D8.4 TRINITY initial open event

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PU	Public	x
PP	Restricted to other programme participants (incl. Commission Services)	
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1 Introduction

The main objective of this document is to report about the TRINITY initial open event organised on 19 September 2019 in the framework of the EMO trade fair in Hannover (Germany). EMO is the most important international trade fair for machine tools and metalworking. International exhibitors present at this trade fair, the latest materials, products and applications.

In addition to the initial open event, TRINITY also had a booth at the exhibition. The TRINITY booth was located at Hall 9 in the area dedicated to industrial electronics, robotics and industry 4.0. This report also describes the promotion activities carried out at the booth during the exhibition.

2 Objectives of the workshop

The main objective of the TRINITY open event was to raise the awareness of relevant stakeholders about the project, its objectives and the first open calls to be launched in November 2019. The event aimed to attract manufacturing companies, specially SMEs, that could benefit from the project. This was the main reason why the partners decided to organise the event in the framework of a trade fair.

EMO is the most important international trade fair for metalworking manufacturing industries. In 2017 it hosted more than 2,200 exhibitors and up to 150,000 visitors from more than 100 countries. Organising the event in the framework of this trade fair gave the opportunity to reach manufacturing companies interested in the technologies being developed within TRINITY. Moreover, in order to increase the visibility of the project it was also decided to get a booth at the fair where visitors could see some of the TRINITY demonstrators and get first hand information about the project.

3 Agenda and organization of the workshop

The event took place on 19 September 2019 in the Convention Center located at the EMO fairgrounds. CECIMO led the organisation of the workshop. The programme was prepared by CECIMO in line with inputs received from Tampere University, Fraunhofer, LSEC, Fastems and other partners.

The event included an introductory presentation about TRINITY and two sessions on robotics and cybersecurity. At the end of the workshop a presentation gave more details about the upcoming TRINITY calls and the TRINITY demonstrators. The main objective of the session on robotics was to present the existing trends in this area and how companies could benefit from the integration of these technologies in their production processes. This session included presentations from Fastems, ABB and KUKA. The session on cybersecurity aimed at raising awareness about the need for cybersecurity with the presentation of some examples. It was organised in an interactive way in order to get feedback from the audience regarding their awareness and activities related to cybersecurity. Mentimeter was used as a tool to get the feedback from the audience. The cybersecurity session also included a presentation from RESADO on existing solutions to protect IoT devices from cyber-attacks.

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TRINITY

ROBOTICS
FOR AGILE AND COMPETETIVE
MANUFACTURING

19 September 2019, 09:15 - 12:30
Convention Center, Room 13/14
EMO Hannover

PROGRAMME

09:15 - 09:45	Registration and welcome coffee
09:45 - 10:05	*The TRINITY approach to agile production* **Minna Lanz**, Professor and coordinator TRINITY project, Tampere University
	Session on Robotics
10:05 - 10:25	*Making lot size one economically feasible* **Tomi Kankainen**, Chief Digital Officer and VP Digital Business Unit, Fastems
10:25 - 10:45	*Robotic solutions for industrial environments- benefits and challenges* **Boris Fiedler**, Digital Leader, ABB Robotics
10:45 - 11:05	*Mobile and autonomous solutions for automatization of die & mould workshops* **Andreas Walbert**, Business Development Manager, Business Unit Handling, Machining & Processing, Kuka **Pascal Haas**, Head of Automation, Erowa
11:05 - 11:15	*Q&A Session*
	Session on Cybersecurity
11:15 - 11:30	*All you needed to know and were afraid to ask* **Ulrich Seldeslachts**, CEO, LSEC Leaders in security
11:30 - 11:45	*The Importance of Cybersecurity – What IoT security solutions are available and how reliable are they?* **Florian Ernst**, Managing Director, RESADO
11:45 - 12:00	*Q&A Session*
12:00 - 12:20	*Applying secure robotics solutions in your company- TRINITY demonstrators and open calls* **Minna Lanz**, Professor and coordinator TRINITY project, Tampere University
12:20 - 12:30	*Q&A Session*

EMO Hannover 16-21.9.2019

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Image 1- TRINITY opening event agenda

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Image 2- from right to left: Minna Lanz (TRINITY coordinator), Tomi Kankainen (Fastems), Boris Fiedler (ABB), Andreas Walbert (Kuka) and Pascal Haas (Erowa)

Image 3 – Ulrich Seldeslachts (LSEC) speaking and Florian Ernst (RESADO) sitting in front of the audience

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A total of 61 people, mainly representatives from industry and research organisations, participated in the event. The signed list of participants is available on request. Following the event, the presentations were made available in the TRINITY website. Currently all the information of the initial TRINITY website is being migrated to the new TRINITY Digital Access Point.

Image 4- picture of the audience during the event

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Image 5- picture of the audience during the event

4 Promotion of the event

4.1 Promotion before the event

The event was extensively promoted through the different TRINITY partners networks and different channels available to the project. The event was announced in the first issue of the TRINITY newsletter, which sent to 40 people on 27 June 2019. A save the date message and an additional message with the conference draft programme were also sent respectively to 50 and 65 people on 16 July and 27 August 2019. In addition to the different mailings, the event was also announced in the Robotics and Automation news and the euRobotics websites.

Different posts were also made in social media through the TRINITY DIH group and pages in Linkedin and the TRINITY Twitter account.

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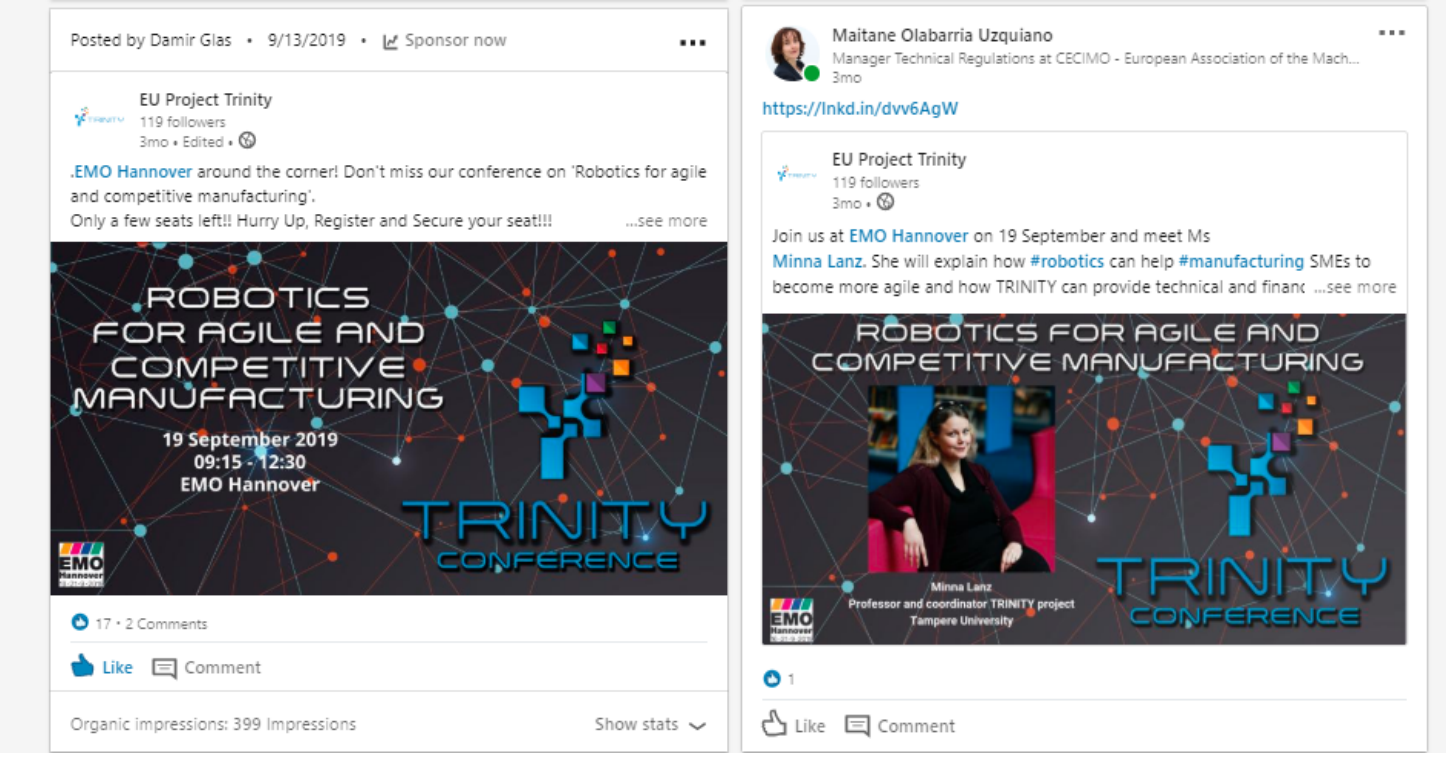

Image 6- Social media posts in Linkedin

Image 7- Social media post in Twitter

A flyer was also prepared by CECIMO and distributed at the TRINITY booth, booths of TRINITY partners and the companies speaking at the event and present at EMO Hannover. These flyers were distributed from 16 to 18 September in the fair days prior to the event. The aim was to attract potential additional participants from the visitors to the fair.

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Image 8- Flyer of the event

4.2 Promotion after the event

A press release summarizing the main outcomes of the event was issued by the TRINITY partners on 25 September 2019 (see Annex 1). In addition to posting the information in the TRINITY website and several of the TRINITY partners website, the press release was also published by Euractiv and the Manufacturing Technologies Association from the UK among others.

A follow-up e-mail including the power points presentations, pictures and the press release was also sent to all participants and people that registered to the conference on 10 October 2019. This information was sent to 127 contacts. The information was also promoted using social media.

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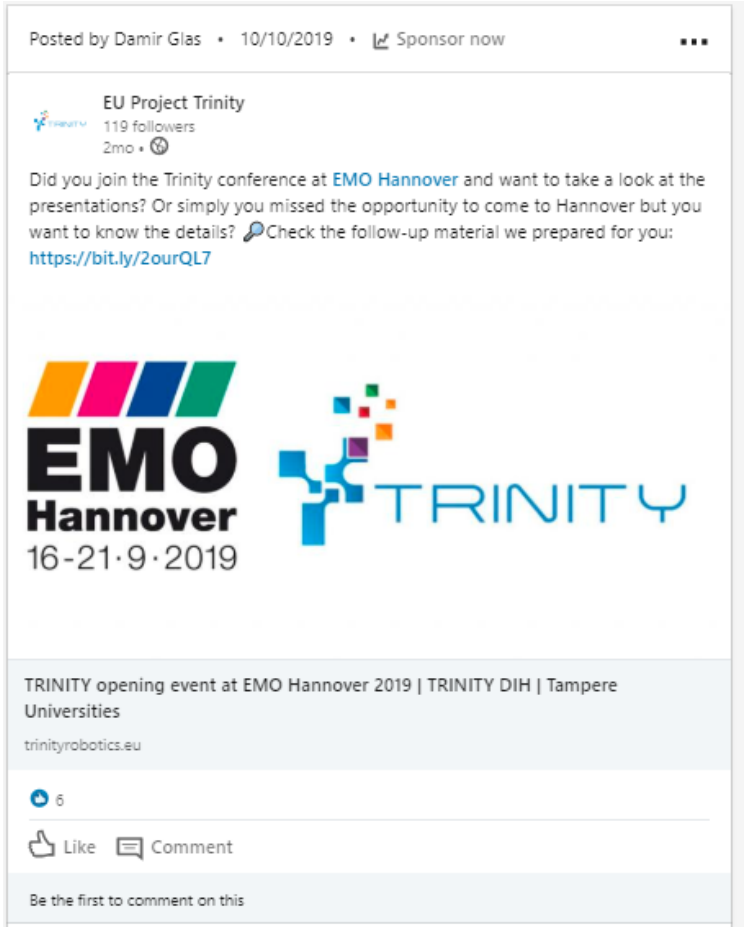

Image 9- Social media post in Linkedin

5 TRINITY booth at EMO Hannover

In addition to the opening event, the TRINITY project was also present at the EMO fair with a booth. The booth was in Hall 9 in the area dedicated to industrial electronics, robotics and industry 4.0. The exact booth number was E19. EMO Hannover 2019 counted with around 117,000 visitors from 150 countries. Therefore, the booth was a good opportunity to provide visibility to the project and increase the number of contacts with SMEs and other manufacturing companies.

The booth included two demonstrators: one virtual reality demo and a collaborative assembly with vision-based safety system use case. In addition to the demonstrators a rolling presentation about the TRINITY project was also prepared for the booth. At the booth brochures about the TRINITY project and the upcoming TRINITY open call were available. The different partners ensured the manning of the booth during the whole duration of the fair from Monday 16 September to Saturday 21 September. The booth was also a great opportunity to increase the number of contacts of the TRINITY network.

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Image 10- setting up of TRINITY booth (within the CECIMO booth)

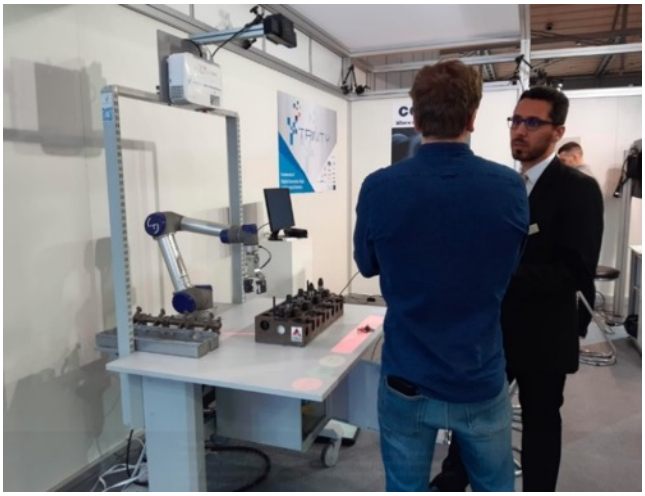

Image 11- Demo cases on collaborative robotics and virtual reality

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Image 12- Visitors at the TRINITY booth

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Annex 1- TRINITY open event press release

TRINITY press release
TRINITY project to help SMEs to benefit from robotics, IoT and cybersecurity technologies

Brussels, 25 September 2019 – Robotics, automation and cybersecurity technologies are critical to the factories of the future. The TRINITY opening event on "Robotics for agile and competitive manufacturing" gave concrete examples of how these technologies can help to increase productivity, agility and make lot size one economically feasible. The TRINITY project will offer financial and technical support to European small and medium-sized companies to test and benefit from these technologies through two rounds of open calls.

Robotics, automation and IoT play a critical role in the factories of the future. These technologies are essential for manufacturing companies to survive in the next decade, increase their competitiveness and production capacity. Nevertheless, only a small percentage of companies is using these technologies. Projects such as TRINITY can speed the technology transfer and shorten time to market. This was the main outcome of the opening event organized by the TRINITY project on 19 September 2019 during the EMO Hannover fair.

The shortage of highly skilled manufacturing workers was one of the main challenges mentioned by the speakers behind the need for robotics and further automation. "In 2030 the manufacturing sector will experience real difficulties in finding skilled workers" said Minna Lanz, TRINITY project coordinator and professor at Tampere University. "In 2040 we won't have enough people to work in the factories. Automated factories are necessary in order to deal with this problem", she added.
Another challenge is the increasing complexity and demand for customization of products. To this respect, Tomi Kankainen, CDO at Fastems, one of the TRINITY partners, highlighted the real challenge was not only about producing lot-size-one but about flexible batch production, this is, producing lot sizes from one to hundreds or to thousands at the same time. He also explained how, as part of the TRINITY project, Fastems developed a new robotized manufacturing cell able to adapt automatically to manufactured products and production lot-sizes thanks to is the reconfigurability of hardware and software.
Boris Fiedler, Digital Leader at ABB Robotics, highlighted the important role of robots in meeting these challenges and their benefits in terms of efficiency, reliability and flexibility. He provided a vision of the future factory based on the ABB new robotics factory in Shanghai. This vision was characterized by further convergence, digital integration and production based on automated cells rather than on fixed assembly lines. In this context, Automated Guided Vehicles (AGVs) would be used to deliver parts to the production robots and to collect finished parts and move them to other cells as necessary.
Andreas Walbert, Business Development Manager at Kuka presented the Kuka matrix production system. A similar concept than the one presented by ABB, already successfully implemented in a factory of the future dealing with the industrialisation of Additive Manufacturing at Premium AEROTEC in Varel (Germany). Together with Pascal

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Haas, Head of Automation at Erowa they showcased a concrete example on the automatization of die and mould workshops. The example highlighted the importance of logistics automation by using mobile robots.
The need to raise awareness about cybersecurity risks in a context characterized by further integration was also highlighted by the speakers. Ulrich Seldeslachts, CEO of LSEC, another TRINITY partner pointed out that manufacturing, with 31% of all incidents, was leading the number of cybersecurity incidents reported. The number of attacks is increasing exponentially every year and it is important to raise awareness and take the necessary measures to avoid theft of sensitive data, financial losses, loss of productivity and damage to the company's reputation.

Florian Ernst, Managing Director of RESADO pointed out that the long product lifetime of industrial equipment is an important challenge from the point of view of cybersecurity He also introduced a new technology developed by his company aiming at protecting IoT devices. This new technology is based on the creation of a digital fingerprint for a device which allows for its unique identification and secure communication.

TRINITY open calls for funding

TRINITY is a four-year project, which started in January 2019 and it is funded by the European Union's Horizon 2020 research and innovation programme. It aims at helping European small and medium-sized companies (SMEs) to implement and benefit from new digital and robotic technologies to increase their agility and innovation capability. The focus areas are robotics, IoT and cybersecurity.

In order to reach these objectives TRINITY will develop a series of use cases to demonstrate how novel robot and digital technologies can contribute to increasing the agility of production processes across different manufacturing sectors. As part of the project two rounds of open calls for funding will be launched. Through these open calls SMEs can team up with technology providers, OEMs (Original Equipment Manufacturers), end-users and other partners to get funding and technical support to test some of the technologies showcased or to propose completely new demonstrators. Companies can get up to EUR 300,000 per demonstrator (maximum funding rate of 70%). The first call, for which EUR 4 million will be made available, will open on 20 November 2019. Companies will have three months to present their proposals.

Contact and further information

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To get further information about the TRINITY project, visit: www.trinityrobotics.eu

If you would like to unsubscribe from these emails, please write to privacy@cecimo.eu

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