Boym Institute

Polish-Asian Cooperation in the Field of New Technologies – Report

Report after the meeting on Polish-Asian Cooperation in the Field of New Technologies

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Support material

Report: <u>Polish Accelerator Program for Asia. What Support Does the IT industry Need?</u> By Mateusz Moczyński and Patrycja Pendrakowska

The most important conclusions for public institutions:

• Institutional state support for Polish technology companies, including startups, is desirable to enable them to compete effectively in Far Eastern markets. Such support enables business development in Asia at its early stage;

- Before funding an initiative with public money, it should be verified whether the product created by the startup can be commercialized and will cope with the Asian market. This should be one of the main criteria for funding the activity;
- Only those innovations that have developed a market entry fit, confirmed by local expertise, should be subsidized in their expansion abroad (lessons from German Accelerator);
- It is crucial to develop Poland's startup-friendly ecosystem in legal and tax terms (lesson from Estonia);
- The allocation of public support for the development of new technologies should be based on a stricter selection of candidates. Public money should be more difficult to access but easier to account for than it is now;
- It is necessary to develop a 10 year strategy for the development of the Polish state in the technology sector, which should include, among others: the reform of school and university education, taking the competencies needed in innovative industries, training of engineers and consultants, and developing measurable goals for foreign expansion in dialogue with entrepreneurs into account.

The most important conclusions for the state and entrepreneurs:

- It is crucial for the state and business to work together to build an Asian network and create Polish support networks in Asia. The greater involvement of public institutions and embassies in animating the sociocultural life of Poles and nurturing existing Polish associations will result in the expansion of social networks useful for business expansion to Asia;
- The effectiveness of Polish institutions in Asia will be enhanced by subsidizing them, ensuring an increase in the number of posts and a lower turnover of officials in these positions;
- Periodic evaluation of the activities of Polish institutions in Asia, in which entrepreneurs will also participate. In this way, the Polish public sector will

become more responsive to the needs of entrepreneurs and there will be an opportunity to jointly develop effective solutions;

- Periodic evaluation of the activities of Polish institutions in Asia, in which entrepreneurs will also participate. In this way, the Polish public sector will become more responsive to the needs of entrepreneurs and there will be an opportunity to jointly develop effective solutions;
- The prerequisite for strengthening the presence of Polish business on the largest continent is the intensification of the process of self-organization through the establishment of Polish chambers of commerce associating entrepreneurs in particular countries. The involvement of Polish companies in the activities of European chambers of commerce is also important in this context.

Purpose of the round table

Asia has experienced a boom in new technology and innovation over the past decade. According to a December 2020 McKinsey analysis, "unicorn" status (private startups valued at USD 1 billion or more) is now held by 170 Asian companies. Just eight years earlier, only two such companies were from Asia. In the list of the world's ten highest valued technology companies, as many as four are Asian, although a decade ago none could boast such status. The share of Asian countries in global investments in startups has increased from 16 percent in the years 2006-2008 to 43 percent today. Finally, it is on this continent that the largest number of international patent applications is filed: in 2017, it accounted for 65 percent of all patents worldwide.

Polish and Polish-founded companies are already operating on the largest continent in sectors such as: IT, educational technology, finance, marketing, e-commerce and space. Despite this, the potential lying dormant in the domestic innovation sector seems to be underutilized.

Therefore, analysts of the Boym Institute together with people connected with the new technologies sector and administration looked for proposals on how to respond to challenges faced by Poland and its most innovative companies. The meeting was also attended by people working in consulting companies, diplomacy and venture capital funds. During the discussion we looked for answers to the following questions:

• Do Polish tech entrepreneurs and Polish public institutions sufficiently exploit opportunities for cooperation with Asia in new technologies?

• How are other countries, including Czech Republic and Germany, developing their cooperation with Asian partners?

- Can Poland build its image and position in Asia through new technology companies? How can it effectively promote itself as an innovative country?
- What tools and mechanisms can entrepreneurs use to promote their domestic business?
- How can public institutions help startups think globally and support their expansion more effectively?

Over the last decade, Polish companies operating in many innovative industries (e.g. fintech, gaming) have enjoyed considerable success. Many companies in the video and mobile games sector, such as CD Project, Techland, Ten Square Games, Playway or 11 Bit Studios, have strong global market positions.

DocPlanner and Booksy are also among the most successful Polish startups. The first is a platform for making medical appointments online. It operates in over 20 countries worldwide and its software is used by tens of millions of patients and millions of doctors. The second offers a service for searching and booking cosmetic and financial services, which operates on several dozen markets.

In Poland, Creotech Instruments and SatRevolution successfully build micro- and nanosatellites. Warsaw Astronika creates satellite devices and mechanisms, and Gdynia's Space Forest works on building suborbital rockets. The European Rover Challenge, organized in Kielce in recent years, has become an internationally recognized brand.

Some of the Polish innovative companies successfully operate in the Far East. The global company RTB House, which already has a strong presence in Asia, offers technologies for conducting online advertising campaigns, mainly for the e-commerce industry. Synerise from Malopolska, which offers marketing tools based on artificial intelligence and big data for the sales and trade sector, also operates on Asian markets. Brainly, based in Krakow, is developing a multilingual educational platform in India, Indonesia and the Philippines.

In the article: Poland's Accelerator Program for Asia. What Support does the IT industry Need?, we argue that Poland has the right competencies and resources to develop companies from the technology sector. Investment in new technologies brings many benefits, including: high rate of return, building a national brand on an innovative and forward-looking sector, creating jobs for highly qualified staff.

Without an ambitious plan for the development and support of the technology sector-including startups – Poland, despite its competence, will not be able to match not only the countries of Western Europe and the U.S., but also the Far East, where an unprecedented technological transformation is taking place.

Glossary:

Accelerator – an institution that supports a group of startups at the early stage of their development, offering, for example, co-working space, contacts, coaching and mentoring support in programs usually lasting from three to twelve months. Selected startups are invited to participate in acceleration programs, usually on the basis of a competition, and their purpose is to prepare companies for rapid development and further market expansion.

E-commerce – a type of commerce in which transactions involving the purchase and sale of products and services are concluded via the Internet.

Fintech (e.g. Financial Technology) – innovative financial services operating exclusively or predominantly online, based on information technology. Fintech companies create, among others, various financial mobile applications that enable payments and wealth management.

Product/market fit – the state (or level of achievement) in which a company's product or service meets the needs of consumers in a specific market, and those consumers not only buy and use it themselves, but also recommend it to others.

High Technology Industry – a sector that includes highly innovative, research and development intensive companies that use complex production technology.

Startup – a newly formed company or temporary organization looking for a scalable business model to grow profitably. Entities in this category are most often associated with information and communication technologies (ICT) and high-tech sectors.

CHAPTER I

EDUCATION, SELECTION AND COMMERCIALIZATION

1. Restrictively select companies before allowing them to participate in accelerator programs.

Challenge A: Too easily accessible public funds lead to entrepreneurs paying insufficient attention to the development of business models. According to the Gründer Zeiten report "Start-ups: Financing and Venture Capital" from 2017, public funding accounts for only about 15 percent among the sources of funding for German startups.

Proposed solution: Public money should be relatively difficult to access. At the same time, however, it must be easy to account for. Entrepreneurs indicate that even with relatively small grants, Polish institutions require them to prepare a large number of documents in a complicated and time-consuming way. Additional administrative barriers should be avoided and entrepreneurs should be able to focus on achieving their goals;

Challenge B: Sometimes companies that have not identified the market in terms of whether their **product** is **sellable** participate in trade shows and accelerator programs.

Proposed solutions: Following the example of the German Accelerator, the level of a product's market fit for a given market (market research) e.g. whether the product is marketable and can be commercialized, should be thoroughly investigated before support is granted to the company as part of the accelerator program. Prior market intelligence is crucial and enables the appropriate allocation of resources.

Challenge C: Global competition

Proposed solutions: As competition in Asia is not between companies from one country or region but from all over the world, any company competing there must ensure that its products and services are of world-class quality and competitively priced. It's also critical to place a much greater emphasis on professional presentation at trade shows and B₂B meetings than is currently the case. Education and mentoring are needed (more on that in the next sections).

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KNOWLEDGE-BASED ECONOMIC ACTIVITIES

1. Build the knowledge base and improve the flow of information between government and business

Challenge A: The flow of information regarding Polish business support programs in Asia, trade fairs, as well as the specifics of local markets is insufficient. Moreover, entrepreneurs are not always aware of the possibility to turn to public and private institutions that can help them. It also happens that they do not receive adequate support due to the underfunding of the Polish administration operating in Asia. As a result, the representatives of companies traveling to this continent in search of business partners are often insufficiently prepared in terms of content.

Proposed solutions: Some entrepreneurs pointed out the need to enrich the website of the Polish Investment and Trade Agency (PAIH) with information about individual markets. The creation of an indicative map showing in which sectors of particular countries it is easier to enter the market, and in which it is more difficult in a visually attractive way, as well as showing the absorption capacity of particular industries was proposed. The information could include legislative obstacles, procedures related to establishing a company, hiring employees, visa and banking regulations, as well as risks, e.g. concerning theft of intellectual property and problems with arbitration, and recognition of markets in terms of prices of products and services.

Proposed solutions: The creation of a single platform gathering the experience of embassies, consulates, PAIH foreign trade offices and companies operating in Asia will enable the synergy of knowledge. Such a platform could be, for example, an appropriately prepared website. The organization of more educational and networking initiatives for entrepreneurs, analysts, students, etc. will also contribute to the improvement of information flow. It is important to keep in mind that administrative capacity is limited and strong motivation for entrepreneurs is needed to learn and use consultancies.

Proposed solutions: To "Go to Brand" project of the Polish Agency for Enterprise Development (PARP) should ensure the better preparation of entrepreneurs for participation in trade fairs. The observations of the round table participants show that currently some companies participating in such events are not sufficiently prepared for it. The key element should be the administration's earlier diagnosis, before a given company goes to the fair, of whether the company is properly prepared for foreign expansion.

Challenge B: Lack of sufficient knowledge and contacts among Polish businesses that already have experience in Asian markets. Existing knowledge resources are often scattered in sources created by different institutions. There is a lack of expertise in cultural specifics of doing business and how to build relationships in particular countries.

Proposed solutions: Create a database of trusted advisory firms and individuals who could assist entrepreneurs in entering local markets and finding partners. Such country-specific lists could be compiled on the same basis as consular posts compile lists of local law firms.

Good practices: Practical information and mentors are already available at PAIH's Foreign Trade Offices, e.g., in South Korea, once a month you can receive free assistance from an advisor who helps profile and suggests the easiest and most efficient way to enter the market. Offices also have the ability to verify information needed by entrepreneurs.

Good practices: Entrepreneurs in the technology sector should be encouraged to use not only public institutions, but also consulting firms – both in Poland and Asia, as well as think tanks with the competence and resources to prepare commercial market analyses.

Challenge C: Underutilization of the potential of local government and private partners

Proposed solutions: It was pointed out that it is important to cooperate with local gas pedals that have the necessary know-how. An example is the Singaporean company Expara, which cooperates with the Czech government's CzechInvest program. Participants from the consulting industry indicated that when scaling Polish companies to foreign markets, it is worth looking for a corporate partner through foreign companies or through corporate gas pedals such as Euler Hermes in Hong Kong. Local government accelerator programs are also a good partner for scaling companies to Asian markets.

CHAPTER II

STRATEGY

1. Build a strategy to support business in Asia, long-term education of human resources and entrepreneurs.

Challenge A: Participants in the meeting pointed out the need to create and consistently implement a long-term plan for participation in the global technological revolution. An example to follow may be counties of East Asia and Southeast Asia, which regardless of the political system, invest in both science-oriented education, science research, and finding applications for the results of this research in industry.

Proposed solution: The creation of a minimum ten-year strategy for the development of Polish technology business in Asia, divided into stages and with a periodic evaluation of the results is proposed. The state institutions should **update and make** the strategy of support and promotion of Polish business in these markets coherent, as well as ensure the competitiveness of Polish higher education and technology sector. A key element should be a clear link between the Asian strategy in the Polish policy and the development program for the Polish economy.

In addition to public administration, the implementation of the strategy should also involve institutions whose continuity remains unconstrained by the logic of the political calendar. The strategy can be common for the Asian continent, but it must be adapted to the individual counties and regions of the continent. Participants at the meeting stressed the need for a multifaceted approach to the strategy implementation. It should combine an increase in human capital (e.g. emphasis on the involvement of specialists combining intercultural competences with knowledge of high technologies, in the sense of frontier technologies), with investment in funding for that part of the administration, the task of which is to develop cooperation with Asian countries.

An element of the strategy should be the creation and financing from the Polish Development Fund (PFR) of an acceleration program aimed specifically at the technology sector. This program would provide financial and substantive support to carefully selected companies during the first months of their operations on one of the Far Eastern markets. The accelerator should use the networking networks of Polish diplomacy, PAIH's foreign offices and institutions of the Polish diaspora and expats, as

well as establish cooperation with Asian industry institutions in all major markets. It is essential to have a clear objective, which should be to commercialize the products of a specified number of companies in designated Asian countries and to acquire an assumed number of clients.

Challenge B: The need to significantly increase the number of specialists in various fields with knowledge of Asian countries.

Proposed solution: It is worth promoting student exchanges with Asian countries in university and polytechnic studies. At the research application stage, incentives should be created to encourage collaboration between companies and universities, and for business development, a review of the administrative barriers that people with project ideas and innovations face, should be conducted. Companies expanding into Asia should consider funding scholarships for students in various disciplines who are engaged on the continent academically; the role of the state should be to partially take over funding, administration of the applications, and branding for these scholarships. Education at the school level should be included in the construction of the strategy, so that it develops mathematical and linguistic competencies among the youngest.

2. Ensure the stability of the national legal system

Challenge A: The frequent changes in the law cause business problems in dealing with Asia and also generate costs.

Proposed solutions: The legal system should be clear, simple and understandable. It is necessary to **ensure a stable and predictable legal system**, which will reduce costs and facilitate contracting.

Challenge B: Competition from states with friendlier regulations toward companies with new technologies.

Proposed solutions: Translating the best solutions into Polish ones, e.g. Estonian ones, in the area of legal and tax facilitations for companies. At present, some Polish programmers are setting up businesses in Estonia due to legal and administrative facilitations and lower costs

DIRECTIONS OF ACTIVITIES

1. Diversify presence. Asia is not just China

Challenge A: The regulatory difficulty of establishing a presence in China, the different business culture there, as well as intellectual property problems and possible geopolitical risks, are important risk factors for technology companies planning to expand in China.

Context: Many entrepreneurs have concerns about the lack of respect for intellectual property in the Middle Kingdom and doubts about the introduction of a social credit system for companies. Difficulties also include the Great Digital Wall, which forces technology companies to build separate data centres in China, significantly increasing investment costs. There is also a catalogue of preferred and prohibited investments in the PRC. The potential economic and legal consequences of geopolitical tensions between the U.S.-West-China are even more threatening.

Proposed solution: It is necessary to inform entrepreneurs in detail not only about opportunities, but also about threats connected with doing business on the Chinese market. At the same time, it is worth diversifying one's presence in the Far East by considering cooperation with rapidly developing countries in South, South-East and East Asia with very receptive markets. From the perspective of the new technology sector, India, Japan, South Korea, Indonesia, Vietnam, Thailand, Malaysia and Singapore deserve special attention. It should be noted that each of these markets has different characteristics.

History of success: Polish technology companies are already successfully operating in Asian markets outside of China. They include: RTB House – a global company with dozens of offices around the world, which provides technologies for implementing online advertising campaigns, mainly for the e-commerce industry, Malopolska-based Synerise, with a presence in India, offers artificial intelligence and big data-based marketing tools for the sales and retail industry, Billennium, with offices in India and Malaysia, provides office solutions involving communication and the automation of enterprise processes. Indahash, which offers tools for social media advertising campaigns, operates in Singapore and Japan. The latter market is also home to Coinfirm, a company active in regtech (high technology used to implement and evaluate existing regulations), data security and cryptocurrency management. Brainly offers a multilingual learning platform in India, Indonesia and the Philippines, among

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others, while Saule Technologies manufactures solar panels using the technology it

has developed and has a presence in Japan.

Good practices: Representatives of government and consulting companies note that Vietnam, which is an alternative manufacturing base to China, has an investor and

business-friendly policy, and in 2020 its GDP grew by 2.9 percent despite the Covid-19 pandemic. The meeting noted that in South Korea, the most promising industries include fintech, cybersecurity and FMCG, while the medtech industry may be difficult due to restrictive laws. Taiwan has been producing hardware for decades, while Poland has a large pool of programmers (ca. 400 thousand). Software developed by our companies could support products already available in Taiwan.

Proposed solution: When investing in China it is worth noting that not all areas have competitive technological products, e.g. exist in the field of biotechnology. It is worth looking for synergies and technologies that could be developed in cooperation with China.

CHAPTER III

POLISH BUSINESS DEVELOPMENT IN ASIA

The following diagnoses, postulates and proposals for solutions emerged during the round table on new technologies, but they relate to the broader issue of the functioning of Polish business activities in Asia. At the same time, they have become a permanent element emphasized over and over again by the participants of the round tables organized by the Boym Institute. We present the following postulates synthetically referring to the reports: "Asia – Integration. Around Poland's Policy Towards Asia" and "India Roundtable – Poland's Challenges and Opportunities on the Subcontinent".

1. Use the power of networking

Challenge A: Insufficient use of the potential of Polish women, Poles and people of Polish origin operating in Asian countries to create a network of information and contacts. The challenge is the lack of a systematic flow of knowledge among the

Polish diaspora and expats, media people, diplomacy, cultural institutions and the few Polish companies present on the Far East markets.

Proposed solution: Synergies should be sought between different groups of Poles in Asia. The big success stories in Asia nowadays have been aided by the support of Poles in the localities and the use of their knowledge and access to local social networks. It is worth making better use of the existing infrastructure of Polish institutions such as embassies, consulates, Polish Institutes or PAiH institutions to strengthen these formal and informal support networks. It would be worthwhile to provide space for meetings of these institutions. A more intensive exchange of information should also take place among institutions operating in Asian countries as well as among people dealing with Asia and business support in central and regional institutions, such as voivodeship and marshal offices.

Challenge B: Insufficient use of the potential of Polish representative offices in Asian countries for business support.

Proposed solution: Representatives of Poland should systematically engage in seeking support programs, tenders, and partners for Polish companies. The practices of Estonian diplomacy could serve as a model by actively sending such profiled information to companies from various sectors and actively seeking business partners for domestic companies.

Good practices: In some Asian countries, there is logistical support from PAIH for companies entering new markets, ranging from assistance in establishing contacts to accommodation support (e.g. lending/renting part of an office). However, these organizations face the problem of low funding and limited staff.

Proposed solution: Seeking synergies across institutions should include organizing information on markets, industries, and available support programs. For example, the trade.gov.pl website should be better able to quickly search for up-to-date information, for example, by industry, country, or keyword. It should also be clearer and more up-to-date.

Depending on the specifics of the country, entrepreneurs need different types of assistance, for example, administrative problems were pointed out in Singapore, while in Japan it was difficult to find local employees who speak English. Assistance to companies in different countries should be tailored.

2. Develop the "Poland" brand in Asia

Challenge A: Poland is not associated with strong associations in Asia, it is not well recognized.

Proposed solution: Strengthening the image of Poland as a European country, a member of the European Union, associated with quality and reliability is recommended. EU membership not only facilitates trade through agreements concluded by the bloc, but also creates a kind of "quality mark" worth taking advantage of.

Proposed solution: It was pointed out that it is possible to build associations of Poland with the strongest national sectors and industries. It is worth choosing a specific group of products or industries in which we have already achieved success or success is likely and build a national brand around them. Polish programmers, architects and other people with engineering backgrounds are highly reputable. A practical idea for combining the marketing strategy of companies and the state could be grants for companies to conduct their own promotion, referring to Poland as their country of origin.

Challenge B: Polish diplomacy often focuses on constructing a historical narrative about Poland, especially one that is connected to the historical role of 20th-century totalitarianism. Although this is important for Poles, sometimes also for those living in Asia, from the point of view of branding on Asian markets, it is irrelevant and usually incomprehensible to the Asian audience.

Proposed solution: Instead of historical politics, it is worth focusing on building Poland's brand as a modern country that can create and contribute to good technologies. Poland's advantage in Asian countries is, for example, the good reputation of Polish programmers or the recognition of titles produced by Polish video game developers. If a reference to history is needed, this should be done through digital means, such as online exhibitions or video games.

CHAPTER IV

LESSONS FROM ABROAD

1. Adapt the strategies of business gas pedals from the Czech Republic and Germany to Polish needs

Challenge A: Insufficient focus of existing accelerator programs on specific markets and building useful resources in those markets.

Proposed solution: The Polish accelerator, following in the footsteps of the Germans and Czechs, should have its headquarters in Singapore, where the financial, trade and technology hub of Southeast Asia is located. As a target, it could also open subsidiaries in India, Korea, China, Vietnam or Japan – specific markets requiring know-how building and strategic assistance for young companies.

The accelerator should not take a stake from the startups for its operations, and all costs generated like flights, accommodation, training, vendor hiring assistance, etc., would be covered by a PFR-funded fund or through a joint fund set up with a local organization such as Enterprise Singapore – an agency under Singapore's Ministry of Trade and Industry that supports local small and medium enterprises.

Challenge B: Need to ensure optimal support (acceleration) time for startups

Proposed solution: The length of acceleration (i.e. the period of time a startup representative stays in a given country) for the German accelerator is about six months and for the Czechs three months. Considering the average lead time in B₂B ranges from three to six months, this period should be no less than six months.

Challenge C: Need to provide mentoring and access to networks in a relatively short time frame for business acceleration

Proposed solution: As part of accelerator programs, counselling and education should be provided related to the cultural specifics of the particular countries, the rules of building interpersonal relations and the culture of doing business there. In order to have maximum time, the Polish gas pedal should use the networking network of both

Polish institutions and partner institutions to arrange B₂B meetings with potential contractors. Also, mentors working with the gas pedal, in addition to helping clarify processes or creating a market entry plan, should also be involved in the process of finding and arranging B₂B meetings focused on commercialization. Mentors should include local specialists and representatives of the Polish community in particular countries.

Challenges D: The need for clear prioritization

Proposed solution: The priority goal of the accelerator must be a certain number of customer acquisitions and successful product commercialization.

Challenges E: Effectively motivating startups to achieve their goals

Proposed solution: Companies that achieve sales (KPI) identified during acceleration should be placed in a post-acceleration program that could cover the costs of product commercialization, hiring the first local employees, and marketing. After the acceleration and post-acceleration period, technology companies should be able to continue expanding in the region without gas pedal assistance. Repeated patterns of achieving goals in the Far East, the so-called success stories, will enable the further success of companies from the new technology sector there.

Thank you for your interest in our report!

If you have any comments or suggestions, please contact the Boym Institute.

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We always reply to all messages within 1-4 business days.

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