

Policy Brief

SME innovation support for the digitalization of the Circular Economy

Executive Summary

The current policy brief highlights the importance of small and medium-sized enterprises (SMEs) in the transition to a circular economy. The brief proposes policy recommendations to unleash the potential of SMEs, including support in the form of training, networking, access to investors, and financial assistance.

Professional assistance on IPR strategies and management, and intensively promoting IPR strategy and management awareness are also recommended. Additionally, a comprehensible and affordable one-stop-shop IPR registration system for the EU is suggested, along with an emphasis on the importance of data access. The brief is based on feedback and suggestions from SMEs collected through the DigiCirc project's questionnaire surveys, which revealed that SMEs faced barriers to growth, including lack of demand, additional costs, lack of economic incentives, regulatory barriers, and lack of transparency and awareness. The brief lists several sources consulted or recommended and provides contact details for further information.

For further information, please contact:
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Rationale for action on the problem

The EU has made the transition to a circular economy a key objective through the Circular Economy package and Green Deal strategy. The new Circular Economy Action Plan promotes circular economy processes, sustainable consumption, and waste prevention. Digital technologies are key drivers of change in this plan, and the European data space for smart circular applications is expected to drive applications and services such as product passports and resource mapping. Small and medium-sized enterprises (SMEs) are important players in the transition to a sustainable economy, but current policies and planned actions are not sufficient to fully unleash their potential. SMEs face barriers to growing their business, impact, and market share, including lack of demand, additional costs, lack of economic incentives, regulatory barriers, lack of transparency, awareness, and circular metrics. Effective policies are needed that foster SME recovery and promote sustainable solutions.

The DigiCirc project

In this context, the DigiCirc project, supported by the Innovation in SMEs programme (INNOSUP) of Horizon 2020, played a key role in supporting European SMEs in the development of their digital innovations in three domains:

-  Circular Cities
-  Blue Economy
-  Bioeconomy

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3 accelerator programs.

2.4

millions EUR
Directly to SMEs

>90

Funded
SMEs

12

weeks per
program

3 domains.



BLUE
GROWTH



CIRCULAR
CITIES



BIOECONOMY

application phase.

Open Calls: Based on CLUSTER DEFINED CHALLENGES (2 months each)

Applications: SMEs will apply on F6S platform

Evaluation process: Independent jury of experts will evaluate online SMEs applications

Selection: 15 consortia of SMEs selected and Contracted per accelerator

PHASE 1 (5 WEEKS) TRL 4-5



15 consortia of SMEs, 5K EUR per consortium

Physical Event: 3 days

Online modules: 5 weeks

FOCUS ON:

- Business model consolidation
- Development of a validated solution with a proof of concept



PHASE 2 (7 WEEKS) TRL 5-7



15 Consortia, 15K EUR per consortium

Physical events: 3 days training and DemoDay (1 day)

Online modules: 6 weeks

FOCUS ON:

- Go-to market strategy
- Development of a validated prototype/MVP in a simulated environment



ACCESS TO DIGICIRC DIGITAL TOOLS
THEMATIC MENTORING • BUSINESS COACHING



5 WINNING INNOVATIONS (EACH PROGRAM)

100K EUR PER CONSORTIUM TRL 8

FOCUS ON:

- First business development success
- Validated prototype/MVP in a real environment



Three open calls were launched, one for each domain, to select innovations that address the challenges identified within the DigiCirc ecosystem. The selected innovations, led by consortia of SMEs, participated in a 12-week acceleration program run by experts from the consortium to transform their validated concepts into viable business models for commercial launch. At the end of each accelerator, five innovations were granted €100,000 to develop their first business success and validate their prototype/MVP in a real-world environment within the next six months. A final pitch contest in March 2023 awarded prizes to the two best innovations in each domain.

The project achieved its objectives through the creation of a Pan-European and cross-border network of Circular Economy's actors, the acceleration of digital and innovative solutions that created new circular value chains, while simultaneously facilitating SMEs' large-scale demonstration through the creation of four digital tools. Therefore, DigiCirc will create a long-lasting impact for a more sustainable and greener economy through its key exploitable results, including supported innovations, gained knowledge, digital tools, and stakeholders' network.

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Key findings

The **DigiCirc** project conducted various questionnaire surveys to collect feedback and suggestions from SMEs regarding the **DigiCirc** tools and activities, as well as success stories arising from the project. The SMEs that participated in the **DigiCirc** accelerators reported a high degree of satisfaction, stating that the program helped them build new commercial relationships and provided knowledge and financial support. The project also helped improve the development of their solutions and increase their market viability. The Circular Economy Data Hub, Matchmaking Tool, Industrial Symbiosis Platform, and InfoPortal were all used by SMEs, with many requesting additional data or content. The IP Workshop and Mentoring Sessions highlighted that SMEs had basic awareness of IP but lacked knowledge of IP/IRP strategies and management. There was also uncertainty regarding data control and sharing and a high dependency on external services and powerful corporates.


Policy Recommendations




EU SMEs have a high potential to develop innovative solutions that contribute to the digitalization of the circular economy. To unleash this potential, they need support in the form of training, networking, access to investors, and financial support.




Professional assistance on IPR strategies and management is a necessity for European SMEs which develop solutions for the digitalization of the circular economy, and should be made more accessible and affordable, to promote innovation and trade within and outside the EU.




A more comprehensible and affordable one stop shop IPR registration system for the EU would be an enormous stimulus for international trade. This would also give a competitive edge internationally to the high potential businesses.



IPR strategy and management awareness is very much needed and should be intensively promoted amongst SMEs in the EU, to enable more growth and innovative businesses.



Data is both a means and an asset, and access to data is even more essential. Within the EU these are not (yet) sufficiently seen as perhaps the currently most important IP/IPR available, whether these fit within the traditional IPR system or not.



(Additional) awareness and innovation policy instruments are highly recommended.

Sources consulted

European Commission, Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Study on the effectiveness of public innovation support for SMEs in Europe: final report, Publications Office, 2021, <https://data.europa.eu/doi/10.2826/7745>

Shaping Europe's Digital Future (Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions COM(2020) 67 final). European Commission.

OECD (2021). One Year Of SME And Entrepreneurship Policy Responses To Covid-19: Lessons Learned To “Build Back Better”

European Commission, Brussels (2020). Flash Eurobarometer 486 (SMEs, Start-ups, Scale-ups and Entrepreneurship). GESIS Data Archive, Cologne. ZA7637 Data file Version 2.0.0, <https://doi.org/10.4232/1.13639>.

DigiCirc project internal surveys

Link to original analysis

Information on the methodology used to derive the DigiCirc policy recommendations is available at: Deliverable 6.3: Digitization for the Circular Economy Policy Brief, available at <https://digicirc.eu/deliverables/>.