

On 22<sup>nd</sup> of May the <u>Openmaker</u> project, led by <u>PlusValue</u> and <u>the Young Foundation</u>, organised a High-Level policy event, hosted by Georgi Pirinski MEP at the European Parliament. The objective was to bring together members of the 'maker community' with policy makers to facilitate dialogue and produce concrete and actionable policy recommendations to <u>unlock the transformative power of the maker movement in Europe</u>. The event showcased examples of cutting edge projects<sup>1</sup> with social and economic impact and the discussion developed around topics such as <u>technological and social innovation</u>, <u>Industry 4.0 and new sustainable business and organisational models</u>, in light of the ongoing debate within the EU Institutions on the long-term budget of the Union (Multiannual Financial Framework- MFF).

The main recommendations which arose from the event were:

# 1) Empower the relationship between makers and manufacturers by rethinking the supply chain and enabling public-private partnerships

MFF: The 'Open Innovation' pillar of the proposed Horizon Europe program (so-called 'FP9') is focussed on incentivising and scaling up small scale innovations through high potential breakthrough technologies. The proposed InvestEU programme also focuses on mobilising funds for innovation as one of its core aims.

Makers and SMEs are able to produce breakthrough technologies. Integrating them into existing supply chains would maximise their transformative potential and develop positive spill over effects across the ecosystem.

Fostering public-private partnerships could create collaborative physical and online spaces for makers and established manufacturers to work together. Large companies will become more agile, innovative and intrapreneurial, and embed principles of co-creation, rapid prototyping and trial and error in the company culture. Makers will see their innovation to scale, bringing benefits to the manufacturing industry and the society alike.



There is an opportunity for large corporates and policy makers to:

- Support the development of a new manufacturing paradigm:
  - Shifting away from mass production and moving towards low-carbon energy sources, circular economy processes and fair employment practices.
  - Developing public-private partnerships This may involve the creation of physical spaces as well as non-physical ones (i.e. networks, online support, mentorship programmes), which will reduce future divides and promote an inclusive innovation ecosystem. An example is provided by the Local Enabling Spaces model of the OpenMaker project.
  - Reshoring production and encouraging the development of regional clusters, based on geographical proximity: First stage reshoring candidates should be industries where proximity between design, manufacture and the consumer has high value, for example the fashion industry.
- Sustain and co-invest in upgrading existing supply chains, supporting innovation capacity and capability development across supply chains (at all stages), both at technical (i.e. upgrading automation) and human level (i.e. encouraging partnerships with innovators, makers and creatives). Actively investing in small scale makers and SMEs in the supply chain will increase quality, efficiency and enhance supply chain resilience. SMEs will be helped to avoid dangerous "dependency" paths and thus become more sustainable and scalable. From a societal standpoint, these strategies can help to decentralise and democratise innovation and share the rewards of industry 4.0 throughout the economy.

<sup>&</sup>lt;sup>1</sup> Four makers presented their businesses on the day: <u>Aquapioneers</u>, <u>Shoe Bird</u>, <u>Co.Bo.Pro</u> and <u>BIOM</u>



### 2) Supporting education 4.0 and develop curricula for makers and fablabs

MFF: Investing in people a is key priority of the next multiannual budget, not least via the European Social Fund+, the Erasmus + programme and the Digital Europe Programme which promises to actively invest in digital skills for Europeans at school, university and the work place.

For the maker movement to drive innovation, it is vital to train the next generation of talented makers, especially women who are less likely to engage with new technical developments. Through education reform, there is an opportunity to embed a culture of making throughout Europe. This can be done both in formal and non-formal educational establishments with a particular focus on vocational skill-based programs.

- Formal education prioritizing critical thinking, creativity, tinkering, tech skills and digital skills within the school curricula (from early stage to university level) and through vocational programs. Some colleges and universities may also offer trainings across a range of manufacturing skill sets and could form part of new 'maker clusters', geographical areas where skills and facilities are highly concentrated.
- Non-formal and informal education Fablabs are collaborative spaces where makers create, learn, mentor
  and invent. Fablabs could host training courses to teach the key skills central to the maker community
  culture, such as teamworking, curiosity, empathy, digital skills and entrepreneurial spirit. By developing a
  certified curriculum for fablabs and makerspaces, these bodies can ensure revenues and recognition, thus
  becoming sustainable.

### 3) Active engagement in the policy arena

MFF: 'Engagement and democratic participation' is highlighted as one of the 'essential tasks for the future EU budget'. This is especially needed in high innovation areas where the pace of change creates regulatory challenges for policy makers.

Europe needs to drive inclusive growth in the age of network economics. In this context, the role of international institutions and national governments is fundamental to enable decentralised and distributed economies as well as democratic societies. Whilst Makers need to become more engaged at policy level to ensure policy makers can understand the full power of fablaces.



policy level to ensure policymakers can understand the full power of fablabs and makers spaces, policymakers will need to facilitate the process. This may happen by:

- Facilitating direct methods of participation in policy activities (bottom-up approach) that allow makers to highlight regulatory roadblocks to policy makers. For example, the development of a Maker Policy Sandbox. A sandbox could offer a place for makers to leave national and European policymakers both very specific policy recommendation related to specific industries, and broader ideas related to policy experimentations with totally new approaches. Thanks to their practical expertise, there are many cases where makers are able to identify clear regulatory roadblocks, and if they could bring these challenges to policy makers, this would facilitate 'quick wins'. For example, the definition of 'organic' in a European context is restrictive for the agroponics industry. A regulation change could help to accelerate this highly sustainable nascent industry.
- Enabling new legal forms to support innovative and open start-ups and SMEs (i.e. the Italian law on 'innovative start-up') through economic and fiscal incentives
- Supporting the creation of intermediaries (umbrella bodies) willing to advocate on behalf of the maker movement and hence include the movement in the international policy agenda (i.e. World Economic Forum at Davos) or in the local one (see <u>URBAN M project</u>)



The high-level policy event was supported by:



## **Background**

The Maker movement is an emerging and dynamic social technology-based movement, embracing the "Open Manufacturing" and "Open Source" paradigms, re-imaging product, processes and governance systems and bringing them closer to people and local communities. In 2013, USA Today stated that Makers contribute approximately EUR 26 billion to the world economy annually and the figure is growing.

The OpenMaker project is an EU-funded project which aims to create a transformational and collaborative ecosystem that fosters collective innovations within the European manufacturing sector. The project seeks to achieve this goal by bringing together traditional manufacturers and digital-savvy 'makers'. More information about the project are available here: www.openmaker.eu

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<sup>&</sup>lt;sup>2</sup> USA Today. 2013. Martha Stewart: Meet USA's new entrepreneurs. [ONLINE] Available at: http://www.usatoday.com/story/money/business/2013/10/14/martha-stewart-column-meet-themakers/ 2980701/

