

START-UPS



## *Incubatore di Imprese Innovative del Politecnico di Torino*

I3P stands for Incubatore di Imprese Innovative del Politecnico di Torino. Founded in 1999, I3P is the incubator of the Polytechnic of Turin. As such, it supports the creation and development of innovative start-ups with high technological intensity and growth potential, founded both by university researchers and students, and by external entrepreneurs, providing strategic consulting services, coaching, mentoring, fundraising support and spaces.

The mission of the Incubator of the Polytechnic of Turin is to support the ecosystem of entrepreneurship, with the aim of generating economic development and employment in innovative industrial chains. I3P adopts a strategy of collaboration with private subjects and institutions, engaged in research and advanced training, in services for technology transfer, in the financing of innovation, in internationalisation.

I3P offers services to startups through pre-incubation and incubation programs to accelerate their growth, corporates based on an open innovation approach, as well as investors helping them to select potential targets. They hold events and conferences on topics such as cybersecurity or startup spinoff (StepToStart), and participate in startup competitions among which Start Cup Piemonte Valle d'Aosta, PNI - Premio Nazionale Innovazione and Italian Master Startup Award.

Main focus themes of I3P include: aerospace, artificial intelligence, blockchain, circular economy, cleantech, deeptech, drones, fintech, industry, IT, medtech, new mobility.

### OUR VISIT @POLITECNICO DI TORINO INNOVATION HUB

Agenda:

1. Introduction to I3P
2. MIDORI Corporate presentation
3. FELFIL Corporate presentation

### Introduction to I3P



I3P is acknowledged as one of the best and long-lived university incubators, for both its supported companies portfolio's width and quality. UBI Global has elected I3P as the Best Public Business Incubator in the world 2019-2020. I3P is a non-profit, joint-stock consortium with 6 equal associates: Politecnico di Torino, LINKS Foundation, FinPiemonte, Turin Chamber of Commerce, Metropolitan City of Turin and Torino Wireless Foundation.

I3P activities cover consultancy and mentoring for the startups, matchmaking with industrial partners and clients, support to technical development through the University's Departments and Research Centers, fundraising support with a network of Business Angels, VCs and equity crowdfunding, scouting for competitions, hackathons and networking, and open innovation to support SMEs and corporates in their interaction with startups.

After a thorough process of selection, startups undergo a pre-incubation phase during which they can analyse their first ideas, define and validate their business model, write their business plan and make it approved by an Evaluation Committee. Once they are incubated, they benefit for logistic services, business services and partnerships for a 12 to 36 months time period.

In 2021, I3P manages a portfolio of 61 incubated companies among a network of 270 active startups incubated over the years. I3P helps them raise money for a growing amount of 37.7M€ in 2021 (double 2019 and 2020) and a post-money valuation of the financed incubated companies of 182.5M€.

RADJA KAHOU

SEBASTIEN D'HERBES

AMELIE BONNOT

ANNE COROLLER

I3P takes part in many major programmes, competitions and events including EuroIncNet, UBI Global, MyStart.BCN, European Startup Festival, Startuppato, Web Marketing Festival, Start Cup Piemonte Valle d'Aosta and NASA Space Apps Challenge.

Projects in 2021 have put an emphasize on open innovation. The European Space Agency awarded I3P a contract for setting up the ESA Business Incubation Centre Turin and for managing the whole incubation programme in coordination with ESA, while Politecnico di Torino and LINKS Foundation will provide technological support. I3P organized successfully calls for proposals for Italgas (Ideas 4 Italgas) and FCA Bank (Digital Factory). I3P also acts as a Node Manager on the projects selected by the Fondazione Compagnia di San Paolo's Artificial Intelligence, Man and Society initiative.

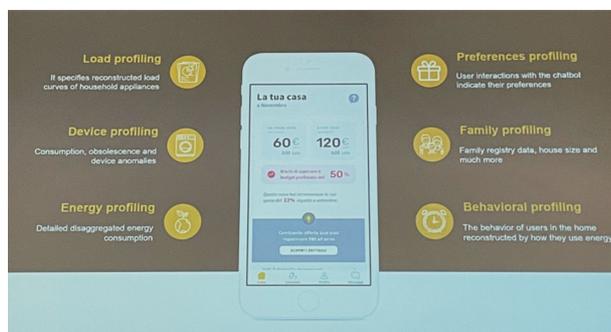
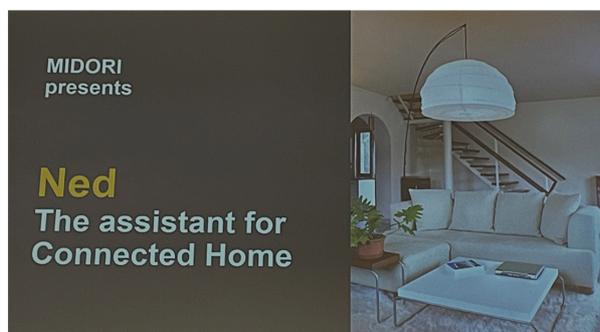
Over the last 3 years, successful startups from I3P portfolio include: Evo pricing based on big data, Alba Robot that creates mobility systems for those with movement impairments, ToothPic that turns every smartphone into an online authentication secure key, and SynDiag which processes data and images to identify anomalies in ultrasound images supporting doctor diagnosis.

### MIDORI Corporate presentation

Home and Big Data, taking advantage of IoT. It aims at helping citizens know and understand their house equipments' consumption in order to save money and prevent malfunctions. Its solution is called Ned and is a home assistant which monitors the consumption of household appliances combining efficiency, savings and comfort in a mobile app.

The solution includes energy coaching in comparison with comparable consumption habits and trends, digital coaching with dedicated chatbot and tutorials, risk management, energy scoring, appliances monitoring, appliances profiling based on device efficiency, quality of the electrical system, preventive maintenance and monitoring of PV systems.

Ned only requires a single sensor which is installable independently and connected to the electrical panel. It then measures and transmits measurements over your Wi-Fi in real time. The algorithms which support the solution are based on Not intrusive Load Monitoring (NILM), energy partitioning to pinpoint the electrical fingerprints of household appliances in the measured home consumption, and load curves to reconstruct the electrical absorption curve of household appliances.

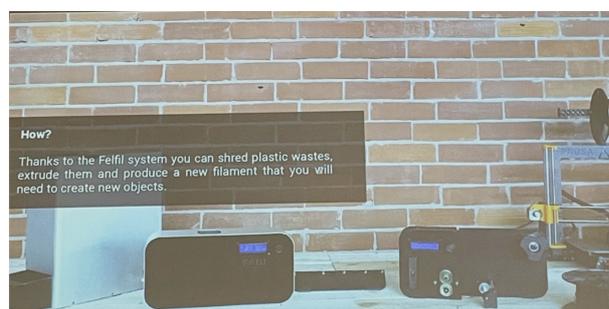


### FELFIL Corporate presentation



Felfil is a startup launched in 2016 based on student project in EcoDesign which earned Felfil to win the prize "Maker of Merit" at the European fair of innovation "Maker Faire Rome 2014". One of Felfil's goals is to reduce waste and the impact that plastic has on the environment, giving a second life to materials.

Felfil produces a filament extruder called Evo as well as plastic shredding and filament winding capacities. These products help to make 3D printing more sustainable and accessible to fablabs, universities and individuals. With Felfil, anyone can create filament for its 3D printers using recycled material and create new objects.



### DISCUSSION & FEEDBACK

These presentations rose many questions around entrepreneurship.

Regarding Midori, many students wondered how the product could integrate in an already existing electrical system. The founder taught us that support by a well-established firm is an absolute need. Indeed, Ned is to be integrated as a service provided by the national Italian deliverer of electricity. Such a topic was a concrete example of what we have seen in class about external innovation and the ability of big industrial firms to renew themselves through small dynamic start-ups.

Felfil stroke a lot of debate regarding the market reach. Such a specific hardware seemed at the same time very accessible and exclusive to a certain narrow segment (« the same who buy 3D printers » as said by some students). Understanding, finding and exchanging with such a niche market is a tricky task. As explained by the founder, there is always uncertainty in the entrepreneurship adventure, and sometimes the assumptions one has are completely contradicted. The product has a great success in Japan and Germany, two countries which were not at the top list of the pitches at the start of the project !