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The EU-Health Innovation Marketplace: facilitating valorization of project results

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Abstract

A recent evaluation of FP7 and early concluded Health-related Horizon2020 projects, showed that an estimated 80% of their results lack valorization & exploitation towards the market. One of the factors influencing the match (and therefore the valorization) between technology push of research results and market pull is human interaction on a personal level. To facilitate the productive collaboration among relevant actors, support innovation and stimulate valorization of funded Health project results, the EU-Health Innovation Marketplace (in short: UTILE) is being developing. The online community will be the place where Innovation Providers (like research centers, universities and research groups), business investors and Innovation Developers (like big pharma and biotech companies) can meet each other for exploiting win-win collaborations. UTILE project makes use of an online platform (the Innovation Marketplace) and offline networking means (for example brokerage events and within personal networks) to reach this goal. Through UTILE, researchers, innovators and EU-project beneficiaries will gain visibility towards peers; get in contact with investors and industry experts; access to a set of online and offline services, such as workshops and round tables, courses and trainings; ask for expertise; broaden their network and perform their next research or development steps.

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Keywords: health H2020 projects; results; valorization; exploitation; innovation marketplace; UTILE project; open innovation.

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1. The UTILE project

A recent evaluation of FP7 projects, executed by the European Commission, showed that an estimated 80% of funded Health innovations is not commercialized within the project's lifetime. Many ground-breaking innovations that have huge potential in improving European healthcare, do therefore not reach patients, doctors or hospitals. The UTILE project responds to this clear need.

The overall objective of UTILE project (funded from the European Union's Horizon 2020 Research and Innovation program under Grant Agreement n°733266) is to defragment innovation supply and actively bring together both innovation providers and innovation developers, by setting-up an online Marketplace as a valorisation one-stop-shop. Additionally, a value adding strategy will be developed to ensure the facilitation and catalysation of innovation to effective valorisation, as well as the development of a viable business case ensuring sustainability of the initiative.

To achieve these objectives UTILE is:

- developing the online UTILE Marketplace;
- evaluating the FP7 Health H2020 SC1 projects ended before January 2017 and add them to the online UTILE Marketplace;
- developing and prove the innovation and support strategy;
- developing a sustainable business strategy.

The paper is structured into three main sections: the UTILE project consortium presentation; the UTILE methodology and the results of the first-year project results; the UTILE marketplace and its main services.

2. The UTILE consortium

The UTILE consortium is a carefully selected team of 12 partners from 9 European countries and 1 third party from the USA (NIH) thus covering a wide geographical area. UTILE brings together the complete valorization chain, from the supply side as well as from the demand side. PNO Consultants is coordinating this project, leading WP1 on legal, administrative and project management. They also lead WP2 on the project portfolio evaluation, together with, Ascenion, Karolinska Innovations, Bergen TO and LifeArc in which they are currently evaluating former projects results in order to create a highly promising project database. In WP3, Innovation Engineering is developing the UTILE Marketplace. At the same time, TTS Global Initiative is working on the strategy and development, and is building a high level Market and Stakeholder Advisory Committee. Following these work packages, E-Unlimited, together with ASTP-Proton, will operate and animate pilots of the UTILE Marketplace and provide services to improve the exploitation potential of health research projects, such as matchmaking opportunities with potential partners and investors. CiaoTech is leading the Dissemination, Communication and Exploitation Workpackage, informing and engaging relevant stakeholders and target groups on activities and results of the project, and developing a strategy to ensure sustainability of the Marketplace. Finally, Europroject will communicate and disseminate the UTILE project in low performing member state. All the members of the consortium will contribute to the communication and dissemination throughout their networks.



Fig. 1. UTILE consortium.

3. The UTILE evaluation methodology

UTILE is following a smooth path to perform its evaluation activities, starting from the definition and selection of the evaluation criteria for the inclusion of the EU funded projects inside the Marketplace till the provision of the innovation and support services to the most promising projects.

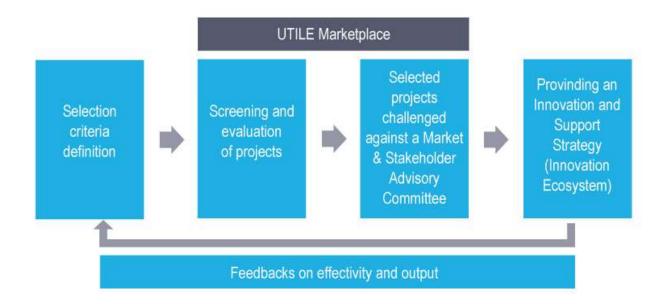


Fig. 2. UTILE methodology.

3.1. UTILE 1st year achievements: FP7 and H2020 Project Evaluation

By the end of December 2017, results from over 1000 projects have been evaluated in the first round (quick scan). This evaluation is based on publicly available project data from CORDIS (the European Commission's primary public repository to disseminate information on all EU-funded research projects and their results) and provides valuable insights in the commercialisation potential of funded research results.

The two graphs show the spread of tags in technology types and therapeutic areas of assessed results. The most common technology types found are: diagnostics (17%), Health Policy (16%), Research tools (9%), therapeutics (small molecules) (7%), and Novel drug targets (7%).

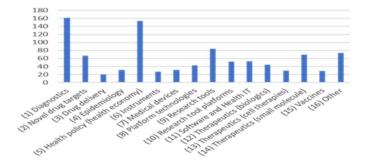


Fig. 3. Evaluated projects: technology times.

The most common therapeutic areas found are: infection (14%), generic health relevance (13%), cancer (11%), inflammatory and immune system (8%), and neurological (including stroke) (8%).

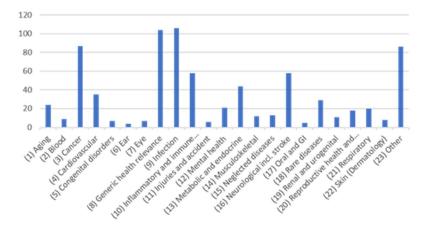


Fig. 4. Evaluated projects: therapeutic areas.

When looking at the exploitation potential of the results, the projects have been ranked on a 1 to 5 point scale (see figure below). More than half (55%) were assessed as having no potential for commercial exploitation scoring 5 ('No'). This might seem as a high number; however, many projects were not intended for commercial purposes. To illustrate, many results received a 'No' recommendation because results were freely disseminated (46%), entailed basic research (20%), or the project did not deliver (4%). Furthermore, some results were already successfully commercialized (10%) and were thus indicated as success story.

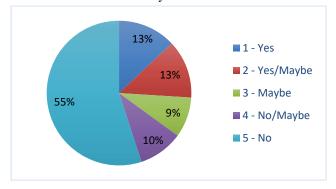


Fig. 5. Evaluated projects: exploitation potential.

Around 26% of all projects received a high exploitation score (rank 1 or 2). These projects have a high probability of having developed commercially promising results ready for further exploitation. Zooming in on these high potential results shows that the following therapeutic areas are most prevalent: cancer (16%), infection (15%), inflammatory and immune system (8%), neurological (including stroke) (8%), and metabolic and endocrine (8%); and the following technology types: drug delivery (10%), research tools (9%), research tool platforms (5%), therapeutics (cell therapies) (5%), and epidemiology (4%). Furthermore, when looking at the developmental stages (i.e. Technology Readiness Level - TRL) of these promising result, the following figure shows that there is more or less an equal distribution of

results within each category (except for TRL1). Promising results can be found throughout the innovation development chain, from early stage to near market.

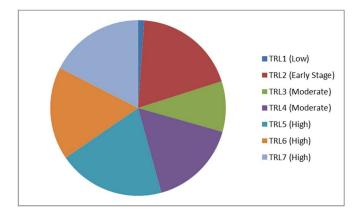


Fig. 6. Evaluated projects: TRL.

4. The UTILE Innovation Marketplace

The EU-Health Innovation Marketplace is an online community where Innovation Providers (like research centers, universities and research groups) and Innovation Developers (like big pharma and biotech companies) can meet each other.

Here they will find an overview of promising health research results that have gone through extensive evaluation. By hooking up 'market demand' with 'innovation supply', these results are only one step away from successful commercialization. To make life easier for developers and innovators, UTILE is currently analyzing all previously granted Health projects in FP7 and H2020 to identify the research results with the highest potential for translation and exploitation. This analysis is being conducted by a pan-European and international team of the most successful and experienced health focused Technology Transfer Offices, with the direct engagement of actual market end-users (biotech, pharma, investors) in Europe and the USA.

Through an inventory of best practices and by implementing and promoting this Marketplace, UTILE will foster the sustainable exploitation of current and future Health project outcomes, gather data from the demand and supply sides, and encourage and promote dialog and collaboration.

In addition, UTILE is organizing a series of offline activities to its users such as workshops and roundtables at international conferences, brokerage events, technology valorization courses and trainings. Special attention will be given to the participation of start-ups, SMEs and the involvement of Low Performing Countries.

4.1. UTILE Marketplace for researchers, innovators and EU project beneficiaries

UTILE will provide researchers, innovators and EU project beneficiaries with an online Marketplace and services to improve the valorization potential of health research projects and offer matchmaking opportunities with the industry and investors. Through our marketplace they will be able to gain:

- visibility towards peer;
- get in contact with investors and industry experts;
- access to a set of online and offline services, such as workshops and round tables, courses and trainings, ask for expertise;
- broaden their network and perform next research or development step(s). The UTILE Marketplace will provide this set of services:

- Access to a toolbox to improve your project results exploitation and commercialization skills. UTILE will build and make available a repository of online courses and best practices on "bringing research to market" to improve health research projects on exploitation and commercialization. Topics such as know-how on intellectual property rights, market potential, business plan development, commercialization strategies, funding and financing facilities, and more. These online courses will be available soon on the UTILE Marketplace and aim to give a basic understanding on exploitation issues.
- Training services to improve exploitation and commercialization potential of relevant projects. UTILE will provide support to projects with high valorisation potential in exploiting their results by providing training on exploitation issues and help them build their business plan as well as their exploitation and commercialization strategy.
- Vouchers for business support. UTILE will also support projects by mobilizing industry experts who will act as
 mentors for selected projects with high exploitation potential and who need specific skills. UTILE will set up a
 mechanism to allocate vouchers to selected projects to receive the individual coaching services from the industry
 experts.
- Brokerage, partnering, investment and networking events. UTILE will bring selected projects with high commercialization potential to brokerage, partnering, and investment events where all the players of the UTILE Marketplace (Research projects, industry experts, investors, policy makers) meet and can network to foster further collaboration and deal-making (investment, licensing etc.). UTILE will also provide information services to the projects on the Marketplace and offer them special conditions to attend existing European events partnered with UTILE.

4.2. UTILE Marketplace for Business Developers, Investors and Entrepreneurs

Representatives from the most active Tech Transfer Offices in Health involved in UTILE will review 1200 finished FP7 Health and Horizon2020 Health related projects and identify those with high exploitation and commercial potential. These selected projects will be added to the UTILE Marketplace.

Through our Marketplace Business Developers, Investors and Entrepreneurs will be able to:

- can have access to these pre-selected projects
- get in contact with researchers and innovators in the health sectors;
- take part to a set of events, such as brokerage, partnering and investment events and meet researchers and innovators;
- broaden your network and find new research or business partners.

Those actors will be able to find new business opportunities by:

- Joining the UTILE online Marketplace: The Marketplace is the place where all projects with potential for commercialisation will be listed. You can have access to this filtered list of projects and publish your own challenges to attract those relevant for you. As an innovation developer, you will also have access to one central place containing interesting research results which are the most relevant for you, hence saving a lot of time and effort from your side.
- Applying to join the Market & Stakeholder Advisory Committee: Joining the Market & Stakeholder Advisory Committee (MSAC) you will further assess those projects with high exploitation potential from a market interest point of view and thus potential for exploitation and take part in remote assessment meetings and consensus meetings that will take place preferably in conjunction with events organised by the consortium partners.
- Taking part in webinars and workshops: UTILE provides its users with a set of services and events, such as webinars and workshops where you can meet with research projects with high commercialization potential and create synergies with them.
- Taking part in brokerage, partnering and investment events: UTILE organises brokerage, partnering and investment events bringing together industry experts, investors and selected research projects with high commercialization potential to network and discuss potential deals.

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