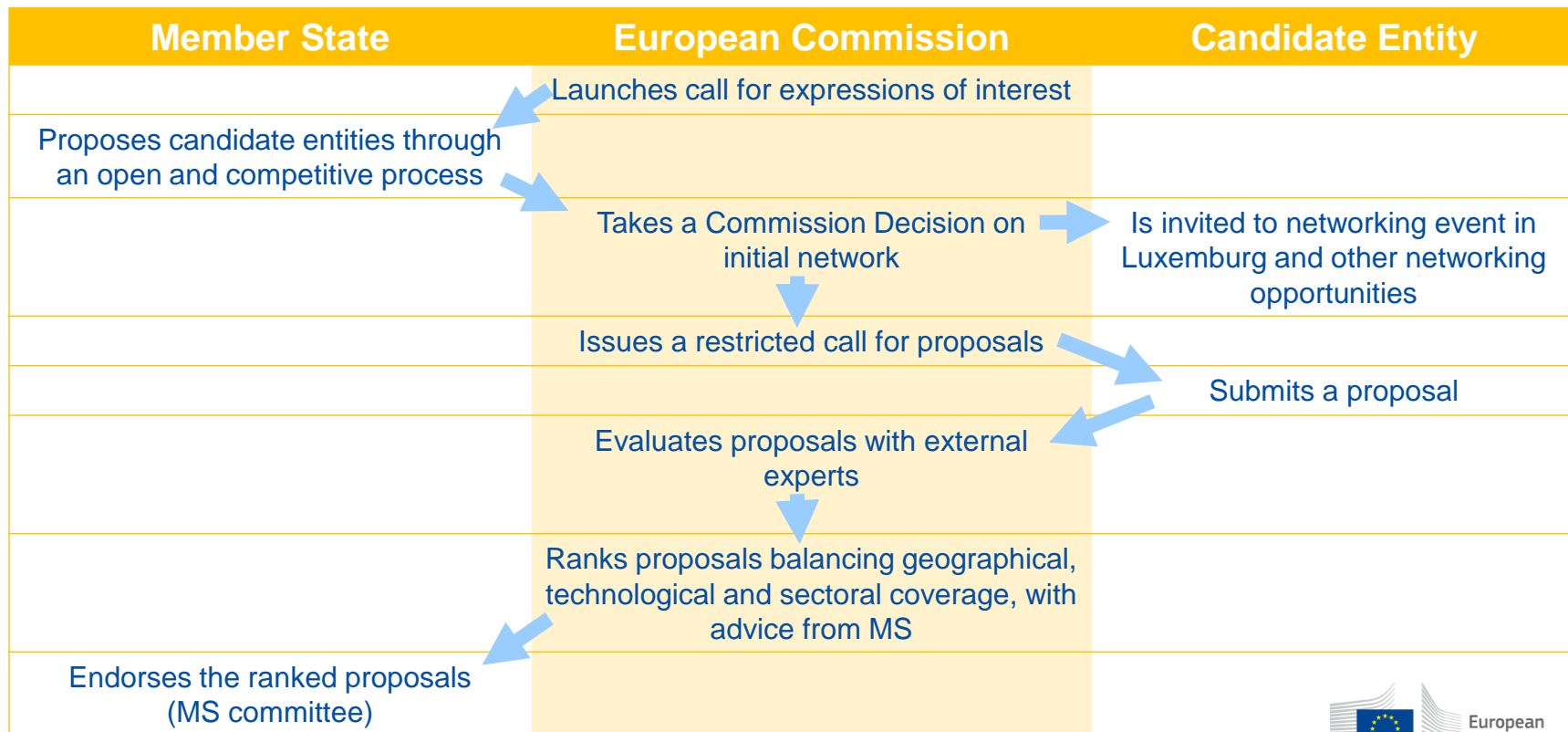
Grants

(section 3.1)

- Direct and indirect eligible costs
 - Indirect costs = 7% of direct costs
 - Direct costs: e.g. purchase of hardware or software, depreciation of hardware or software, personnel costs of the EDIH for delivering digital transformation services, travel costs for hubs and local stakeholders to work with other hubs
- Price list for services to-be-provided, and estimated number of customers

Two-Step Selection Process for first grants

(section 3.2)



Selection Process – Next Steps

Member States

- Designation of hubs by Oct 2020
- May use a light process, for instance Expression of Interest, identifying only core partners of the EDIH

Commission

- Communication campaign with MS
- Finalisation of budget discussions on next MFF
- Fully digital EDIH networking event around 9-11 November 2020, organized with Luxembourg
- Restricted call: Q4 2020 (?)

More information

- Digital Innovation Hubs
 - <https://ec.europa.eu/digital-single-market/en/digital-innovation-hubs>
- Digital Innovation Hubs in Digital Europe Programme
 - <https://ec.europa.eu/digital-single-market/en/european-digital-innovation-hubs-digital-europe-programme-0>
- Country contact points for European Digital Innovation Hubs
 - <https://ec.europa.eu/digital-single-market/en/news/country-contact-points-european-digital-innovation-hubs>

Keep in touch

Arian Zwegers

European Commission

Directorate-General for Communication Networks, Content and Technology

Artificial Intelligence & Digital Industry – Technologies & Systems for Digitising Industry Unit



Arian.Zwegers@ec.europa.eu



[@DigIndEU](https://twitter.com/DigIndEU)

Thank you



© European Union 2020

Unless otherwise noted the reuse of this presentation is authorised under the [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/) license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

**Disclaimer: The views expressed here are for further discussion with the MS.
The EC cannot be held liable for any of the views expressed in this document.**





Question 2

2. What should be the most significant benefit of EDIHs for companies in Finland?

- ▶ Raising awareness
- ▶ Networking and ecosystem
- ▶ Testing and experimentation
- ▶ Advanced technological support
- ▶ Business model development support
- ▶ Access to finance and enabling investments

Join at
slido.com
#2072





VTT



Finnish EDIH perspectives

June 23, 2020

**Riikka Virkkunen
Professor of Practice, VTT**

23/06/2020 VTT – beyond the obvious

Digital Innovation Hubs in Finland - background

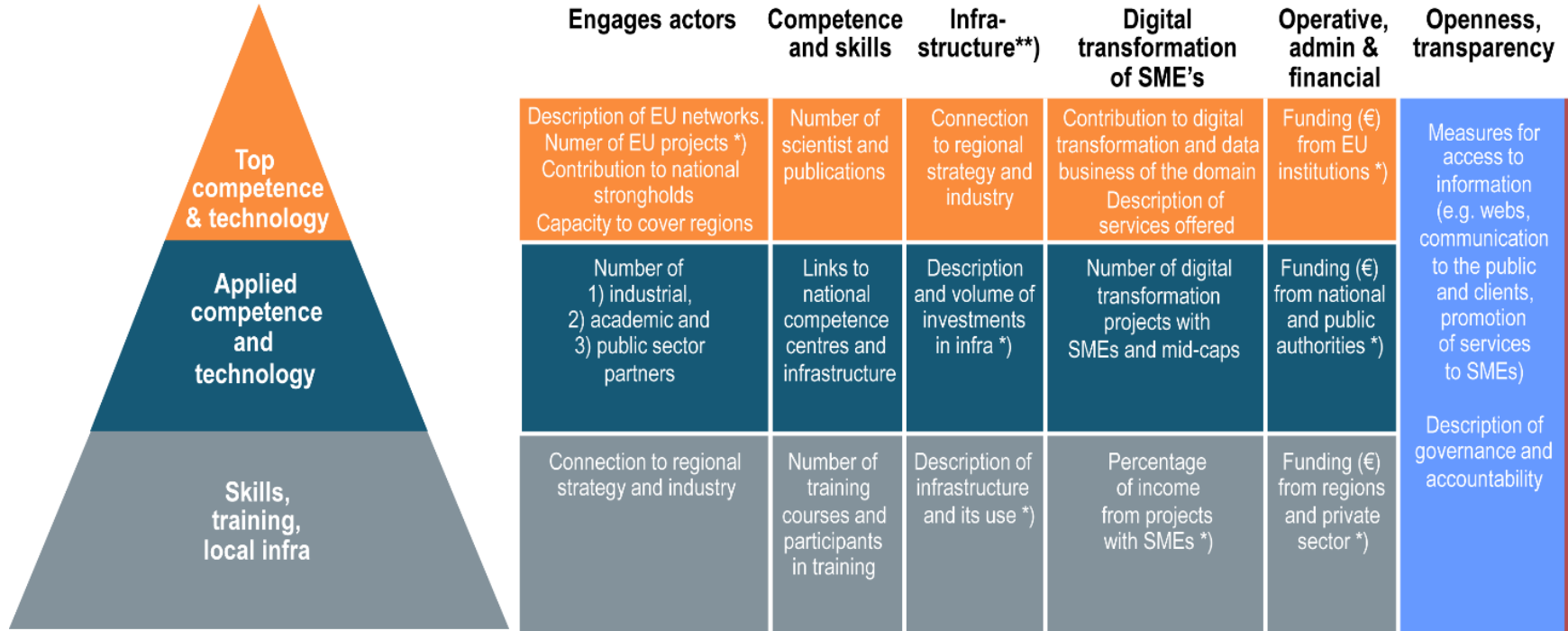
Finland needs a network of DIHs that

- is based on a national digitalization vision and targets
- rests upon Finnish strengths: sectors exploiting digitalisation and cutting edge digital technologies
- combines regional, national, European and global digitalization pursuits
- brings value to Europe and is consistent with European approaches

Each Finnish DIH needs to have

- an ambitious vision to reach for top competence and impact
- capacity to orchestrate ecosystems and combine regional/national/European targets
- a broad set of digitalisation services, in particular for SMEs, and support to data based business creation

Digital Innovation Hubs in Finland - background

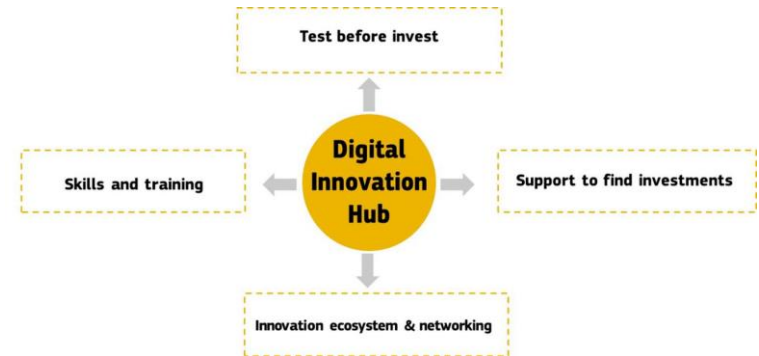
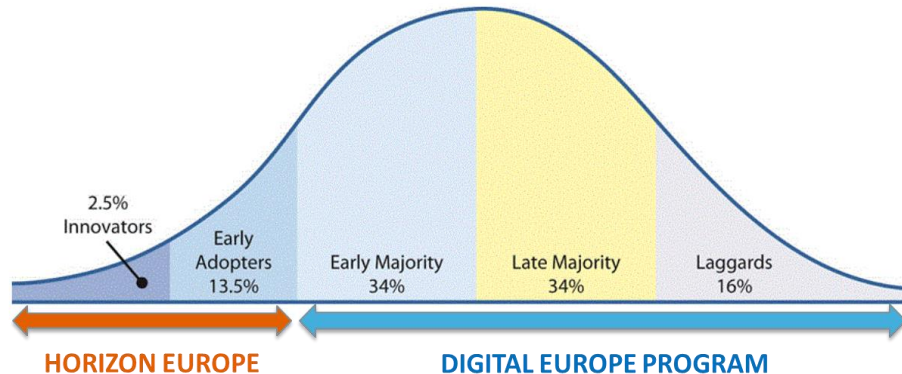


*) during last 3 years

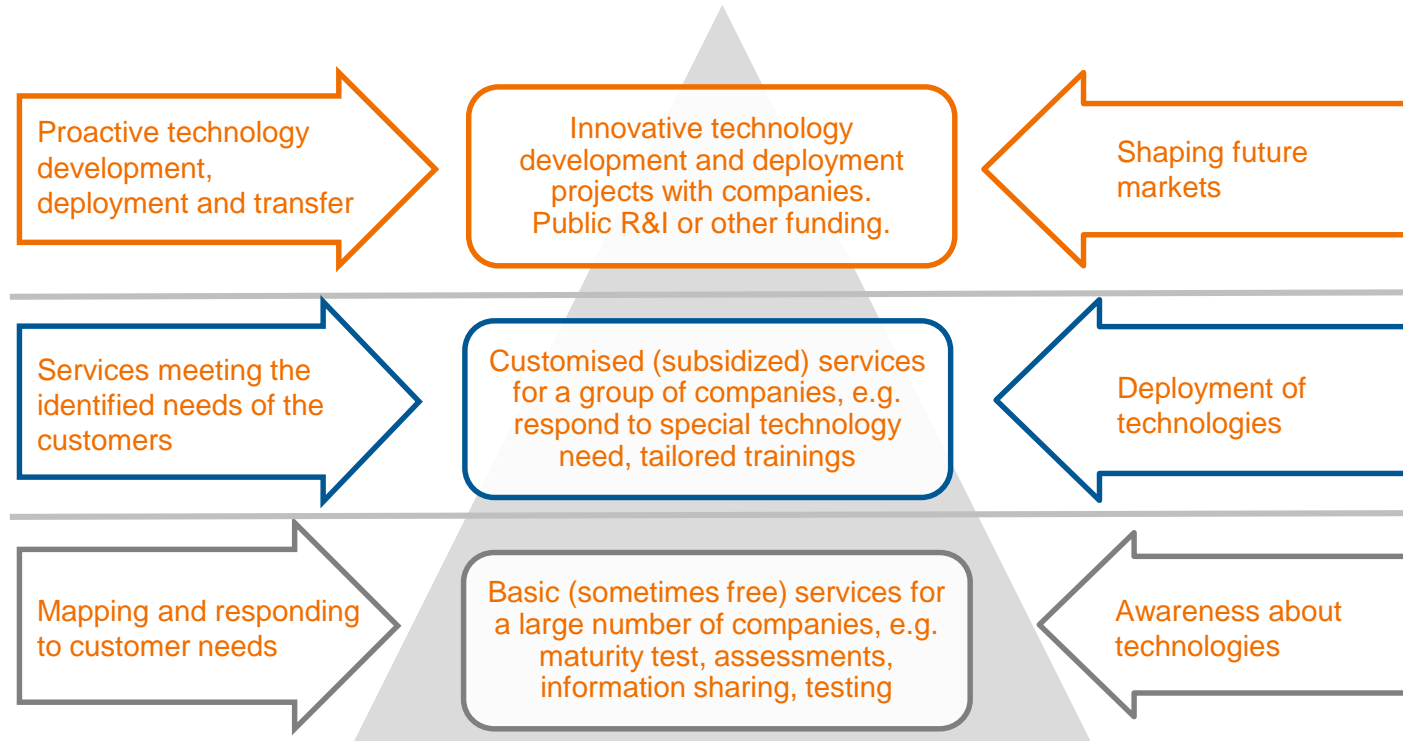
**) Infrastructure supporting digital transformation and incl. data & platforms

European Digital Innovation Hubs

- Implement objectives of the **Digital Europe Programme**
- Must have **European added value** and impact - precondition for EU funding
- **Access points to latest digital capacities** including high performance computing (HPC), artificial intelligence, cybersecurity, as well as other emerging innovative digital technologies
- Bring together **national and European networks and ecosystems**



EDIH service layers



What elements do we have already?

- Hubs, ecosystems and networks based on regional/national/domain/sectoral needs
- Testbeds, pilot lines and infrastructure for other testing and experimentation
- Top digital competences, flagships
- Leading digital companies
- High technology adoption in several economic sectors
- National initiatives (e.g. on AI), open-innovation models
- DIHs in the European Catalogue and DIH networks based on Horizon2020 collaboration
- Etc.

How to combine exiting great elements to build EDIHs that help companies and bring additional value to society in Finland and EU?

bey⁰nd

the obvious

Riikka.Virkkunen@vtt.fi

Katja.Ojakangas@vtt.fi

Kansallinen EDIH- aiekysely ja EDIH- jatkonäkymä Suomessa

**Webinaari: Eurooppalaiset innovaatiohubit (EDIH): Kohti
uusiutumisen palvelukeskittymien verkostoa 23.6.2020**

Erityisasiantuntija Lasse Laitinen

Työ- ja elinkeinoministeriö

Kansallinen EDIH-aiekysely 1/2



- **Edeltää varsinaista kansallista hakua syksyllä.**
- **Kenelle? Niille, jotka harkitsevat EDIH-statusen hakemista.**
- **Miksi? Hyötyä:**
 - EDIH-asemasta kiinnostuneille: tukee toiminnan kehittämisessä sekä valmistaa kansalliseen ja komission hakuun
 - TEM:lle: antaa tietopohjaa hakijoiden valmistelutilanteesta, valmiuksia kehittää EDIH-toiminnan kansallista kehikkoa sekä hakuprosessia ja sen valintakriteereitä
 - Muille: antaa tietopohjaa liiketoiminnan digitaalisen kehittämisen palveluista ja kyvykkyyksistä Suomessa (siltä osin kuin tietoja on jaettavissa tai julkaistavissa, ks. seuraava kalvo)
- **Vastaukset ovat alustavia ja ei-sitovia. Vastaamatta jättäminen ei estä osallistumasta varsinaiseen kansalliseen EDIH-hakuun eikä aseta hakijaa huonompaan asemaan.**

Kansallinen EDIH-aiekysely 2/2



- TEM voi luottamuksellisesti jakaa vastaukset valtioneuvoston ja hallinnonalansa piirissä. Vastaukset voi jakaa kolmansien osapuolien kanssa salassapitosopimuksella (NDA). TEM ei jaa vastauksia muille EDIH-hakijoille tai sellaisten konsortioiden jäsenille.
- TEM ei julkaise vastauksia, joista vastaaja on tunnistettavissa, ellei toisin sovita vastaajan kanssa. TEM voi julkaista tuloksia, joista vastaaja ei ole tunnistettavissa.
- Kysely on avoinna ma 10.8. saakka.
- Suositellaan vastaamista englanniksi, mutta myös suomea tai ruotsia voi käyttää, erityisesti palauteosiossa.
- Tarkempia tietoja kyselyn alussa. Kysely löytyy osoitteesta <https://link.webropolsurveys.com/S/439ECF3F0E56888C>.
- Kyselyyn voidaan tehdä muutoksia pe 26.6. saakka palautteen perusteella.

EDIH-jatkonäkymä Suomessa



- **Komissio on tiedustellut jäsenvaltioiden valmiutta nimetä EDIH-ehdokkaat syyskuun loppuun mennessä. Kansallinen valmistelu ja EDIH-ehdokkaiden haku tiiviillä aikataululla.**
- **Rahoitus: alustavasti EU-rahoitus 50 % (määrä riippuu MFF-ratkaisusta), 50 % muista lähteistä. Yksityinen, EAKR ym. mahdollisia. Kansallinen EDIH-rahoitus auki.**
- **Haetaan Suomeen 3-5 vaikuttavaa EDIH:iä, jotka ovat kansallisesti merkittäviä ja joilla on tarjottavaa osana eurooppalaista verkostoa.**
- **Osa laajempaa kokonaisuutta: TKI-tiekartta, TKI-ekosysteemisopimukset 15 kaupungin kanssa, Tekoäly 4.0, EAKR, Business Finland...**
- **Digitaalinen Eurooppa –ohjelma: työryhmäkokous 1.7. Komissio esittelee uuden orientaatiopaperin kahdelle ensimmäiselle vuodelle, jonka pohjalta työohjelma tullaan valmistelevaan.**



Lisätietoja

- Digital Europe programme

<https://ec.europa.eu/digital-single-market/en/europe-investing-digital>

- European Digital Innovation Hubs in Digital Europe Programme

<https://ec.europa.eu/digital-single-market/en/european-digital-innovation-hubs-digital-europe-programme-0>

- A practical handbook & good practices for regional, national & RIS3 implementation policy makers

<https://ec.europa.eu/digital-single-market/en/news/want-boost-digitalisation-smes-your-region-provide-your-feedback>

- 3.7. klo 11 Suomen aikaa: Webinaari: Powering public sector change through digital innovation hubs

<https://ec.europa.eu/cefdigital/wiki/display/CEFDIGITAL/Digital+Innovation+Hubs+Webinar>



Kiitos!

Lasse Laitinen
Erityisasiantuntija
050 359 9258

lasse.laitinen@tem.fi

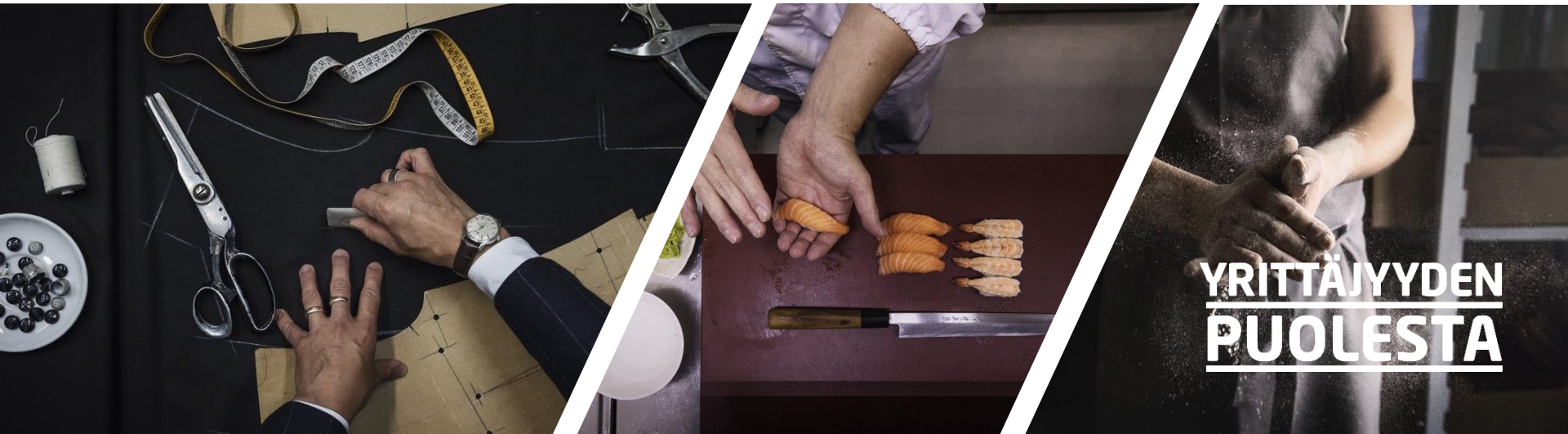
Työ- ja elinkeinoministeriö

Pk-yritysten näkökulma digitaalisiin innovaatiohubeihin

Kommenttipuheenvuoro EDIH-webinaarissa 23.6.2020

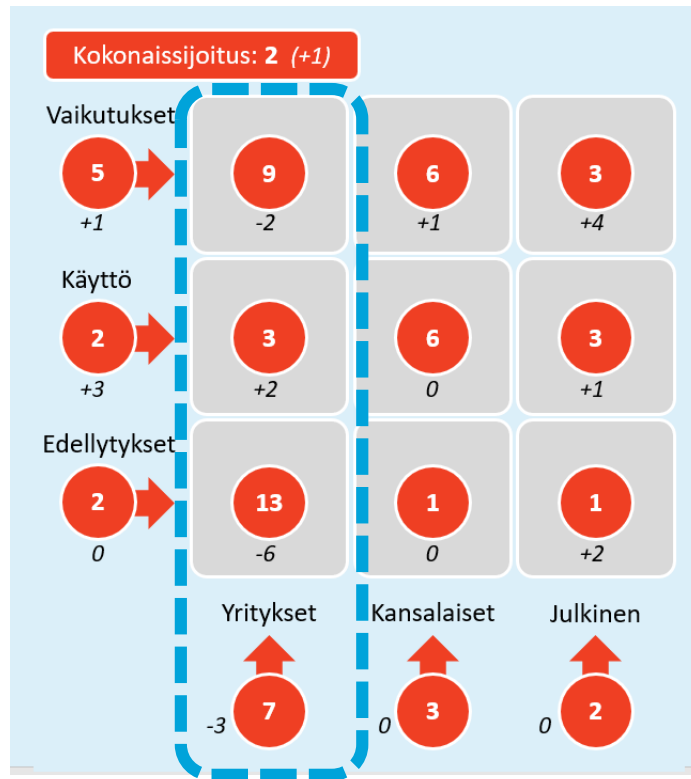
Digi- ja koulutusasioiden päällikkö Joonas Mikkilä

Twitter: @JoonasMikkila #yrittäjät



Suomalaisyrittysten sijoitus tippui Digibarometrissä – digitalisaatiotempon noustava

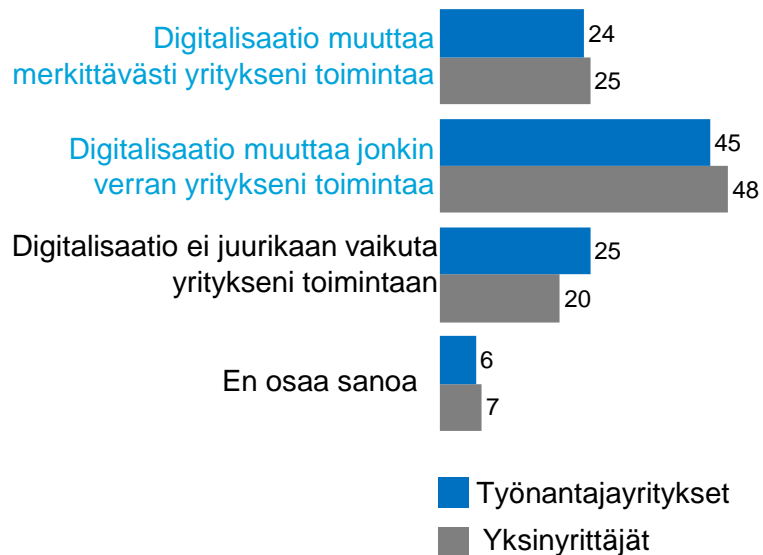
Yrittäjät



Lähde: Etlatieto Oy: Digibarometri 2020.

Valtaosa pk-yrityksistä näkee digitalisaation tuoman muutostarpeen

Digitalisaation merkitys yrityksen liiketoiminnalle (%)



Enemmistö pk-yrityksistä digitalisoi toimintaansa tarpeen mukaan – vähemmistö järjestelmällisesti tai edelläkävijäasenteella

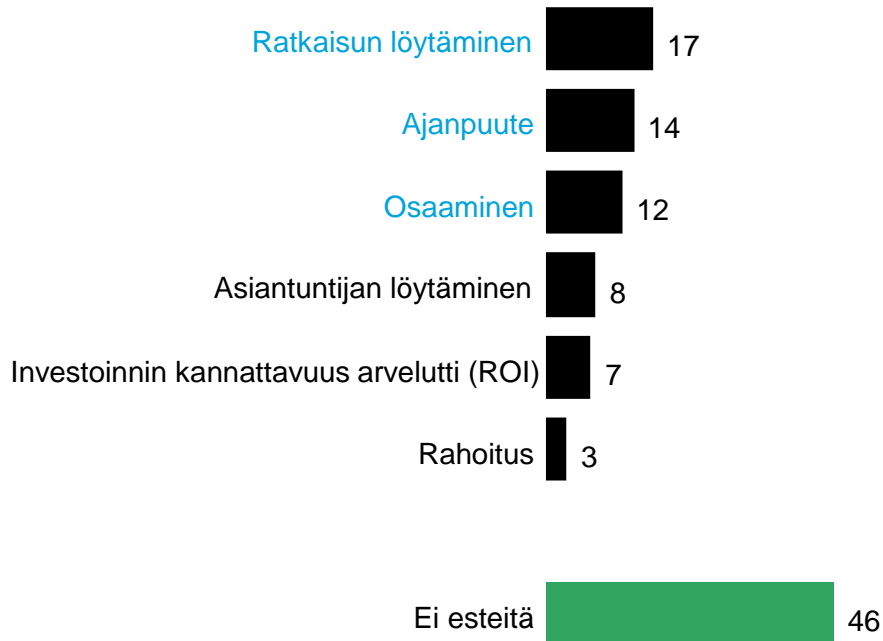
Yrityksen digitaalisuuden aste (%)



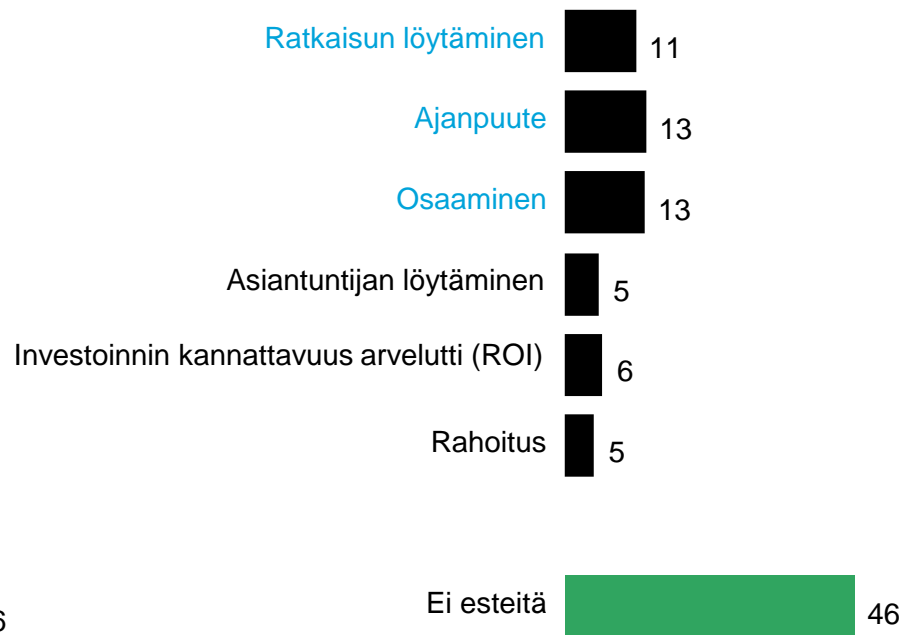
Ratkaisun löytäminen sekä ajan ja osaamisen puute pk-yritysten digitalisointiprojektien isoimmat esteet

Yrittäjät

Työnantajayritykset

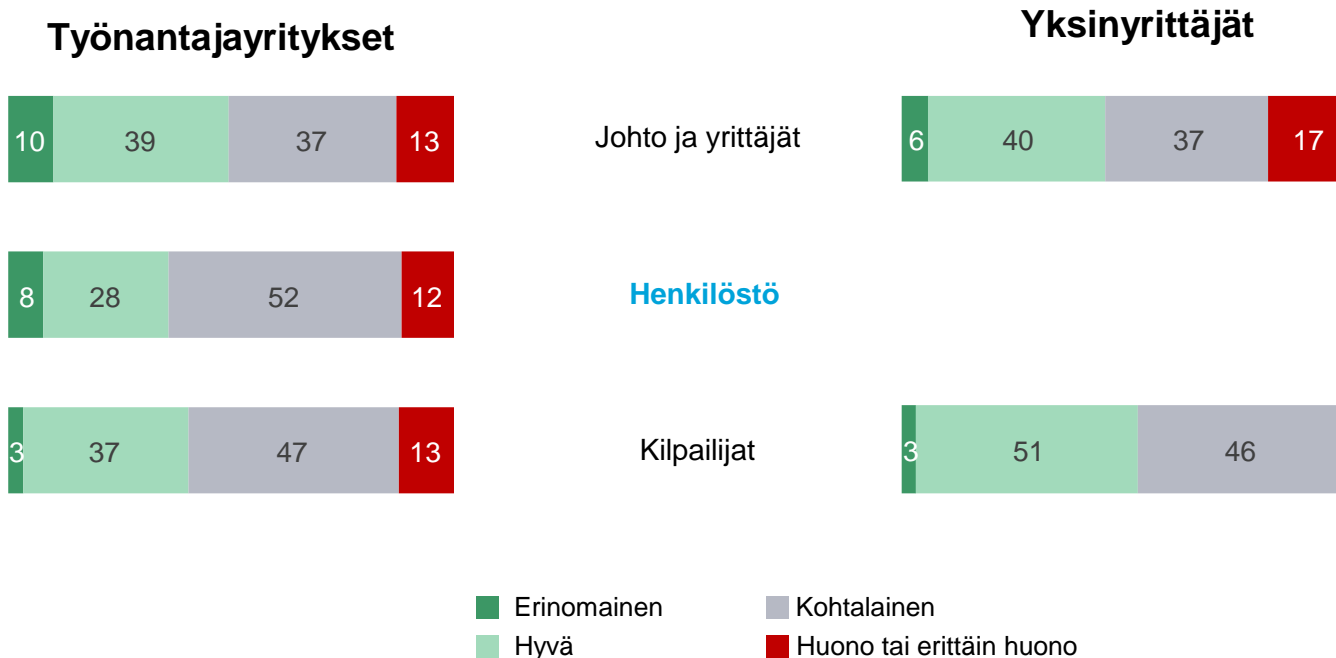


Yksinyrittäjät



Reilu kolmannes pk-yrityksistä arvioi henkilöstönsä digiosaamisen vähintään hyväksi – johdon tilanne hieman parempi

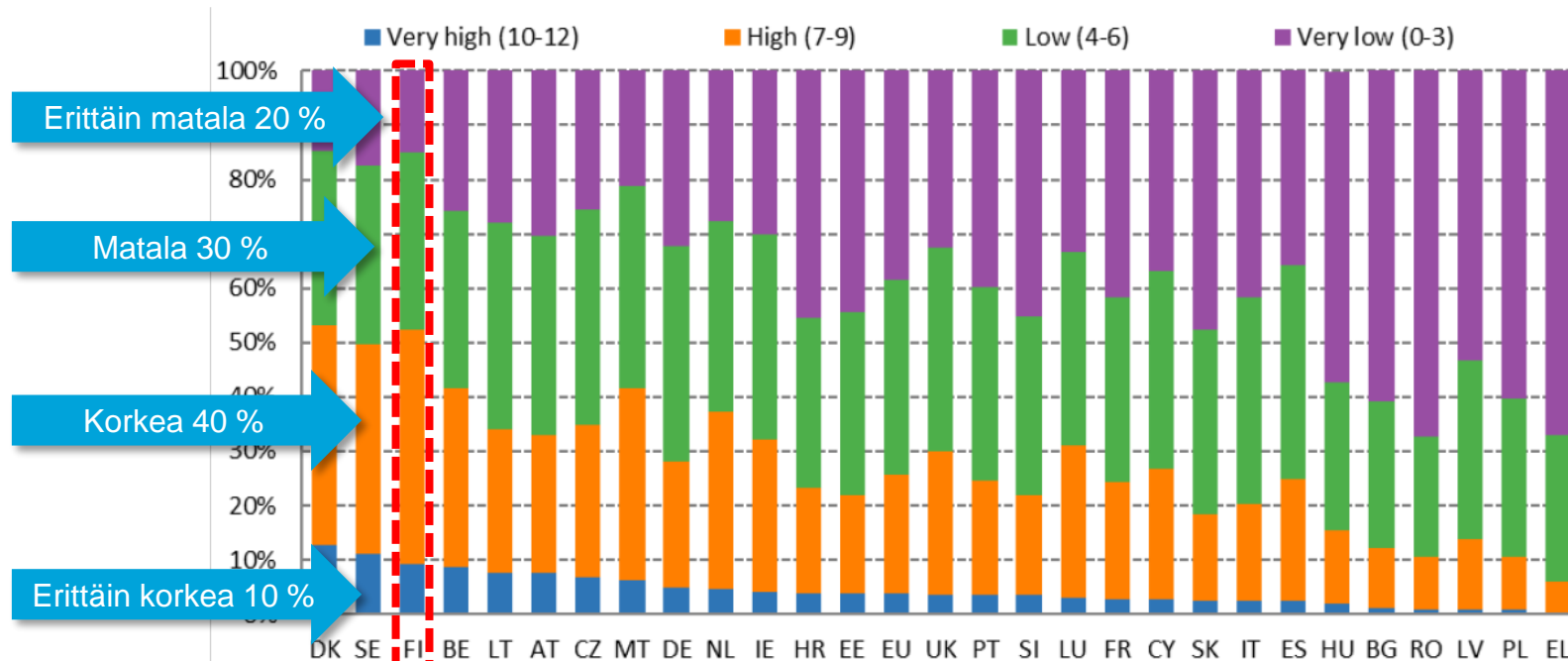
Yrittäjät



Lähde: Suomen Yrittäjät & Elisa: Suomalaisten pk-yritysten digitaalisuus 2019.

Yritysten digikypsyys vaihtelee – tämä huomioitava palvelujen kohdennuksessa ja tarjonnassa

Figure 5 Digital Intensity Index by level (% of enterprises), 2019



Source: Eurostat, Community survey on ICT usage and e-commerce in enterprises.

3 toimintaperiaatetta digitaaliselle innovaatiohubille

1 Vastaa pk-yritysten aitoihin tarpeisiin

- ⑩ Tunnistetaan hubin kohderyhmät ja ymmärretään niiden tilanteet ja edellytykset – ei rajauduta tiettyihin teknologioihin

2 Tavoittaa pk-yritykset toiminta-alueellaan

- ⑩ Otetaan yrittäjä- ja yritysjärjestöt mukaan hubin ohjaukseen ja viestintään alueellisesti ja valtakunnallisesti

3 Hyödyntää muita digitalisaation edistäjiä

- ⑩ Hankitaan palveluita luotettavilta digitoimittajilta ja toimitaan pk-yrityksille luukkuna laajempaan palveluverkostoon

Kommenttipuheenvuoro

Pekka Rantala, Business Finland



Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet

Question 3



**Will EDIHs offer something new in
Finland?
Yes / No**

Join at
slido.com
#2072



Kiitos!



Työ- ja elinkeinoministeriö
Arbets- och näringsministeriet