The critical role of innovation for the well-being of our society: a multilateral approach matters

The article analyzes the importance of innovation in promoting social well-being and its possible role in driving prosperity and accelerating regional development. It elaborates on the paramount role of small and mediium sized enterprises in generating jobs and spurring employment. International cooperation must take these aspects into account in order to promote economic, environmental and social sustainability and contribute to the reduction of inequalities

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nnovation, a kind of "buzz word" over the last decade, seems to be at the center of each and every discussion today: be it with regard to research (normally indicating the way forward towards the commercialization of results), or concerning the long-lasting debate on the future of our youth, invited to take their stake on knowledge-driven entrepreneurship, the basis for sustainability and inclusive growth. Innovation on the one hand stands for hope; for a better future, for a fully-connected digital world, in

which security is given its deserved place. On the other hand, it can lead to mistrust and doubts, for example when following the debate on artificial intelligence, blockchain, the Internet of Things and *scenarios*, that once were mere protagonists of science-fiction films and considered just a crazy phantasy.

We live in a globalized world where our connections are not limited by physical borders. Knowledge flows leak out via exhaustible channels, reaching potential users and "sympathizers" in real time; never more than now it becomes tangible how interconnected and interdependent we are on each other, how much we rely on digitalization for the organization of our daily lives and how the developments of recent years kicked off a process, that reasonably appears unstoppable today.

An interesting example can be a self-driving car. While we are aware of the fact that progress means to overcome barriers and gain consumers' and customers' trust and that this process requires a certain amount of time, this example also



makes it tangible, why we need a sensible and decent commitment towards multilateralism to convene on international norms and standards. Multilateralism versus a *solo* effort – a topic that the dynamic political scene of the moment adds suspense to when looking at international dialogue practices. Jointly accepted and implemented norms and standards are a prerequisite for new business models to stimulate people from all over the planet to collaborate and jointly develop solutions to global challenges.

This could frame the historic moment in which the G7, the place where seven out of the most industrialized countries worldwide and the European Union come together to align strategies, talk about visions for their future actions and share best practices on foresights. All this for the benefit of our society, often referring to the 17 Sustainable Development Goals, jointly adopted in 2015 based on an ambitious declaration, to be achieved through constant and fruitful international cooperation by the end of 2030.

Following this approach, Italy – as holder of the G7 Presidency in 2017

- had put its focus on "Building the Foundations of Renewed Trust", by considering three main priorities: 1) Citizen Safety; 2) Economic, Environmental and Social Sustainability and Reduction of Inequalities and 3) Innovation, Skills and Labor in the Age of the Next Production Revolution, being – the last – devoted to "the deployment of a global, coordinated, international effort to make innovation the catalyst of worldwide prosperity and inclusive growth".

Inclusive growth and the role of small and medium sized enterprises

Within the G7 dialogue among Innovation and ICT Ministers, who met in Venaria Reale at the end of September 2017, this has been translated into concentrated efforts on promoting the competitiveness of small and medium sized enterprises, undisputed backbone of all G7 economies, contributing with "more than 50% of GDP, and 56% of employment [...] disproportionally to job creation, innovation and social inclusion".²

Sustainable growth can be achieved

only by implementing an approach that places the principle of inclusiveness at its very heart. In the digital age, or the fourth industrial revolution, following the evolution from steam power, mass-production, automation, computers & electronics towards "Industry 4.0", we rely on cyber physical systems and the Internet of Things, which required diverse paradigm shifts (Figure 1).

SMEs need to be able to capture the benefits brought by digitalization thanks to an active attitude when exploiting the opportunities. This demands an investment in digital infrastructure, but also in the skills of their workers to engage with people from all countries, industrial sectors and stakeholder categories. A "collaborative approach" with regard to innovation is on top of the list speaking of key success factors for entrepreneurs that have managed to collect the benefits from advancing new business models and taking the risk to invest in new services; to quote Vivek Wadhwa on this: "innovation thrives when the population is diverse, accepting and willing to collaborate"3.

We can consider how things worked in the past and how they are organized in today's routine, through a reflection on the role of innovation and the "interplay between participation and positioning in global value chains"4. While exporting goods and services has become an "ordinary phenomenon" for many micro-enterprises and niche companies have been able to thrive thanks to a reasonable adoption of e-commerce, it is still rare that small companies share the idea and engage in open innovation initiatives⁵. The majority of family-owned businesses still considers globalization and its strength to open up markets and

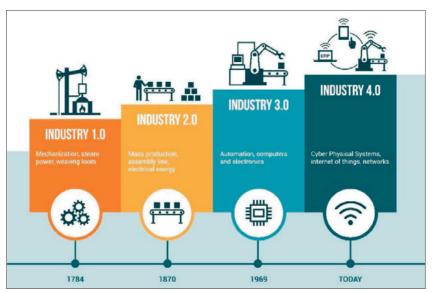


Fig. 1 The fourth industrial revolution

Source: https://www.jelisamone.com/work/2018/3/26/fourth-industrial-revolution

access to new clients more a threat than an opportunity. There is still little track record on small companies that apply a constant and scrupulous analysis of big data, for example, to explore market intelligence, but (and literature unanimously agrees on this point⁶), it needs time to adapt management practices to new and such global *scenarios*.

Back to the idea of spreading an innovation culture for the benefit of competitiveness against the backdrop of a digital world: how can we measure and monitor digitalization? This vast field of technology, progress, connection and interoperability? One indicator that animates the debate is the level of productivity and the question on how to improve it in small companies. Diverse and variegated are the policy measures proposed, often paraphrased with the "enterprise 4.0" domain, offering businesses vigorous support to maneuver the digital transformation, and even if there certainly remains a margin for improvement and adjustment, some first milestones have been reached.

Another debate seems to be even more relevant and "thrilling" when considering the role of SMEs driving prosperity for society and accelerating regional development: its paramount role of generating jobs and employment.

While most of us would agree on the added value of artificial intelligence when used to save human lives (for example robots to defuse bombs), numerous work places seem to be jeopardized by the installation of machines in manufacturing replacing lower-skilled workers7. As this phenomenon is affecting all economies, a multilateral dialogue on G7 level mirrored the concern. While the industrial development leading to economic benefits in this sector is undeniable, G7 Leaders engaged in a taxing debate on how to reflect their shared "vision of human-centric A.I."8, as stated in the Ministerial Declaration "ICT & Industry", which origins from the G7 ICT Ministerial Meeting in Takamatsu, Japan in 2016. Canada has put strong efforts on taking this discussion a step forward by stimulating the Leaders' conversations, which culminated in the "G7 'Innovation Ministers' Statement on Artificial Intelligence (AI)"9, passed in March 2018, which confirms the need for a continuous, vibrant multi-stakeholder dialogue on questions related to the support of economic growth from AI innovation, the increase of trust in and adoption of AI and the promotion of inclusivity in AI development and deployment.

In Italy important emphasis from policy makers is devoted to the creation of entrepreneurship, tackling the challenge to reduce especially youth unemployment and to elevate the growth trajectory of less developed Regions (mainly in the South). This effort has translated into enduring investments into the "start-up community", notably contributing to build a dynamic contest and foster the prominent role of innovation as a prerequisite to compete in a global marketplace.

In this regard, the G7 – especially in 2017 - has underlined the preeminent importance of cutting red tape and ensure, that "businesses can easily understand and navigate regulatory environments"10. This has to go hand in hand with a constant and continuous dialogue on how to facilitate access to finance and how to foster the multi-stakeholder approach for a fruitful knowledge exchange, enabling and fostering "integrated and collaborative innovation ecosystems"11, which promote cooperation between entrepreneurs, businesses, universities, research institutes and local governments.

Finally, a thought on skills and talent – the "Common Trait of Innova-

tion", how the G7 elaborates under the Canadian Presidency in 2018, requiring a profound reflection on the competences for the labor force of tomorrow. Policy makers, in fact, have to take actions to stimulate a "new mindset of continuous learning which starts in school but also includes continual up-skilling and reskilling"12. By quoting Brené Brown's "there is no innovation without failure. Period.¹³, the intent of G7 Leaders' must remain to continue sharing innovation initiatives, case studies and best practices, as during the Employment and Innovation Ministers Meeting in Montréal last March and to confront their theses also in the wider frame of Argentina's G20 Presidency, in particular at the upcoming Digital Economy Ministerial Conference under the topic "A Global Digital Agenda for Development", at Salta.

Whatever we look at innovation and above at its positive effects, the role of governments designing national and local policies coherent to the multilateral approach is crucial. There is no concrete possibility to drive local developments or defend single positions or markets through a purely

local or national approach in a globalized world. Multilateral fora are an opportunity to assess risks and design more effective policies, especially for the benefit of SMEs. In this regard Margaret Heffernan's words can mark the way to approach innovation in the future: "for good ideas and true innovation, you need human interaction, conflict, argument, debate" 14. Be it always a constructive and continuous one!

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- ¹ See http://www.g7italy.it/en/priorities [retrieved on July 23rd 2018]
- ² G7 ICT & Industry Ministers Declaration "Making the Next Production Revolution Inclusive, Open and Secure", page 3, http://www.g7italy.it/sites/default/files/documents/G7_ICT_and_Industruy_Ministers%27_Declaration_2017.pdf [retrieved on July 23rd 2018]
- ³ See https://www.brainyquote.com/authors/vivek_wadhwa
- ⁴ See OECD Science, Technology and Industry Policy Papers, Investing and Innovation and Skills, https://www.oecd-ilibrary.org/docserver/9e296b43-en.pdf?expires=1532702235&id=id&accname=guest&checksum=F4D9715479921695967A4E7F7AF15B07 [retrieved on July 23rd 2018]
- ⁵ Hakikur Rahman, Isabel Ramos, SMEs and Open Innovation: Global Cases and Initiatives, Minho, 2011
- ⁶ See among others Henry Chesbrough, Innovating Business Models with Co-Development Partnerships, Research Technology Management, 50 (1), 2007 or Wim Vanhaverbeke, Managing Open Innovation in SMEs, Cambridge 2017, or World Economic Forum, "Leadership in the Fourth Industrial Revolution: It's time for an upgrade", https://www.weforum.org/agenda/2016/11/leadership-in-the-fourth-industrial-revolution-its-time-for-an-upgrade/ [retrieved on July 23rd 2018], or OECD, Enabling SMEs to scale up, Discussion Paper Plenary 1, SME Ministerial Conference, February 2018, Mexico City, https://www.oecd.org/cfe/smes/ministerial/documents/2018-SME-Ministerial-Conference-Plenary-Session-1.pdf [retrieved on July 23rd 2018]
- ⁷ See G7 Public Engagement Paper- Peparing for the Jobs of the Future, 2018, https://g7.gc.ca/en/g7-presidency/themes/preparing-jobs-future/g7-public-engagement-paper/ [retrieved on July 23rd 2018]
- ⁸ Annex 2 "G7 Multistakeholder Exchange on Human Centric AI for Our Societies" G7, part of the G7 ICT & Industry Ministers Declaration "Making the Next Production Revolution Inclusive, Open and Secure", Venaria Reale/Italy, 2007; the human-centric aspect is referred to as a "matter of understanding the broader potential effects of these technologies on society and our economies and of ensuring that we advance these technologies with a human-centric approach in harmony with our laws, our policies and our values", page 2
- ⁹ G7 Innovation Ministers' Statement on Artificial Intelligence, as part of the "Chairs Summary: G7 Ministerial Meeting on Preparing for Jobs of the Future", held in March 27th-28th 2018 at Montréal, Canada; see https://g7.gc.ca/en/g7-presidency/themes/preparing-jobs-future/g7-ministerial-meeting/chairs-summary/ [retrieved on July 25th, 2018]
- ¹⁰ G7 ICT & Industry Ministers Declaration "Making the Next Production Revolution Inclusive, Open and Secure", page 6-7
- ibidem, page 7
- ¹² Annex C: G7 Ministers'Statement on Stimulating Innovation, https://g7.gc.ca/en/g7-presidency/themes/preparing-jobs-future/g7-ministerial-meeting/chairs-summary/annex-c/ [retrieved on July 25th, 2018]
- ¹³ Check https://www.brainyquote.com/authors/brene brown
- ¹⁴ Check https://www.brainyquote.com/quotes/margaret heffernan 556959