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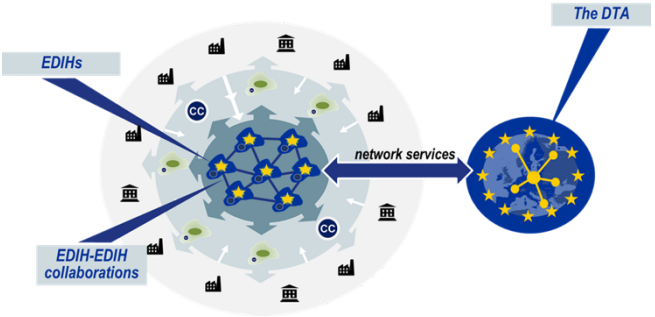
European Digital Innovation Hubs and how they differ from the DIHs

Note: This article only describes the understanding and opinion of the authors. It does not necessarily represent the views of the EC.

1. Purpose

Digital Innovation Hubs (DIHs) have been one of the key mechanisms of the European Commission and Member States to support the digitization and adoption of advanced technologies of EU industry. With the new upcoming Digital Europe Programme, the European Commission has proposed and started the process of creating a network of approximately 200 European Digital Innovation Hubs (EDIHs) (*see EC draft working document on EDIHs in DEP here*). The EDIHs are envisioned as a one-stop-shop that supports industry and public sector in their digital transformation and the uptake of advanced technologies such as AI, HPC, and cybersecurity. The EDIHs, financially supported by the DEP and the Member States, represent a new entity in the EU DIH ecosystem.

To support the (robotics) Innovation Action projects, this paper aims to identify and describe a number of characteristics that distinguish EDIH from DIH. This effort is the result of the work of the consortium partners in RODIN as well as other projects such as DIHNET and BOWI.



2. Scope

FORMAL ENTITY | The EDIHs will be a formal entity, as they are embedded in the legal DEP framework. EDIH will be set up on a legal basis – the DEP Regulation - since they are a formal collaboration between the EC and Member States. In contrast, DIHs do not have a formal status and definition, simply an informal status from being included in the DIH catalogue.

WIDE FUNCTION | EDIHs have both a regional and European wide function whereas DIH are primarily regional. The European aspect of the EDIH is dedicated to connecting expertise across Europe and providing access to European resources and brokerage for local organisations within their region. It is expected that the European aspect will be proactively targeted by the EDIHs.

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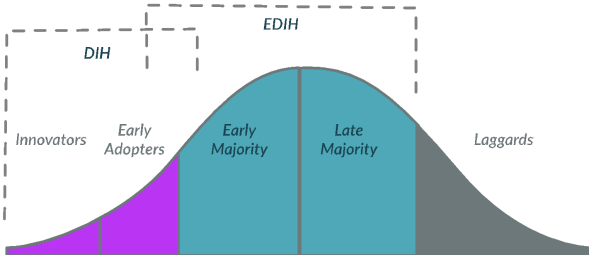
ADVANCED TECHNOLOGIES | One of the primary activities of EDIH is in managing the delivery of expertise and deployment of digital and green technologies rather than delivering lower TRL R&I activity. This demands greater focus on support for the implementation of advanced technologies in contrast to that found in DIHs, where the focus is, most often, on experimentation with the innovation industry. EDIHs' main impact is therefore on the Early and Late Majority of technology deployment.



INTERSECTIONALITY | The EDIH strategy has a remit that covers both industry at large and public sectors. It is expected that there will be a significant number of EDIHs that focus on the public sector. DIHs, in contrast, are often more focused on innovative industry players (with the ability to address other groups).

INTERREGIONAL SELECTION | EDIH are designated by Member States and selected by the European Commission. This involves a specific procedure that is expected to result in the selection of approximately 200 EDIHs across Europe (roughly aligned with the NUTS-2 regions). The selection procedure also implies the branding of the EDIHs as distinctive entities which will also undergo regular KPI checks. This differs from the current DIHs which were often bottom up initiatives or connected to national strategies.

EC FUNDING | Funding for EDIH is provided 50:50 (salary costs +7% overhead) between Member States/Regions and the European Commission, with the EC funding part coming through the Digital Europe Programme (DEP), with a focus on capacity building. However, it is also possible that EDIHs can also utilise other funding sources, such as the Recovery Fund and Green Deal. The DIHs do not have a specific European funding instrument.

REGIONAL SPECIALISM | The EDIHs are expected to have a specialism selected that they will develop and focus on. This is intended to be connected to the place-based characteristics of their region, taken up by their Smart Specialisation Strategy. This region based specialism is also present in DIHs but relies more on pre-existing skill sets already embedded in the DIH.

TECHNOLOGY GATEWAY | It is expected that EDIH will act as a gateway for advanced digital technologies, either acting as a lighthouse attractor to local novel expertise that has wider value for Europe or as a channel to bring European (other region) based expertise into their

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region. In addition, the EDIH will have the task of directly or indirectly supporting their customers with (access to) digital transformation at large. In contrast DIH may channel-in European expertise but only where the specialisation already exists.

CENTRALISED TRAINING | All EDIH will receive training around a set of core competencies that include AI, Cybersecurity, High Performance Computing and Key Digital Technologies. The delivery of these advanced technology core competencies is one of the primary impacts that EDIH are expected to bring to regions, thereby raising levels of expertise. There is no centralised training for DIH.

3. Results

Looking at the EDIHs in relation to the currently existing DIHs, the following observations can be made:

Table 1

CHARACTERISTIC	EDIH	DIH
Legal Status	*Formal legal status*	*Informal status*
Reach	*Regional and European*	*Regional (DIH Networks can be European)*
Adopter focus	*Early and Late Majority*	*Innovators and Early adopters*
Stakeholders	*Industry and Public Sector*	*Innovators and related*
Formation	*Member State and EC selection process*	*National and regional policy and self-selection*
Funding	*Formal through DEP; 50:50 split (EC + Member States)*	*No fixed funding process*
Specialisation	*Aligned to regional Smart Specialisation*	*Focused on existing regional need*
Multiplier effect	*Access to unique local expertise scaled to Europe*	*Regional scaling (DIH Networks can have European scaling)*

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Local impact	*Enable broad access to digital acceleration + spread of advanced technologies*	*Enhance regional innovation and technology development. Spread within region.*
Training	*Trained on Advanced Technologies.*	*No centralised technology training*

4. Conclusions

It can be said that the EDIHs will often be based on a DIH, but being an EDIH expands its active ecosystem to be able to offer support for digital transformation services at large. Special focus is seen on the uptake of digital technologies for the industry/public sector at large, as well as acting as a gateway to Europe.

In addition to the individual EDIH an overarching Digital Transformation Accelerator (DTA) is to be funded to cohere the EDIH network. Therefore, current IA networks might consider starting a dialogue with the DTA and the EDIHs soon after they are selected.

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