

Tailored IoT & BigData Sandboxes and Testbeds for Smart,
Autonomous and Personalized Services in the European
Finance and Insurance Services Ecosystem



D8.7 – Virtualized Digital
Innovation Hub - I

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Executive Summary

A Digital Innovation Hub or DIH is a key player when it comes to help companies to grow, especially start-ups, scale-ups and spin-offs. This figure gathers a set of services, material and non-tangible services, that could launch innovative companies towards success.

Due to the important role of the DIH in their local scenario, building a nurtured network where universities, research and technological centres, businesses (SMEs and large companies), start-ups, spin-offs, governments, etc. live together, INFINITECH marketplace platform and the project itself should include a virtualized version of these actors. All the services offered by a physical DIH should be designed in a virtual way, leveraging partners networks, knowledge and daily work, encompassing a wide range of geographies and allowing the connection between regions that otherwise will be impossible to be created. This is the scope of INFINITECH's VDIH (Virtualized Digital Innovation Hub), which is destined to enable, support and to some extent offer DIH-like service in a distributed, virtualized way, using the project's assets and marketplace as main vehicle.

To limit these services and properly define them, it is necessary to correctly identify their users, paint the use cases, and identify all the services that could be virtualized and offered through the partners' networks and expertise, partners that include banks, technology providers, accelerators / DIHs, universities, large companies, etc. with a clear focus on Fintech and Insurtech sectors. A previous market analysis should also be performed in order to identify the business pains that will act as starting point.

The current report gathers the specifications of the initial version of the INFINITECH VDIH, analysing the relevant trends and potential synergies in the Fintech and Insurtech sectors, defining a DIH and then, landing all this information in the form of real specifications and requirements for the VDIH. It also illustrates the initial services of the VDIH, including content that has been developed by the project and readily available content that has been integrated or linked to the marketplace. The document will be furtherly updated as the VDIH evolves in time, including all the new functionalities and services that will make it grow.

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Abbreviations

AI	Artificial Intelligence
AltCoin	Alternative Coins
AML	Anti-Money Laundering
API	Application Programming Interface
AR	Augmented Reality
B2B	Business-To-Business
B2B2C	Business-To-Business-To-Customer
B2C	Business-To-Customer
B2G	Business-To-Government
BTC	Bitcoin
DIH	Digital Innovation Hub
DIS	Digital Innovation Services
DL	Deep Learning
DLT	Distributed Ledger Technologies
ECTS	European Credit Transfer and Accumulation System
EU	European Union
FinTech	Financial Technology
ICT	Information and Communications Technologies
InsurTech	Insurance Technology
IoT	Internet of Things
IPR	Intellectual Property Resources
ML	Machine Learning
NACE	Nomenclature of Economic Activities in the European Community
R&D	Research & Development
SES	Sandboxes Experimenting Services
SME	Small and Medium-Sized Enterprises
URL	Uniform Resource Locator

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VDIH	Virtualized Digital Innovation Hub
VR	Virtual Reality

1. Introduction

INFINITECH is a project that aims to provide a complete integrated environment where new technologies, such as IoT, Big Data, Artificial Intelligence or Cybersecurity, among others, live together with a Fintech and Insurtech perspective. It enables the utilization of these technologies and related techniques for the finance and insurance sectors. But this objective is not feasible if INFINITECH users and integrators (notably SMEs) do not have at their disposal and in a unique space the set of technologies and services that enable them the exploitation of various datasets (from different sources), optimized data management for these datasets, analytics with innovative algorithms covering a wide range of scenarios in the finance and insurance sectors, as well as the use of tailored sandboxes on the underlying infrastructure layer for the execution of the aforementioned algorithms.

However, in order to achieve the digitisation and the uptake of all these disrupting technologies, a new actor is needed: a DIH. A Digital Innovation Hub is an organisation with a high knowledge of digital technologies that support companies in their environments, especially SMEs and start-ups, to enhance competitiveness using these technologies. This important labour is possible thanks to the DIHs composition, including research and technology institutions, universities, business associations and clusters, chambers of commerce, incubators and accelerators, regional development agencies and even government institutions.

Taking into account the development of a marketplace in INFINITECH as this unique space mentioned above, the DIH should leverage the fact that all technological assets and management tools had been put together. So, the INFINITECH marketplace solution goes beyond a technological offer and includes a DIH in a virtual format, a VDIH, that gathers all the knowledge and contributions of all INFINITECH partners, as well as it creates a network in a collaborative way, ensuring a global connection with different accelerators all around Europe, neighbour and overseas countries that are considered relevant.

Based on the above, the INFINITECH marketplace will be continuously enriched with services and attract a wide network that will support INFINITECH's users in the digitisation process, optimizing the uptake of Big Data, AI, IoT, Cybersecurity and other cutting edge and disruptive technologies. This VDIH included as a valuable asset of the marketplace is not satisfied with responding Fintech and Insurtech companies at a regional level, as a DIH does, but it takes this concept to the next level by encompassing an international geography thanks to its virtual format. At the same time, it leverages the experience, knowledge and networks of all its partners, being able to build an unbeatable offer for Fintech and Insurtech companies and its environment.

1.1. Objective of the Deliverable

The main objective of this deliverable is to define the INFINITECH VDIH (Virtual Digital Innovation Hub) concept and specifications, as well as all the services that are going to be offered by this asset and the process followed for making available all these services through INFINITECH's Marketplace. The current deliverable is nurtured by the first specifications and description that was done in previous deliverables, D8.1 and D8.2 (entitled "Market Platform and VDIH Specifications - I" and "Market Platform and VDIH Specifications – II") and will be extended in future deliverables (D8.8, entitled "Virtual Digital Innovation Hub – II") with respect to the updated specifications based on the reflections of the initial design and implementation of the VDIH. Based on these specifications, the realization of the VDIH is realized (an initial version) in this deliverable.

1.2. Structure

This document is structured as follows: the remaining of this chapter introduces relevant approaches that will help in the definition of the VDIH services. Section 2 describes the overall concept of the VDIH, while Section 3 describes the different services that are now implemented. Section 4 provides the explanation of how these services are going to be available through the marketplace. The report ends with some conclusions and next steps in Section 5.

1.3. Potential synergies and relevant trends

This section summarizes the results of the analysis performed over the Fintech and Insurtech ecosystems in order to find the needs and trends that will help in the definition of the INFINITECH’s VDIH specifications and services, as well as it puts the focus on the potential synergies that other networks and actors represent.

1.3.1. Fintech and Insurtech Galaxy: Needs and trends in the Fintech and Insurtech ecosystem

In order to perform a valuable analysis of the market to identify needs and trends for the Fintech and Insurtech sectors, Insomnia’s ecosystem has been used, since the partner has the DIH leading role and works also as accelerator mainly in these sectors.

More than 1.000 start-ups integrate this ecosystem, all of them from different countries and specialized in a diverse range of cutting edge and disruptive technologies. In this ecosystem, a 20 % of the start-ups come from the United Kingdom and the United States and a 55 % are from the European Union and Israel. Around a 40 % of these start-ups are Spanish, and this is why this analysis is only a starting point that will be enriched with contributions from all partners. Below, it is included the geographical distribution.

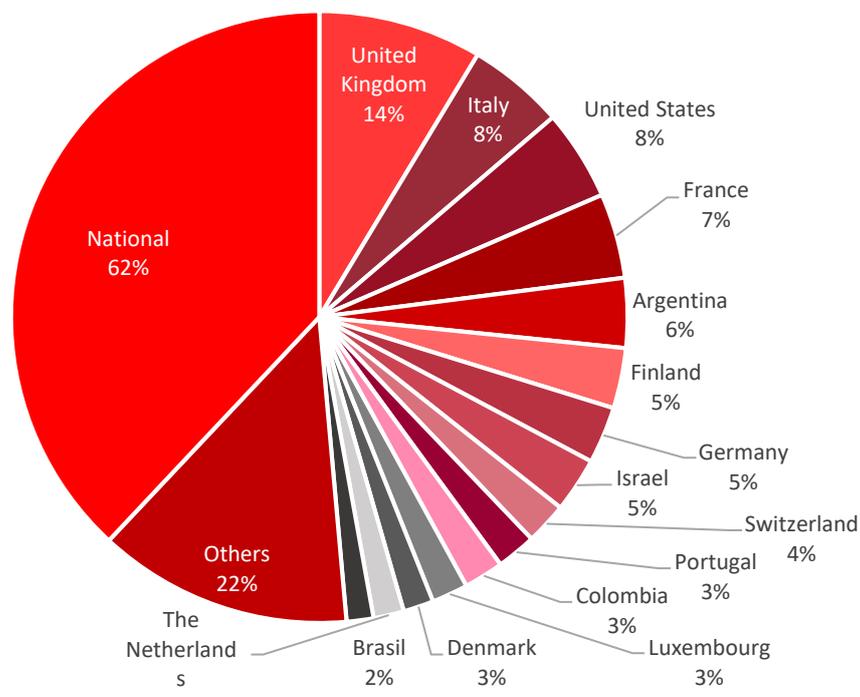


Figure 1. Geographical distribution of the start-ups and scale-ups

Additionally, this survey has been conducted under the support of The Talent Route, the biggest international and independent accelerator network. More information is included in point 1.3.2.

From the analysis performed taking as a starting point the 1.000 start-ups network, it has been concluded that there is a huge polarization when it is referred to technologies. The Fintech and Insurtech ecosystems have specific technological preferences, being the Artificial Intelligence the leader of all of them. The different technologies that this universe has been boosted not only because of the technological advances in the state of the art, but also for the pandemic and the emerging need of being digitally present. Furthermore, the use of digital technologies has as a consequence the generation of a huge amount of data that need to be processed in order to reach conclusions and to anticipate to the customer and market needs.

Knowing the aforementioned, the different technologies that emerge as the main and preferred trends in the fintech ecosystem are:

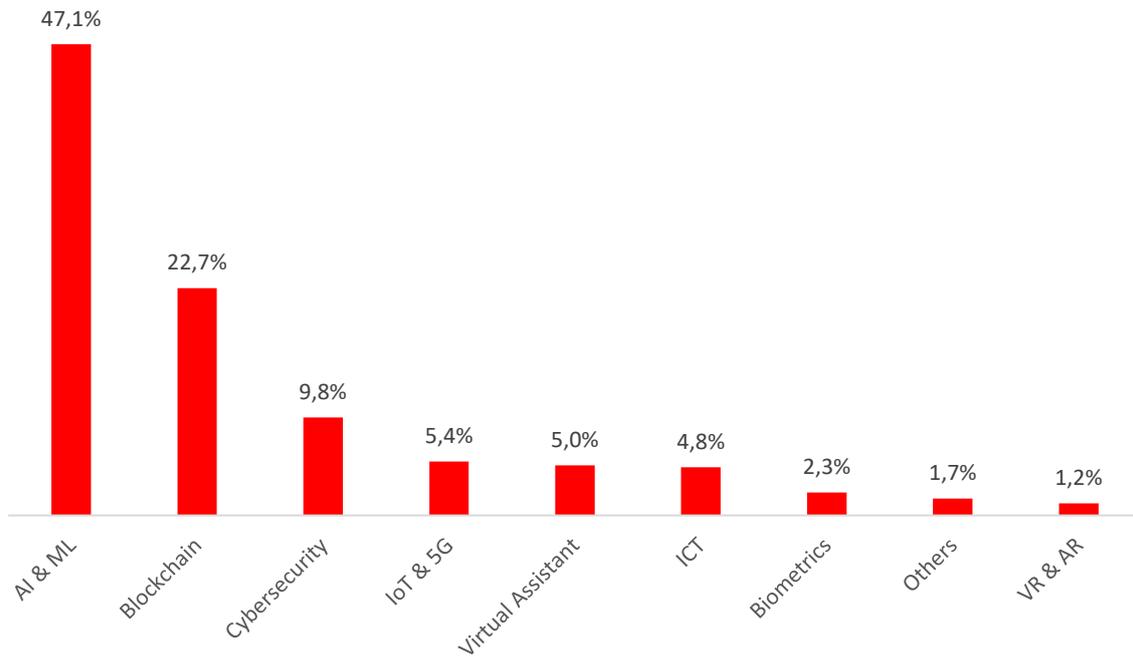


Figure 2. Technology trends in Fintech and Insurtech

These start-ups have developed more than 3.000 Fintech and Insurtech solutions, that have been tested as MVPs and following a B2B collaborative, scalability model in order to reach more customers through agreements and partnerships. Among all these solutions, a 71 % are Fintech solutions, a 52 % are Insurtech solutions and a 9,5 % are LegalTech, PropTech and RegTech solutions. They have developed virtual assistants, chatbots, finance training, document management solutions, alternative payment methods, reporting solutions, digital onboarding, Fintech brain, monitoring, on demand insurance, recommenders, marketing finance, wearables, predictive models, micro-insurance, 360° CyberRisk, etc.

Among these solutions and focusing on Fintech ecosystem, there is an alignment with the future of Open X, the new way of proactive and dynamic collaboration between banking and the new digital actors of the finance ecosystem, such as Fintech and Bigtech companies.

In this new scene, new challenges arise, being information security and data privacy two pillars in order to achieve a more effective and efficient alliance. Open X concept was born after Open Banking and will replace it reinforcing the collaboration between banking and digital actors, enabling a massive and secure data integration.

The transition to Open X considers and requires that participants develop and adopt standardized technologies that allow them to overcome security and privacy challenges, supported by a consulting firm specializing in solutions of this type, as well as the support of a regulation that monitors the correct information management. And that is exactly what INFINITECH's VDIH and Marketplace aim to do.

SMEs and self-employed solutions represent the highest percentage of the bunch, being this innovative trend a need in order to transform the SMEs ecosystem, allowing them to access new ways of financing, what is the key in order to achieve a fast and sustainable growth, something especially relevant for technological small companies with innovative ideas to be developed and implemented. The second position in the podium goes to B2B and B2C innovative solutions, where banks are a key partner. Finally, payment methods take the third place, where cryptocurrencies play an important role.

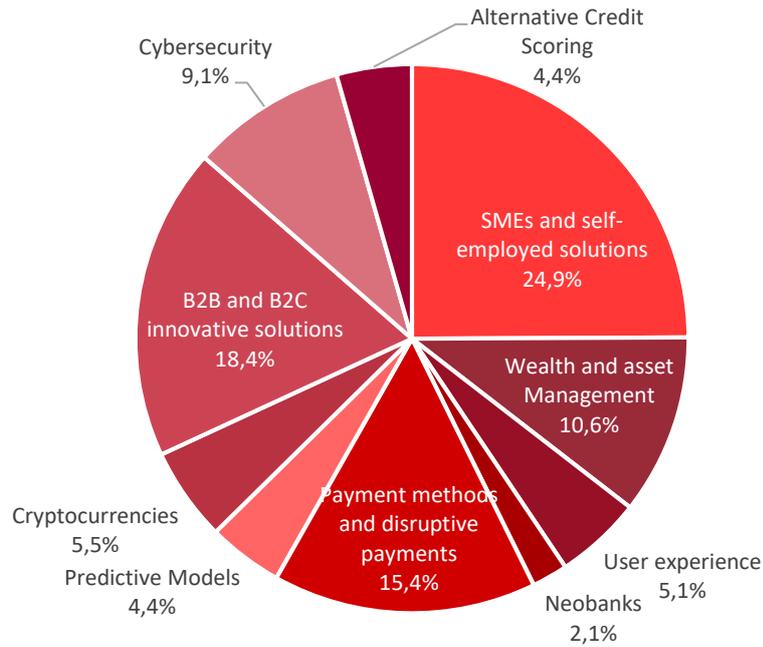


Figure 3. Solutions in the studied Fintech ecosystem

On the other hand, the Insurtech potential depends on the generation of new business models. An illuminating and perfect example of new business model is the connected vehicle. Electric mobility is the emerging trend that arises as the climate neutrality objective solution and the insurance of this model is the key to encourage its use. Below, one can see the bunch of solutions that the analysed ecosystem presents for Insurtech.

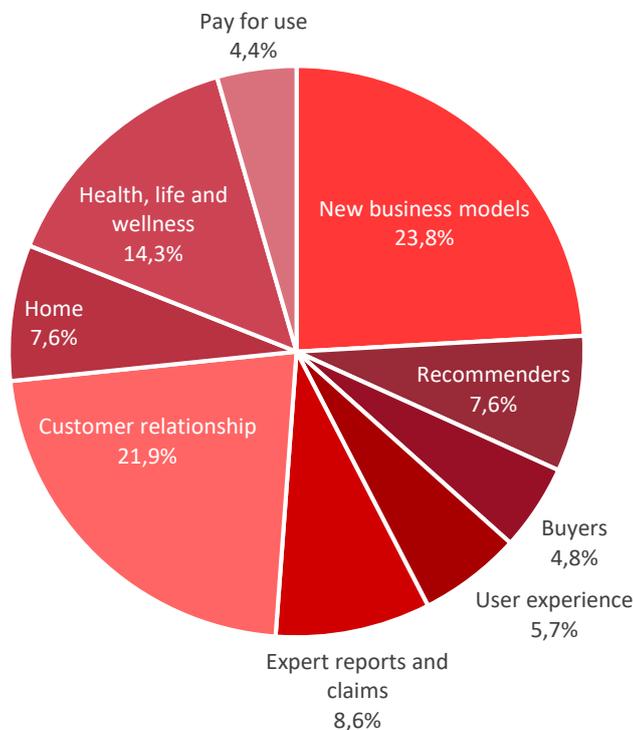


Figure 4. Solutions in the studied Insurtech ecosystem

The Covid-19 pandemic fostered the investment in Insurtech solutions due to the uncertainty and the increase in risks. Insurances and Insurtech companies were the key actors that mitigated the pandemic impact and this fact acted an accelerator to the digitisation processes in the aforementioned sector.

The insurance sector, as a result, is committed to more personalized solutions, accelerating the development and implementation of new models: pay for use, telemedicine, diagnosis tools and supply digitisation. In the development of these solutions, they use Cloud, IoT, AI and more Smartphone applications in order to achieve a multidevice model that improves the user experience and the customer relationship.

Additionally, the collaborative model that is adopting a starring role has caused the emergence of a new solution: B2G or Business to Government. This model defines the commercial relationship between the administration/government and businesses using the Internet. If public administrations need services or products, such as technological solutions for data processing or the execution of a project, the public authorities award the corresponding contracts to private companies. These contracts are attractive to companies as they generally represent a secure source of income. To secure these contracts, different marketing techniques are used to convince public authorities of the value of your products or services.

Despite the advantages that it carries, the preferred solutions adopt, mainly, the B2B model and the distribution creates the scenario shown below:

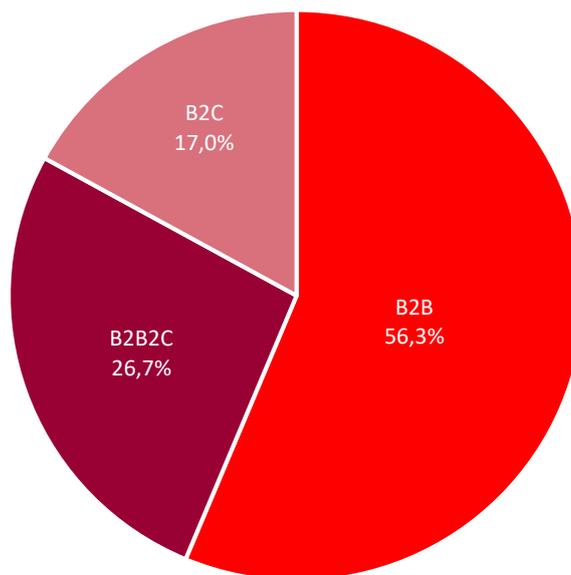


Figure 5. Business models adopted

When talking about the international scalability of the start-ups analyzed, most of them have international projects and business. This aspect reinforces the need to create a marketplace and, specifically, a VDIH for INFINITECH that offers international services and that connects different geographies to answer the possible requests of the Fintech companies and start-ups that could become users of the platform.

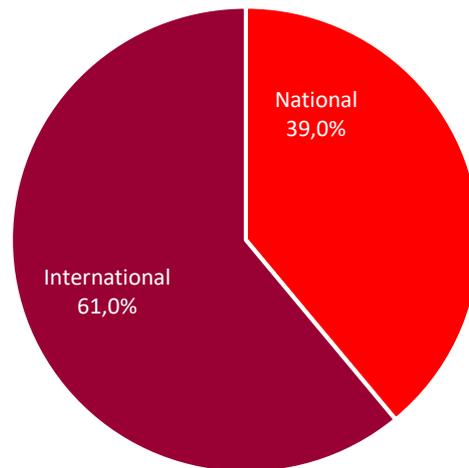


Figure 6. Start-up's internationalization

Scalability plays a key role when defining the services that the VDIH should offer. Given that accelerators play a fundamental role in the growth of companies' (start-ups, scale-ups and SMEs) billing, special attention must be paid to the creation of a network that covers the whole European territory and that, in addition, offers services focused on the cutting-edge technologies that populate the Fintech and Insurtech universes (cybersecurity, AI & ML, Blockchain, etc.).

Most of these companies bill less than 100.000 € per year, representing more than a 56,7 % of the analysis, being only a 9,4 % the portion that bills more than 1 million €. This highlights the need to connect with acceleration services through INFINITECH's VDIH to achieve the growth of small companies with great innovative potential, with a flexible and agile model.

Despite the crisis, the creation of start-ups in the Fintech and Insurtech sectors continues to occur and this is the reason why INFINITECH must create an appropriate offer to help them in the process of positioning themselves and growing in the market.

As a conclusion of the analysis, it is important to highlight that it is time for engagement. The Covid-19 has caused the appearance and acceleration of new digitalization technologies boosting the contactless economy, inclusion and financial education, crypto coins, wallets, asset tokenization. Cross initiatives and the concept of *Cooperation* (Co-competition) are key factors to achieve the growth and digitization objectives.

1.3.2. The Talent Route

The Talent Route is the first network of innovation hubs across Europe that reunites accelerators and DIHs from different regions. Although most of its members are from Europe, it also connects with Israel and Latin America as collaborators of the network.

The network follows a free collaboration model and a member of The Talent Route shall freely collaborate and help each other with the objective of a friendly and collaborative innovation ecosystem. One of the primary objectives of the companies is to provide good support and open business innovation, improving their services and processes together with their customers.

In order to understand the network, it is important to know its purpose:

- Enhancement of collaboration actions and cooperation between parties.
- Promotion of the entrepreneur ecosystem around the world and Europe.
- Development of collaboration activities.
- Encouragement of the internationalization of start-ups.
- Cooperate in the internationalization of the start-ups' ecosystems of the different country members of The Talent Route.
- Seek to mobilize collaboration activities and the proper functioning of the network.
- Cooperate in the promotion of international calls made for a specific vertical, by one or both partners, they can exchange recommendations and information of the start-ups that may be most interesting for the vertical determined by each.

Due to the connections that this network offers, it represents a valuable input for INFINITECH's VDIH, offering a connection model and the inclusion of important innovation and accelerator actors that enrich the catalogues that will integrate the platform.

1.3.3. The importance of training

In addition, the importance of training to respond to the demand for well-trained professionals should be highlighted. Motivating and training employees gives as a result a more productive output, as well as it increases the quality of the daily work, services and products offered by the company.

INFINITECH partners thanks to their knowledge and constant work on innovation are well aware of the need to keep employee and population, in general, in constant training in order to be able to respond to the accelerated growth and the rapid appearance of technologies. This is specially relevant in emerging ecosystems, where the integration of cutting-edge and disruptive technologies becomes a must if one does not want to disappear from the market.

And it is precisely because of the great growth of digitisation in these sectors that new disciplines are appearing and being created from the most prestigious institutions in Europe and all over the world. Current employees should be aware of the need for renewal to keep their jobs, entrepreneurs should be aware of the need to adapt and adopt these technologies and, consequently, knowledge to manage and integrate them in their emerging companies, and students should be aware of the need to be trained in these disciplines to aspire to better jobs.

As it has been aforementioned, different universities and institutions across Europe offer a huge bunch of training courses that could perfectly complement the connection to accelerators and Digital Innovation Hubs, creating not only a network for growth, but also a capacitation network to support this growth. In order to create a rich catalogue, described in the following points of this report, the contributions of all INFINITECH's partners will be the key.

1.3.4. Selection of baseline

Based on the aforementioned descriptions and analyses, for the INFINITECH VDIH, the different trends have been identified. These trends justify the need to create a VDIH to advise and support the different INFINITECH's marketplace users, offering services that could be enriched thanks to potential synergies. First of all, the talent route network helps in the identification of a bunch of accelerators in the EU and in other neighbour or overseas countries that sets up an initial catalogue. This list of accelerators is completed with other partners' network contributions. When talking about training courses, the contribution of all partners, including those who offer training material, enables the VDIH to be a link to facilitate that kind of services that add value to INFINITECH's labour in the Fintech and Insurtech ecosystems to help them manage digital innovation. Finally, all of this is integrated together with the list of technological assets developed for the marketplace.

2. VDIH definition

In this section it is included the overall definition of the VDIH that will be included in INFINITECH's marketplace. In order to understand the process followed in its definition, it is important to explain the DIH concept and usual services, so they could be refocused to a virtual perspective, where omnipresence becomes real and a bigger ecosystem could be created.

2.1. Context: what is a DIH?

In this section and the related subsections include a brief context in which a DIH is presented as well as the services that it offers to the ecosystem that inhabits.

2.1.1. Definition of a Digital Innovation Hub

What is a Digital Innovation Hub or DIH? Digital innovation hubs (DIH) are a pillar of the Digitising European Industry initiative. They are organizations with a high knowledge of digital technologies that help companies in their regions, especially SMEs, to improve their competitiveness through the use of these technologies.

This is possible thanks to the DIH ecosystem composition, that usually includes R&D and technology organisations, universities, associations and business clusters, as well as chambers of commerce, incubators, accelerators, development regional agencies and governments. As European economy system is integrated mainly by SMEs, the role of the DIH is a real need, since the digitisation of these companies generates a direct impact over Europe's competitiveness.

Since a DIH acts as regional cooperation ecosystems integrated by multiple partners focused on innovation opportunities to support digital transformation in the industry, including technological centers, universities, industrial associations, clusters and the other aforementioned actors, they should present an offer according to their role.

Thus, they articulate knowledge about certain technologies to advise SMEs in identifying the solutions that best suit each case:

- **Innovation Technology:** DIHs have and develop test-beds, prototypes and proofs of concept so that companies can test the technology before acquiring it, in a "test before invest" model.
- **Business development:** DIHs identify the most disruptive technological trends and advise companies in their Digital Transformation, through the knowledge and experience of their partners, connecting companies with the appropriate provider for each situation. In addition, they are key organizations in the mobilization and distribution of public funds to finance the digitization of European companies.
- **Training:** DIH partners are experts in digital transformation and application of digital technologies.

It can be concluded that a DIH acts as a one-stop shop where SMEs can test the latest digital technologies before entering, develop new products and processes through integration, and obtain training, financial advice, market intelligence, and opportunities to improve their business through innovation. digital. DIH supports the digital transformation of companies and the region.

Although they are established locally, they are connected to a network of partners across the EU and other DIHs, giving companies a unique opportunity to access skills and facilities that are not available in their region.

2.1.2. Services offered by a DIH

DIH supports SMEs to promote their competitiveness in production processes and business models, in their products and services, using digital technologies.

More specifically, the services offered by a DIH include:

- **Awareness and diagnosis:** access to the latest information on the possibilities that digital transformation can open to companies. You could attend events, learn good practices, or go through a diagnostic process.
- **Transformation plan:** carrying out in-depth audits and definition of transformation plans with specific objectives and results with the support of experts.
- **Training:** obtaining the latest digital skills through training, seminars, internships, and workshops.
- **Prototype and testing:** DIHs give access to infrastructure for experimentation that allow testing and experimenting a high potential digital innovation for products, processes or business models. It is possible to achieve the opportunities that digitization offers to experiment and interact, learn and add value to the business.
- **Network for growth and financing:** DIHs facilitate links between users and technological providers and digital enablers across all the value chain, as well as they provide links with training providers, investors and facilitate the access to finance for the digital transformation.

2.2. Definition of INFINITECH's VDIH

This section includes the definition of the VDIH as well as the definition of the type of users that will have access to the VDIH. These users will shape INFINITECH VDIH.

2.2.1. Overall concept

The INFINITECH VDIH offers key accelerations services and resources for companies. The main objective of such services is to support businesses in their digital transformation leveraging on the expertise that the INFINITECH consortium can utilize and exploit. The VDIH is a Virtualized shop based upon technological infrastructure and brings knowledge and experience to provide services such as piloting, training and consulting to implement innovative solutions across the value chain.

The specific services will be defined and prioritized, by taking into account innovative business models to implement each of them, as well as adhering to IPRs and commercial agreements. The provided services will be standardized and federated after defining ontologies and setting blueprints.

Moreover, the service federation will follow a design thinking approach, mapping and integrating the other INFINITECH services and the other third-party services.

The INFINITECH VDIH, then, is defined as a space where two main actors coexist:

- **Digital Innovation Hub Services:** these services include technological support services, training services, business plan services, business modelling services and go-to-market services, as it has been explained in the previous point of the document.
- **Sandboxes and Experimenting Services (SES):** these services include co-design services, testing services and co-innovation services.

These two dimensions that integrate INFINITECH VDIH imply that the acceleration offered by the platform needs to find the synergy between the business and the technological perspectives. From these initial idea, the VDIH will grow as the project does.

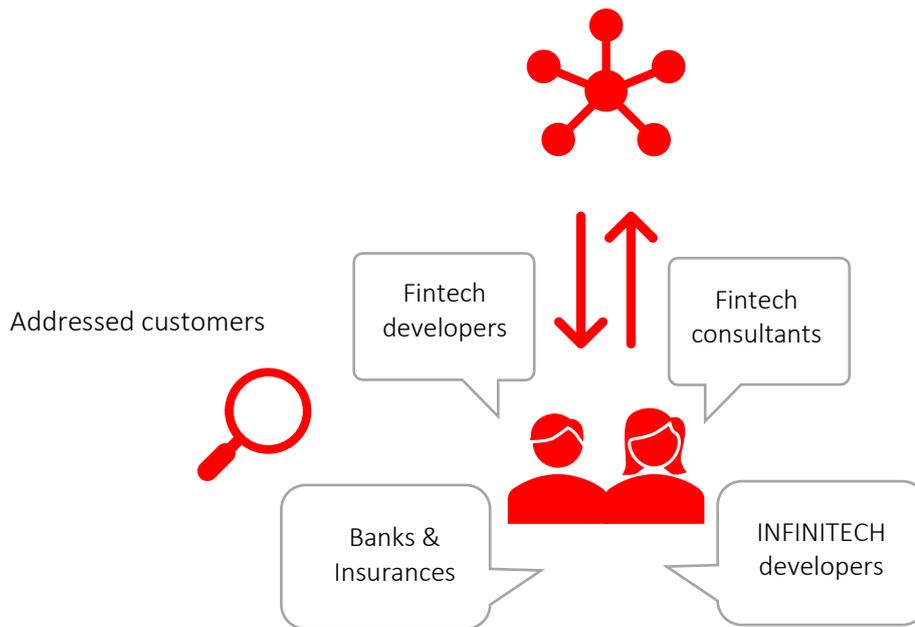


Figure 7. Basic structure of the VDIH

A deeper explanation of this overall description of the VDIH concept is provided below, according to the description included in D8.1 and D8.2. The current situation of the VDIH and the services that it offers will be furtherly described in next points of the report:

- **Digital Innovation Services (DIS).** These include the usual services provided by the Digital Innovation Hub but in a totally Virtualized manner. The DIS are a very relevant layer of the VDIH and they are presented through an easy and user-friendly dashboard that uses filters and maps to give customers an effective path for finding the right service. The partners of the INFINITECH consortium will provide joint expertise and knowledge in different fields, offering support to companies to become more competitive with regards to their business processes, products or services using digital technologies. Some already identified services are:
 - **Technological support services.** Such services leverage on the technological expertise of the consortium for providing a vast range of services such as engineering, design, specification and implementation. Third-parties outside INFINITECH will be offered with the option of providing requests for technological support (e.g., “Help me with my FinTech solution or MVP) through the INFINITECH Marketplace.
 - **Training services.** Several training services would be provided to enhance the businesses’ employee’s level. The training may vary from technical to quality or skill training. In this direction, the project will provide a range of training materials and courses through the marketplace, covering topics related AI, Blockchain and Big Data in digital finance.
 - **Business planning services.** These services would aim to implement strategic approaches to merge innovation and business exploiting cutting-edge technologies and skilful collaborators. As per the context of INFINITECH, such planning would be much targeted to the financial environment. Third-parties outside INFINITECH will be offered with the option of providing requests for business planning services (e.g., “Create a business plan for my Business Case or FinTech company).
 - **Business modelling services.** Innovative business model services would be provided to translate complex processes into financial insights and decision-making approaches. The existing framework, such as Business Model Canvas or Odyssey 3.14, would be utilized as a means to achieve strategic models and approaches. Third-parties outside INFINITECH will be offered with the option of providing requests for business modelling services (e.g., “Propose and help me validate a business model for my Business Case or FinTech company).

- **Go-to-market services.** These would take into account the essential factors to develop effective strategies, aimed at increasing the technology readiness level (TRL) of a specific product, providing the most fruitful market segmentation for a business, or defining the target market for a service.
- **Sandboxes Experimenting Services (SES).** This second category of services is mainly devoted for providing design services, safe testing environments and innovative joint labs models. The infrastructure developed in INFINITECH would allow testing and deployment of solutions in safe environments - sandboxes.
 - **Co-design services.** Companies and businesses would be guided in the overall design of a specific product or solution in gathering requirements, defining specifications, developing the architecture, selecting technical services and then being supported for the integration.
 - **Testing services.** The consortium would offer safe environments to allow stakeholders testing their solutions in an easy and friendly way, leveraging on the flexibility of the INFINITECH Reference Architecture and its microservices approach. Such environments may be both for early-stage testing and proof of concepts, and for real testing environments and prototyping.
 - **Co-innovation services.** These services would leverage on the available innovation labs provided by INFINITECH consortium, supporting the businesses in creating new innovative models, enabling them to access the market through joint collaborations.

The VDIH would be the catalogue of the services stated above and more. These will be appropriately structured and their delivery will be defined based on the federation and integration of resources from existing innovation management infrastructures of the partners. High importance would be given to access and governance rules for ensuring easy-to-use and fully compliant services.

The VDIH is integrated in the marketplace as shown below.

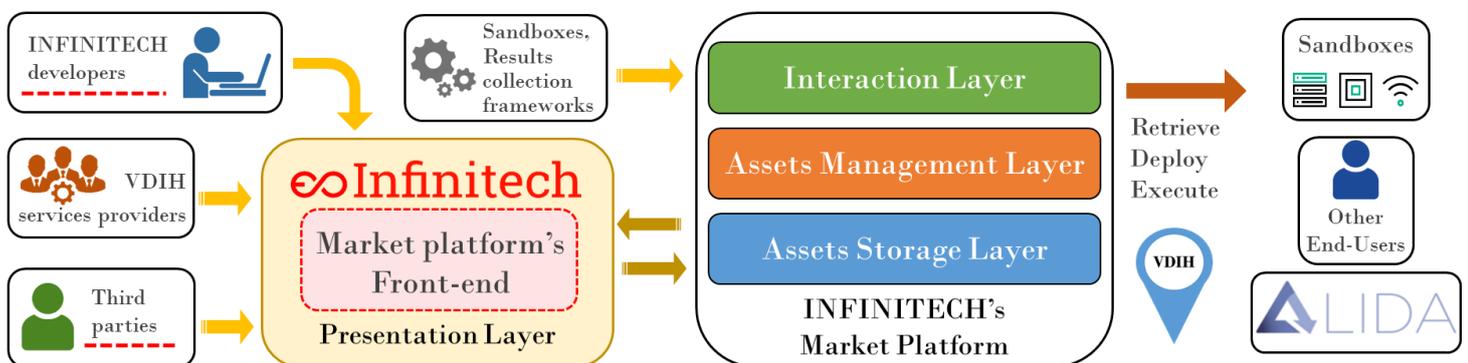


Figure 8. Front-end of the marketplace integrating the VDIH

2.2.2. Definition of users and their INFINITECH Journeys

As it was shown in D8.2, the user journeys for the VDIH are the same as the ones defined for the marketplace. In order to not forget this definition, it is also included in this report.

Persona Definition
<u>FinTech Developer</u>
<ul style="list-style-type: none"> ▪ High trained people in SW development. ▪ People searching for new Fintech technological application according to market trends.
Goals & Objectives of the Persona – Indicative User Journey
<u>Objectives</u>
This kind of users are looking for:

<ul style="list-style-type: none"> ▪ Understanding the basics of data science for digital finance use cases such as fraud detection, wealth management, Anti-Money Laundering (AML) and more. ▪ Gaining insights on the use of machine learning pipelines and data science workflows for wealth management in his product / project. ▪ Seeing some practical use cases of such solutions i.e., financial organizations improving their wealth management approach based on Machine Learning solutions over large wealth management datasets. <p>User Journey</p> <ul style="list-style-type: none"> ▪ Logging in the INFINITECH platform (after signing in), searching for a pipeline for a specific digital finance topic, accessing the ML pipeline with sample code and documentation. ▪ Accessing information about training courses that relate to their needs.
--

Table 1. Fintech Developer Persona

Persona Definition
<p>Digital Finance Consultant</p> <ul style="list-style-type: none"> ▪ Digital Finance Consultant for Banks, Insurances... ▪ Search technological solutions to be implemented
Goals & Objectives of the Persona – Indicative User Journey
<p>Objectives</p> <p>This kind of users are looking for:</p> <ul style="list-style-type: none"> ▪ Finding detailed descriptions and the benefits of each solution. ▪ Exploring technical details about the solutions including information on data needed, machine learning models and more. ▪ Finding out practical use cases of such solution in relevant organizations, such as banks. ▪ Being able to see some demonstrable and working software solutions. ▪ Being able to contact the vendor of the solution. <p>User Journey</p> <ul style="list-style-type: none"> ▪ Logging in the marketplace and searching for solutions, accessing solution artifacts (including documentation), using the solution examples to present them to their customers. ▪ Accessing information about training courses that relate to their needs.

Table 2. Digital Finance Consultant Persona

Persona Definition
<p>INFINITECH Developer</p> <ul style="list-style-type: none"> ▪ INFINITECH developers responsible of any Project’s pilot ▪ Alternative approaches to existent pilots that should not replace the original one
Goals & Objectives of the Persona – Indicative User Journey
<p>Objectives</p> <p>This kind of users are looking for:</p> <ul style="list-style-type: none"> ▪ Limiting the access to their solution and make them available only to people who those that engaging in the pilot they work.

<ul style="list-style-type: none"> ▪ Informing, the end users properly about what needs are covered by the new approach, how it should be used, what are the expected results of its execution and what are the inputs. ▪ Being able to receive feedback from the users about their experience with the new solution. <p>User Journey</p> <ul style="list-style-type: none"> • Logging in the platform and accessing relevant/alternative solutions, including relevant documentation. • Testing, customizing, and deploying alternative solutions in-line with their needs (e.g., the needs of their pilot application).

Table 3. INFINITECH developer Persona

Persona Definition
<p><u>Banks and Insurances</u></p> <ul style="list-style-type: none"> ▪ Banks and Insurances that are looking for new (BigData/AI) technologies to implement. ▪ Develop improvements for clients according to market trends, notably based on AI/BigData solutions. <p>In this context, bank and insurance companies are represented by relevant employees, like employees from IT related departments, innovation departments, or other business departments link for specific solutions (e.g., retail banking concerning wealth management for retail customers).</p>
Goals & Objectives of the Persona
<p><u>Objectives</u></p> <p>This kind of users are looking for:</p> <ul style="list-style-type: none"> ▪ Being able to express their interests in specific technological solutions. ▪ Receiving advisory on these solutions. ▪ Contacting with INFINITECH developers to find Fintech tools. ▪ Being able to develop specific solutions and present them to INFINITECH ecosystem. <p>User Journey</p> <ul style="list-style-type: none"> ▪ Logging in to the platform. ▪ Submitting information about desired solutions and getting relevant answers from the INFINITECH consortium or community. ▪ Searching for relevant solutions and their artifacts (e.g., documentation, demos, sample code etc.).

Table 4. Banks and Insurance Company Persona

3. Services and resources provided by the VDIH

This section provides the overview of the current services offered by the INFINITECH VDIH. These services will grow as the project continues.

The Virtualized Digital Innovation Hub (VDIH) is a component of the INFINITECH marketplace and will be integrated in it, to provide innovative services ensuring a complete set of offers that can be presented to customers and businesses. The VDIH's services will leverage on the expertise of the consortium and will be differentiated in categories, providing filters for agile research and identification. The VDIH will be based on the INFINITECH marketplace infrastructure, and its dashboard will be a specific layer inside the Presentation Layer.

3.1. Technology assets from the Marketplace

The services of the VDIH will be supported by assets of the INFINITECH market platform, including the technological assets of the platform and complementary assets like training. Specifically, the following enhancements to the already described assets will be used to support the VDIH and the delivery of its services:

- **Packaging and Distribution of Assets for the Development of Digital Finance Services:** To boost the technical support, integration and sandboxing services for the digital finance sector, some of the INFINITECH assets will be packaged and made available in a form that can be consumed by developers, integrators and innovators, including SMEs and FinTechs. For instance, selected INFINITECH components are made available in the marketplace as images for Docker containers to facilitate their distribution, deployment and use in different environments. As another prominent example, data science developments (including ML algorithms) will be made available as Jupyter notebooks, which is nowadays one popular way of making available and distributing data science and machine learning knowledge.
- **Technical Documentation of Technological Assets:** Some of the technological assets of the marketplace will be appropriately documented to facilitate their use in technological support and sandboxing services. This documentation shall include:
 - **Developers' manual**, including documentation of APIs, sample code and how-to guides.
 - **Users' manual**, with information about potential use of the asset in digital finance scenarios.
 - **Demonstration of the asset**, through screenshots, videos and simulation.
- **Training and Education Assets:** To support the training services of the VDIH the assets of the marketplace will include:
 - **Presentations and tutorials** on Digital Finance topics.
 - **Structured Courses** in AI and Blockchain in Digital Finance.
 - **Webinars**, including recorded workshops of the INFINITECH projects.
 - **White Papers** and Publications of the project.
 - **Links to external resources**, including resources residing within affiliated platforms and marketplaces (e.g., the IoT Catalogue and the Finsecurity.eu platform of the FINSEC project).

The VDIH will leverage in that way the different assets developed, not only by INFINITECH partners, but also by third parties like from related projects. As it will be explained in the following points of this document, these assets will be integrated in the marketplace.

As a physical DIH does, including tools that will help the users to develop and integrate technological solutions, the INFINITECH VDIH gathers all the knowledge and innovative Fintech and Insurtech solutions, developed through the different waves of experiments. All the technologies and tools included will add a significant value to the VDIH offer oriented to the different users exposed previously in point 2.2.2.

Furthermore, the VDIH will be enriched with non-tangible services that are explained furtherly in the following points.

3.2. Accelerators and DIHs catalogue

As a virtualized DIH, INFINITECH VDIH should include a network of actors that allow the users to contact other organisations in order to scale-up nationally and internationally. Since all the partners that take part in the project are from different European regions, the geographical dimension plays a very relevant role in order to provide services in the partner's regions and beyond.

Internationalisation is one of the key aspects when talking about scalability and this is the reason why INFINITECH VDIH has included a wide network of acceleration services to nourish the growth opportunities for Fintech and Insurtech start-ups that come to the marketplace and services.

In order to create a batch of acceleration solutions, all the partners have contributed, and will further contribute as the project continues, with a market study in which the best Fintech and Insurtech accelerators and DIHs have been identified. These organizations, endorsed by the network of partners, their knowledge of the sector and their expertise, have integrated a catalogue in which the relevant information has been included. The key aspects included in order to give the proper data that will help the VDIH users to choose the best acceleration offer are:

- **Accelerator name:** the full name of the DIH and/or accelerator is included.
- **Website:** in order to directly link the profile in the VDIH to the official webpage of the organisation.
- **Country and region:** in order to geographically locate the organisation.
- **Services provided:** studying the accelerators' profile, several and different services have been identified. Some examples are non-equity internationalization opportunities, new customers and new partners connection, training, mentoring, added value services, start-up support, technological credits, notoriety, etc.
- **Acceleration method:** including open innovation and equity/seed capital among others.
- **Sector:** it refers to the specialization sector of the accelerator, including:
 - Blockchain
 - Artificial Intelligence
 - Machine Learning
 - Cybersecurity
 - IoT
 - ICT
 - VR/AR
 - 5G
 - Biometry
 - Virtual Assistant
 - Innovative Financial Solutions
 - LegalTech
 - Brand & retail
 - Mobility
 - HealthTech
 - FoodTech & Agtech
 - Smart Cities
 - Enterprise Tech
 - SafetyTech
 - Other
- **NACE Sector:** this time, the economic sector is included taking into account the NACE codes:
 - Agriculture, animal breeding, forestry and fishing
 - Trade and Tourism
 - Culture and Sports
 - Employment and social concerns

- Education and training
 - Energy, efficiency, renewable energies
 - Environment
 - Circular economy and waste management
 - R&D
 - Digitisation
 - Innovation and IT
 - Industry
 - Internationalization
 - Mobility, transports and logistics
 - Healthcare
 - Other
- **Success cases:** some acceleration projects and start-ups/products that have been internationally or nationally successful.
 - **Beneficiaries:** main organisations that could ask for advice or that could participate in the acceleration programs.

The catalogue of accelerators' assets enable interested parties like FinTech enterprises and SMEs to locate incubator and accelerator programs that they could leverage in order to boost their growth. Searching could be based on multiple criteria, like the location of the accelerator and areas of focus and more.

3.3. Training courses catalogue

3.3.1 Overview

Once again, taking into account the services offered by the VDIH, training courses and resources are a relevant asset to be included. These training courses come from external organisations and a similar process has been followed for the elaboration of both catalogues.

The different partners have performed a market analysis, this time with focus on training resources oriented to Fintech and Insurtech technologies and its application. Taking into account that some INFINITECH partners are Universities, this initial input should be used for the elaboration of the catalogue of training solutions.

Mentoring and training are a fundamental pillar in the accompaniment of start-ups and scale-ups during their growth and scaling, both nationally and internationally. In order to create a quality offer, the different key aspects have been taken into account:

- **Course title:** including the official name given by the educational institution.
- **Keywords:** it includes different words to identify the topic and training resources offered by the course.
- **Platform:** indicating the technological platform used to deliver the course contents.
- **Instructor or Institution:** it indicates the name of the main teacher, director of the course or the name of the institution if the teachers board is too big to be indicated. It gives a main idea of the quality of the course.
- **Provider:** indicates the institution that delivers the training course and if it is a university, business institute, etc.
- **Level:** with this information, the user knows if previous knowledge is required or not. The options are beginner (no previous knowledge required), intermediate (basic knowledge required) and advanced (intermediate/advanced knowledge required).

- **Duration:** indicated mainly in hours, unless it is indicated otherwise in the official website of the course. It could also include the equivalent in ECTS.
- **Cost:** in the local currency of the country in which the course is delivered.
- **Location:** indicating the physical location if the course is delivered in a presential mode or online if it is delivered virtually.
- **Search keywords:** in order to link these words to the users’ search.
- **URL:** official website of the course in which the user could apply to participate.

As illustrated in following paragraphs, the INFINITECH marketplace will include/integrate three types of training courses as follows:

- Existing courses focuses on AI and BigData in digital finance, as well as related subjects.
- Courses developed in related projects (e.g., H2020 FINSEC) with which INFINITECH has established collaborative links. In this case INFINITECH will not just list the courses, but it could directly integrate some of its materials.
- INFINITECH “Home grown” courses developed in INFINITECH in areas of interest to the project.

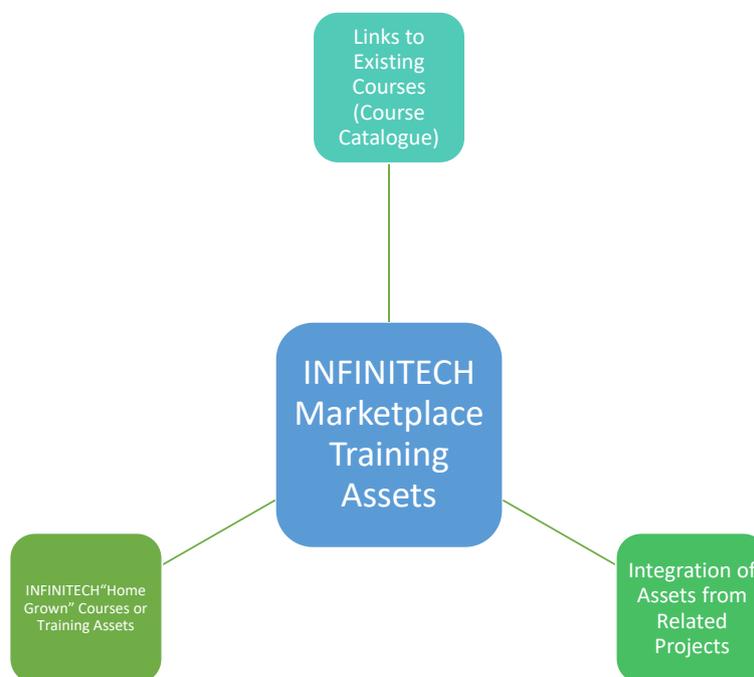


Figure 9: The three different types of Training Assets in the INFINITECH Marketplace

3.3.2 From Individual Courses to Learning Paths

One the main drivers for the creation of the INFINITECH course catalogue is to support digital finance professionals in skills acquisition for entire skills profiles as illustrated in Figure 10. Specifically, the following process is envisaged:

- **Digital Skills Profiles Definition:** Based on the desk research and skills surveys, INFINITECH will define a number of skills profiles for digital finance professionals, with special emphasis on profiles that related to data-driven applications that leverage BigData, data science and AI knowledge.
- **Key Skills Definition:** Each specified skills profiles will be broken down to a more fine-grained list of skills e.g., data science, machine learning, data visualization, basic Fintech knowledge, advanced FinTech knowledge etc. Different lists of skills will be specified for each one of the identified profiles.

- **Learning Paths Specifications:** Each list of key skills will be mapped to a consolidated learning path including the skills to be learnt, any overlaps and interdependencies between them, as well as any relevant prioritization that could facilitate learning.
- **Mapping of Learning Paths on INFINITECH Assets:** Each learning path will be mapped to specific courses of the INFINITECH marketplace (notably courses of the catalogue). In this way, the INFINITECH marketplace will provide its users with access to consolidated and integrated paths of knowledge, which users can follow leveraging courses developed by INFINITECH and/or course integrated in the catalogue.

Overall, the training strategy of INFINITECH will facilitate the project’s community to transition from learning based on individual “siloes” courses to integrated learning paths that lead to skills profiles with clear market relevance.

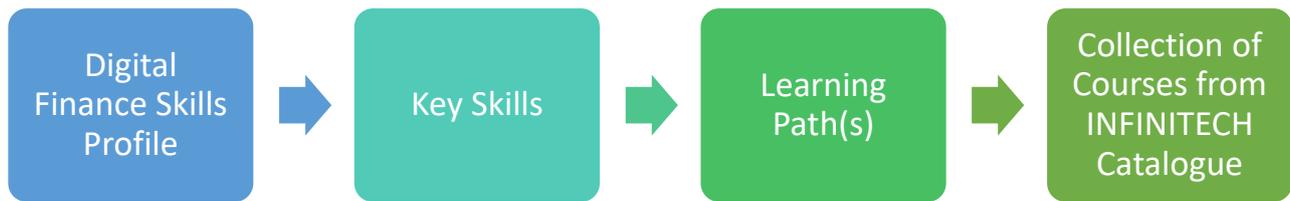


Figure 10: Concept of Learning Paths and Link to INFINITECH Course Catalogue

4. Availability of the VDIH services in the Market Platform

At this point, it is explained how the exposed services have been made available in the marketplace, as well as the process followed in order to achieve that.

First of all, it is important to highlight that the VDIH is an important functionality integrated in the marketplace with its own space.

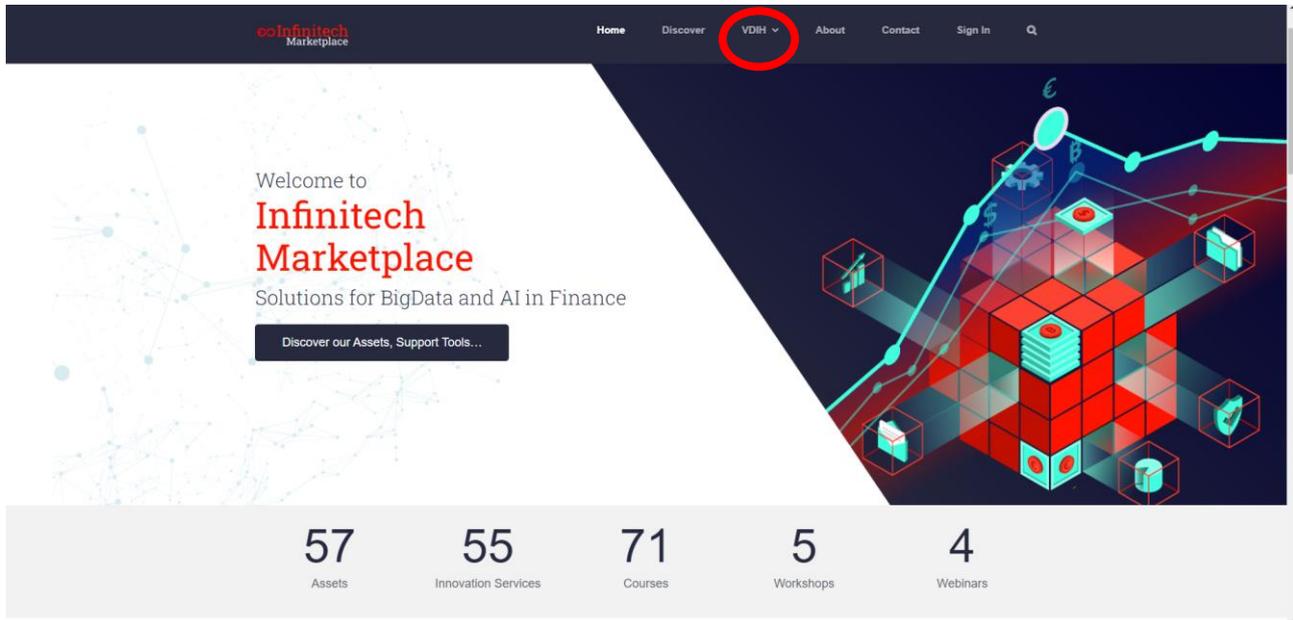


Figure 11. INFINITECH VDIH in the Marketplace

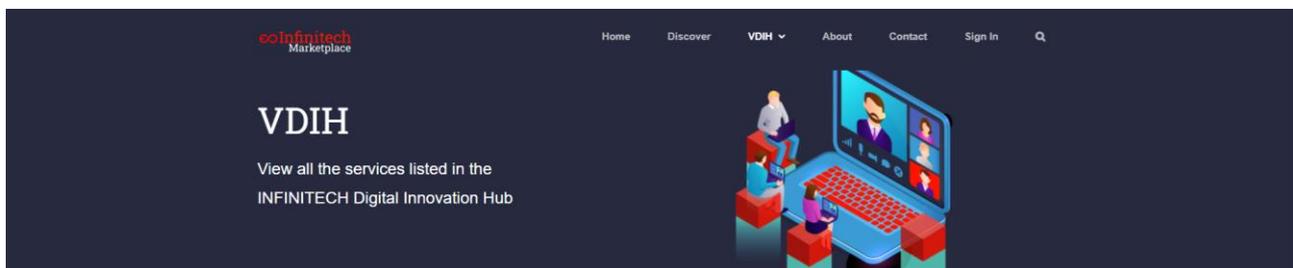


Figure 12. INFINITECH VDIH homepage

Knowing that the users could find this space in the INFINITECH’s marketplace, it is important to describe the interface and the access to the different resources through it and how the VDIH leverages the marketplace assets.

The catalogue of services delivered by the VDIH will be increased as the project continues and they will be included in the following version of this deliverable (D8.8 – Virtual Digital Innovation Hub - II).

4.1. Training

The first service offered by the VDIH is training. In this section, INFINITECH users could find three kind of training services and training offer shown in the image below.

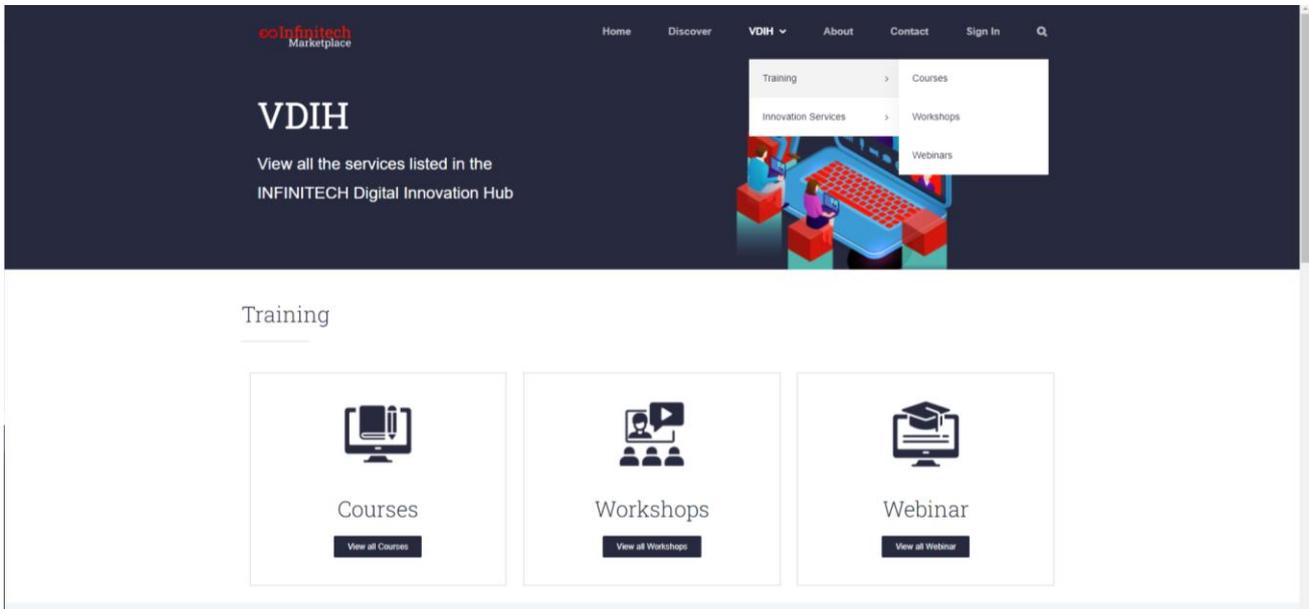


Figure 13. VDIH Training services

First of all, there is a Courses section in which all the courses included in the catalogue are listed. In order to create this section, the training courses catalogue input has been refined to include only the relevant information for the user.

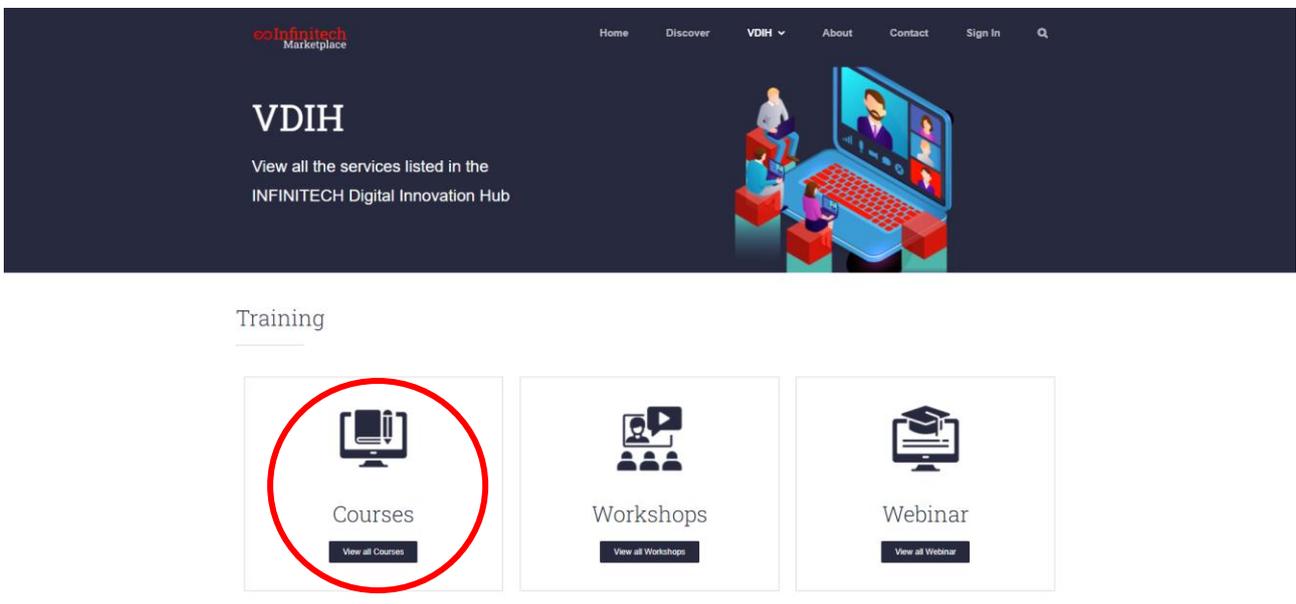


Figure 14. Training - Access to the Courses section in the VDIH

The users can access this section by clicking on the “View the Courses” options in the VDIH homepage.

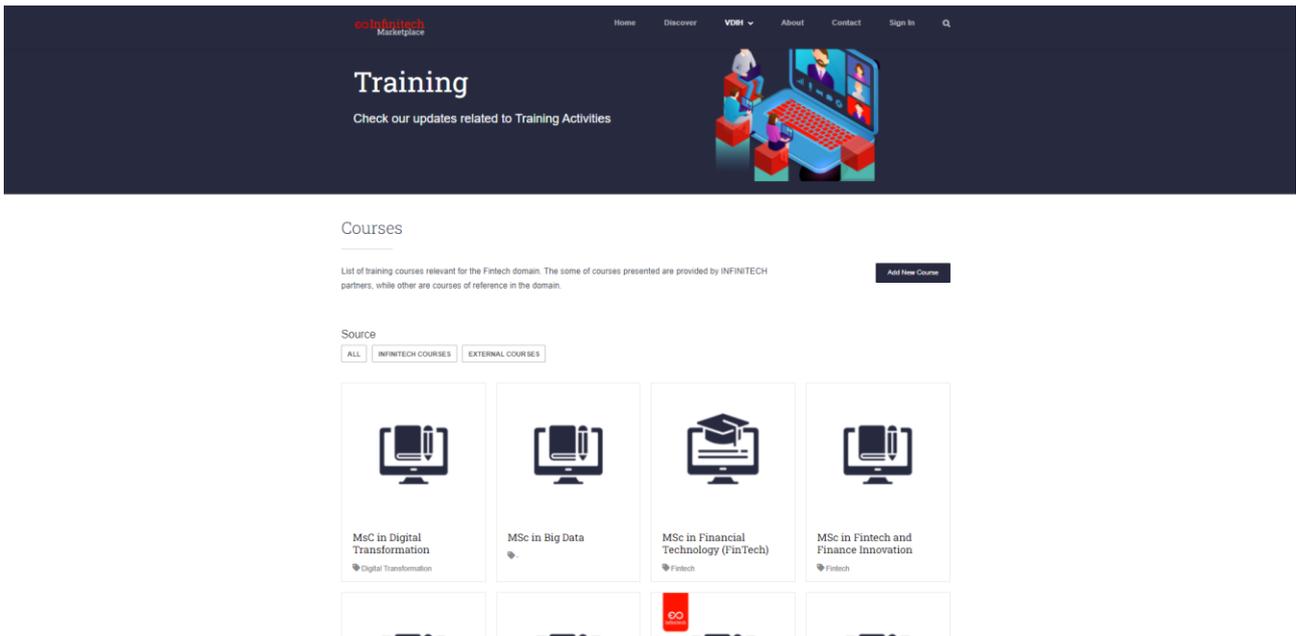


Figure 15. Training - Courses section view

Once the user has accessed the section, the list with the bunch of training courses appears. There, the user can find information about the name of the course, the keywords, an icon that indicates the type of course (if it is an ECTS course or not) and if it is delivered by INFINITECH's or by an external institution. The user can apply filters in order to find INFINITECH's courses and external courses.

By clicking on each course, the user obtains more detailed information, including the website link, a brief description of the training course, the keywords and details of the course (provider, level, duration, cost and platform).

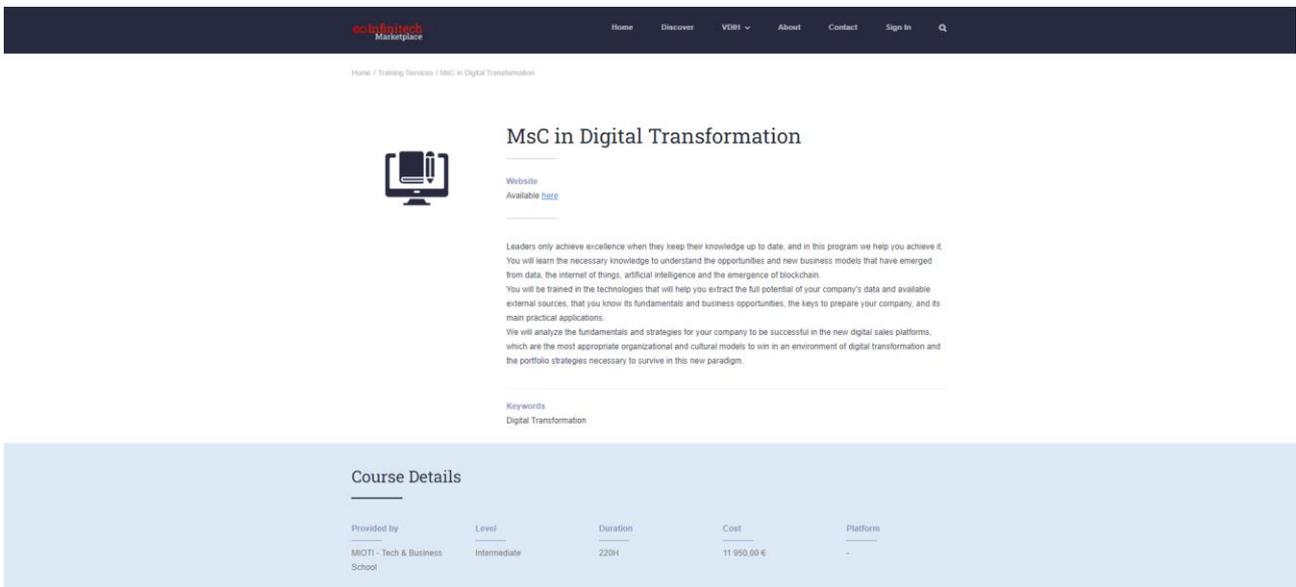


Figure 16. Training - Information about the course

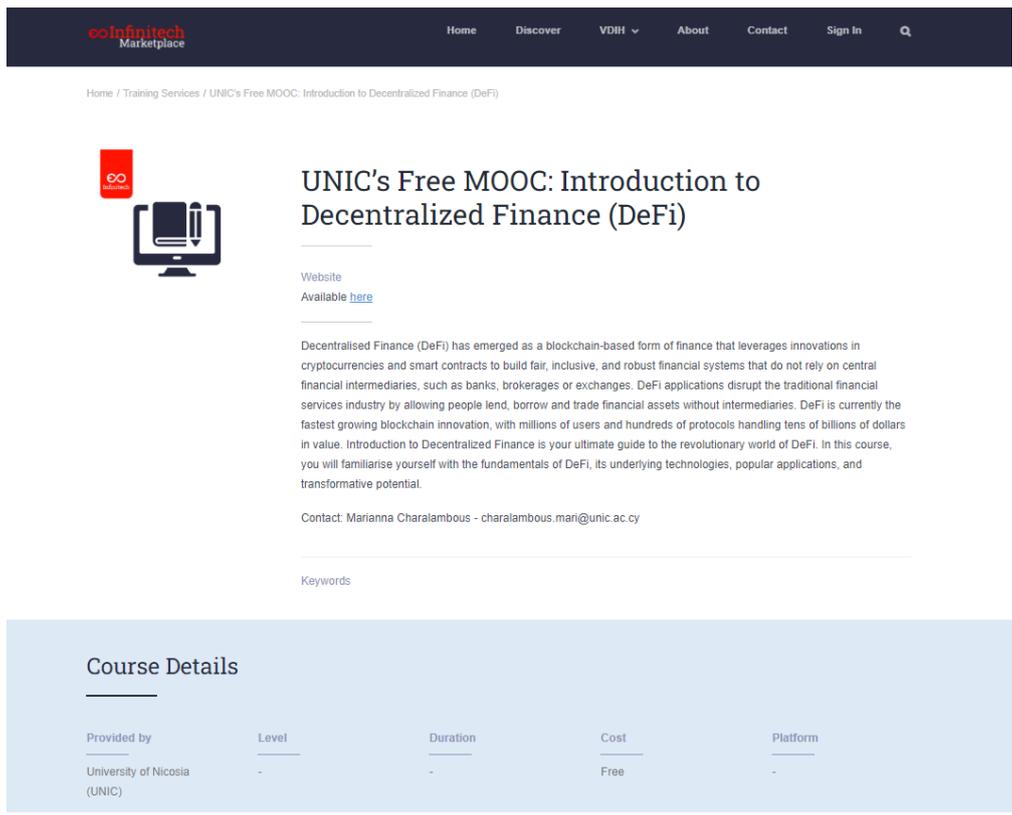


Figure 17. Training - INFINITECH's courses

The second training resource offered through the training section are workshops. In this section the user can find also INFINITECH’s workshops and external workshops.

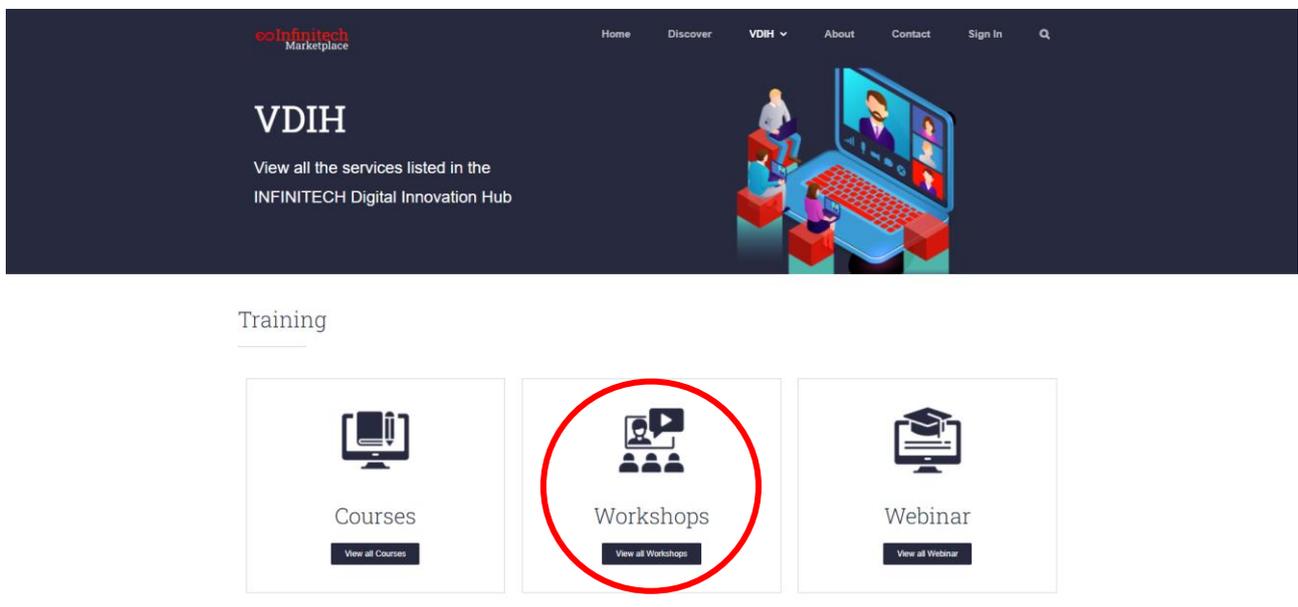


Figure 18. Training - Access to the Workshops section in the VDIH

In this case, by clicking on the “View all workshops” option, the user is directly addressed to the list of this resources. This list includes the title and the keywords to identify the topic of the resource, as well as it indicates if they are INFINITECH’s property or external workshops. Furthermore, there is an option to “Add New Workshop”, since the platform works as a collaborative option.

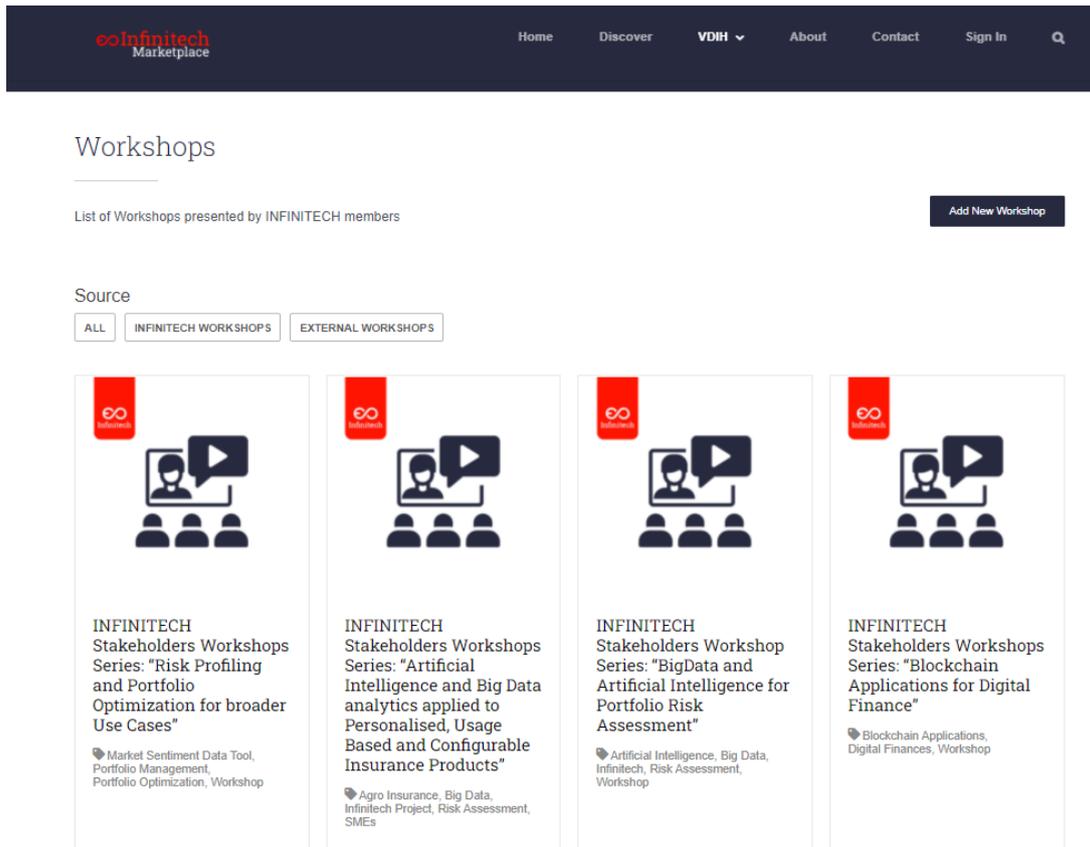


Figure 19. Training - List of workshops

Once the user clicks on the resource, the information displayed includes the miniature and possibility to display the video and the option to watch it on YouTube or the platform in which it has been published.

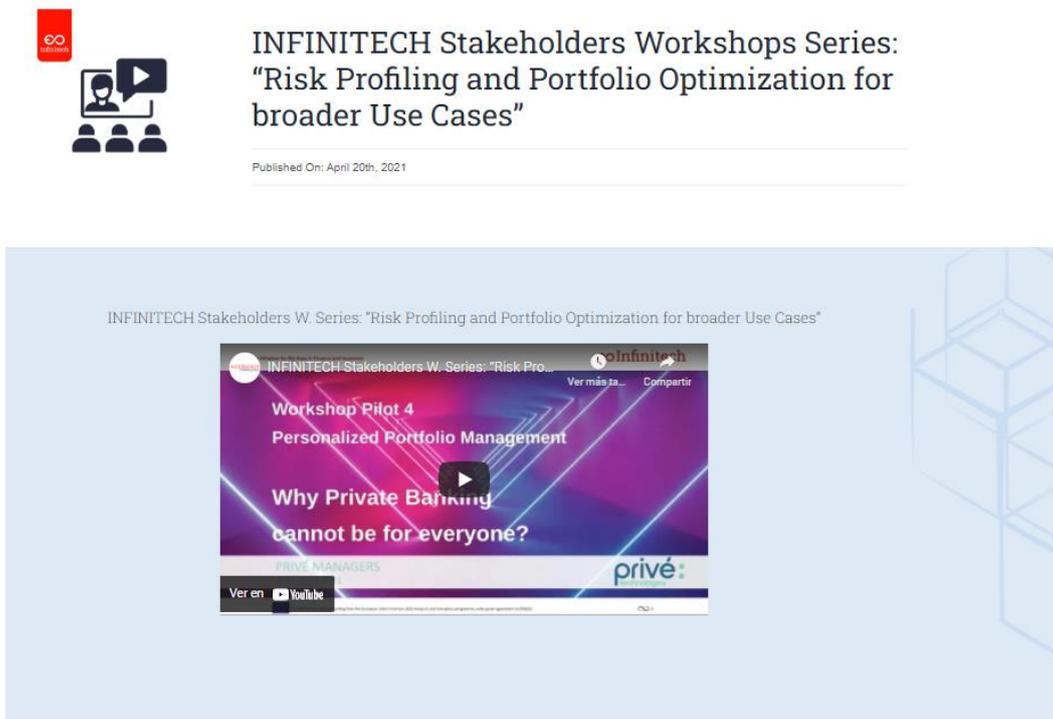


Figure 20. Training - Information displayed for the workshops (I)

It also includes more information about the speakers, description of the workshop, duration and the presentations that have been used. Finally, a Contact button is included in order to receive all the details about the content that has been created by INFINITECH partners.

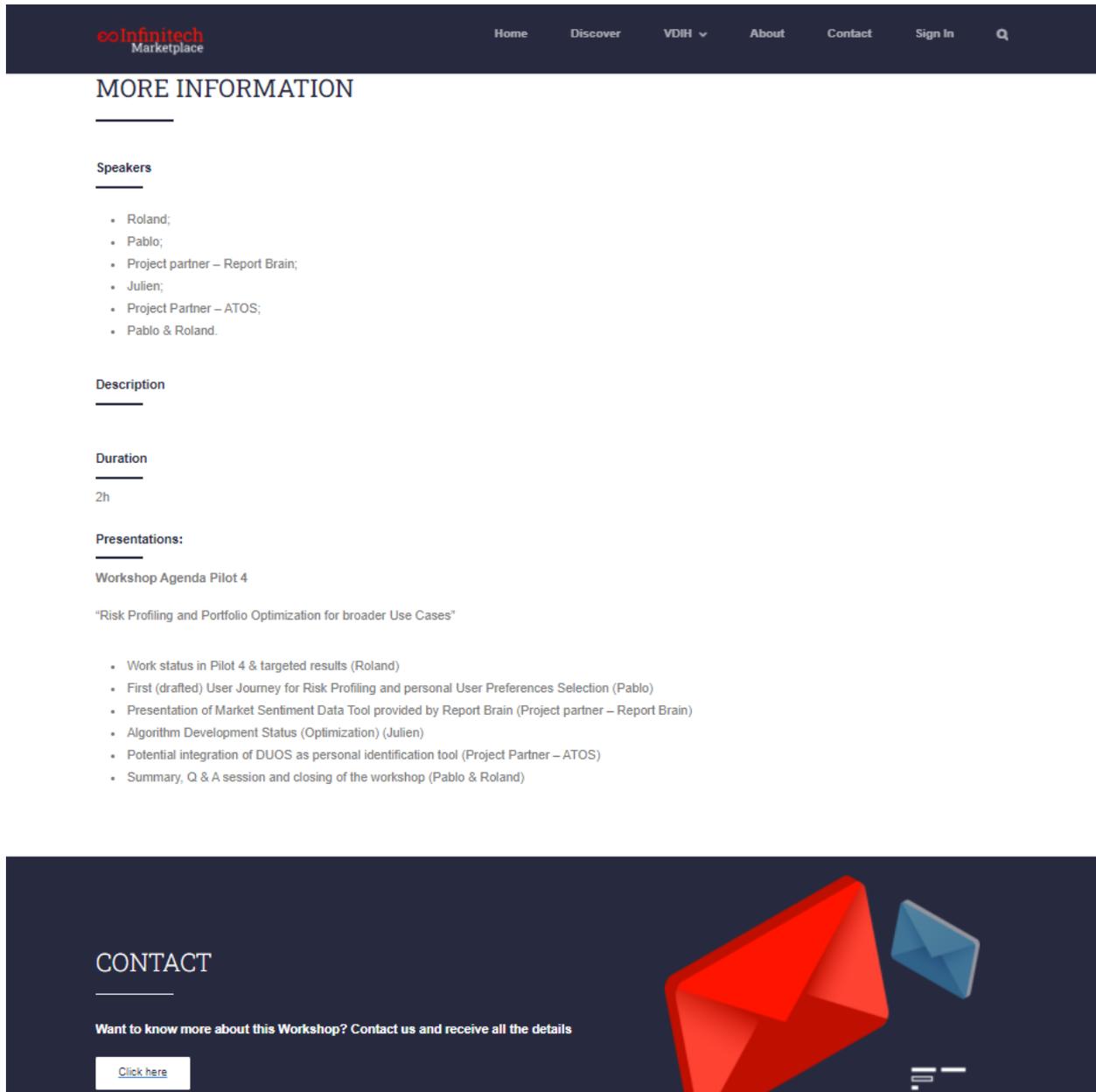


Figure 21. Training - Information displayed for the workshops (II)

The final section is the one dedicated to Webinars, accessed by clicking on the “View all webinars” options. In this case, the list of webinars includes not only INFINITECH’s partners webinars, but will also include external ones. It gives also the option to create/add new resources in a collaborative way.

These resources aim to help and train in small pills format INFINITECH users and partners about Fintech and Insurtech technologies and its application.

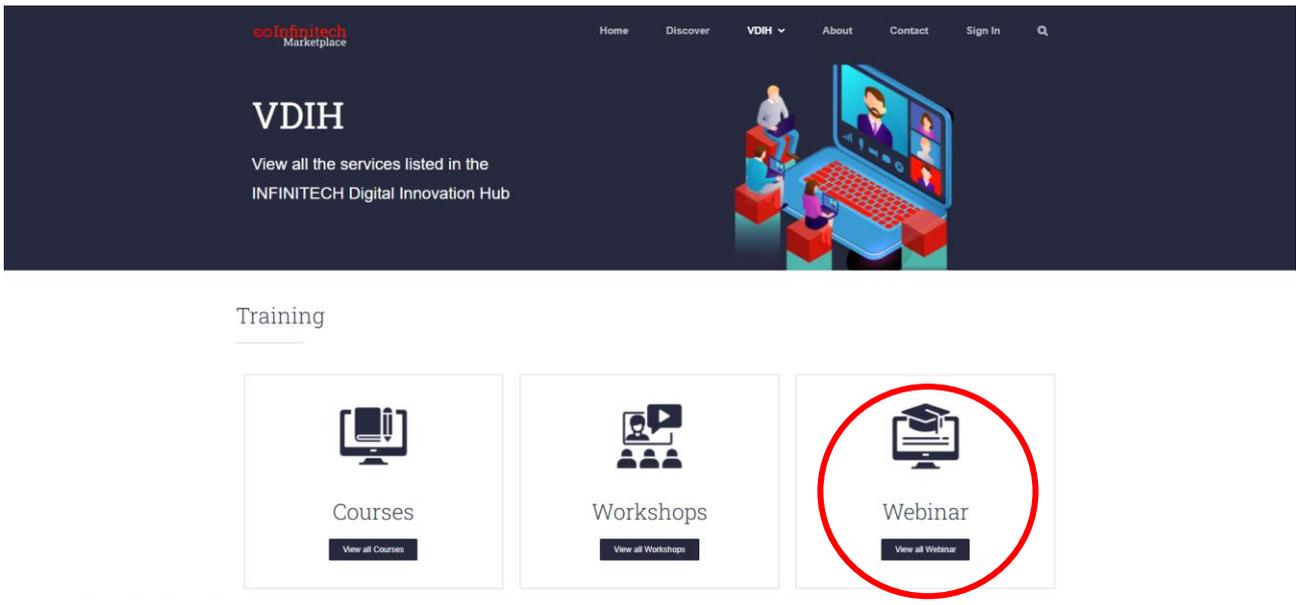


Figure 22. Training - Access to the Workshops section in the VDIH

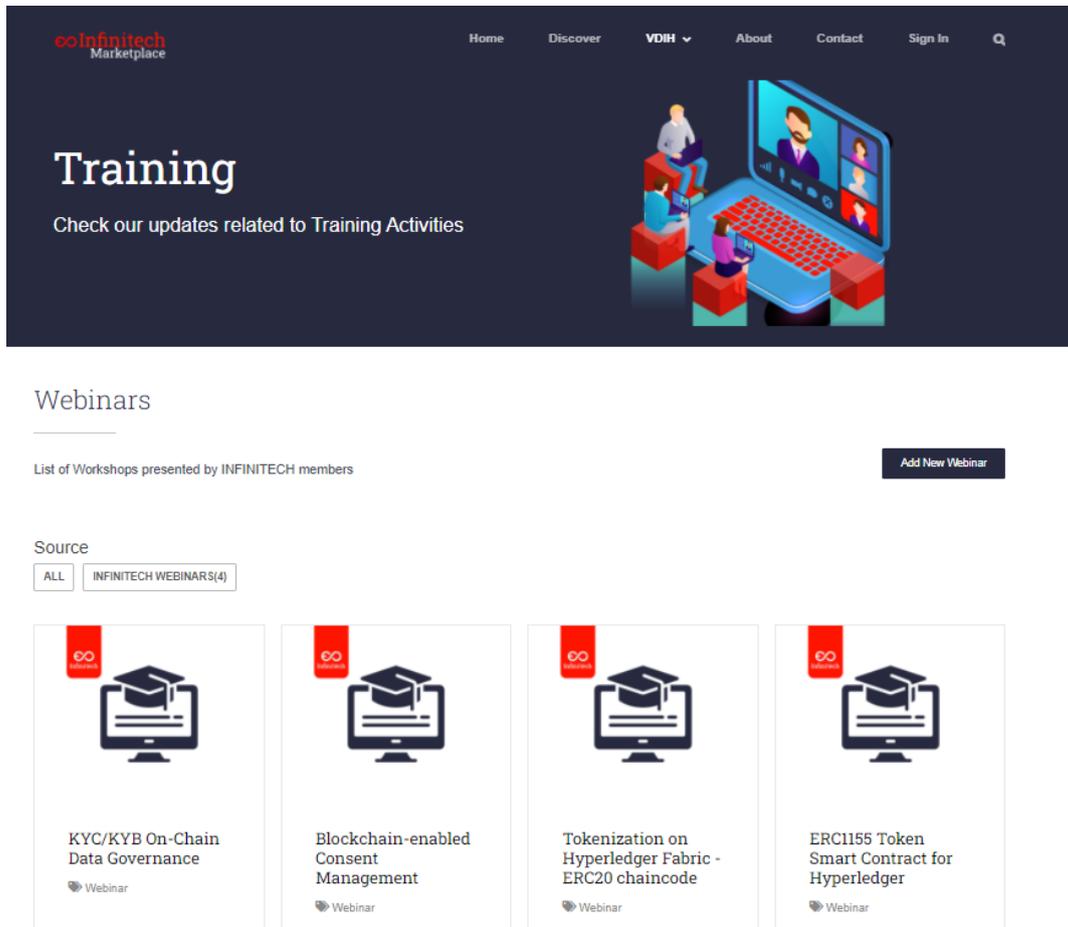


Figure 23. Training - List of webinars

The information shown in this list includes a tag that indicates the type of resource (webinar) and the complete title.

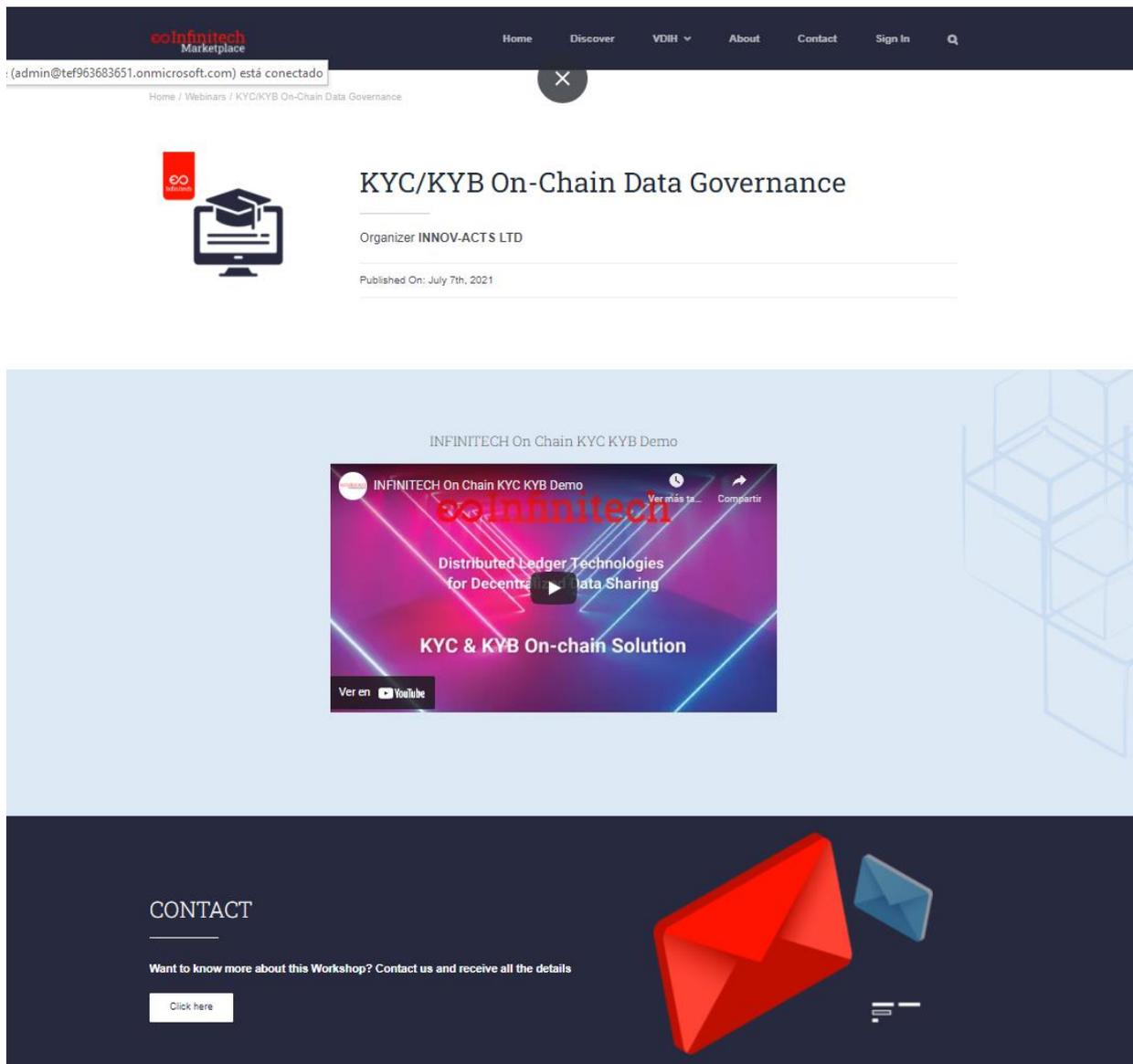


Figure 24. Training - Information displayed for the webinars

When clicking on a webinar resource, the information includes the name, organizer, date of publication, link to watch the webinar on the VDIH platform or on YouTube and the Contact option to receive all the information related to the resource.

The course listed in the above screenshots comprise the links to the courses of the INFITECH catalogue. However, as part of the VDIH the project has been developing courses associated with rest two types of assets namely:

- **A Home Grown Blockchain Course:** It is developed in the project with a view to providing introductory information about blockchain technologies, spanning the project’s developments (e.g., permissioned blockchains), but extending also to topics beyond INFINITECH (e.g., AltCoins). An outline of the current contents of the course are listed in Table 5.
- **Courses developed in related projects like FINSEC:** The project has linked and integrated resources from the FINSEC course on digital finance security (see a snapshot of the course page in Figure 25). The course focuses on concepts, standards and solutions for securing critical infrastructure in the finance sector, including solutions that are based on BigData, ML and AI technology i.e., as such it fully aligned to the INFINITECH developments.

INFINITECH Course: “A 360 Degree Introduction to Blockchain Technology”	
Lecture	Title
1	Financial Landscape Overview
2	Introduction to Blockchain Technology and Decentralization
3	Bitcoin
4	Smart Contracts
5	Permissioned Blockchains
6	Quorum
7	Overview of Alternative Coins (AltCoins)

Table 5: Overview of INFINITECH Course: “A 360 Degree Introduction to Blockchain Technology”



Figure 25: Home page of the FINSEC Course: “Securing Critical Infrastructures in the Financial Sector”

4.2. Innovation Support

The second option and functionality included in the VDIH is the Innovation Support. This section addresses to the list or catalogue of accelerators abovementioned. This list has been refined in order to include the information that could be useful for INFINITECH users. Below it is shown the interface to access this service.

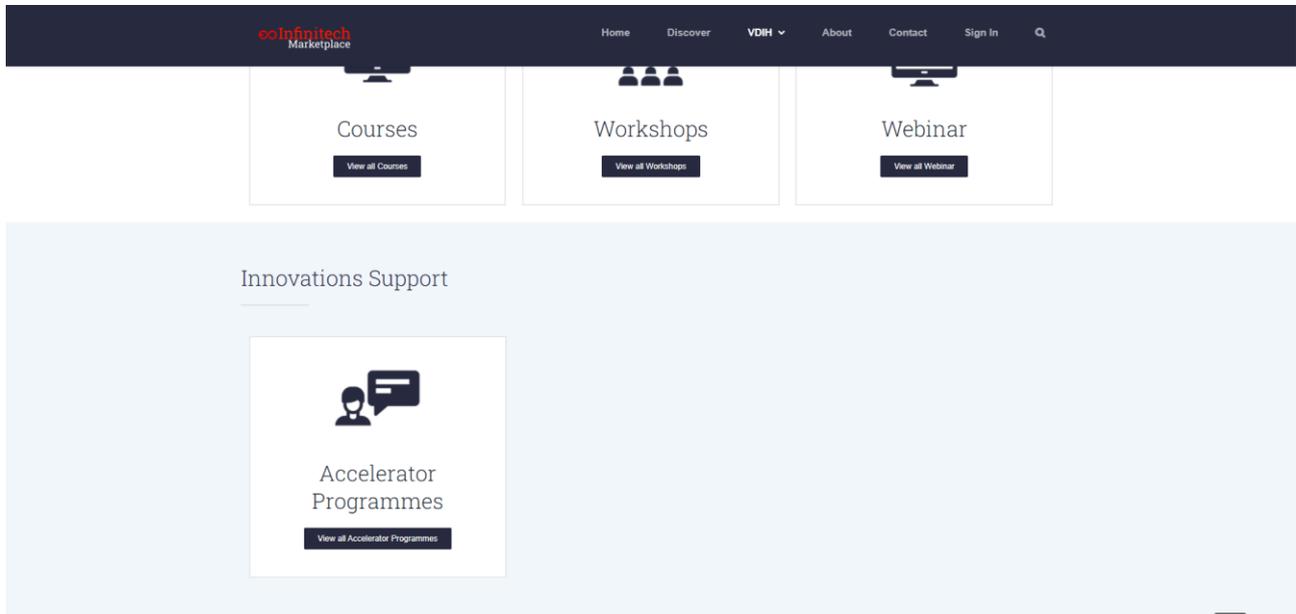


Figure 26. VDIH Innovation Support service

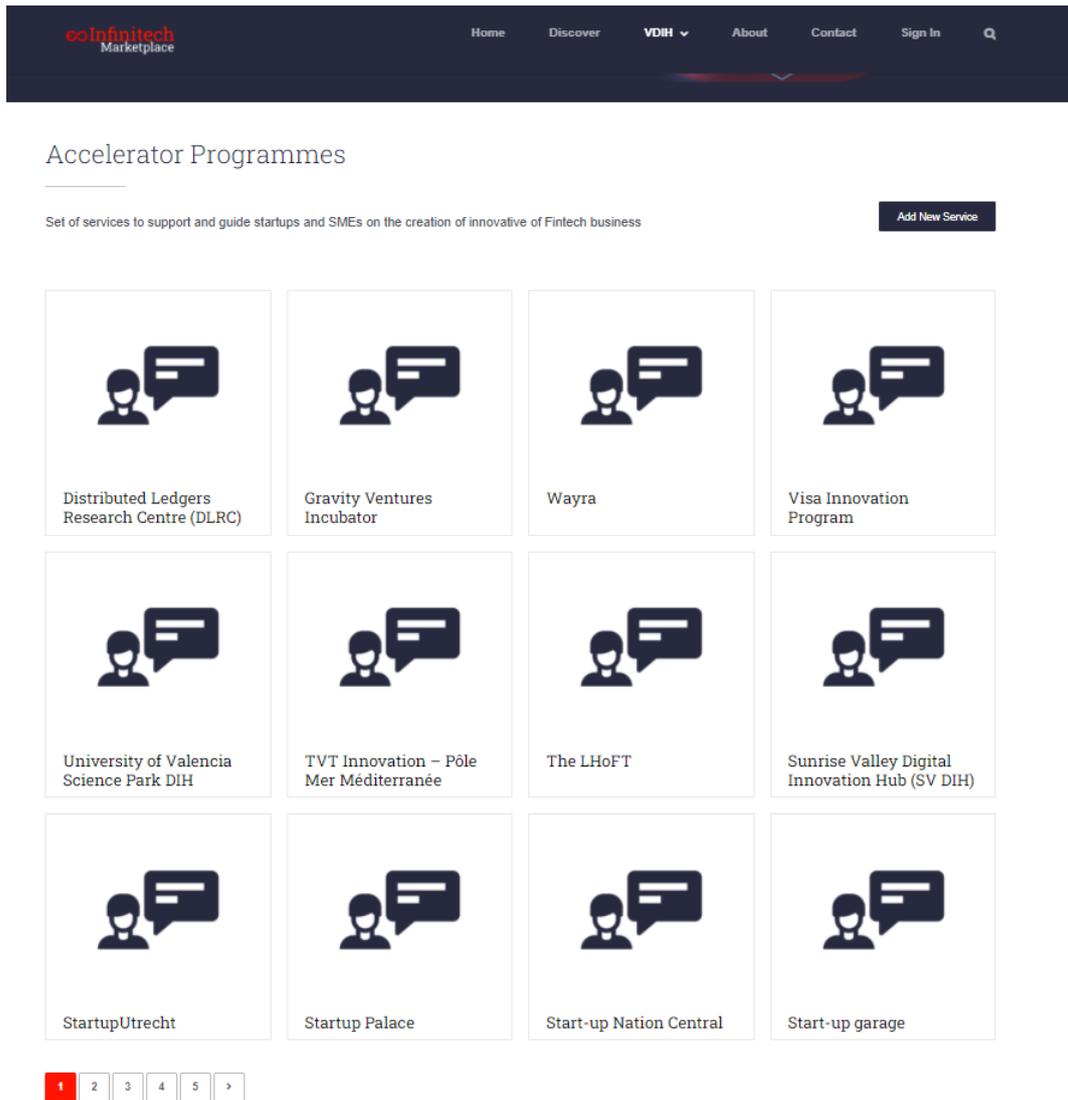


Figure 27. Innovation Support – Accelerators’ list

Through the option of “View all Acceleration Programs”, the user can access the complete list of accelerators that offer Fintech and Insurtech acceleration programs, and some tags about their services if it applies. In this list, they will find the complete name and, by clicking on the name, they will find all the relevant information as shown below.

The screenshot shows the Infnitech Marketplace website. At the top, there is a dark navigation bar with the logo 'Infnitech Marketplace' on the left and menu items 'Home', 'Discover', 'VDIH', 'About', 'Contact', 'Sign In', and a search icon on the right. Below the navigation bar, there is a breadcrumb trail: 'Home / Services / Innsomnia'. The main content area features a profile for 'Innsomnia'. On the left, there is an icon of a person with a speech bubble. To the right of the icon, the name 'Innsomnia' is displayed in a large font. Below the name, there are two columns of information: 'Website' with the text 'Available [here](#)' and 'Country' with the text 'Spain'. The profile is divided into two main sections. The first section, titled 'Services Provided', contains a list of services: Non equity, Internationalization Opportunities, New Customers and new partners connection, Scale-up and growing, Training, Mentoring, Added Value Services, Technological credits, Notoriety, and Unique co-working space. The second section, titled 'Beneficiaries', contains a list: Start-ups, SMEs, Scale-ups, and Spin-offs. Below these sections, there are two more columns: 'Acceleration Methodology' with the text 'Open Innovation' and 'Sector' with a hyphen '-'. The second part of the profile is a dark blue box titled 'Success Cases'. It contains two columns: 'The Logic Value' with the text 'Application for listed entities and indexes assessment, with more than 16 markets, 900 companies and available in 6 languages' and 'GAMCO' with the text 'Pioneer software manufacturer that generates advanced predictive models, based on AI and ML'.

Figure 28. Innovation Support - Accelerator's information

Each accelerator will have a file where the link to the website is included, as well as the country, services provided, main beneficiaries, acceleration methodology, sector (if it is addressed to a specific one) and the success cases. As it can be seen, the information of the catalogue is included in a more friendly view.

4.3. Technology Assets

First of all, since the INFINITECH market platform will be a repository of all the project's results, which will be made available to the EU digital finance/insurance communities, as mentioned in previous deliverables, the VDIH will make use of these assets. The project will provide the means for integrating within the platform, not only solutions of the consortium partners, but also solution from third-party solution providers and innovators (e.g., solutions that will be implemented during the project's hackathons or solutions that will be developed as part of the INFINITECH pilots).

The DIH serves as a single-entry point for accessing INFINITECH resources for innovation in the finance/insurance sectors (including FinTech/InsuranceTech). It aggregates and will aggregate more and more resources from FinTech accelerators/clusters, incubators of the incumbent financial organizations, FinTech developers, R&D organizations and other stakeholders of the consortium. As aforementioned, it leverages resources from the project's tailored sandboxes, including the EU-wide experimentation infrastructure that the project establishes for FinTech & InsuranceTech firms, which will be enhanced with complementary assets and services such as training, consulting and business support.

Various third-party solutions in the areas of Regulatory Compliance (e.g., Anonymization, Digital Onboarding, etc), Natural Language Processing, Sentiment Analysis, Insurance or Investment Products Recommendation Engines, etc) are available through INFINITECH Project. Also, other solutions that will be developed from Fintech or InsuranceTech, and that will benefit from the outcomes of the INFINITECH Big Data, IoT and AI technologies, will also be included in order to provide alternative applications related to the Financial or Insurance Industry. The list of the available third-party solutions that will be available through INFINITECH market platform, will be placed in a separate deliverable (D8.9), grouped by the relevant functionality and sector that will be mainly relevant to.

For all third-party solutions, that will be part of the marketplace -along with additional information for each one- specific examples will be included, as well as the relative Open API input / output information descriptors and relative sandbox and datasets that may be available either through INFINITECH, or other sources (e.g., Open Data, Synthetic Data, etc).

These assets are now available through the marketplace. In the Discover option, the user could find the list of assets that could be filtered according to the following criteria:

- Algorithm
- API
- Data Set
- Docker Container
- ML Model
- Notebook
- Other
- VDIH service

Furthermore, the user, on the left has a list of the latest assets added to the marketplace.

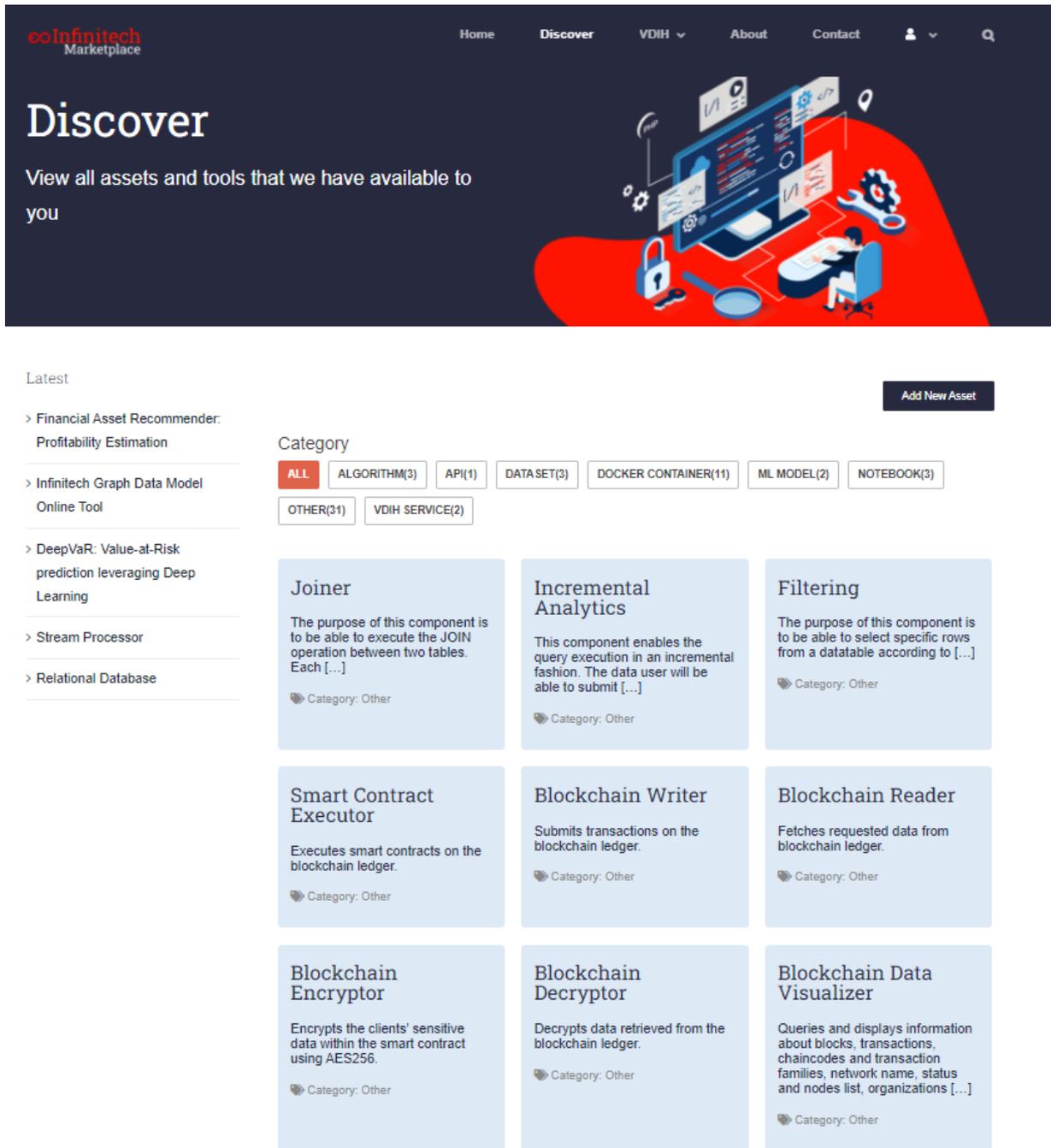


Figure 29. Assets - List of assets

In this case and paying attention to the assets related to the VDIH, there are available two assets on the Marketplace that are directly related to this service. About these assets, the user can see the name and a brief description together with some key tags.

When clicking on each of them, more information is provided about the owner, release date, composition, link (if available), a longer description, category, type and field of use.

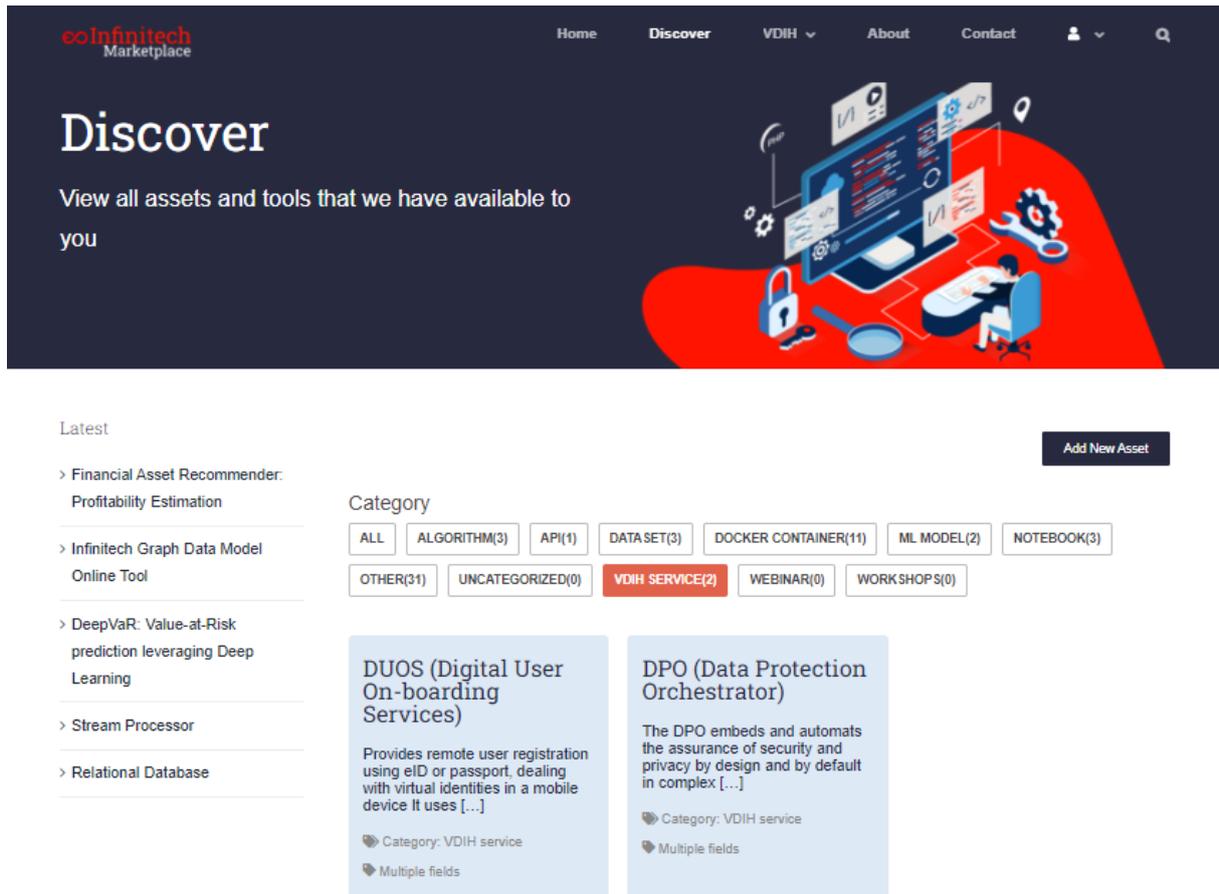


Figure 30. Assets - VDIH directly related assets

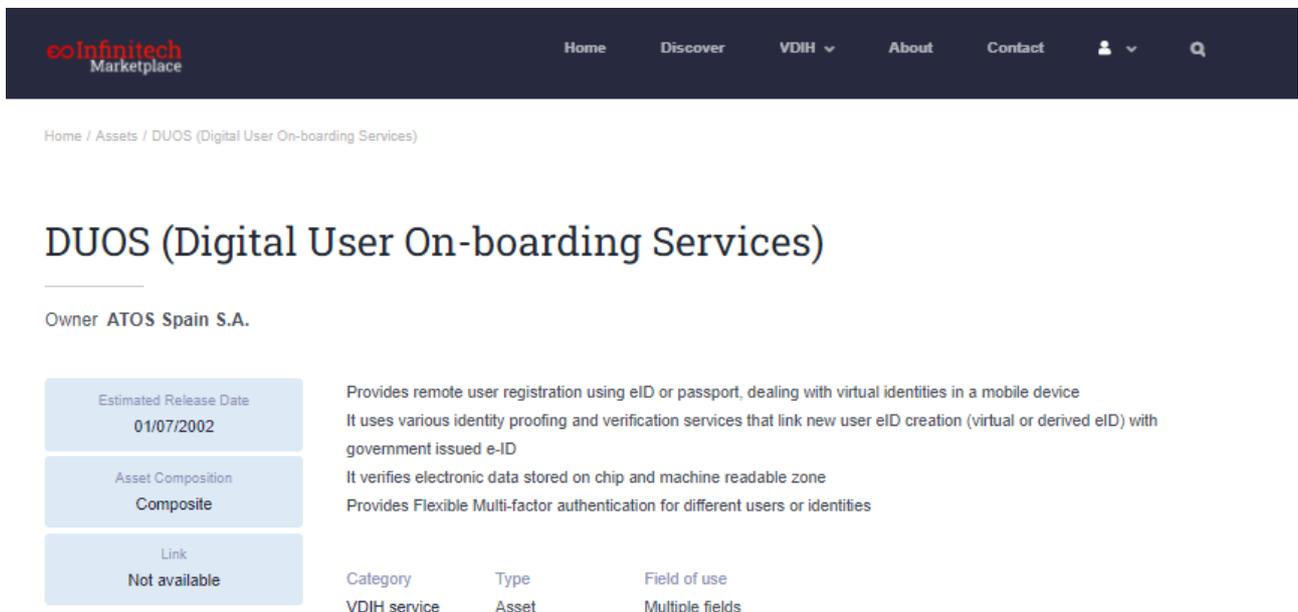


Figure 31. Information about the asset

4.4. Other functionalities

The VDIH also includes an option that allows every user or visitor to add new content or to suggest new content to the platform.

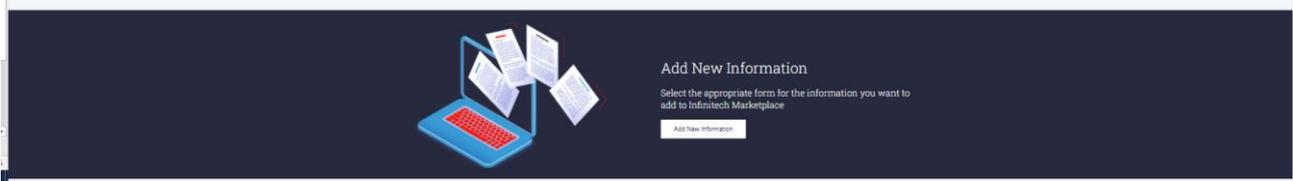


Figure 32. Add New Information option

Through this option and using a predefined form, the user or visitor could suggest to add training courses, workshops, webinars, accelerators or assets.

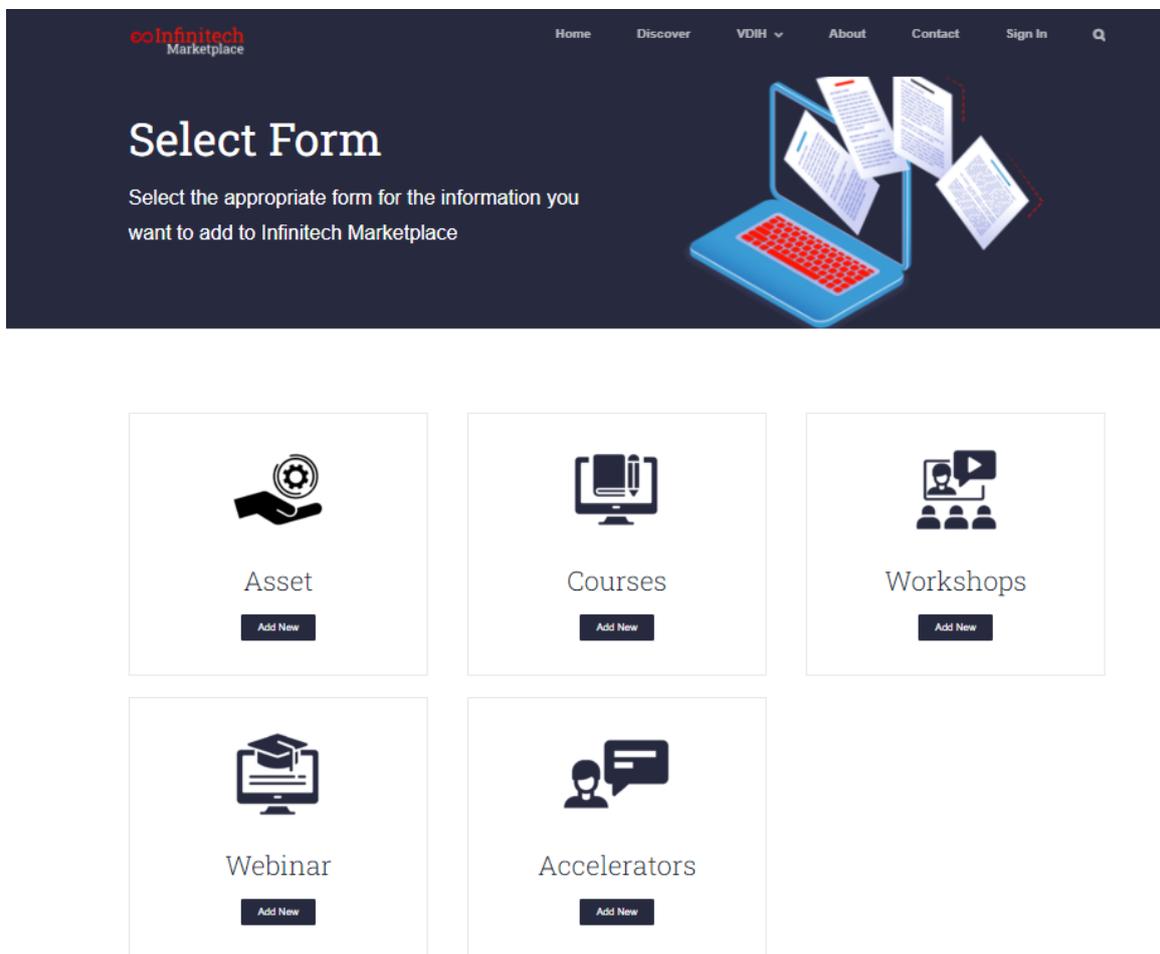


Figure 33. Forms to add resources to the VDIH

In order to access these forms, the platform asks for a register. There is a form per resource to add. The information slightly varies depending on which is needed to add this resource to the VDIH or marketplace. All this information will be reviewed by INFINITECH’s team in order to see if the suggestion fits the project requirements.

ooInfinitech Marketplace Home Discover VDIH About Contact

Add New Asset

Add new information in Infinitech Marketplace

Your Information

First Name

Last Name

Email

Company

Asset Information

What type of Asset is? *

Select a option

Details

Asset Name *

Owner

Estimated Release Date

Asset Composition

Link

Category

Type

Field of Use

Description *

Tutorial Information

How many tutorials you want to add? *

Additional Information

Upload files

Click or drag a file to this area to upload.

Figure 34. Form to add new assets to the VDIH



Add New Course

Add new information in Infnitech Marketplace

Your Information

First Name

Last Name

Email

Company

Course Information

What type of Course is :*

Select a option

Details

Course: Name :*

Course: Link :*

Course: Description

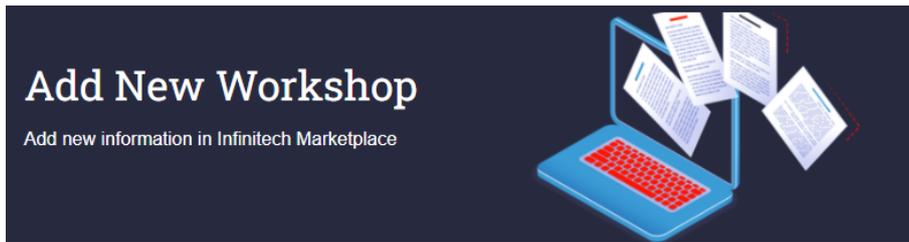
Course: Tags

Created by <input type="text"/>	Level <input type="text"/>	Cost <input type="text"/>	Platform <input type="text"/>
---------------------------------	----------------------------	---------------------------	-------------------------------

Starting Date

Ending date

Figure 35. Form to add a new course



Add New Workshop

Add new information in Infinitech Marketplace

Your Information

First Name

Last Name

Email

Company

Workshop Information

What type of Workshop is *

Details

Workshop Name *

Date * Duration *

Summary *

Video Links

How many videos you want to add *

Additional Information

Speakers

Description

Upload files

Figure 36. Form to add a new workshop



Add New Webinar

Add new information in Infinitech Marketplace

Your Information

First Name

Last Name

Email

Company

Webinar Information

What type of Webinar is it?

Details

Webinar: Name

Organizer

Date

Webinar: Website

Webinar: Description

Video Links

How many link you want to add?

Additional Information

Upload files

Figure 37. Form to add a new webinar

Add New Service
Add new information in Infinitech Marketplace

Your Information

First Name

Last Name

Email

Company

Service Information

What type of Service is it?
Select a option

Name

Link

Country

Sector

Services Provided

Beneficiaries

How many Success Cases you want to add?
-

Additional Information

Upload files

Click or drag a file to this area to upload.

Figure 38. Form to add a new accelerator

4.5. Exploitation Plan for the VDIH

In order to ensure the success of INFINITECH VDIH, an exploitation plan should be followed. These services will be offered through the platform, but the partners should promote them among their networks, as well as they could enrich their financial and insurance ecosystems, at the same time that they will improve the services offered by the VDIH under the different Fintech and Insurtech programs.

In order to design this exploitation plan, it should be considered that the VDIH is a structure that provides one-stop shop services helping Digital Finance and Insurance practitioners to become more competitive. This exploitation strategy should be based on specific actions to attract customers to the VDIH services according to the different types of services offered and mentioned before.

For this purpose, the following networks and assets will be used for the dissemination and consequent exploitation of the VDIH in an effort to give maximum visibility to the VDIH among core targets and gain business customers that contribute to the future sustainability of the services VDIH:

- 1) **European Fintech and Insurtech Communities:** INFINITECH partners will work to attract start-ups and scale-ups into the VDIH by conducting specific dissemination actions and exploiting relevant activities like hackathons. As a starting point, it is proposed to address partners' start-up communities such as the "Fintech and Insurtech Galaxy", the major Fintech and Insurtech ecosystem created by Insomnia in 2020, composed of more than 1,000 start-ups and 300 solutions already tested in the market.
- 2) **European Digital Innovation Hub network:** INFINITECH VDIH services will be connected to the DIH Catalogue of the Smart Specialisation Strategy of the European Commission (+600 DIH) and the future EDIH network to be created under the 2021-2027 Digital Europe Programme (+200 DIH), as well as other DIH communities like DIHNET. Partners like Insomnia will play a special role on this task, as current fully operational DIH under the S3 platform and candidate to the Digital Europe EDIH Network.
- 3) **Fintech and Insurtech Accelerators and Hubs:** INFINITECH partners will address their exploitation efforts also at Fintech and Insurtech Accelerators and Hubs that could become subscribers of the VDIH services among their own start-up communities and bank/ insurance clients as well as becoming potential clients. As an example, cooperation agreements will be signed with The Talent Route Network (the major Fintech and Insurtech Accelerator Network in Europe, Israel and LATAM composed by more than 15 accelerators) or the Blockchain Innovation Hub of the RMIT University.
- 4) **Fintech and Insurtech Innovation/ Acceleration Programs:** INFINITECH partners will work to scout and identify the main Fintech and Insurtech Innovation/ Acceleration Programs in Europe that could be linked to the VDIH both by enriching the VDIH offer and finding potential clients.
- 5) **Fintech and Insurtech-related Training Programs:** INFINITECH partners will also create synergies between the INFINITECH VDIH and the existing Data/ ML/ Blockchain courses including all these training assets into the VDIH Training Catalogue and bringing the attention of their participants/ students (HEI students, start-ups, investors, consultants...) into the VDIH.

5. Next Steps & Conclusions

This report provides the current state and services offered by INFINITECH VDIH that is included in the market platform or marketplace. The services gathered in this document and that are currently working on the platform have been defined as the first steps and will grow as the project does in a collaborative way. The catalogues that are now offered to INFINITECH users will be enriched through partners knowledge and users/visitors' suggestions.

Overall, it must be taken into account that the VDIH should encompass all the services that are related to a DIH but in a virtualized way, answering to the needs of a wider geography than a physical DIH does. This goal is only achieved if all the regions and partners work as a network that links the platform with the services offered by accelerators, educational institutions, technology developers/providers, etc. These solutions and services should be and, in fact, are reviewed and guaranteed by INFINITECH partners, based on their expertise and knowledge of the Fintech and Insurtech solutions.

Based on these key highlights, the initial version of the VDIH has been launched and integrated in the platform (<https://marketplace.infinitech-h2020.eu/vdih>). However, further work and development is needed in order to achieve a more complete and quality offer. The next steps that should be followed include an extension of the Innovation Support, Training (Courses, Webinars and Workshops) and assets catalogue (third party solutions and INFINITECH solutions). This point will be done in a collaborative way and, among other methodologies, it includes the forms aforementioned. The extension will not be limited to enhancing the content of existing catalogues, but it will rather enlarge the scope of support functionalities of the VDIH in the following directions:

- Development of “Home Grown” training resources i.e., INFINITECH training courses.
- Development of learning paths based on the consolidation of multiple courses towards enabling the VDIH users to develop the skills matching entire skills profiles associated with BigData and AI in digital finance.

Moreover, new services should be included and developed by INFINITECH partners in order to align the VDIH with the DIH concept. These services should include the Technical and Business (planning, modelling and go-to market services) Support Services, the link to the INFINITECH partners' services, and sandboxes experimenting services (co-design, testing and co-innovation), as it was described in section 2.2

The final version of the VIDH will be included in the next version of this deliverable named D8.8 – Virtual Digital Innovation Hub – II. This deliverable will describe the final list of VDIH services, including their content and feedback from their use by the INFINITECH community.