SPARK

D5.4
SHOW-CASES
FOR
INCREASING THE
AWARENESS OF
SPARK
PLATFORM

Approval Status

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TABLE OF CONTENTS

Sommario

1. EXECUTIVE SUMMARY

This document presents the activities carried out in Task 5.4 of the SPARK project. They concern the planning, preparation and execution of events to showcase and demonstrate the SPARK platform in use. Showcases and demos have been planned to take place alongside existing, well-established events that are capable of gathering a lot of people. The full range of dissemination target audiences have been addressed through these events including: professionals from SMEs and large enterprises; scholars and students from academia; and end consumers. Within these events, the SPARK consortium also had the chance to invite some relevant and interested industrial contacts who had expressed their interest in the technology and the SPARK solution. The activities mentioned within this deliverable, then, are strongly correlated to the last objective of the project, namely objective #4:

> Demonstrate the effectiveness of the SPARK platform in wider real cases and showcases.

The document presents the description of the 10 events the consortium organized together with a presentation of the tradeshows and the exhibitions where these events took place. The following list summarizes the main events the consortium participated in:

- **Big tradeshows:**
  - Milano Design Week – Salone del Mobile/FuoriSalone – Milan – Italy (2018, April 17th-18th);
  - Barcelona Design Week – Barcelona – Spain (2018, June 7th-8th);
- **Major exhibitions:**
  - DEVELOP3D Live – Warwick – Unite Kingdom (2018, March 20th);
  - Digital Assembly – Sofia – Bulgaria (2018, June 25th-26th);
  - Design Computing and Cognition – Lecco Campus – Politecnico di Milano, Lecco – Italy (2018, June 30th - July 4th);
  - SuperNova 2018 – Antwerp – Belgium (2018, September 28th-30th);
  - Empack 2018 – Brussels – Belgium (2018, October 3rd-4th);
  - Prototyping 2018 – Kortrijk – Belgium (2018, November 7th-8th);
  - ICT 2018 – Wien – Austria (2018, December 4th-6th)
- **Minor exhibition:**
  - Future Furniture (by the Argonauts in Milan, September 19th)

The document also describes how the SPARK project outcomes have been presented to the audience at these events. The consortium organized the events to showcase both the SPARK platform with full functionalities (with one or multiple projectors and tracking capabilities, where possible, due to the limitations faced in different events) and side applications developed within the activities of the project (e.g.: Augmented Reality application running on tablets, Spatial Augmented Reality on a static object with a "minor" version of SPARK technology – not tracked – as well as a product configurator station powered by the SPARK application and Sony T technology).

These activities also included the capturing of feedback from the participants through a questionnaire, with analysis of the results presented in this deliverable. Overall, these events provided valuable insights to feed the reflections about the exploitation of the project, as reported in deliverable D6.6.

The gathered feedback proved to be effective in confirming that the SPARK platform had a good reception by the audience that had the chance to interact with it. This feedback will be also used in order to inform

the definition of the future steps for the SPARK partners that are willing to continue with the development of the solution beyond the conclusion of the project.

2. INTRODUCTION

Starting from March 2018, so even earlier with respect to the initial plans, and for the rest of the year, the consortium partners have been involved in the organization and management of a series of events for the SPARK exploitation. These activities were aimed at increasing awareness of SPARK technology and demonstrating its effectiveness in wider real contexts (SPARK Objective 4). At the same time, they gave the chance to gather feedback concerning the functionalities of the platform. This document presents all the activities pertaining to the different showcases and demonstrations carried out with entities outside the SPARK consortium.

To give a general framework of reference, in the first part of Section 3 the type of events and their different audience are described. The second part of Section 3 provides a description of the SPARK events: typologies of showcase and set-up used, what kind of interactions were possible for the participants, and some pictures of the events. Section 4 illustrates the feedback and lessons learnt from these exploitation activities.

The deliverable represents a picture of what has been done until December 2018. However, it is not exhaustive of all activities in progress or planned but not yet implemented at the time of writing this document.

3. DESCRIPTION OF THE SHOWCASE ACTIVITIES AND TARGET AUDIENCES

The activities carried out within task 5.4 have been grouped into three main categories, according to their characteristics and kind of audience: Big Tradeshow, Major Exhibition, Minor Exhibition. Addressing different kinds of fairs and events ensured the chance to target a broader and heterogeneous audience: designers, design agencies and designer clients, students, professional interested in AR technologies.

For the same reason, case studies used to present the SPARK platform during these showcases were not ad hoc projects, but a pool of predefined different demos and use cases about packaging and product interface design.

Depending on the characteristics of the events along with the technical and practical limitations, different configurations of the SPARK Platform were used: AR with tablet, AR with big touch screen, SAR with multi/mono projection.

3.1 SHOWCASE AND PARTICIPANTS

3.1.1 Big Tradeshow

Milano Design Week – Fuorisalone
Every year, in April, Salone and Fuorisalone define the Milan Design Week, the most important event in the world for design.

Fuorisalone is not a Fair but it started spontaneously early in the 1980's thanks to the will of companies working in the furnishing and industrial design sectors. Currently, it is expanding into many related sectors including automotive, technology, telecommunications, art, fashion and food.

Hundreds of events, organized in the main fashion and design districts of Milan, welcome hundreds of thousands of people from the international design community who come to participate in the Fuorisalone. The SPARK event was organized among Fuorisalone initiatives, at Artefice premises, not far from Tortona district, the oldest and most famous district where the Milan design week takes place.

Barcelona Design Week

World Design Weeks is a network for design weeks and festivals around the globe and the Barcelona Design Week (BDW) is a member of this network to elevate the global conversation, understanding, education and connection of people involved with design in Barcelona. BDW organised by Barcelona Design Centre (BCD Barcelona Design Centre) is a must-attend event on design, creativity and innovation in Barcelona. The annual event is a meeting point for companies, entrepreneurs and professionals from the sector, and an opportunity for the general public interested in creativity.

The main activities are in the Disseny Hub Barcelona, with events also taking place in the Districte Disseny, a selection of parallel activities spread throughout the city organised by those related to the design field. SPARK event was organised following BDW premises, so the event was host at BatlleGroup studio, branding and packaging agency, inside Districte Disseny.

3.1.2 Major Exhibition

DEVELOP3D Live

DEVELOP3D Live is the leading UK event focused on design technologies. It features a conference, workshops and an exhibition including many of world's leading suppliers of design technologies include CAD, CAE, and rendering software, as well as an array of AR/VR and 3D printing equipment. In 2018, the event was attended by nearly 2,000 participants, mainly managers or designers/engineers from industry – see below. The event is organised by the publishers of DEVELOP3D magazine, which provides its 45,000 global readers with insights into the latest design technology and trends. This event was targeted due to the large number of design practitioners in attendance, as well as the presence of AR/VR equipment suppliers and resellers – who might be relevant as exploitation partners.
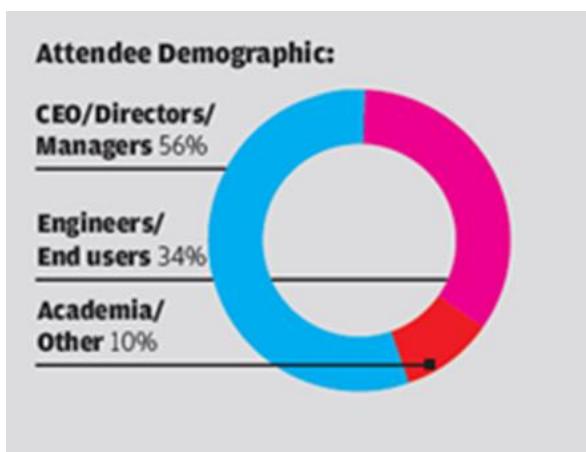

Figure 1 – Demographic of DEVELOP3D Live attendees.

6

Digital Assembly

The Digital Assembly in Sofia was a two day event (held on 25-26 June 2018) co-organised by the European Commission and the Bulgarian Presidency of the Council of the European Union. As a major annual forum, it was open to more than 1000 stakeholders and policymakers. The exhibition, held in parallel to plenary sessions and workshops, hosted different EU funded projects in order to show to the public interesting digital initiatives and opportunities.

Design Computing Cognition

The Design Computing and Cognition[1] is a three-day conference (in 2018 held on 2-4 July 2018 at the PoliMi campus in Lecco) preceded by two days of workshops (30th of June and 1st of July 2018). Organised every two years, it aims to provide an international forum for the presentation and discussion of state-of-the-art and cutting-edge research and developments in design computing and cognition. The audience, with more than 130 individuals, was composed of experts on artificial intelligence, cognitive science and computational theories in the design research field. A SPARK demo was hosted in the main room where plenary sessions and poster presentations took place.

SuperNova 2018

SuperNova is an innovation festival where visionary solutions, technologies and insights come together, where game-changers and businesses of tomorrow meet and entrepreneurs, professionals and creatives connect to get inspired and empowered.
The event took place on 28-30 September 2018 in Antwerp, Belgium.

Empack 2018

Empack is the trade fair for packaging technologies, materials and services related to the packaging industry, which took place on 3-4 October 2018 in Brussels, Belgium. The fair is the single largest packaging exhibition in Belgium and provides national and international exhibitors the opportunity to showcase their expertise in packaging technology to the professional audience.

Prototyping 2018 in Kortrijk

The PROTOTYPING2018 trade fair (7-8 November 2018, Kortrijk, Belgium) is designed for everyone in the field of product development. The focus is on the whole design process, from the original idea through to setting up a business model and actual production in a pilot run or small series. At Prototyping 2018 one could find companies and research centres with the technologies, materials, tools & techniques to make ideas materialise.

ICT 2018 – Wien

ICT 2018 took place in Vienna (Austria) on 4-6 December 2018. A research and innovation event promoted by the European Union with a focus on digital transformation of society and industry. It presented an opportunity for the people involved in this transformation to share their experience and vision of Europe in the digital age. SPARK event was part of the Thematic Networking Sessions. These networking sessions were informal group discussions that encourage brainstorming and active interactions between participants. By stimulating forward-looking collaboration, they aimed to develop new partnerships, notably for research and innovation. The SPARK networking session was attended by 37 participants.

3.1.3   Minor Exhibition

Future Furniture event by The Argonauts in Polimi - Milan

In cooperation with Wood.be, The Argonauts organized an inspiration trip for the Belgian furniture industry to Milan to learn how the Italian design scene is preparing for a future in which new technologies and global competition challenge the famous Milan-based brands.

For SPARK it was a great opportunity to present the technology and collect feedback from experts in a field which is quite different with respect to the main target sectors (packaging and product interface).

3.2 ORGANIZATION OF THE SHOWCASES

The organization of a series of different events has given the opportunity to show SPARK in different forms to different audiences, always taking care to maintain consistency in building the experience of the participants with the platform. In this section it is possible to have an overview of all the different set-up and a description of the events organized.

3.2.1   Big Tradeshow

Milano Design Week - Fuorisalone

SPARK Fuorisalone was a two-day event (17-18 April 2018), open at the whole design community participating at MDW 2018.

Figure 2 – SPARK event at Artefice premises, Area open to the public.

Two different kinds of area were planned:

a) **open to the public upon registration.** In this area it was possible to get information about the project and test three different typology of SPARK set-up, distributed on:

✓ Augmented Reality - N°2 stations with two table to test the app interface and functionalities directly on three different objects (packaging, product, beermat)

Figure 3 – AR stations with SPARK app on tablet and real products.

✓ SPARK set-up with SAR and no trucking - N° 1 station with tablet and 1 projector; possibility to test SPARK functionalities with the projection on a fixed real prototype (packaging or a product)
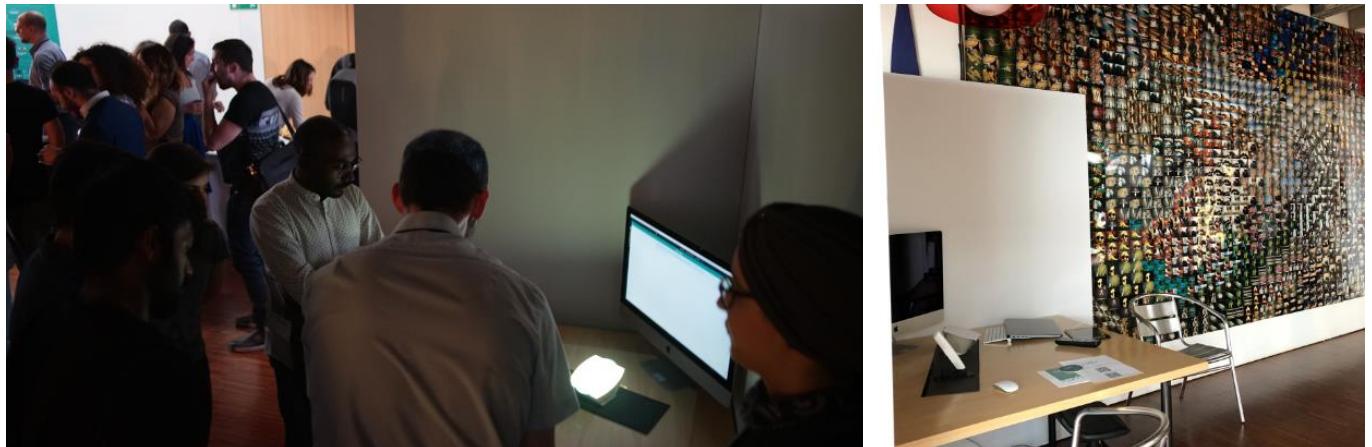

Figure 4 – SPARK set-up with no tracking system.

✓ SPARK set-up with Sony-T - N° 1 station with fixed projection (no tracking) and Sony-T instead of the tablet. The demo simulated a 'shelf test' (a sort of test to verify the shelf performance of different creative proposals) where a configurable SAR mock-up powered by SPARK was comparable with real products. People had the chance to try out the yield of the different creative layouts for a biscuit pack not yet on the market.

Figure 5 – SPARK area with Sony-T and real shelf simulation.

B) **restricted access based on appointment**. 24 live demo sessions, with a duration of around 20 minutes, hosted in the Artefice SPARK room. The latest version of SPARK platform is installed in this room, with a large touchscreen (to allow the interaction of several people), optimized video projection and a tracked mixed real prototype, that was possible to move in a limited handling area.
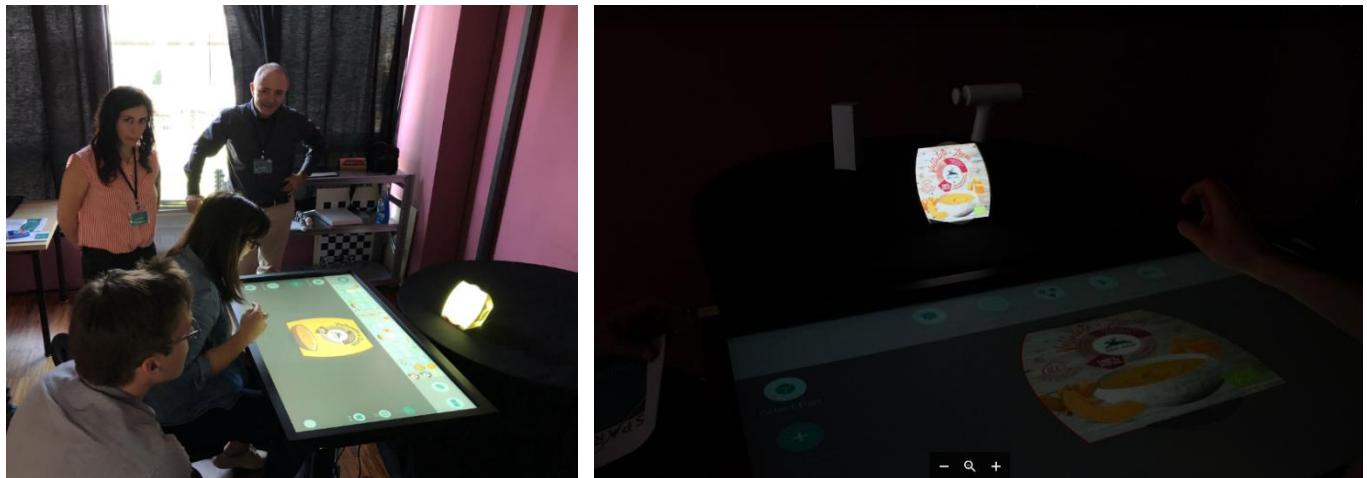

Figure 6 – SPARK room in Artefice on-going session and detail of the real prototype with projection.

Figure 7 – SPARK room in Artefice on-going session and detail of the real prototype with projection.

Access to this room was by pre-arranged appointment only. Artefice, Polimi and the other consortium partner had the chance to invite their clients or their professional contacts for a real SPARK session. At the end there were 69 participants out of a total of 75 bookings.
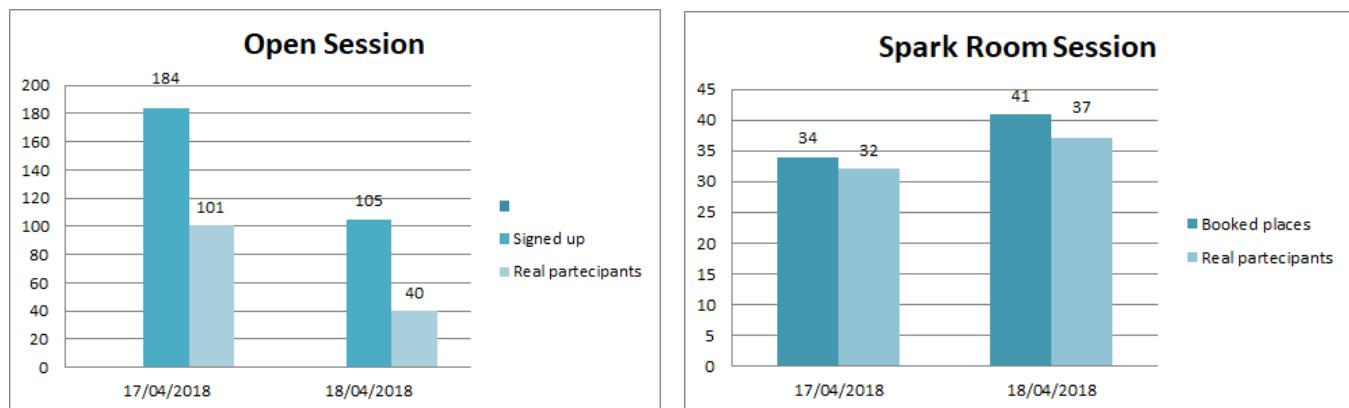

Figure 8 – SPARK Fuorisalone event participants recap. Total visitors 210

Besides "one-to-one" communication activities, carried out by all the partners, a wider resonance of the event was ensured through digital campaigns on social media channels: Facebook, LinkedIn and Eventbrite.
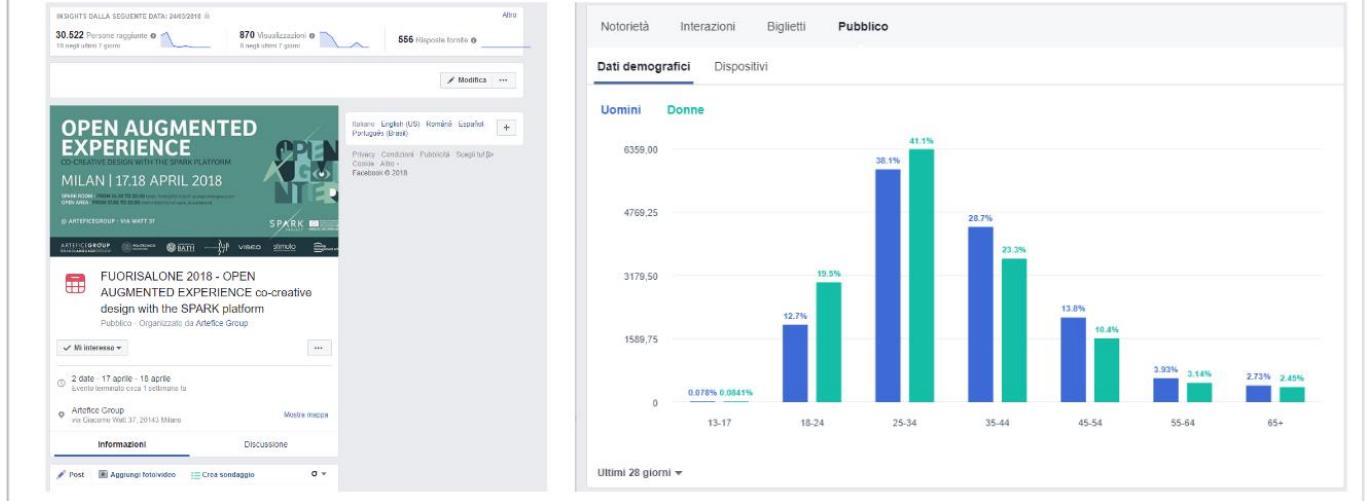
Figure 9 – Fuorisalone – Digital campaign recap.


Figure 10 – Fuorisalone – Official page on fuorisalone.it / Digital campaign, Artefice Group Facebook page activities.

Barcelona Design Week

SPARK Barcelona Design Week (BDW) was a two-day event (7-8 June 2018), open to the whole design community participating at BDW 2018 - professionals from the design industry – as well as members of the public with an interest in experiencing Spatial Augmented Reality (SAR) and Augmented Reality (AR) technologies.

In the build-up to BDW the SPARK event communications were published in the printed program of the BDW, presented in the online program, newsletter and social activities on official BDW social media channel.

Figure 11 – Samples of communication of the SPARK event on official BDW channels: website and print program

Two different venues were used over the course of the BDW activities, the first in central Barcelona and the second at the Stimulo premises, a short distance outside Barcelona. Further details of the activities completed at each venue are provided here.

1.Space in Barcelona - Open to the public upon registration including all SPARK activities.
A number of demos, similar to those presented at Milano Design Week, were set up at BatlleGroup, tailored for the available space to get a better experience for visitors.
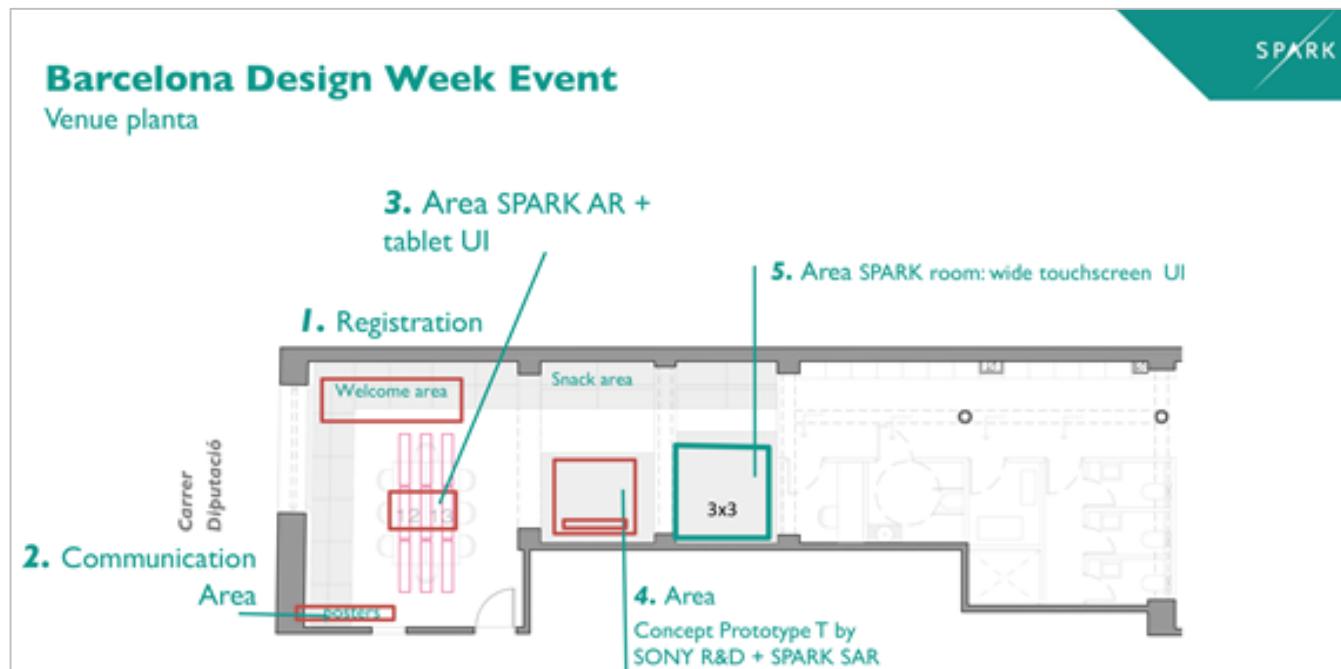
*Figure 12 – SPARK event at BattleGroup: plant and areas distribution*

In the front area, there was an information panel describing objectives and ambitions of the SPARK project with the logo of all partners/collaborators. A member of the SPARK team was present to welcome the visitors; the description of the SPARK project was mainly visual, using the graphic style of infographics, with only few paragraphs of written text.

Figure 13 – SPARK event in Barcelona,

Besides this welcome area, there were three different types of SPARK set-up, distributed on:

a) Augmented Reality station with two tablets to test the app interface and functionalities directly on two different objects (packaging, product):
- ✓ Area where multiple participants were able to interact modifying graphics elements on mixed prototypes, that can be handled, using the SPARK AR application;
- ✓ Multiple tablets (for visualization and interaction);
- ✓ Prototypes with visible markers (or with their original look) that could be handled by the user;
- ✓ The user could look at the prototype AR version through the tablet camera.

Figure 14 – AR station with SPARK tablet and real prototype

b) SPARK set-up with Sony-T station and fixed projection (no tracking). A shop shelf simulating supermarket experience. A mix with real products and a blank prototype. This was the same as the 'shelf test' experience created for the MDW activities.
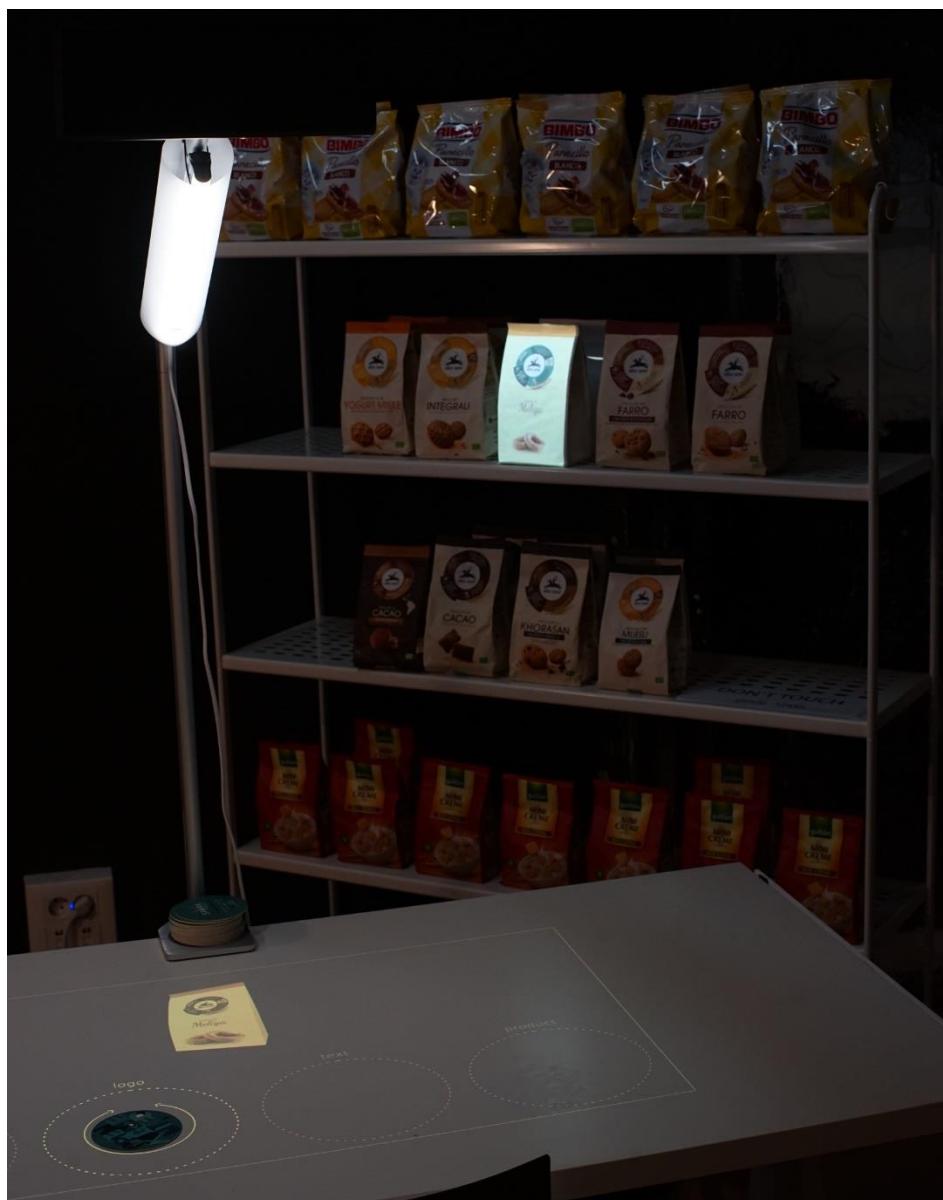
Figure 15 – Interaction with Concept Prototype T using a smart AR tangible tool. Note that, when viewed with the naked eye, the luminosity of the mixed reality pack appeared very similar to that of the real packs next to it.

C) SPARK room static (no tracking system): One projection on the static mixed prototype combined with multi-touch screen interaction (multiple participants at the same time).

Figure 16 – Moments from SPARK sessions during Barcelona Design Week

Event participants, top profiles:
- ✓ Designers: ADP, Barcelona professional design association - BCD, Barcelona Centre Disseny - ADIDAS designer (Germany);
- ✓ Service Design: ROCHE, UX Freelands;
- ✓ Education: BAU school - EINA;
- ✓ Managment: HP;
- ✓ Packaging: DURERO (manufacturer) - BatlleGroup (agency).
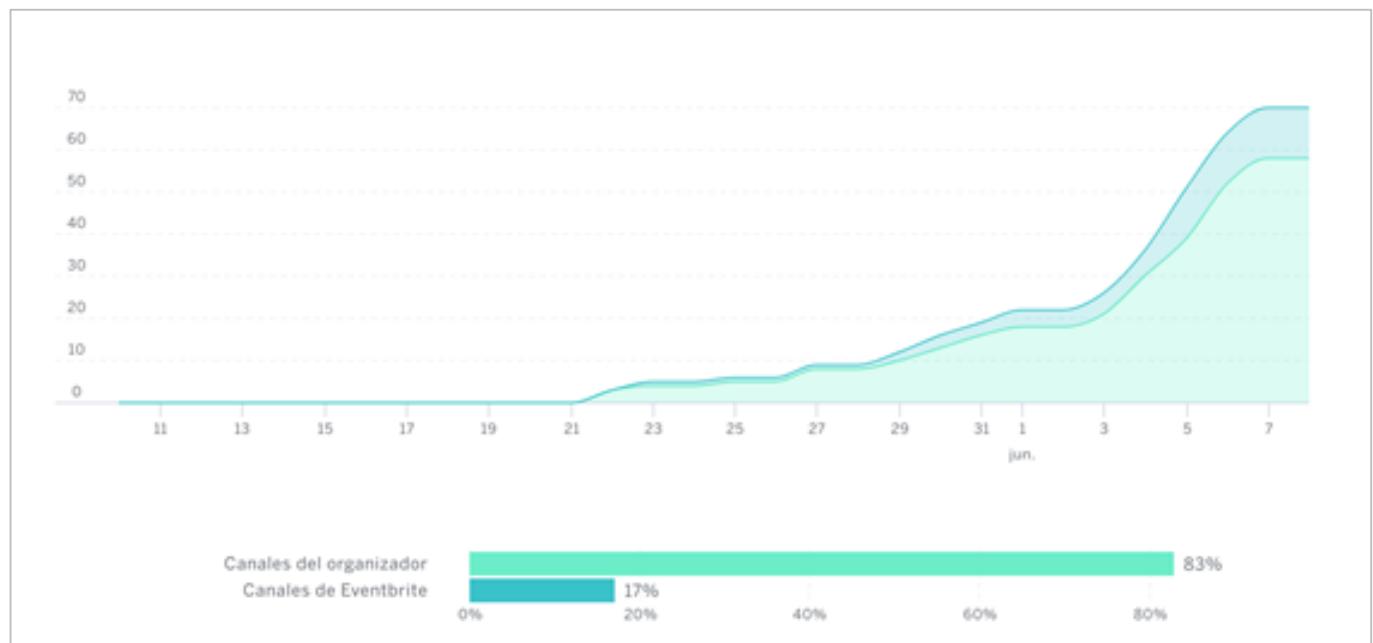
Figure 17 – Barcelona Design Week – Page visualization recap: Facebook 12.544 / Eventbrite 698

2. Space in Stimulo – SPARK room

During and after the open activities in central Barcelona, a full SPARK room at Stimulo premises was set up as a confidential area. Contacts from the open activities and other existing contacts were invited to arrange a private session at the Stimulo SPARK room in which the participants were able to interact with the SAR technology, modifying graphics elements on a tracked, mixed prototype;

16

- ✓ Multi-projection on the mixed prototype;
- ✓ Tracked prototype (the prototype can be handled);
- ✓ Tablet screen interaction.

*Figure 18 – SPARK room at Stimulo premises*

Figure 19 – During these days 2 main activities were schedule with: PACKAGING CLÚSTER and SEAT – automotive.

3.2.2 Major Exhibition

DEVELOP3D Live
The exhibit presented at DEVELOP3D Live consisted of two AR demo kits, a looped video explaining the SPARK project, along with posters, banners and promotional material. A general overview of the project was provided to stand visitors, making use of the poster and video content to help explain SAR technology and the specific objectives of SPARK within the application of SAR for co-creation. Visitors were then shown the SPARK AR demo – using either a product or packaging design case study depending on the interests of the visitor.

Figure 20 - Left - The exhibition stand at DEVELOP3D Live. Right – Presenting the SPARK AR demo.

The visitor was then given the opportunity to interact with the AR demo kit and ask questions. Finally, the visitor was asked to complete a brief survey about their opinion of the technology.

Figure 21 - Visitors at DEVELOP3D Live completing the participant survey.

A good variety of visitors came to the stand during the day, with many showing significant interest in the technology. Some even enquired if they could start using or purchase the AR technology for immediate use within their work. There were also many good suggestions for how the technology could be improved, particularly with respect to the GUI.

In the late afternoon the number of visitors decreased, which provided an opportunity for some of the SPARK team to visit the stands of other AR/VR technology providers to discuss the SPARK project and opportunities for collaboration.

Digital Assembly

SPARK had a wide open space with two different stations, an illustrative panel to explain the project and a monitor to show videos related to the use of the technology. The main focus of the exposition was the SAR set-up with two static prototypes (applied in the product and packaging design fields) and a wide touch screen as a means of interaction. The high-quality projector was mounted on a vertical frame fixed to the ground. The second set-up, instead, was made by the AR version of the SPARK application running on a tablet with two target prototypes (for product and packaging design tasks).

Even though the exhibition was opened for the entire duration of the DA event, we had the majority of the visitors during the breaks. They had the chance to freely play with both the setups and to gather information on the project itself, its aim and features.

N° of station: 2 stations;
Typologies: SAR (without tracking) and AR
Duration: two full days
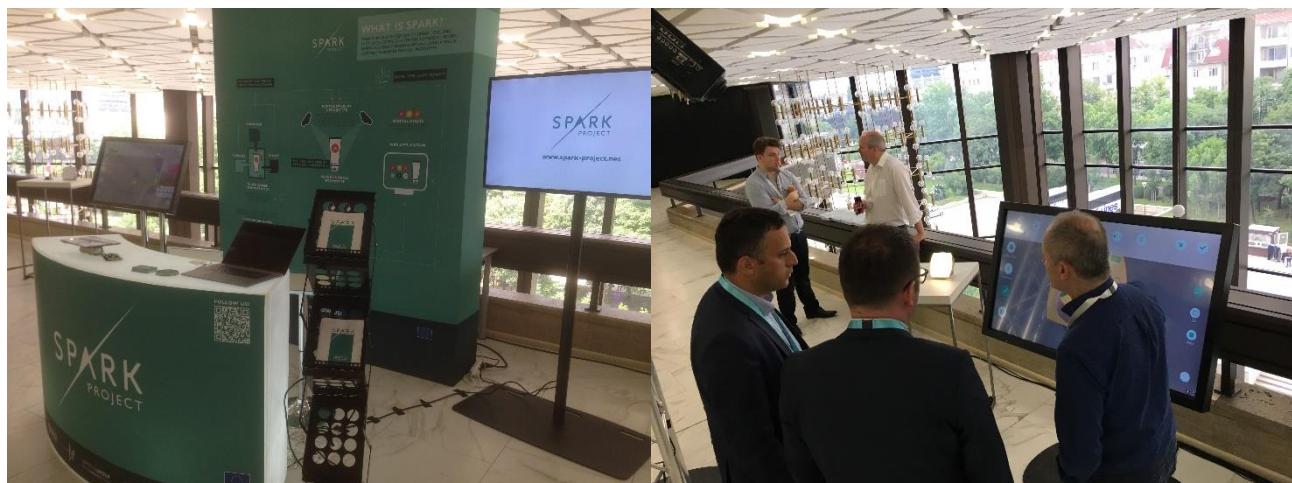
Figure 22 - Photos of the SPARK booth at the Digital Assembly 2018: the complete setup (left) and a detail of the SAR area (right)

Design Computing Cognition

SPARK, as a conference sponsor, had the chance to organise two exhibitions opened to the public during the breaks of the second and third day. Near to a large information panel, which described the features of the platform, there was the SAR booth with all the developed functionalities: two projectors hung on a span structure, the IR optical tracking system, the tablet for interacting with the application and two physical prototypes (one applied in the product design field and one in the packaging). All the attendees had the possibility to see and test the potentiality of the system with live demonstrations.

N° of station: 1 station;
Typology: SAR with tracking and multi-projection
Duration: two days during the breaks

Figure 23 - Photos of the SPARK booth at the Design Computing and Cognition conference 2018: the complete setup (top-left), two details of the SAR area (top-right and bottom-left) and the entire audience of the conference during the live demo (bottom-right)

SuperNova 2018

The SuperNova Innovation festival invited all professionals, entrepreneurs, creatives, researchers, innovators & investors to squeeze time and embrace tomorrow at the SuperNova Professional summit on 27-28 September 2018.

During the weekend, September 29 & 30 2018, the event was open to the wider public to discover and experience the life of tomorrow at the 'SuperNova Expedition'. At this expedition AMS showcased the SPARK AR application on 2 tablets, each with 2 prototypes on a branded SPARK booth. More than 30,000 people from 23 different countries visited the SuperNova Expedition in the weekend alone.

N° of stations: 2 stations
Typology: SPARK AR
Duration: two full days during the weekend

Figure 24 - Photos of the SPARK booth at SuperNova 2018

Empack 2018

Empack is the trade fair for packaging technologies, materials and services related to the packaging industry. The fair is the single largest packaging exhibition in Belgium and provides national and international exhibitors the opportunity to showcase their expertise in packaging technology to the professional audience. As an information platform for the packaging industry, the Empack fair is an important reference point and it gives insight into the latest developments, practical tips and relevant advice for greater efficiency and effectiveness at the workplace.

At Empack 2018, the SPARK consortium showcased 2 SPARK AR applications with 4 prototypes and a SPARK SAR high-resolution application with no tracking.

N° of stations: 3 stations
Typologies: 2 x AR; 1x SAR no tracking
Duration: 2 days
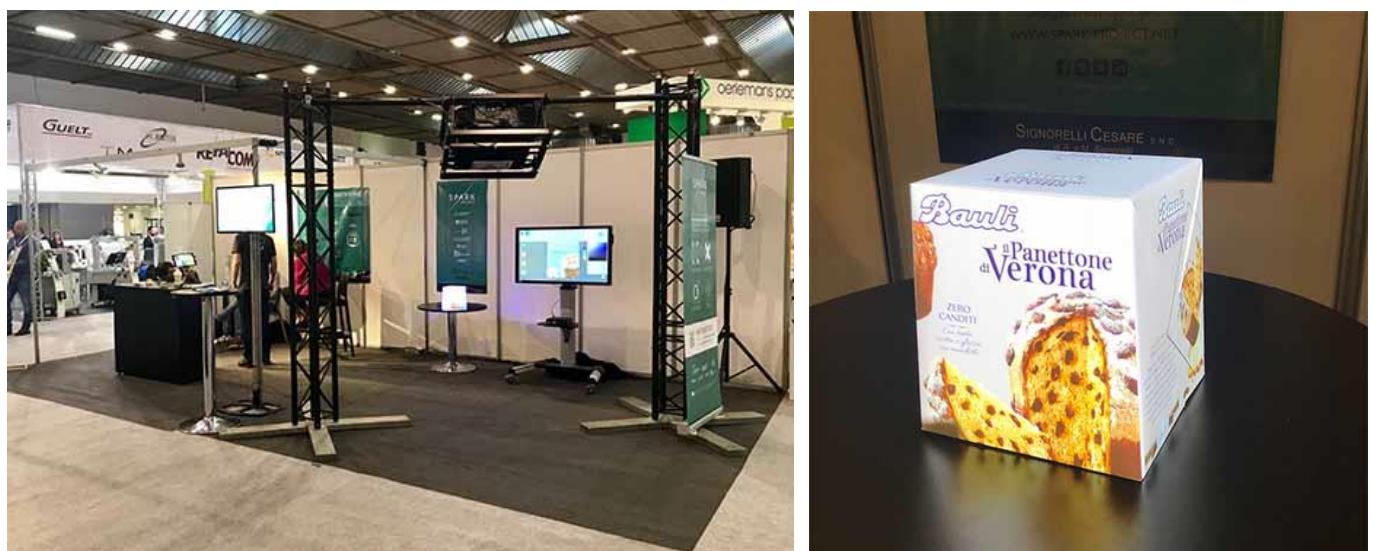
Figure 25 - Photos of the SPARK booth at Empack 2018

Prototyping 2018 in Kortrijk

The PROTOTYPING 2018 trade fair (7-8 November Kortrijk, (BE) is designed for everyone in the field of product development. The focus is on the whole design process, from the original idea through to setting up a business model and actual production in a pilot run or small series. One can find companies and research centres here with the technologies, materials, tools & techniques to make own ideas materialise.

During the Prototyping 2018 exposition the SPARK consortium has showcased the SPARK technology on one SPARK AR tablet station and one MiniSPARK SAR station with a tracked turning table.

N° of stations: 2 stations
Typologies: AR and Mini-SPARK SAR
Duration: 2 days

Figure 26 - Photos of the SPARK booth at Prototyping 2018

ICT 2018 – Wien

SPARK networking session in ICT was a successful opportunity to present the platform at a qualified audience of researcher and professional interested in AR/VR technologies. In total, 37 people attended the session, apparently more than in other sessions of the same kind.
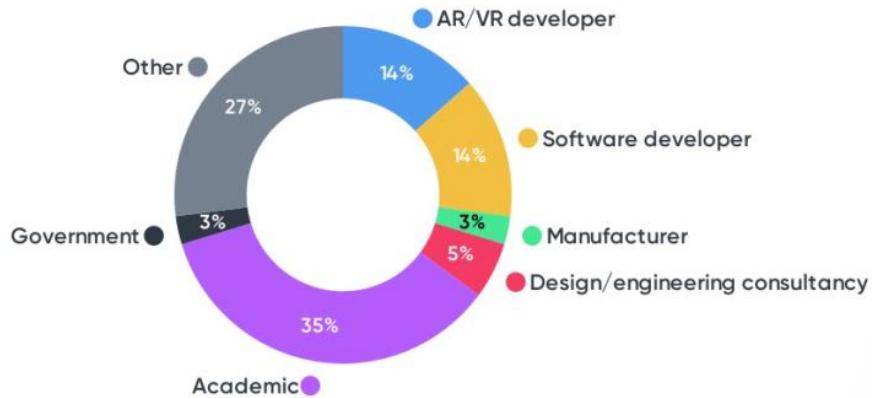
Figure 27 – Participants composition recap

The objectives of this seminar were to:

- Share the experiences of SPARK end-user partners and other participants that have begun to adopt AR technology within their design practice.
- Identify the business benefits, challenges and lessons learnt of working with AR.
- Foster academia-industry collaboration to address the challenges identified.
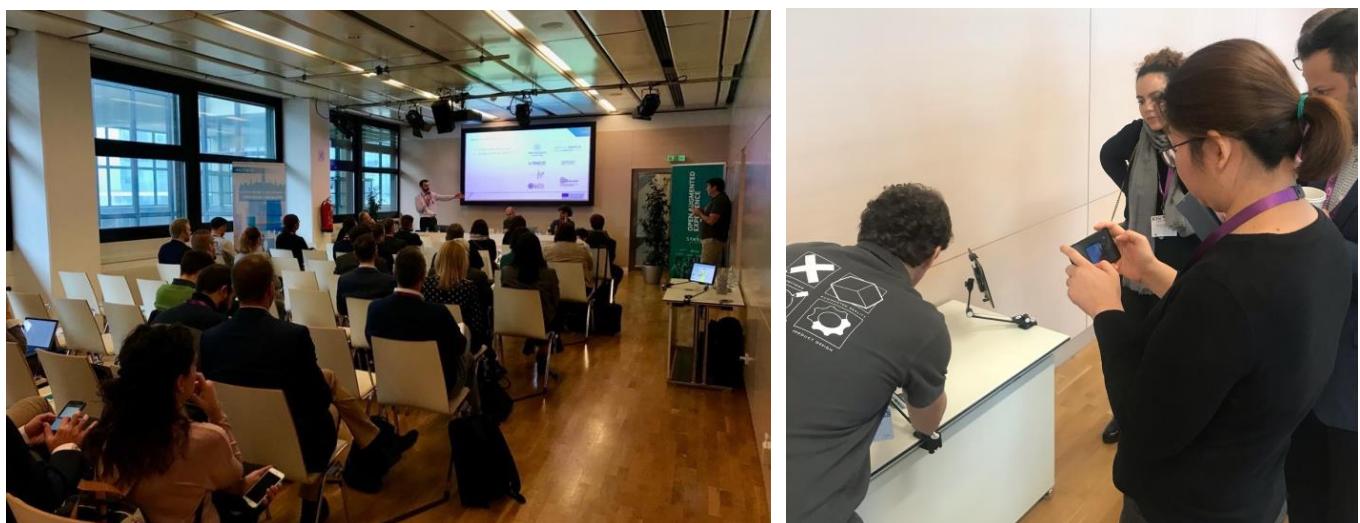
Figure 28 – SPARK ICT networking session and AR station

N° of station: 2
Typology: AR demo with two tablets;
Duration: 1 hour session

3.2.3 Minor Exhibition

Future Furniture event by The Argonauts in Politecnico di Milano

In cooperation with Wood.be, The Argonauts organized an inspiration trip for the Belgian furniture industry to Milan to learn how the Italian design scene is preparing for a future in which new technologies and global competition challenge the famous Milan-based brands.

On the last day of this trip, the participants visited Politecnico di Milano for a presentation of the SPARK project and a live demonstration of the SPARK SAR platform.

N° of stations: 1 SAR station
Typologies: AR; SAR no track; SAR with track; SonyT
Duration: Half a day
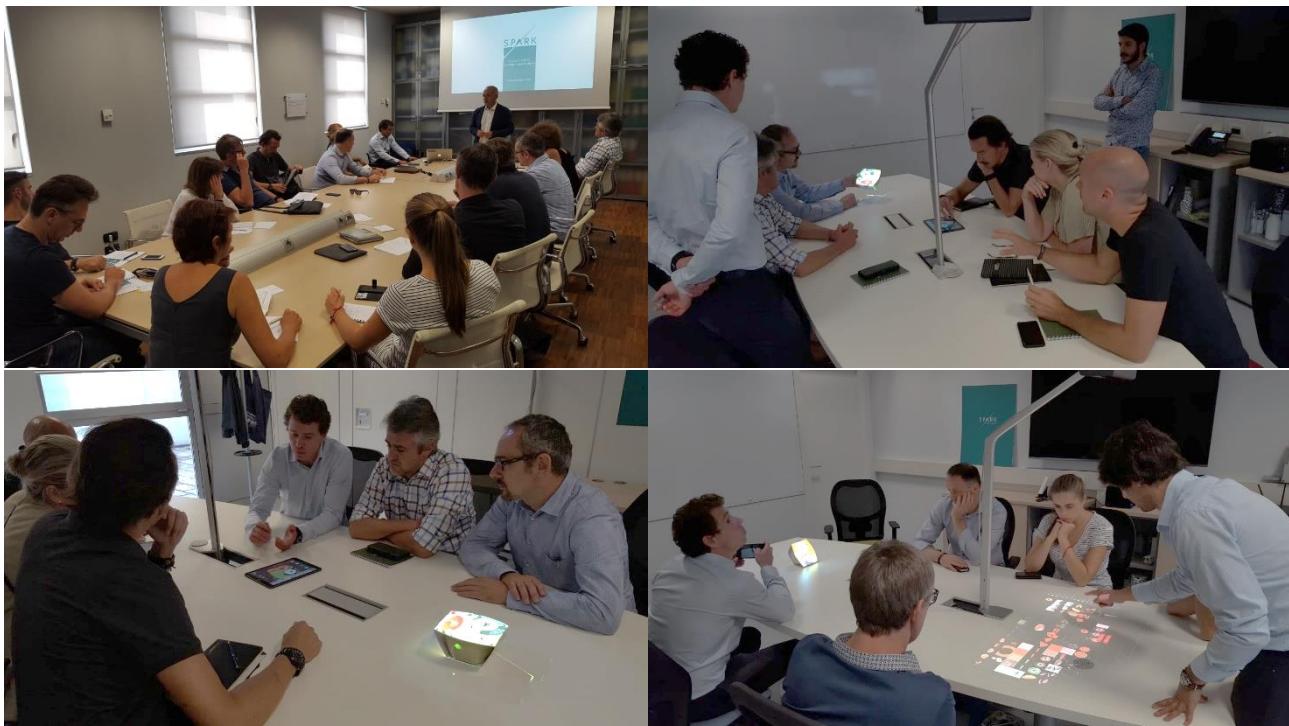
Figure 29 - Photos of the SPARK exhibition at PoliMi during the Argonauts: the full audience during the SPARK presentation (top left), the live demos with the full SAR technology (top-right and bottom-left), and the live demo with the SONY T (bottom-right)

4. IMPACT PERFORMANCE AND FEEDBACK

4.1 Method for collection of results and feedback

In addition to the presentation of the platform and the possibility to test the SPARK technology functionalities offered during each of the events, the exhibition and tradeshow activities enabled the SPARK consortium to gather feedback on how to address the evolution of the platform and explore the potential market interest for this type of product or service.

The consortium partners defined a short survey to be completed by participants at the different events. The survey was tailored to the expected audience at each event. To aid analysis of the results, each version of the survey contained the following four questions:

- ✓ How often does your company currently hold co-creative design sessions (or product development review meetings) with internal stakeholders, customers or end users?
- ✓ How important are the following challenges for your organisation?
- ✓ What type of organisation do you work in?
- ✓ Approximately how many people are employed in your organisation?

Other questions were included to capture open ended feedback from participants. The questionnaire was available in both paper and electronic (via SurveyMonkey) formats. The analysis of the results of the surveys presented in Section 4.3 focuses on the questions common to all versions of the questionnaire.

4.2 Summary of impact performance

10 tradeshows were organized and implemented from March 2018 to the beginning of December 2018 in 6 different EU nations. The total reach is estimated as 16.800 people and more than 700 people have had the chance to directly interact with the SPARK platform (in one of the various set-ups described previously). Below is a summary table of the chronology and the impact that SPARK tradeshows have had in terms of participants and target type achieved.

Name	Target group	When	Participant/Reach
Milano Design Week	Designers, all	April '18	210/4270
Barcelona Design Week	Designers, all	June '18	82/1800
Develop 3D Live, Warwick	Designers, Design tech. managers	March '18	1800
EU Digital Assembly, Sofia	EU H2020 community	June '18	130
Design Computing Cognition	AI experts, researcher in design field	June '19	130
SuperNova, Antwerp	General public	Sept '18	5000
Empack, Brussels	Packaging designers	Oct '18	100
Prototyping '18, Kortrijk	Designers	Nov '18	3500
ICT, Vienna	Digital EU	Dec`18	37
Argonauts visit at Polimi (MI)	Professionals	Sept '18	15

Table 1 – Evaluation of the audience composition

Beyond the numbers, one of the main benefits of these activities has been the many hours of conversations with relevant stakeholders that has enabled the SPARK consortium to collect feedback on the general characteristics of the SAR, on its use in the creative design and on the usefulness of SPARK.

4.3 Feedback received through surveys

The following graphs present a summary of the survey results obtained from the surveys completed at the various tradeshows and exhibitions. As mentioned in Sect 4.1, not all the participants answered the questionnaire as this was not mandatory for participating in the demo sessions. However, it is also worth saying that most of the invited audience (which should be the most representative target group to gather

interesting feedbacks and support the future development of the SPARK platform) provided their answers. In total, 108 people participated in the survey, with the majority coming from Milan Design Week (n=70).

It is important to underline that the collected answers differentiated by market area of the participants are considered potentially relevant for the business exploitation of the platform, thus the consortium decides not to disclose them in full. However, the results of the questionnaire will be presented referring to the overall number of respondents.
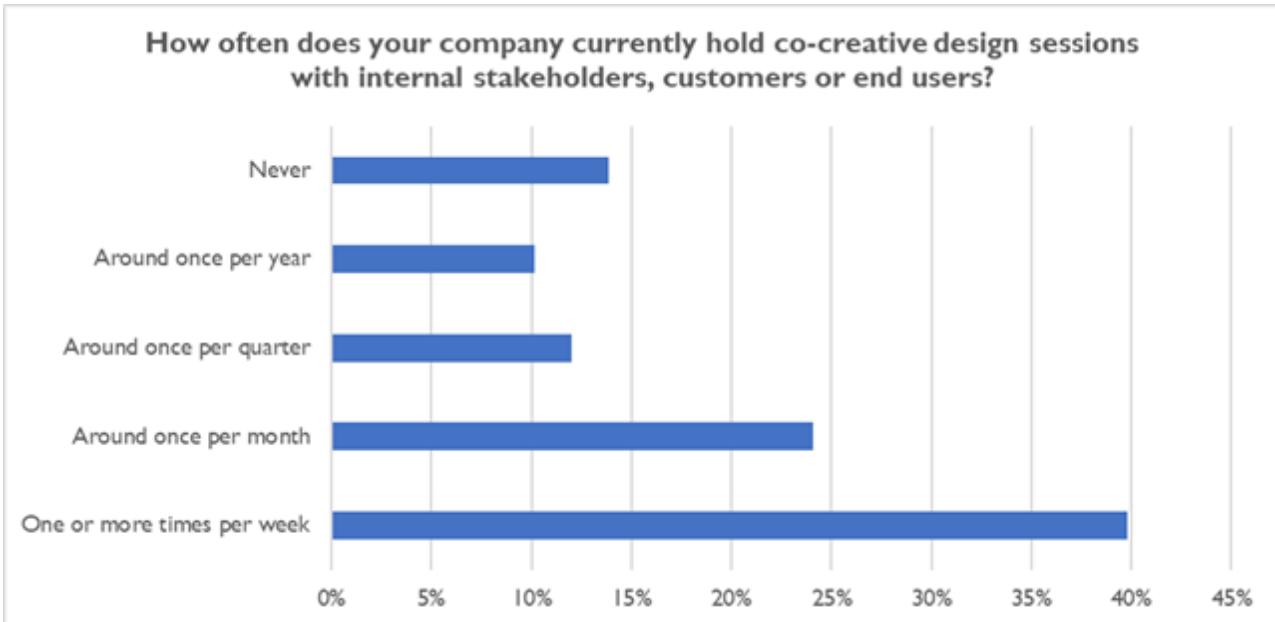

Figure 30 – Recurrence evaluation of creative sessions within the design process, within attendees' companies at SPARK tradeshows and events.

The histogram of Figure 30 shows that the largest majority of the respondents participates, organizes or, more in general, works for an organization that believes that co-creative design sessions are relevant within their workflow. In fact, more than 60% of the respondents says their company/institution runs at least one co-creative sessions per month, if not more frequently. In this context we expect that SPARK platform could find higher interest within these market segments (independently from the business exploitation strategy/model the consortium will adopt).
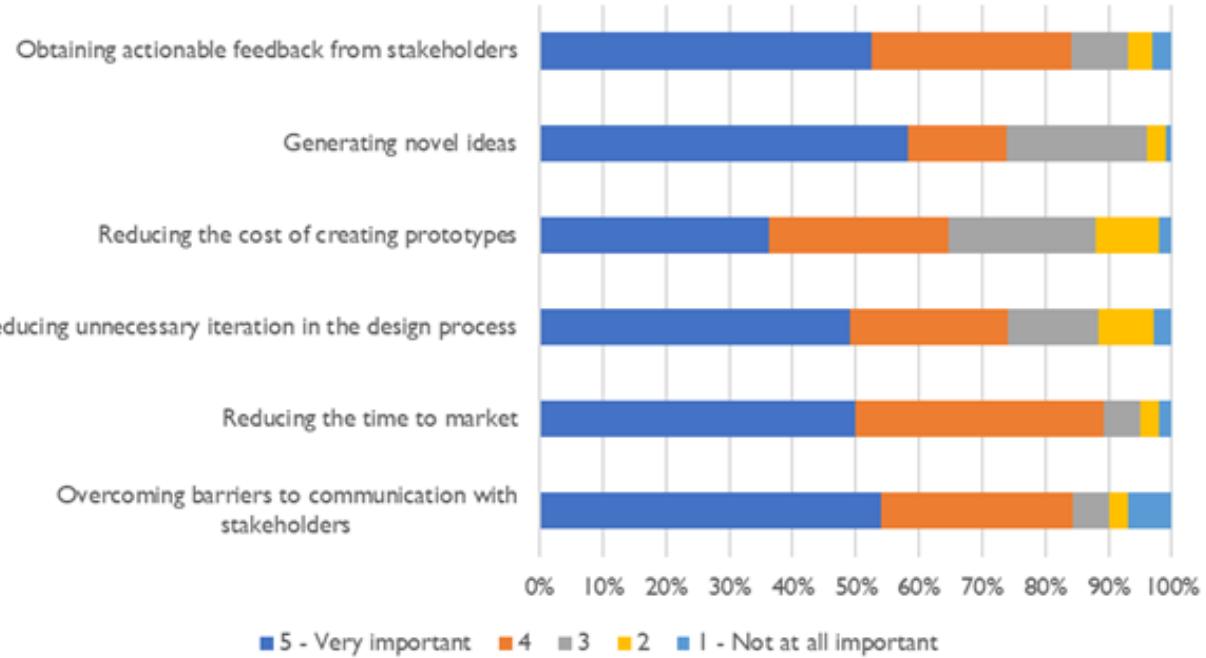
Figure 31 – Probing the market interest for the different competitive advantages obtainable using SPARK Platform

The answers shown in figure 31 shows that the SPARK technology is addressing a range of problems that are considered important or very important by at least the 65% of all respondents. This bodes well for the SPARK exploitation activities. The respondents felt that the reduction of the time-to-market as well as what prevents an effective communication with the stakeholders that take part to those co-creative design sessions is what currently hinder their effective and efficient development of solutions. It was somewhat surprising that reducing the cost of creating prototypes was the considered to be the least challenging aspect by the respondents, given that the interviews completed with practitioners in T1.5 had identified prototyping costs as a major contributor to the overall cost of product development.
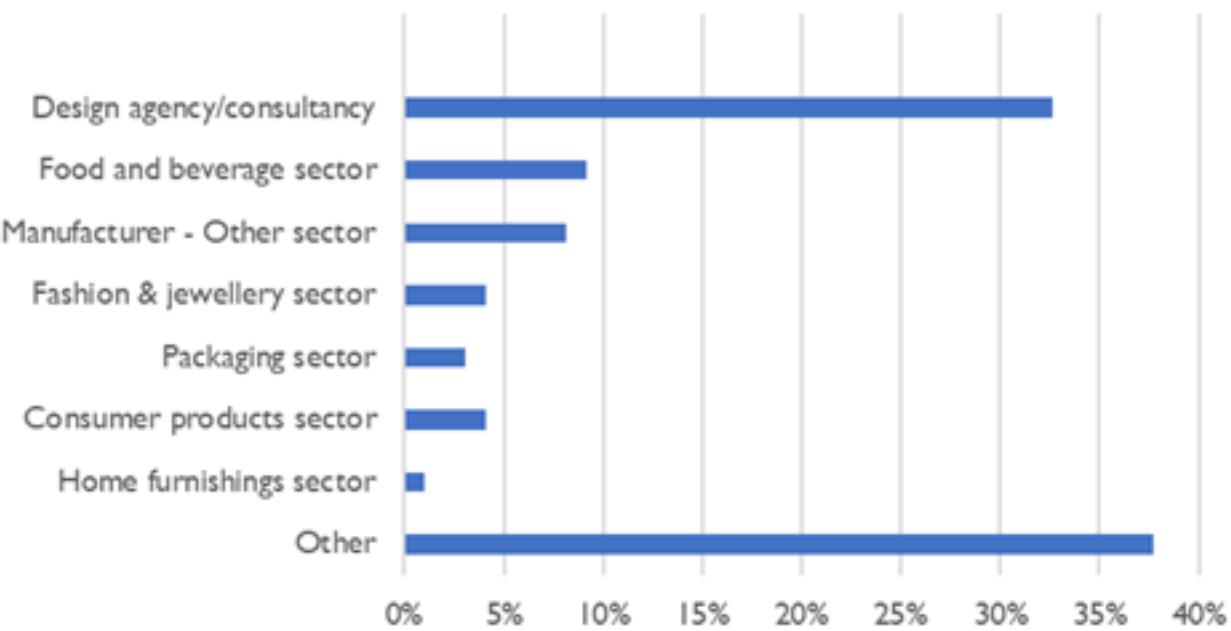
Figure 32 — Evaluation of the audience composition: types of companies/organization
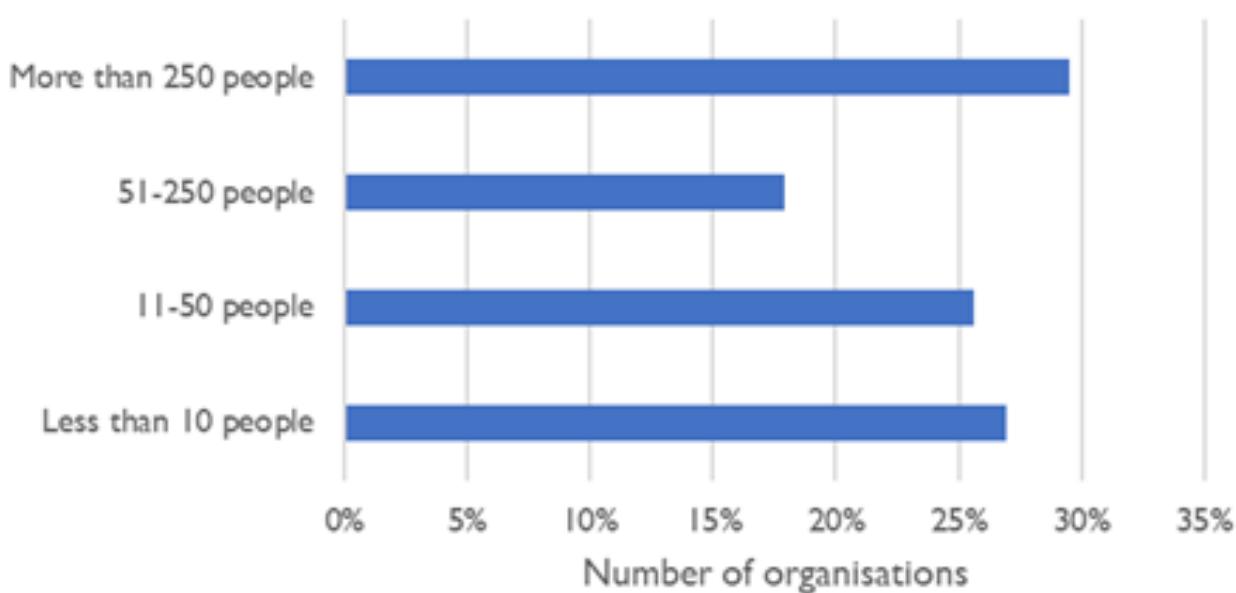
Figure 33 — Evaluation of the audience composition: companies/organization sizes

The histogram in Figure 32, shows that the arena of respondents is clearly composed by actors having different professional profiles. The respondents are distributed along several classes. Despite more than 1/3 of the respondents chose the answer "other", the remaining two thirds are distributed across different market sectors (food, consumer product, including manufacturing, as well as fashion, jewellery and furniture). These heterogeneous sets of respondents, together with the answers to previous questions, highlight that, independently from the specific domain at hand, there is a general need to speed up the time-to-market and improve the communication with stakeholders (other companies, different functions and roles within the same company, end consumers…). Then, the histogram of figure 33 confirms that these needs are not strictly dependent on the size of the company the respondents work for. This is a preliminary evidence that companies, whether they are big or small, are increasingly relying on co-creation and shared sessions that includes stakeholder to make their activities more efficient and effective.

The above mentioned two graphs (figures 32 and 33) also suggest that this arena of potential SPARK customers might have significantly different needs they aim at satisfying with the platform. These needs can be revealed through the analysis of the qualitative feedback provided within the survey responses. However, these data are considered as particularly sensitive/valuable for the SPARK business exploitation and, as mentioned above, the consortium chose to keep them confidential.

5. CONCLUSIONS

The consortium, within the activities of Task 5.4, participated in 10 different events across Europe: two linked to tradeshows in Italy and Spain (Salone del mobile – Fuorisalone/Milano Design week and Barcelona Design Week), 7 in big exhibitions (across Belgium, Italy, Spain and UK – consortium countries – and Austria and Hungary – outside the consortium boundaries) and 1 small exhibition (Italy). During these events, the partners organized demos and showcases of the SPARK platform, with the purpose of sharing with a broader audience what the project is about, what the proposed solution is and how it works, and what functions it delivers. Most of all, these events provide the participants with an opportunity to put their hands on the SPARK platform, so that they can clearly feel the benefits with a live experience. The ten events varied significant in size and audience (from a few tens to thousands of attendees). Moreover, these events gather participants (professional and/or curious people) coming from very different domains. Together with the demos and showcases, the consortium took the opportunity to gather feedback from the participants, which highlighted two main points:

- There is a general interest in methods and tools that support companies (independently from their size and field of operation) to reduce time-to-market and improve they way that they gather feedback from stakeholders. This highlights a general relevance of the platform to the audience.
- The SPARK platform, despite some expected issues that are typical of an early development stage, generally got a very good reception by the audience, who clearly stated that they would benefit from a system that helps them facilitate meetings with end consumers and other stakeholders, not necessarily with the purpose of designing new solutions (design support platform), but also to show already conceived solutions and identify the best alternative (design review platform).

The organization of the showcases highlighted two important lessons related to the management of exhibition activities that are worth noting by future recipients of EU funding:

- The availability of a consortium partner "on site" for the events dramatically facilitates the preparation as well as the execution of demos and showcases. Most of the work, indeed, belongs to the preparation stage, where:
  - o it is both important to keep a communication channel open with the overall event organizers to share needs and problems;

- o all the equipment has to be put in place and tested before the beginning of the event.
- In places where the consortium does not have any available equipment, there is the need to find reliable entities which are capable of providing the equipment for the showcase, as it is extremely ineffective to move the equipment where it is installed to move it elsewhere. This impairs the development activities as well as the showcases the different partners carry out with the current version of the platform. This suggests that also a portable solution of the platform (as MiniSPARK) could be extremely beneficial for showcasing the technology, also with reference to the activities the consortium will carry out after the project conclusion.

Despite these challenges, the overall conclusion is that the showcase activities completed within T5.4 required a major effort from consortium partners but were highly successful in terms of demonstrating the effectiveness of the SPARK platform in wider real cases and showcases (SPARK Objective #4) and in terms of gathering feedback that can inform the future development and exploitation of the SPARK technology.