Digital Transformation Monitor

Poland:
“Initiative for Polish Industry 4.0 – The Future Industry Platform”

February 2018
Country: Poland

“Initiative for Polish Industry 4.0 – The Future Industry Platform”

Fact box for Poland’s Future Industry Platform policy initiative

<table>
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<tr>
<th>Policy Lever(s)</th>
<th>Financially backed by the state – and by the private sector in the long term, bottom-up, industry led approach combining technological transformation and business development.</th>
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<tr>
<td>Funding Model</td>
<td>Public funds will serve to boost private investment and to shape market capabilities for the industrial transformation.</td>
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<td>Target audience(s)</td>
<td>Public and private stakeholders interested in the field of industrial transformation: mostly SMEs as well as domestic 4.0 solutions suppliers, academia, research organisations etc.</td>
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<td>Concepts and Focus Areas</td>
<td>Raising awareness, competence building, infrastructure development, SME support, actions focused across multiple industrial sectors (e.g. manufacturing sector or technology supplier).</td>
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<td>Key drivers</td>
<td>Competence Centres and network of experts aiming to create a ‘critical mass’ for an effective implementation of the digital transformation strategy.</td>
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<td>Key barriers</td>
<td>Low awareness level among SMEs, long legislative process and the complexity of establishing a mechanism supporting SMEs financially in implementing new technologies.</td>
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<td>Implementation strategy</td>
<td>The implementation will be carried out following three phases: 1. Preparation phase; 2. Formation of the Future Industry Platform, and 3. Operational phase.</td>
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<td>Results achieved</td>
<td>It is expected that the initiative will boost the innovativeness of domestic suppliers of digital solutions, resulting in an increase of the competitiveness of the Polish industrial sector.</td>
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<td>Budget</td>
<td>The Industry Platform will have two budgets (preparation phase and implementation phase); EU funds will be used for market transformation.</td>
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<td>Uniqueness factor</td>
<td>As the Government cooperates closely with a prior private initiative in this field, the Platform is expected to meet the expectations and needs of the private sector.</td>
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<td>Value-added for policy-makers</td>
<td>A competence center pilot project will ensure proper evaluation mechanisms are in place before the replication of the initiative in other Polish regions.</td>
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<td>Expected Impact</td>
<td>Improve the industrial transformation capabilities of SMEs and provide a boost to the Polish economy.</td>
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Executive summary

The Future Industry Platform was announced as part of the Responsible Development Plan (‘Morawiecki Plan’) by the Ministry of Finance and Development in 2016. Providing industrial financing over a 25-year period, the Morawiecki Plan pursues an agenda of reindustrialisation through new partnerships, export-oriented support measures and comprehensive regional development.

The main mission of the Platform will be to act as an integrator of all stakeholders interested in Industry 4.0 as well as an accelerator of the digital transformation of Polish industry. The Platform seeks to achieve these goals through a mix of activities comprising knowledge transfer and awareness raising, as well as the development and application of digital transformation support measures.

While the financing will initially be based on public funds serving as leverage for expected private investments in the future, the initiative is enabled by the so-called Industrial Transformation Team as well as the network of Competence Centres. This Platform is based on activities developed by the private sector, its original promoter.

The roots of the Morawiecki Plan

The Ministry of Finance and Development presented the Responsible Development Plan (‘Morawiecki Plan’) in 2016. With a total planned investment of €235 billion over the next 25 years, the Plan seeks to unleash the potential of the economy to achieve development that improves the quality of life in Poland.

The Responsible Development Plan analysed the problems of the Polish economy and recommended a series of solutions:

1. Low salaries and the difference between GNP and GDP will be tackled through a reindustrialisation agenda. Measures such as creating partnerships between the strategic branches of the economy, fostering national specialisation in competitive sectors of the economy, developing clusters and industrial valleys, and attracting foreign investment will be adopted.

2. The lack of investment for innovation and R&D will be addressed by means of new business models, an amenable legal environment for the establishment of new companies, and a review of legislation governing research institutes.

3. Capital from different sources (higher provision of public funds after the economic crisis, the Polish Development Fund, EU funds and the ‘Juncker Plan’) will be used to strengthen both industry and public sector institutions.

4. Foreign dependence will be tackled by supporting Polish business expansion into foreign markets through export assistance, financial support, improved business diplomacy and focus on strong Polish brands.

5. Expected work force shortages will be confronted by promoting social and regional development (e.g. comprehensive demographic planning programmes, a more specialised regional policy, and rethinking education).

The Future Industry Platform

The idea of the Platform was developed by the private sector in cooperation with the Ministry of Economic Development. The Polish government linked this initiative to the Operational Programme Digital Poland 2014-2020, operated by the Ministry of Digitalisation. Today, the proposal for a Future Industry Platform is following the legislative process and is expected to be operational in the third quarter of 2018.

Both public and private stakeholders interested in the field of industrial transformation will be able to participate in the activities of this open space. The main objective of the Platform will be to improve the competitiveness of Polish industry while establishing the conditions for Industry 4.0 to prosper in the country.

“A Platform responding to economic challenges

The initiative is expected to respond to a series of challenges defined in the Responsible Development Plan: enhancing the current low productivity level; improving the competitiveness of domestically produced machines, devices and software; consolidating supply chains to remain competitive at global scale; and improving the attractiveness of the labour market. The following objectives are intended to respond to these challenges:

Policy levers for Poland’s Future Industry Platform

Source: Digital Transformation Monitor
• Create a framework for digitising industry professional skills.
• Build trust and share knowledge among stakeholders.
• Promote the digitisation of industry.
• Develop new business models for industry, material engineering, and automation processes.
• Support the development of machine-to-machine and machine-to-human interfaces.
• Promote integrated hardware and software solutions, ensuring data sovereignty and interoperability.

Set up by the state, handed over to industry

The platform will be publicly funded during the first phase of the implementation in order to demonstrate its worth and attract stakeholders. This public funding is intended to help leverage private investment in the mid to long term, with the goal of the platform eventually running on a combination of private funding and revenue from the commercialisation of its services.

Enabling technological transformation will help with the establishment of new business models and a higher-skilled workforce. Once the ecosystem is implemented, a strategy on digital skills training of workers will be developed.

Last but not least, the Future Industry Platform can be classified as a bottom-up initiative as the Government has launched a project team – the Industrial Transformation Team – aiming to prepare its implementation.

The role of the Industrial Transformation Team

In June 2016, Minister Morawiecki appointed the Industrial Transformation Team, in charge of the implementation of the Platform. This organism includes representatives of ministries, private companies, agencies, chambers of commerce and experts from leading ICT companies. Its main goal will be the development of initiatives aimed at the fostering the digital transformation of industry.

Five Working Groups were set up, focusing on:
1. Standards, norms, infrastructure and smart industry specialisation;
2. Digital industry support;
3. Intelligent software and data processing;
4. Education, competence and human resources for Industry 4.0; and
5. Legal framework for the functioning of Industry 4.0.

Interested stakeholders will be gathered in an advisory board for the Platform to support the work of the different working groups.

All players will be involved in the three implementation phases: 1. Preparation phase to identify relevant stakeholders and to analyse the market needs, 2. Setting up of the Future Industry Platform, and 3. Operational phase where the Platform will be launched and where the advisory board will continue with the activities undertaken by the Industrial Team.

Main activities

The key enabler of the initiative is the network of field experts and digital tools gathered within the Competence Centres. Academia, industry and the public sector will drive the

SWOT Matrix for the Future Industry Platform

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<th>Strength</th>
<th>Weaknesses</th>
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<td>• The initiative combines regulatory activities with practical business approach.</td>
<td>• Given the ground-breaking character of the initiative, there are delays in the legislative process before implementation.</td>
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<td>• All interested stakeholders (e.g. business, universities, regional governments, etc.) are involved.</td>
<td>• Low SME awareness.</td>
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<tr>
<th>Opportunities</th>
<th>Threats</th>
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<td>• Adoption of a coherent strategy based on different perspectives on digitising industry from diverse stakeholders.</td>
<td>• Risk of violation of competition law (e.g. state aid rules).</td>
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<td></td>
<td>• Complexity of developing a sustainable mechanism for financial support (public to private transition).</td>
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Source: Digital Transformation Monitor
transformation towards Industry 4.0. The activities covered by the initiative include, among others:
• raising awareness among Polish companies about the technological and business opportunities that Industry 4.0 can bring;
• generating ideas concerning support mechanisms for the transformation of the domestic industry;
• assessing market needs and presenting recommended actions;
• integrating the technological solutions of Industry 4.0 (e.g. big data solutions, machine-to-machine learning, cloud computing, etc.);
• promoting "Industry 4.0" solutions and awareness of features, benefits and risks;
• sharing information regarding new technology, standards, regulations and best practices;
• aligning stakeholders involved in the industrial transformation;
• delivering innovative services to increase company productivity;
• carrying out virtual and physical demonstrations of Industry 4.0 technologies;
• offering consulting services in areas including business models and technology application;
• education through company trainings and vocational teachers;
• analysis of legislation, proposed R&D directions, projects, etc.⁵

Expected results
In general terms, the transition towards Industry 4.0 will add significant value to new and existing products, business models and processes within Polish industry. The overall objectives of the government for 2020 include:
• increasing investment to over 25% of GDP;
• increasing the share of R&D expenditure to 2% of GDP;
• increasing the number of medium-sized and large enterprises to over 22,000;
• increasing foreign direct investment in Poland by 70%;
• improving the growth rate of industrial production, so as to exceed the growth rate of GDP;
• Setting GDP per capita of Poland at the level of 79% of the EU average.

Specifically, the Platform aims to create critical mass for an effective implementation of the digital transformation strategy.

After the launch of the platform, the monitoring and evaluation of the platform will be carried out by the platform’s advisory board gathering key industrial stakeholders by facilitating a constant exchange of information.

References
⁴https://www.polskieradio.pl/130/5925/Artykul/1767008,Morawiecki-Plan-Odpowiedzialnego-Rozwoju-to-kregosłup-polityki-gospodarczej
About the Digital Transformation Monitor

The Digital Transformation Monitor aims to foster the knowledge base on the state of play and evolution of digital transformation in Europe. The site provides a monitoring mechanism to examine key trends in digital transformation. It offers a unique insight into statistics and initiatives to support digital transformation, as well as reports on key industrial and technological opportunities, challenges and policy initiatives related to digital transformation.


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