

# Follow-up on Strategic Plan

Board of Trustees Meeting

19/11/2019



## INNOVATION

**We connect the entrepreneurial community**

### **The Collider**

A pioneering technology transfer programme



## TECHNOLOGY

**We spearhead change via technology**

### **5G programme**

Validation and adoption of technology in a real city environment

### **ON5G**

Innovation, synergies and knowledge of 5G technology



## TALENT

**We promote competitiveness via digital talent**

### **Barcelona Digital Talent**

An alliance to accelerate the development and recruitment of digital talent in Barcelona



## SOCIETY

**We reflect on the image of technology on society**

### **Digital Future Society**

We are building a fairer, more inclusive and sustainable society thanks to technology

### **Mobile Week**

An open space of reflection on the impact of digital technology on society

# **The Collider**

A pioneering technology transfer programme

# The Collider

Technology transfer programme whose goal is to transform the excellence of our scientific system – in the top 10 globally – into solutions that improve people’s lives and industry, consolidating our region as a global hub of digital enterprises

## MILESTONES REACHED (since the Board of Trustees meeting in July 2019)

STRATEGIC LEVEL

OPERATIVE LEVEL

### mVentures Portfolio

Companies (29)      Value of the portfolio [€1.45 B (\*)]

■ The Collider   ■ Numa   ■ Startup BootCamp   ■ The Collider   ■ Numa   ■ StartupBootcamp

- The Collider generates wealth and profits. Forecast for 5 new companies per year, 10 jobs and 10 indirect jobs in science.**

Jobs created

31 direct

14 indirect in science

- We are exploring an accompaniment to sell SBC in 2020 and focusing efforts on The Collider.**

### “Beyond Data” Publication starting Jan. '20

- 35% increase in talent applications and 21% in the quality of the profiles received.**
  - 303 of 36 countries, 37% non-European.

Origin of the candidate entrepreneurs

■ Africa   ■ Asia   ■ Europe   ■ United States   ■ South America

- Average profile of entrepreneurs.
  - 20% females (5% in 2019)
  - Fundraising reached: €5M
  - Number of startups created: 3
  - Age : +40
  - 75% international experience.
- Soflanding made with 50 scientists to anticipate pilots.**

### Catalan OTRIs Training

- 76 people from 27 institutions in Catalonia trained in March '19.** New training planned for **March 2020.**
- Exploring **expanding the agreement in Catalonia (€180k/year)** to spur the scientific community and allow more projects to crop up in the region. **Formalisation in 1<sup>st</sup> quarter of 2020.**

### The Collider Partners 2019-20

- Incorporated Partners**

- In discussions with...**

\*The auditor of the Mobile World Capital Foundation and Barcelona Mobile Ventures will also be the auditor of the StartupbootCamp.

## NEXT STEPS

## SPECIAL ATTENTION

STRATEGIC LEVEL

- **Signing and payment of subsidy with the Government of Catalonia to train the Catalan OTRIs.**
- **Workshops have been held with corporations in Castilla y León in October as pilots to start training OTRIs in 2020** (€1B in 3 years). Feedback in 1<sup>st</sup> quarter of 2020.
- **Exploring sale of SBC portfolio in 2020.**
- **Exploring involvement of investors in financing The Collider programme; results expected in 2020.**
- **Closing agreement with CaixaBank Dayone: €50k in funding for companies and events organisation.**

- **MWCapital** has advanced the amount of the services from 2019. **Payment is expected in the 1st quarter of 2020 (€240k).**
- **There are plans to sign the subsidies for 2020 and 2021 in the 1st quarter of 2020.**



OPERATIVE LEVEL

- **Sessions held on October 15th in Madrid and October 18th in Barcelona with more than 60 corporations to present the 15 technologies in the new edition of The Collider.**
- **In the team-creation phase till December 2020.**
- **Incubation of the technologies will begin on January 7th 2020.**





## 5G Programme

We promote change using technology as a key factor

Spain: leader in 5G with 24 pilots of the 165 undertaken in Europe (September 2019 report from the European 5G Observatory)

Catalonia has hosted 8 of these 24 pilots (5GBarcelona), leading the change

# 5G Programme



The goal of the MWC Capital 5G programme is to consolidate the city of Barcelona, Catalonia and Spain as a tech hub in the development of new technology, exploring the social and economic challenges, as well as those related to positioning and consolidating the talent of each initiative. It currently includes two initiatives: 5GBarcelona and the National 5G Observatory (ON5G)

## 5G BARCELONA: PILOTS, LABS, WORKSHOPS, ROADSHOWS AND TRAINING

PILOTS

Social	Rural	Industry 4.0	Tourism	Media & Ent.	Health
Two pilots to improve the care of at-risk people and provide them with emotional support	First connected orchard in Spain for the complex task of pruning fruit trees	Two pilots: one aimed at improving industrial processes and the second to control security	An augmented reality pilot which will be visualised during Smart City WE 2019	With new immersive experiences and the use of holograms	Spreading the Clinic's experience and applying remote monitoring



LABS

The Thinx	Smart Lab	VR Lab
More than 30 applications. <b>€45K investment in acceleration</b> <i>Telefonica i2cat</i>	Ceding the right to use the spectrum for pilots in the region (active) <i>orange i2cat</i>	<b>Canòdrom: VR lab.</b> Gaming and innovation <b>February 2020</b> <i>Vodafone-PENINSULA i2cat</i>

WORKSHOPS

**To explore**  
With more than **400 participants** and **35 proposals of use cases**

ROADSHOWS


To spread	
5G Barcelona Smart Cities October 2018	Lleida Rural May 2019
Girona Tourism April 2019	Tarragona Petrochemical July 2019

NEXT STEPS



## NATIONAL 5G OBSERVATORY

LATEST ACTIVITIES

1st ON5G Forum	3 Sector reports	5G Handbook and pilot reports	RDI report
 <p><b>+200</b> participants</p> <p>#ON5Gforo19 was a Trending Topic on Twitter Spain! (ranked 37<sup>th</sup>)</p> <p>Held 22/10/2019 (Madrid)</p>	<ul style="list-style-type: none"> <li>Report on 5G and Industry 4.0</li> <li>Report on 5G and Security</li> <li>Report on 5G and Media and Entertainment</li> </ul> <p>In progress</p>	<ul style="list-style-type: none"> <li>5.0 Handbook (first global ON5G report)</li> <li>Report on 5G pilots in Spain</li> </ul> <p>In progress</p>	<ul style="list-style-type: none"> <li>Report on innovation and development activity in Spain. Main activities and details of the initiatives.</li> </ul> <p>In progress</p>

NEXT STEPS

- Security, Media & Entertainment reports
- Publication of 5G Handbook
- Handbook Report on RDI projects
- Publication of Report on Pilots in Spain
- Revision of Smart Cities report





## **Barcelona Digital Talent**

We promote competitiveness  
through digital talent

# Barcelona Digital Talent

Barcelona Digital Talent is a public-private alliance coordinated by MWCapital whose goal is to position Barcelona as a capital of tech talent by reskilling local talent and attracting international digital profiles

## MILESTONES REACHED (since the Board of Trustees meeting in July 2019)

STRATEGIC LEVEL

### Business partners

Incorporated premium Partners:

Advanced talks

### Public Trustees Contribution

- **Approval of the agreement with the Government of Catalonia:** addition of 3 members to the BDT **staff for 3+1 years**
- International missions
- Media campaigns
- Financing of reports

### Governance model landing

- Contribution from promoting partners through **projects approved** by the BDT alliance
- Stronger **orientation towards private financing** through the adhesion of business partners

OPERATIVE LEVEL

### Dictionary of Digital Skills

Definition of **30 digital professions** with the participation of **+230 companies**

### Speed dating@IndustryWeek

**(29-30 OCT)**  
**16** companies  
**80** candidates  
**220** interviews

4YFN: **27** contracts  
 SONAR+D: **10** contracts (suppliers)

### Attracting int'l talent

**BCN Community Day**

### BDT workshops

**JUL-SEPT@cybernarium**

# Barcelona Digital Talent

## NEXT STEPS (UNTIL MWC'20)

## SPECIAL ATTENTION

STRATEGIC LEVEL

→ **Launch of the project to permanently attract talent from international universities (Poland pilot)**



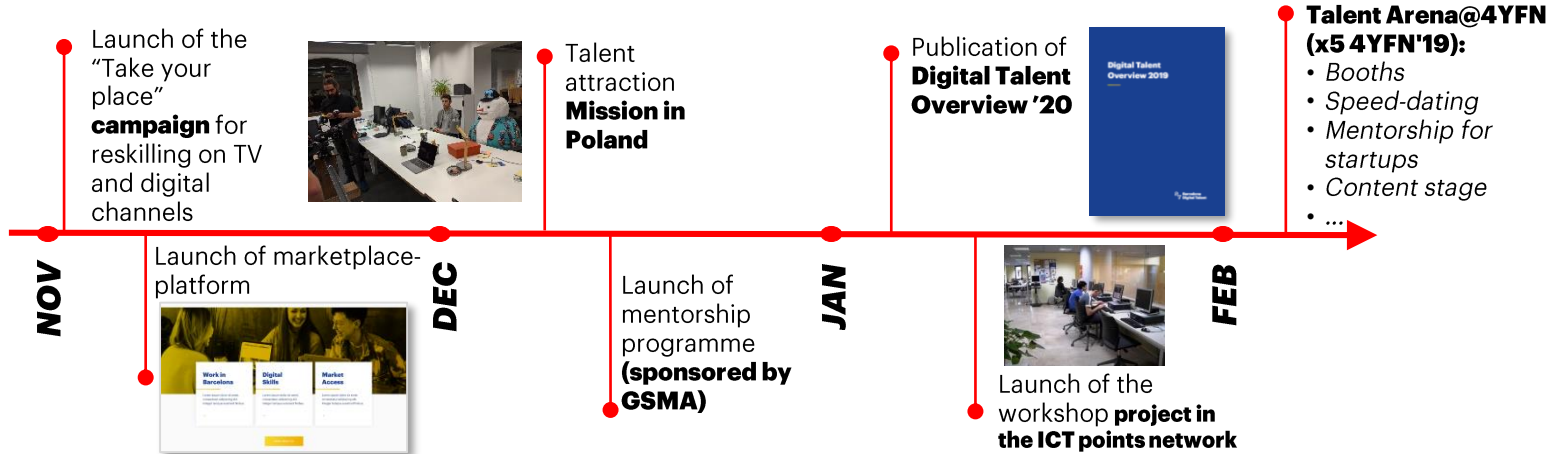
Picture of the workshop on designing the value proposition of Barcelona

→ **Design of Barcelona Digital Talent training programmes** with public financing (€6m) run by top-notch centres



- Identifying **new collaboration with Trustees** (e.g., Barcelona City Council)
- **Strengthening contributions from private partners** to guarantee the programme's sustainability and impact

OPERATIVE LEVEL



## **Digital Future Society**

A global meeting point to understand how to use technology to build a fairer and more inclusive society

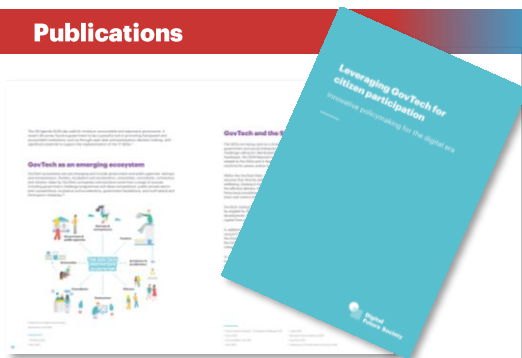
A project which seeks to create solutions focused on citizens and on the challenges that the impact of technological advancement has led to in our societies by coordinating important global stakeholders, including public bodies, tech corporations and companies, civil society organisations and transnational entities.

## MILESTONES REACHED (since the Board of Trustees meeting in July 2019)

PROJECT

### Publications

Publication of the Think Tank's **second, third and fourth report** with specific recommendations on the role of the public and private sectors in the development of tech solutions to improve citizens' quality of life.



### International relations

Project invited to join internationally influential platforms:



G20  
Global  
Smart Cities  
Alliance



WORLD  
ECONOMIC  
FORUM

Global  
IoT  
Council



digital COOPERATION  
UN SECRETARY-GENERAL'S HIGH-LEVEL PANEL

In talks to participate in the Global Technology Governance Summit that the World Economic Forum is hosting in San Francisco on April 21th, 2020.

**Global  
Technology  
Governance  
Summit**

THINK TANK

### First deliverable

**Emerging technology and governance:** Automated decision-making systems and distributed ledger technology.  
*Recommendations for the public sector on how to analyse, manage and prioritise public innovation projects.*

### Second deliverable

**Towards data governance for everyone:** Data and privacy ethics in the digital era.  
*Recommendations on ethical business models and guide to overcoming today's legal, ethical and inclusion-related challenges.*

### Third deliverable

**Leveraging GovTech for citizen participation:** Innovative policies in the digital era.  
*Analysis of cases of public-private partnerships which have strengthened citizens' efficient engagement in public policies.*

### Fourth deliverable

**Towards an Agenda 2030:** Digital Future Society and the Sustainable Development Goals.  
*Analysis of the goals which the programme impacts according to the activities undertaken in the first 8 months of implementation.*



The Laboratory provides specific, scalable solutions in response to the challenges identified by the Think Tank in order to position Spain as a citizen-oriented tech innovation hub.

## DELIVERABLES FROM THE LABORATORY

LABORATORY

### Pilot of existing solutions

The Laboratory validates the conclusions of the Think Tank by identifying the solutions which could resolve the challenges identified and testing them in a real environment.

### Prototyping

The Laboratory co-designs and implements new solutions and its adaptation to the local/national context.

### Generating tools

The Laboratory generates “toolkits”, step-by-step guides and handbooks of good practices to help the public and private sectors guarantee mindful use of technology for the common good.

## Public Innovation

Document	Recommendation for action	Solution developed	Audience
First deliverable: <b>Emerging technology and governance</b>	The working group detected an urgent need to develop specific governance tools to manage the emerging technology project using the existing frameworks, such as algorithmic impact assessments for ADMS.	➔ An interactive “ <b>toolkit</b> ” was developed for ADMS in the public sector to use: <b>a tool to support departments, digital innovation for local governments (town halls) in the decision-making process associated with assessing the solutions that use ADMS (Automated Decision-Making Systems)</b>	
	The government as an expert procurement client: it is essential to create ethical, transparent and inclusive design criteria in the public procurement process.	➔ <b>Prototype:</b> Design of a system to manage innovation challenges open to local governments.	
Third deliverable: <b>Leveraging GovTech for citizen participation</b>	The GovTech solution ecosystem must be promoted (SMEs and startups dedicated to creating and offering tech solutions targeted at the public sector).	➔ <b>Mapping of existing solutions</b> in the GovTech system in Spain and Latin America + recommendations targeted at both the public and private sectors to promote the GovTech ecosystem after an analysis of the most advanced regions (Colombia and Mexico).	

## Digital trust & security

Document	Recommendation for action	Solution developed	Audience	
Second deliverable: <b>Towards data governance for everyone</b>	Certification and voluntary measures present another set of opportunities to put ethics into practice as a certifications for the algorithms.	➔ <b>Prototyping</b> of a certification process for corporations, SMEs and startups that are responsible and transparent in their development of artificial intelligence solutions.		
	<b>Leading with the example a good data governance.</b> There is an emerging global consensus that autonomous intelligent systems should be designed such that their decisions can be explained.	➔ <b>Step-by-step guide:</b> How to apply in practice the rules to design ethical algorithms for / in the public sector.		
	Adopting an inclusive, transparent approach to data governance beyond consent and the fallacies about transparency.	➔ <b>Mapping existing solutions</b> with sustainable and growing business models that reinforce trust and transparency.		

Entities co-leading the project

## Equitable growth

Document	Recommendation for action	Solution developed	Audience
Publication in December: <b>Digital divide</b>	Governments have to empower citizens as the first measure to combat the digital divide.	➔ <b>Pilot:</b> Development of a Digital Skills training platform for citizens which includes skills for both the private and professional spheres.	

## Citizen empowerment & inclusion

Document	Recommendation for action	Solution developed	Audience
Publication in November: <b>Tools for a digital citizenry</b>	Development of tools to get citizens involved in detecting and deactivating disinformation campaigns.	Prototyping an app to help citizens detect fake news and sources of disinformation and sharing the results via their social media channels.	
	Technological solutions to favour the groups that are the most vulnerable to social violence (women and children).	<b>Pilot:</b> working on defining the project.	

Entities co-leading the project



UNITED NATIONS



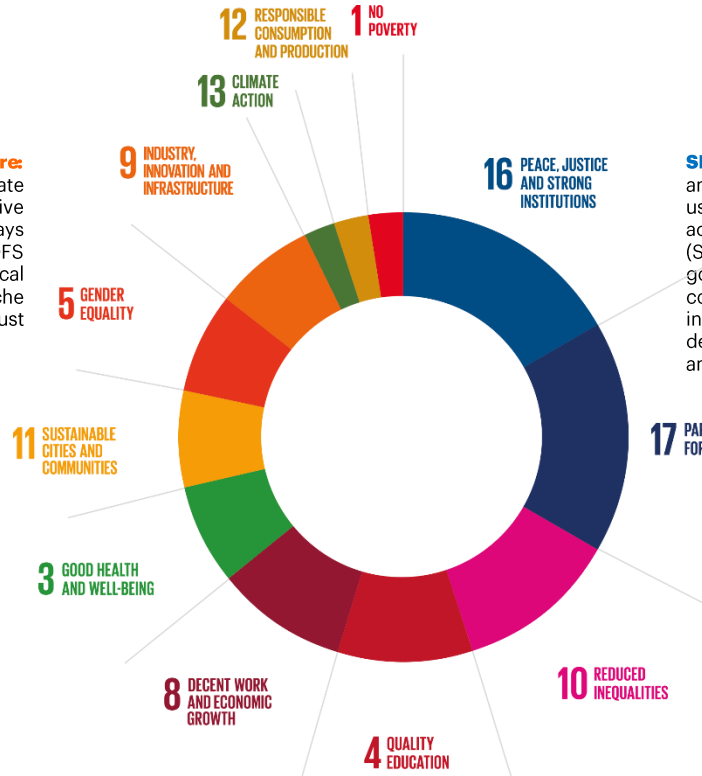
The Digital Future Society project impacts **six Sustainable Development Goals (SDG)** through the Think Tank’s analysis and reflection and with specific, applicable solutions already developed by the Laboratory.

**SDG9: Industry, Innovation and Infrastructure:**

DFS proposes policies and incentives that create an environment in which SMEs can competitive innovative while challenging the traditional ways of doing business in the digital space. DFS experts provide a verification list to political leaders which enables them to identify a niche sector of companies working to increase trust and transparency in the digital economy.

**SDG8: Decent Work and Economic Growth**

DFS experts design specific initiatives to support workers on the digital work platform, such as establishing a cooperative platform accelerator administered by the government, sharing important information for workers and guaranteeing the clarity of the information provided on their rights and responsibilities.

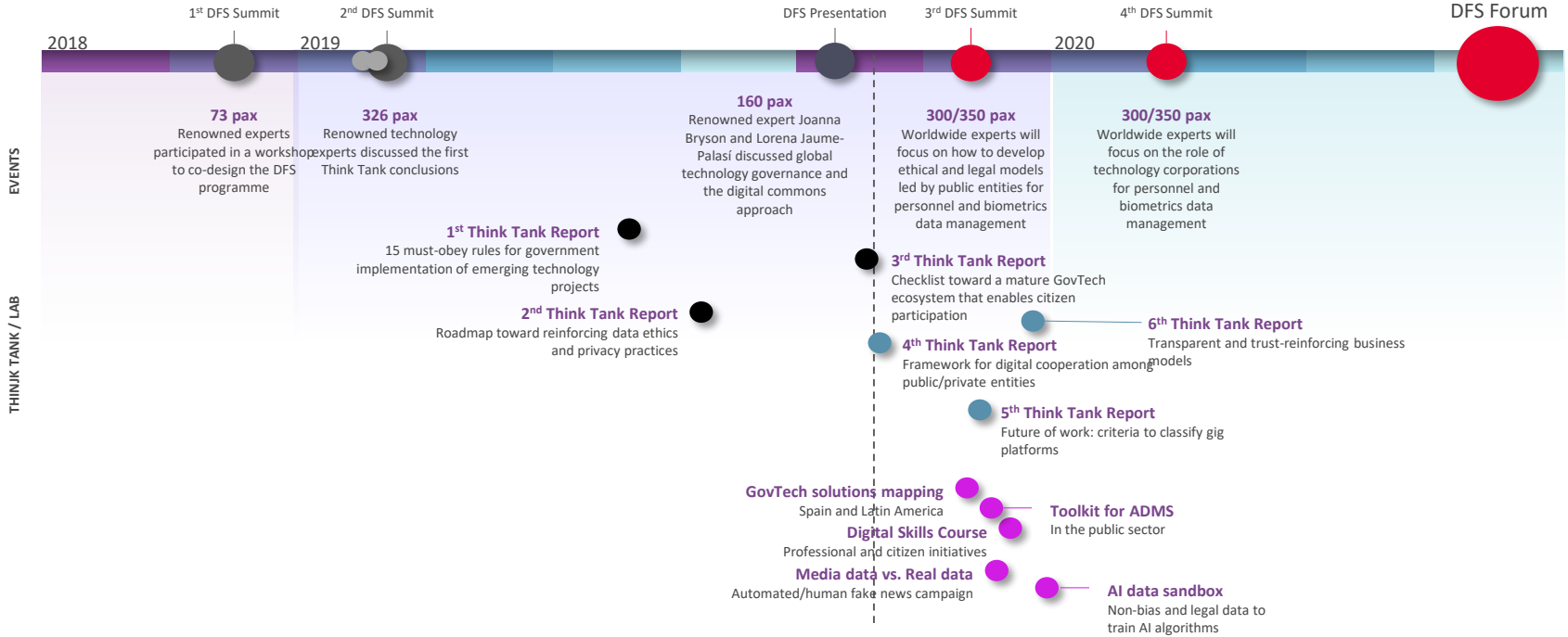


**SDG16: Peace, Justice and Strong Institutions:** The DFS analyses and recommends policies that help governments use digital technologies to improve the quality and accessibility of public services, increase inclusion and access (SDG 10) and optimise processes in cities (SDG 11). Better governance and use of digital technologies particularly contribute to strengthening institutions. DFS offers an online interactive toolkit for the public sector to evaluate automated decision-making systems (ADMS) while considering and anticipating their social, economic and ethical implications.

**SDG17: Partnerships for the Goals** Governments and organisations have to work together to lower the digital divide (SDG 10) by making digital skills more important for people who are late technology adopters. DFS has created a two-layer platform of digital skills that provides:

- Digital skills for citizens to improve their quality of life (**SDG10**), and
- Professional skills so they can reap the benefits of access to the digital economy (**SDG4**).

The project is currently focused on the Global Technology Governance Summit announced for October/November 2020 in Barcelona. This is a bid on a state policy that implies a threefold challenge: relational, cohesion and financial (the minimum estimated budget is 1,800,000 euros to be co-finance between MWCcapital and Fira de Barcelona).





# Mobile Week

Project focused on strengthening citizens' digital skills through talks, debates and, especially, training workshops for those who will become the ambassadors of their community in order to boost the positive impact of technology in our society.

## MILESTONES REACHED (since the Board of Trustees meeting in July 2019)

### Mobile Week Catalonia

Thanks to the agreement with the Government of Catalonia to implement the **Mobile Week** project in 15 towns around Catalonia, the cities that will participate in the 2020 edition of the project have been chosen:



**Generalitat  
de Catalunya**

- **Begues**
- **Igualada**
- **Mataró**
- **Sabadell**
- **Sant Feliu de Llobregat**
- **Sant Pere de Ribes**
- **Vic**
- **Vilanova i la Geltrú**
- **Girona**
- **Olot**
- **Riudellots de la Selva**
- **Mollerusa**
- **Pirineu**
- **Reus**
- **Ribera d'Ebre**

The project is going from impacting 6 cities to being in 16.

From spanning 23 days of activity to spanning almost 40.

From reaching 10,000 citizens to potentially reaching 20,000.

### Citizen events

In November and December 2019, the Foundation will work with Red.es to implement three citizen events to reflect on the impact of technology in our lives and hold practical workshops with training in basic digital skills.

These events will be held in the towns of **Dos Hermanas (Seville)**, **Logroño (La Rioja)** and **Gijón (Asturias)**. They will last half a day and are part of the agreement signed to create the Digital Future Society project.

red.es

### Mobile Week Coruña

The Coruña edition, which is scheduled for November of this year, was delayed until 2020 because of budgetary problems in this city's Town Hall. Therefore, the second edition of **Mobile Week Coruña** will be held in November 2020.

## NEXT STEPS

## SPECIAL ATTENTION

## STRATEGIC LEVEL

→ In discussions with the Town Halls of **Madrid, Toledo, Cáceres, Vigo** and **Coruña** regarding the 2020/2021 editions. It is important for each of these Town Halls to contribute resources in order to be able to implement these editions.

→ **Branding:** analysis and proposal to rebrand the project. The change reflects two factors: the “mobile” concept does not cover all the topics dealt with in the proposed activities, and the goal is to reinforce the relationship with the Digital Future Society project.

## OPERATIVE LEVEL

→ Announcing the presence of the project in the chosen cities, along with the date of each edition and a first draft of the proposed programme in each of them (November).

→ Developing the new image and communication campaign of the 2020 edition of the project.



## **Other initiatives**

European projects

## European Projects

Participation in different research and innovation programmes financed by the EU which are aligned with the key programmes.

MILESTONES REACHED (since the Board of Trustees meeting in July 2019)

PROJECTS	<b>RobotUnion</b>	<b>I4MS</b>	<b>L4MS</b>	<b>IMPACT Connected Car</b>
	Acceleration programme with 20 startups connected by MWCcapital with investors	Creation of catalogue of technologies for SMEs and a digital training catalogue	Creation of a documentation system on an IoT platform based on FIWARE	Selection of successful startups doing business with investment funds
	<b>New proposals</b>			
	<b>Tech4NGI</b>	<b>LAB@Hola</b>	<b>WIDENING</b>	<b>TRANSFORMATION</b>
Network of Labs. 5G Barcelona available for testing	5G Barcelona would take charge of the pilot test at Barcelona's Hospital Clinic	Support for digitalisation in SMEs by DFS and Digital Talent	Support for digitalisation in SMEs. Digital Talent supports the analysis of digital skills and the creation of a communication campaign	<b>5G CORRIDOR</b>
PROPOSALS	<b>Pilot test of cross-border 5G connection along the AP-7 and E-9 motorways for the circulation of driverless cars</b>			

### NEXT STEPS

- **The strategic partnership relations have translated into partnerships in writing proposals in which we can better integrate the contents of the MWCcapital programmes.**
- **A roadmap is being created with the proposals that interest MWCcapital, and work is underway on the proposals along with the strategic partners previously identified.**

# MWCapital at MWC Barcelona 2020



# Mobile World Capital Barcelona at MWC Barcelona 2020

MWCapital takes advantage of the MWC to show the press and the local and international community the outcome of the work it has done throughout the entire year, as well as to announce some of its new initiatives.

## CORPORATE PRESENCE

### Mobile Lunch



**MWCapital networking lunch to gather corporations, representatives for the ICT sector and associations within MWC 2019. This year's edition will be held at the Boqueria Market.**

2020 – Next steps:

- Signature of agreement with the Boqueria Market.
- Forecast of +350 attendees.
- Targeted at the MWCapital community, including institutions, stakeholders, associations, ICT corporations, SMEs, investors and startups.
- Searching for partners.

### MWCapital Stand



**The meeting point for the MWCapital community will show how in Barcelona, Catalonia and Spain, we are working to position Barcelona as a benchmark digital hub around the world.**

- Open space (300 m<sup>2</sup>).
- Activations with programmes and demonstrations with a particular emphasis on the pilots undertaken by 5GBarcelona.
- Networking area for the MWCapital community.
- MWCapital tours: Up to 18 tours for partners and associations.
- Content programmes in the Auditorium open to the MWCapital community with sessions every hour.

### Stand at 4YFN



**This space is geared towards the startup ecosystem, to continue to position MWCapital as a prominent part of it.**

- Activity space including activations of the programmes:
  - The Collider.
  - Barcelona Digital Talent.
  - 5GBarcelona.
- The Collider Startup Corner (8 startups)
- Networking area.
- MWCapital content programme. Plus, Barcelona Activa, ACCIÓ and Red.es will be offered the chance to host activities with their own content.

### Stand at YOMO



**The MWCapital stand at YOMO will host the mSchools programme and include activities for younger audiences, as well as information on the programme for its target audience.**

- mSchools information point.
- MWCapital activity space: including activations of the programmes:
  - DFS.
  - mSchools.

## PROGRAMMES ACTIVITIES

### The Collider



- The Collider startups in the MWCcapital zone at 4YFN (8): ALLREAD, SAALG, PREDICTIVE COMPANY + 5 startups from NUMA /SBC.
- Main stage event on day 2 of 4YFN to share international best practices.
- The Collider startups in the vertical zones of 4YFN:
  - Digital Health (3): RHEO-DX, PHARMACELERA, ICARIA
  - Intelligent Connectivity (1): SMART TOWERS

### 5G



- 5G pilots:
  - **Connected violinist (Ara Malikian) and holographic technology.**
  - **Remotely assisted surgery, 2<sup>nd</sup> edition with mentoring from 5 cities and Artificial Intelligence.**
  - **Aumented reality F.C Barcelona women's football team**
  - **Ferrocarrils de la Generalitat with 5G coverage between Plaza España and L'Hospitalet.**
- Content at MWCcapital stand, tours for ON5G partners and activity in the auditorium.

### Barcelona Digital Talent



- 4YFN: We are sponsoring the Talent Arena in conjunction with GSMA; 300m2 which hosts the talent-related activities at the event. 4 zones:
  - Employer Branding booths of companies and startups.
  - Main stage with Digital Talent content (Talent track in 4YFN)
  - Speed Dating between corporations and digital talent.
  - Networking area for startups.
- MWC :
  - Content at MWCcapital stand, tours for BDT partners and activity in the auditorium.

### Digital Future Society

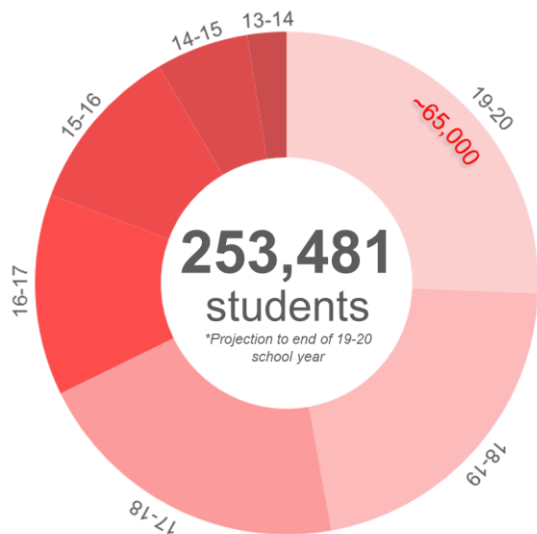


- 2nd DFS @ MWC Summit which analyses the issues posed in the reports published in 2019 (500 people).
- Content at MWCcapital stand, tours for DFS partners and activity in the auditorium.



# mSchools update

- On track to reach 250K students at end of the 19-20 school year.
- Kicked off mSchools Bootcamp trainings for Student Awards winners, who will present their projects at 4YFN.



- Published 5 new STEM modules with spanish research centers: ICFO, Barcelona Supercomputing Center and Center for Genomic Research.
- Final stages of agreement with Airbus to jointly develop additional mSchools content.
- Successful presence in YoMo LA 2019
  - 120 mSTEAM workshops
  - 1.060 student participants
  - 50 LAUSD schools registered for mSTEAM 2019-20



MOBILE  
WORLD CAPITAL™  
BARCELONA

[mobileworldcapital.com](http://mobileworldcapital.com)