Top Disruptors in Healthcare

Review of the innovative medical startups in Poland

2021
Authors and Partners of the Report

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Top Disruptors in Healthcare
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Dear Madams/Sirs,

on behalf of the Polish Federation of Hospitals and the Association of Young Medical Managers, as well as our Partners and Patrons, we are pleased to present to you the 2nd edition of the Report „TOP DISRUPTORS IN HEALTHCARE“. The Report was created thanks to the work and involvement of a team of experts who, for over half a year, deepened their knowledge of the Polish medtech sector and dealt with stocktaking of Polish startups.

The first edition of the Top Disruptors in Healthcare Report met with an extremely positive response – 74 startups participated in it, and additionally it was supported by key public entities supporting innovations. Information about the Report and the Report itself have been published on numerous occasions by the most important industry and nationwide media.

As many as 45% of respondents to the evaluation survey after the first edition of the Report indicated that they contacted business partners thanks to the Report, which shows how important this project is for the Polish market of medical startups in Poland. It is the only inventory Report of the Polish medtech sector, which is thus a valuable source of information about innovative medical entities on the Polish market. It was supported by representatives of the public side, industry organisations, large entrepreneurs, as well as representatives of the startups themselves, who responded in greater numbers to our proposal to present themselves in the Report.

The Top Disruptors in Healthcare Report is an initiative implemented under the honorary patronage of the Ministry of Health, the Ministry of Labour, Development and Technology, the Ombudsman for Patients’ Rights, the National Centre for Research and Development, the Agency for Medical Research, the e-Health Centre, the National Health Fund, the Polish Agency for Enterprise Development, the Polish Agency for Investment and Trade, the Supreme Chamber of Physicians, the Supreme Chamber of Nurses and Midwives, and under the patronage of several industrial media and patronage of nearly thirty governmental and non-governmental organisations.

Special thanks are sent by us to our commercial partners, who are the leading entities supporting the innovation environment in the medical sector and cooperating with startups, i.e. EIT Health, AstraZeneca, Google for Startups and PZU Zdrowie (Main Partners), and Honeywell and Law Firm Domański Zakrzewski Palinka (Supporting Partners), as well as all startups that have established cooperation with our team – without your support, this Report would not be created.

We hope that this year’s version of the Report will help to combat Covid-19 by identifying startups that offer innovative solutions aimed at supporting the medical sector. We also hope that gathering the most important information about startups participating in the Report will help to establish fruitful cooperation between startups and medical entities, as well as startups and investors.

We kindly encourage you to read the 2nd edition of the „Top Disruptors in Healthcare“ Report!

Ligia Kornowska
Managing Director
of the Polish Federation of Hospitals PFSz,
President of Young Medicine Managers

Karolina Kornowska
Coordinator of the 2nd Edition of the Report
„Top Disruptors in Healthcare“, Project Manager of Young Medicine Managers
The pace of development of medical technologies in the world is rapidly accelerating. Nearly every day we hear about revolutionary solutions that change the face of medicine. Looking at this issue more broadly, the real race for technologies of the future is only beginning.

Stimulating innovation is today one of the key tasks for the coming years for the Polish health care system. As shown by data, more than 80 per cent of Polish startups in the digital health sector plan to enter foreign markets within a year. This shows the strength and dynamism of this environment.

I am convinced that an initiative such as the creation of the Report will help to develop better health protection, and knowledge of medical startups available on the Polish market will contribute to the quality and availability of the services offered to the patient, presenting new medical technologies and therapeutic methods.
Innovations and advanced technologies are the main driving forces of development and well-being, which are at the same time significant features of highly developed economies. Advanced computer technologies and artificial intelligence algorithms offer Polish startups an opportunity to emerge on the regional and even global medtech market.

The market for telemedicine solutions (on a global scale) is expected to grow by nearly 20% per year over the next five years. It will soon reach a substantial value of USD 175 billion. It also seems that the COVID-19 pandemic could further accelerate this trend.

However, the barriers to the entry of startups into the medical market are very high and the time from the development of the ready-made version of the solution to its commercialisation is relatively long. Clinical investigations, pilot programs and necessary certificates are required. In addition, there are differences in the architecture of each country’s healthcare system, stakeholder structure or reimbursable benefits. It is not easy to find investors willing to inject capital into a risky undertaking either and even more difficult – those offering smart money.

However, in Poland, we have excellent programmers, doctors, biotechnologists, pharmacists, as well as medical market experts and strategists that have demonstrated many times that they are able to build medtech projects with high market potential. I believe that by creating better and better conditions for development and providing adequate support, we will increasingly frequently read about Polish startups in foreign industry press.

Since 2017 the Polish Agency for Enterprise Development (PARP), commissioned by the Ministry of Development, Labour and Technology, organises national stands promoting the medical equipment industry. In 2017-2019, such points were organised at MEDICA fair in Dusseldorf and in 2019 also at Arab Health fair in Dubai. More than 150 companies benefited from promotion at national stands during these fairs. From 2020 onwards PARP has also been implementing the Industrial Promotion Program for the Medical Equipment Sector. Activities under the program aim to promote the industry abroad and include, in particular, the organisation of information and promotional stands at selected international fair events. By the end of 2022, we will have organised 8 stands in Europe, Asia and North America. Support for the medical equipment industry is also foreseen in the new financial perspective of the European Union.

The fact that it is worth supporting Polish manufacturers of medical equipment is evidenced by annual export data. Over the last five years, domestic exports of this industry have doubled, reaching almost EUR 2.5 billion. We can also be glad of the noticeable trend of increasing sales to non-European countries, in particular the United States.

I believe that, with appropriate support, technologies using robotics, as well as artificial and expanded intelligence, will play an increasingly important role in exporting medical solutions over the next few years. They do not only build smart GDP and a good brand but above all serve our health.
"Health protection is a driving force for innovation" is a message from times before the COVID-19 pandemic, which has been positively verified because it is thanks to innovative medical procedures that we have recently managed to save many lives. Vaccines based on modern mRNA technology, adenovirus vectors or protein nanoparticles are a clear example. The key role of the various innovative tools to combat the pandemic, such as artificial intelligence algorithms, mathematical modelling, telemedical systems, digital solutions, communication solutions or digitised strategic management centres should also be highlighted.

Our economic sector, and in particular hospitals, can boast of numerous modern solutions, both technical and organisational. It is medical sciences and health sciences combined with progressive technologies and efficient management that are a real innovation mine. Inspiration and the locomotive of progress in the health sector are projects commonly known as startups, which can be described as, young businesses in a polonised form. Young businesses include projects in typically medical disciplines but above all - interdisciplinary projects, combining organisational, managerial, technological solutions by means of IT techniques, with diagnostic, medicinal or prognostic procedures.

Poland is one of the leaders of the region of Central Europe in the area of medical startups, which is connected, among other things, with dynamic economic growth, high demand for new projects, ambitious and well-educated society and fruitful international cooperation. Our country owes its leadership position, in particular to impressive human activity, mostly of young people, who can boldly be called innovation leaders and pioneers of progress in health care. In sum, this small group, which forms networks supporting each other, including through modern communication channels, does not only carry out projects of young business on its own but it also initiates, helps and promotes other startups, creating so to say an ecosystem of young medical business on national and international scales.

The Report on Polish medical startups was prepared by a group of leaders forming part of the team of Young Medical Managers (MMM) operating at the Polish Federation of Hospitals (PFSz) chaired by Ligia Kornowska, a doctor, winner of Forbes 25under25 and at the same time the PFSz managing director. This team brings together dynamic people who, despite their young age, have both directional education (medicine, management, marketing, IT, law, etc.), practical knowledge and experience in implementing brave projects that meet the definition of startups. Most importantly, it is a group that does not lack ideas, courage and motivation, and that does not know the concept of hopelessness, sense of entitlement or so-called professional burn-out. The Report on Polish medical startups was prepared at the initiative of MMM team leaders at the PFSz, which is worth reading about at the very end of the Report.

Top Disruptors in Healthcare Report is the second comprehensive and exhaustive compilation of the topic after the first, enjoying great interest, issue of the Report drawn up in 2019. The Report contains a description of 115 extremely interesting young medical businesses presented for information, investment, networking, marketing, popularisation, education, and other purposes, aiming at promoting and supporting Polish startups in the health care sector at national and international levels. I would like to add that cooperation with the MMM team, and particularly with its leaders, is a cause for me to be personally satisfied. The patronage over the MMM team and support for young innovators in the health care sector bring further fruit, this time in the form of a second revolutionary Report on Polish medical startups, which I strongly encourage you to read. Personally, I am pleased that I could have contributed to this important publication for health protection and I encourage you to read the Report.
Current, unprecedented rapid scientific and technological progress in the area of life - science, which is the driving force behind the development of the knowledge-based economy, is driven, among other things, by the dynamic development of Polish startups. At last year’s MEDmeetsTECH conference, current Minister of Health Adam Niedzielski made a significant statement that, “medical startups save the healthcare system”. It is difficult to disagree with this by observing how on a daily basis during the first wave of the pandemic ICT solutions became publicly used by combining patients, doctors, medical facilities. It was thanks to med-tech solutions that the system survived by providing basic care. This is due, inter alia, to the fact that the predominant areas of startup activity are telemedical solutions, AI/machine learning and medical devices and applications.

Compared with the first Top Disruptors in Healthcare Report, it is clearly noticeable that the pandemic has accelerated the development of telemedical solutions and the Big Data analysis and machine learning areas. More than 50% of the tested startups offer services from broadly understood telemedicine and 45% - solutions using AI. Digital health solutions are valued due to their impact on the improvement of diagnostic processes and the development of remote medical care. Enabling doctors to take therapeutic decisions remotely is particularly important during the epidemiological crisis. They may allow starting treatment, shorten its duration and increase its effectiveness, while reducing the costs incurred by the system.

There are no examples in the world where health care in the broad sense and self health-care are supported by state-of-the-art technological solutions, providing real opportunities for better care over the patient in terms of quality and, equally importantly, reducing its costs. More and more innovations dedicated to life-sciences are being created in Poland and, most importantly, more and more of them are going into the commercialisation phase. Poland is one of the leaders of the region of Central Europe in the area of medical startups, which is connected, among other things, with a large group of ambitious and well-educated young people, scientists-visionaries who are open to knowledge sharing, work in a multidisciplinary team and international exchange. In my opinion, Polish medical startups can look at the European or global markets without any complexes, making telemedical devices, mobile applications or AI/machine learning „national export goods”.

Looking at the dynamics and directions of development of the digital health industry, I will boldly risk saying that in the near future we have the chance to join the group of major players on the global stage. The condition is consistency. Further development of startups in Poland, making creative solutions by them in the field of digital health requires multidisciplinary cooperation, maintaining public sector support, strengthening the involvement of private investors, as well as development of new business models optimising cooperation with the medical market – understood as government and local self-government institutions, medical personnel, business environment.

The main need for med-tech startups remains unchanged: it is capital but in the long-term perspective and not in terms of a draft. Capital that will allow the construction of a sustainable business model under which the product itself will be certified, scalable and will meet the payer’s needs, ready to use its values. In the Polish market, public funding undoubtedly reigns from, among others, NCBiR (National Centre for Research and Development), PFR (Polish Development Fund). At the same time, compared with last year’s Report, more and more startups declare that they finance their activities from their own resources. Financing above PLN 10 million already applies to 14% of startups in this year’s summary (compared with 11% in 2020). This shows increasing maturity of health-tech startups, which increases the chances of gaining markets other than domestic ones.
The future of medicine is closely linked to the development of new technologies. Our patron, Stanislaw Lem, would probably agree with this thesis. But he was not an optimist. In new technologies, he often saw hazards and risks of various kind, drawing attention to ethical aspects that we are forgetting today in pursuit of development. He wrote, "technologies have a bright averse but life gave them a reverse – black reality." Lem’s works can be seen as a sort of collection of warnings on, "how not to use new technologies." In combination with this Report, they can provide instructions for releasing the potential of the industry – to make optimal use of new technologies in the fight for our health and lives.

For me, it is absolutely crucial, without which we will not be able to talk about the dynamic development of the industry, to open medical data for the purposes of, "training" of artificial intelligence algorithms. We are still doing this too slowly, too conservatively. Still entrepreneurs, startups must primarily use foreign databases with difficult access to these national ones. Data is the crude oil of the 21st century and the sooner we all understand it, making full use of its potential, the better it is – both for entrepreneurs and for public administration. And, ultimately, for all of us as the final recipients of technological products, which will detect and manage our diseases more quickly.

This is an important Report that we, as Lem Institute, will promote and recommend to those who have the capacity to remove the barriers identified here.

dr Maciej Kawecki
PhD, a President of the Management Board of Lem Institute
Startup from the area of med-tech, especially in the area of Artificial Intelligence, is a real challenge! Moving in such an extremely sensitive, regulated and, at the same time, non-established industry as AI in healthcare and medicine poses many challenges to us, which do not exist in the world of startups of other industries.

When, in 2005-2010, we started talking loudly at the University about computer-assisted diagnostics, it was already a challenge in itself to establish a dialogue and find a common language between mathematicians, engineers and doctors. Today this barrier has been overcome – no one on both sides has any doubt that digitisation and innovation are already revolutionising health care and medicine in practice today. However, solutions based on machine learning, or more broadly the Artificial Intelligence, still face the challenge of proving their role in practice. In diagnostic or clinical practice and not in research. The challenge facing us all today is to build mutual trust and a common language between technology and physicians. This requires both high responsibility and awareness of the work of the creators – according to the doctrines of ‘trustworthy AI’ or ‘explainable AI’, as well as the willingness to cooperate, openness and conscious use of tools on the part of practitioners.

Of course, regulatory issues are one of the glass ceilings suspended relatively low above the heads of the med-tech segment startups. Starting from the procedures already in place today for the certification of a medical device, through the possibility of lawful data acquisition, to emerging legislative restrictions on the responsibility of manufacturers of AI solutions. On the one hand, in the US, we are seeing some increased flexibility on the part of the FDA for AI based solutions, on the other hand, there is an increase in restrictions in Europe with the implementation of the MDR, which comes into force this year. Detailed national regulations are still ahead of us but we expect more restrictions here too.

I think that a well-functioning community and support instruments are key elements of this puzzle, which should be a catalyst for an efficient innovation system – from universities to market solutions. Innovators entering this difficult market need, above all, the models on which they can rely. They need a good mentoring of people who have already fought against similar obstacles and can share their knowledge. They also need adequate environments – both infrastructure, data and recipients - where they can test and validate their ideas and solutions in the sandpit model. We have excellent talents at universities. We have a lot of innovations in the early stages of R&D. We have willing young people who want to build startups. We have good incubators and accelerators. We have sensible financing models on the market. Finally, we have physicians willing to innovate and patients’ and the healthcare system’s needs. Let us therefore also support the development of this layer, the task of which is to facilitate a second step, which may become a bridge over the first and most difficult to get through ‘death valley’.

Bartosz Borucki
Head of the Artificial Intelligence and Image Analysis Team in Medical Diagnostics, Interdisciplinary Centre for Mathematical and Computer Modelling, the University of Warsaw; co-founder, President of the Management Board, Smarter Diagnostics Sp. z o.o. (spin-off UW)
“In the EIT Health, the largest European public-private partnership in the field of innovative medicine and healthcare, we are primarily looking for breakthrough solutions with a high implementation potential. We are not only studying technological maturity but also whether the given solution is based on the real needs of doctors and patients. We subject projects to a careful analysis of the selected business model so that the best of them will be placed on the market. Poland has great opportunities to become a place for creating and validating medical innovations. We have a diverse and specialised clinical base which is definitely our competitive advantage. In Poland, EIT Health works closely with partners from the world of industry, research and development and universities, as well as with local and national authorities. We are the only European player of this kind that is so active on the Polish market.”

Cooperation with EIT Health gives different opportunities of development for the Polish universities, research institutes, companies as well as startups. On the one hand, it is a chance for joining top tier education and acceleration programmes in Europe within Horizon Europe framework (2021-2027), among others. On the other hand, working with EIT Health opens doors to the leading European Research & Development consortia working on the cutting edge healthcare innovation projects.

More information: www.eithealth.eu

Selected EIT Health programs:

**Startup Amplifier** – a unique program for startups, spin offs, university research teams, small and medium-sized enterprises operating in the field of medtech, biotech and digital health, interested in entering other European markets and building partnerships with R&D centres, hospitals and other organisations within the EIT Health network.

**Investor Network** – a unique EIT Health network bringing together more than 80 investors from the health sector from 17 European countries, which allows startups seeking funding at an early stage of development to quickly connect with VC funds or business angel networks who want to invest in Seed, Bridge or Series A investments of up to EUR 10 million. Only over the last year and a half we have completed transactions worth EUR 18 million with five companies.

**EIT Jumpstarter** – a pre-acceleration program for teams developing ideas in the fields of healthcare, agri-food, raw materials, energy, urban mobility or manufacturing. The program supports scientists and innovators wishing to market the effects of their research and scientific projects. Up to now, more than 220 teams have received comprehensive business support (including in the area of business model creation, fund acquisition, solution scaling, networking). As a result, 20 new startups were created in key market areas. The EIT Jumpstarter was awarded the Best Association Training Initiative of the Year and Young Empowerment Initiative of the Year. It is one of the programs that also supports regions in a more systemic approach to activating research teams, commercialising knowledge and creating new jobs.

More information: www.eithealth.eu
This year marks the 30th anniversary of AstraZeneca’s operations in Poland. In Warsaw, we located one of our global hubs and employ over 2300 people. Our innovativeness and important presence make us a catalyst for the development of life sciences innovations in Poland. The challenges faced by us now and those from before 30 years remain valid, and their overcoming and systematic search for new solutions results in the continuous delivery of innovative therapies to patients. One of the pillars of our company is research and development, the key area of this activity is building academic cooperation and providing mechanisms to support startups. We believe that the science we create and develop to help patients all over the world must not be isolated. That is why it is so important for us to strengthen public-private partnership, as well as partnership with other stakeholders and implementation of innovations to treat patients. An important milestone in the implementation of our strategy for development and support of the health protection ecosystem in Poland was the acquisition by AstraZeneca Pharma Poland of the status of Research and Development Centre granted by the Minister of Development in 2020. We have obtained this status as the first global innovative pharmaceutical company in Poland – this achievement is an expression of our key assumption - continuous pursuit of science. Below we present selected initiatives in which we support the development and operation of startups.

We believe that through our actions and support for initiatives such as the “Top Disruptors in Healthcare” Report, we are setting the way to take advantage of the full potential of Polish science and the startup environment.

**AstraZeneca and PACTT** - Cooperation with the Agreement of Academic Technology Transfer Centres (PACTT) and supporting over 70 Polish universities in delivering innovations in health care, treatment of patients and other key areas of science are an important milestone in building a private and public agreement and future joint scientific undertakings. It is our constant contribution to supporting Polish scientific thought and developing a modern health protection ecosystem in Poland.

**AstraZeneca and the University of Warsaw** - The agreement between AstraZeneca and the University of Warsaw has opened up numerous possibilities for building joint work and future projects in the field of unique and innovative technologies and implementing ideas in order to transform scientific knowledge into innovative therapies for patients and improve their quality of life. We are proud that we can support Polish talents and play an important role in the education process of new generations of scientists.

**AstraZeneca and Life Science Kraków Cluster** - Artificial Intelligence is not only the way to accentuate the development of new medicines but also a key element of personalised medicine. Cooperation between AstraZeneca and LifeScience Kraków Cluster enabled the creation of a common platform for the exchange of scientific ideas in order to better understand the current and future needs of the health care ecosystem in Poland and create a strong foundation for transforming innovations into optimised and effective treatment methods.

**AstraZeneca Exchange Mentoring Program** - We are open to sharing our knowledge and experience in order to support the development of talents in science, business and education and to build new possibilities for providing therapeutic solutions to patients. Our experts from all over the world are available as mentors for universities and startups in Poland.

**AstraZeneca OPENINNOVATION and CoSOLVE platform** - Together, we are developing modern science by creating opportunities for cooperation and using our data and particle libraries. By combining different experiences and tools, we can explore hypotheses on which work has not been possible so far. Sharing ideas and enabling innovation to cross barriers between universities, industry, governmental and non-profit organisations will help us to turn innovative ideas into breakthrough scientific discoveries and develop new medicines even more quickly and efficiently.
For several years, we have seen dynamic development of startups from the Health/MedTech sector in Poland. Many of them offer innovative technologies and approaches to the subject of health care, showing great international potential and thus increasing opportunities for expansion to foreign markets. The results of this year’s study clearly confirm our experience in cooperation with startups, such as: Infermedica, Stethome or SensDx. We have excellent scientists who better and better combine medical knowledge with business. Google for Startups offers startups from the HealthTech sector not only support in the use of Google technology but also the best practices in product development, business mentoring and support in market analysis and international expansion.

Google for Startups:
The Google for Startups mission is to equalize opportunities in the startup community. Thanks to our support, startups have access to knowledge and resources that help them develop.

We are doing this with the conviction that startups are a key element in building an innovative economy. We run programs such as Google for Startups Accelerator, Startup School or Founders Academy, which help companies not only acquire knowledge of technology or scaling business but also support the development of leadership skills, teach business models or business management itself.

Our success involves the success of the startups with which we cooperate. In 2019 alone, the startups in the global Google for Startups network created over 33 thousand jobs and received over USD 6 billion of funding.

More about Google for Startups community can be found at www.campus.co/warsaw.
PZU Zdrowie is one of the leaders of private medical care in Poland. It has its own medical network, which already has 130 medical centres, including imaging diagnostics workshops. In addition, it cooperates with over 2200 partner facilities in over 600 Polish cities. Nearly 800 of them provide occupational medicine services.

PZU Zdrowie focuses on a unique model of medical care based on the so-called patient experience. To this end, it implements innovations that genuinely help patients and medical staff alike. An example of this approach is the latest facility – PZU Zdrowie Warszawa Chmielna Medical Centre fitted with equipment of the latest generation and various types of service innovations.

PZU Zdrowie also uses the Symptom checker provided by the Polish medical and technological company Infermedica. The tool helps patients choose the appropriate specialist based on complaints. Based on responses to questions about symptoms, the system estimates the probability of disease units, thus directing the user to the appropriate doctor and shortening the time of accurate diagnosis.

PZU Zdrowie is willing to cooperate with domestic technology companies whose solutions support the treatment and service processes of our patients. I believe that an initiative such as Top Disruptors in Healthcare will strengthen the synergy of Polish startups and the medical care sector.

News about PZU Zdrowie is available at www.pzuzdrowie.pl and LinkedIn (https://www.linkedin.com/company/pzuzdrowie/)

Anna Janiczek
President of PZU Zdrowie
The starting point for works on the Report was a conclusion resulting from the experience of authors and other industry experts, on the existence of a huge information gap in the area of health innovation, in particular between startups and startups as well as startups and potential investors or customers. This gap causes that obtaining answers to such questions as:

a) what are the new interesting solutions in the medical sector and what is their level of progress;
b) who and how can take advantage of these solutions;
c) what are the maturities of startups;
d) what are the needs of startups and the challenges faced by them;
e) how does a given startup come off compared with other initiatives,
is extremely difficult and time-consuming. We hope that the Report will also make it possible to reach innovations that can help to combat the COVID-19 pandemic, and investors and business partners will receive reliable information before starting cooperation.

The aim of the Report is to support the ecosystem of innovation in healthcare, including establishing effective cooperation between startups and other entities. This is used to identify the most promising startups on the Polish health market, obtain key information about these entities and present this information in a structured and coherent manner to potential recipients, including in particular:

a) potential investors, business environment institutions;
b) entities carrying out medical activities or pharmaceutical sector entities interested in implementing the solutions offered by startups;
c) persons engaged in medical professions;
d) representatives of the public party interested in supporting the development of health innovations as well as the implementation of innovations in clinical practice and in the organisation of provision of benefits;
e) consumers/patients.

What startups are presented in the Report

The concept of a startup is unclear. We have therefore assumed that we will consider as a startup those initiatives whose representatives consider themselves to be a startup. Among the potential “top disruptors in healthcare” described in the Report, we included startups that plan to offer or that offer:

a) services addressed to entities carrying out medical activities;
b) services supporting medical or administrative processes which support the provision of services;
c) services addressed to patients connected with medicinal activities;
d) services for pharmaceutical companies and R&D related to processes regulated by pharmaceutical or medical law or R&D processes.

Methodology of work on the Report

The Report was created on the basis of information gathered using a standardised survey tool developed in cooperation with industry experts. The set of questions for the survey has been developed in such a way that it can gather the most important information about startups participating in the Report - concerning the solution being created, needs, problems, team, financing, etc. The following sections are included in the survey:

a) Current Needs - information on how the pandemic influenced a startup, what factors are crucial for the development of startups
b) General information on a startup – contact details, legal form and maturity degree, basic information on the solution and founders
c) Solution information - this is a key section in which we asked startups for a detailed description of the solution, whether this solution requires CE certification as a medical device, and we also asked about the competitive position of startups on the market
d) Finance – in this section, we asked about the sources of startup financing and expectations regarding the acquisition of financing, as well as asked about basic financial data, allowing, on the one hand, to determine the degree of maturity of the business conducted in a directional manner, as well as suggesting a possible valuation of the startup.
e) Foreign expansion - experiences, especially from the medical sector, indicate that the Polish market may be too small, and foreign expansion is a necessary element for achieving success and scaling up the activity, which is why in this section we asked about the planned and implemented directions of expansion to foreign markets.
f) Contact details - contact details for owners and managers of startups

Some questions and answers are visible only in the extended version of the Report intended for the Partners of the Report, such as direct contact details.

Collection and processing of data for the Report

The authors of the Report, on the basis of generally available sources and information made available by some Partners of the Report and on the basis of Reports submitted by startups themselves, identified a list of approx. 380 Polish entities. Subsequently, the editorial team attempted to contact startups in order to initially verify their business profiles and then after establishing their business profiles, to invite the startups to cooperate. Interested startups received a link to the survey tool and then filled out the questionnaire on their own. In case of doubts when filling in the questionnaire, they were explained on an ongoing basis by direct contact of the editorial team with startup representatives. Data collection as part of surveys took place between December 2020 and March 2021. Subsequently, the results of the questionnaires were evaluated and supplemented by the editorial team (in consultation with the representatives of startups) in terms of:

a) completeness;
b) comprehensibility of the claims used
c) orthographic and stylistic.
Important note:
The editorial team did not perform a substantive analysis of the data presented by startups, in particular did not verify the data with publicly available data, including in public registers, and did not verify claims whose verification would require expert knowledge, e.g. as regards the legitimacy of obtaining CE certification or competitive environment or potential recipients.

Report in numbers

Work on the Report:

a) Almost 400 identified startups which editorial team members attempted to contact. It is almost by \( \frac{1}{3} \) more than the authors of last year’s edition of the Report identified
b) Approximately 120 days – working time on the Report
c) 9 – number of editorial team members (authors)
d) 115 – number of startups that filled out the survey and were included in the Report. This is more than half as much as in last year’s Report
e) 11 – number of patronages of representatives of the public party
f) 6 – number of commercial partners – leaders of cooperation with startups in Poland
g) 15 – number of media patronages
h) 27 – number of other patronages

Selected statistics based on survey results

Have you participated in the previous edition of the Report?

44 startups from last year’s edition of the Report also participated in this year’s edition, while 30 startups from last year’s edition of the Report did not participate this year despite messages sent several times by the editorial team, which represents 41% of the total sample tested last year. This may indicate the cessation of activities by a large number of companies, which is confirmed by the fact that few startups in the medical sector were successful in the market. It is satisfactory that a significant part (as much as 62%) includes startups appearing in the Report for the first time - this may indicate a greater interest of entrepreneurs in the medical industry in the course of the pandemic.

How has COVID-19 affected your business?

The COVID-19 pandemic has changed the playing field of practically all sectors of the global economy for a year. The health sector is not an exception. Survey respondents indicate the positive effects of the pandemic on their business, such as:
- popularisation of telemedical services,
- significant increase in the interest of the general population in health related topics,
- significant growth of the diagnostic services sector,
- increased health needs of Poles, e.g. in the field of mental health,
- progressive digitisation of healthcare providers and greater openness to innovation,
- breaking down barriers to online medical education,
- on the other hand, medical startups also suffer from the adverse effects of the pandemic, such as:
- reduction of health needs in movement medicine,
- decrease in turnover of medicinal entities operating in the fee for service model resulting in a smaller budget for innovation,
- transfer of personal and financial resources of medicinal entities to diagnosis and treatment of COVID-19, with a loss for patients suffering from other diseases,
- impediments to contact with partners of startups conducting medical activities,
- limitations in raising capital by the inability to physically meet with the investor,
- delays in clinical trials.
The impact of COVID-19 on business is much more positively assessed by startups developing digital products and services - for these companies, the pandemic proved to be a business catalyst. On the other hand, startups creating hardware suffer greatly - the difficult cooperation with medicinal entities stops the development of products and hinders sales.

Nevertheless, the majority of respondents (51%) point to the impact of COVID-19 pandemic on their business as clearly positive, according to 33% of respondents, the pandemic did not significantly negatively or positively affect the business objectives of their companies, and only 23% of respondents assess COVID's impact as clearly negative.

What is the legal form of your startup?

<table>
<thead>
<tr>
<th>Legal Form</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Limited partnership</td>
<td>3%</td>
</tr>
<tr>
<td>General partnership</td>
<td>2%</td>
</tr>
<tr>
<td>Non-formal working group</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
</tr>
<tr>
<td>Sole trader</td>
<td>1%</td>
</tr>
<tr>
<td>Stock-offering company</td>
<td>8%</td>
</tr>
<tr>
<td>Limited liability company</td>
<td>82%</td>
</tr>
</tbody>
</table>

The vast majority of startups audited conduct business activities as a limited liability company. Legal forms commonly used in Poland for tax optimisation purposes, such as a general partnership or limited partnership, do not enjoy an interest of startups - this may result from the reluctance of investors to invest capital in such forms of business or from the choice of simplicity of business activity conducted by startups above potential tax benefits. Also, as further statistics show, profits are rarely the key growth metrics for startups, which can also benefit from tax reliefs for R&D purposes and generate high operating costs through participation in grant programs, which may also result in a lack of interest of startups in forms of activities that are more tax-friendly. One-person economic activities are also of little interest, which may indicate the reluctance of creators of medical startups to bear the risk or the rare conduct of projects by individual founders.

As regards the form of conducting business activity, there are no significant changes compared to the previous edition of the Report.

Medical startups tested are characterised by a high degree of development. As many as 90% of startups tested have a market-valuable product at the level of at least MVP. More than half of respondents (53%) offer their product commercially on the market. Almost ½ of startups are in the growth phase, reaching product-market fit. There are also no significant changes to the level of development of startups studied last year.
In which sector does your startup operate?
(you can choose more than one answer)

- Telemedicine
- AI/machine learning
- Medical devices
- Medical data
- IT Tool - application
- Education
- Internet platform
- Other
- Rehabilitation
- Laboratory tests
- Biotechnology
- Providing health services
- Pharma/Dietary supplements
- Robotics
- AR/VR
- Wearables
- Dietary Services
- Blockchain
- Medicine

The largest number of respondents because as many as 63 startups (55% of subjects) indicate telemedicine as one of the areas of activity followed by AI/machine learning (52 startups, 45% of the audited) and ex aequo medical devices with the medical data area (43 startups, 37% of all the audited entities). It is worth noting the noticeable increase compared with last year in projects related to artificial intelligence and machine learning. In 2020, only 22 startups identified AI/machine learning as an area of activity. It is also the dominant business area of startups, which have indicated that they are at the stage of commercialisation, although the small number of startups from this area scales the solution already in place (only 2). These figures show a dynamic increase in interest in artificial intelligence in health - a trend that is certainly worth observing in the future. We hope that, over time, even more startups from the AI/machine learning area will be able to boast of the scale of their activities successfully.

Does your product/service has the CE certificate?

- No
- Yes
- Does not apply

Out of the startups that took part in the Report 44% (50 startups) indicate that the CE certificate is not required for their products. 30% (34 startups) hold the required CE certificate, whereas 27% (31 startups) do not yet hold the required CE certificate. None of the startups at the Proof of Concept stage hold the required CE certificate, while it is held by 29% of startups at MVP stage, 38% at the commercialisation stage and 46% at the expansion stage, which shows that in nearly half of cases the CE certificate is necessary to scale medical business successfully.

As regards this parameter, there are no significant changes compared with the data from the previous edition of the Report.
43 startups (37%) from the treatment group indicate that their products or services are not patentable. As many as 31 startups (27%) have obtained patent protection for their innovations, which shows that the authors of medical startups in ¼ of cases create an innovation at a level worthy of patent protection. 37 startups (32%) see the potential for patenting the developed innovation in the future.

Do you have a business model established?

The vast majority of the audited startups already have a business model - only 8% (9 startups) indicate that there is no business model in this regard. Such positive indicators in this area can be attributed to the dynamic activities of the startup environment (incubators, accelerators), which help starting innovators to develop a model for the commercialisation of their products or services. This positive trend has not changed since the last edition of the Report, where 7% of startups indicated the lack of a developed business model.

What is your current level of financing?

The largest number of medical startups in Poland obtained external financing at the level of PLN 1-2 million. This may be caused by the popularity of grant programs such as 01.01.02 POPW (Eastern Poland Operational Program; the value of co-financing up to PLN 1 million) and BRIdge Alfa investment funds, whose investment resources usu-
ally amount to approximately PLN 1 million. Apart from external financing, bootstrapping (financing the project from own resources, without indicating the amount thereof) is the most popular, which has been selected by 29 startups (25% of respondents).

The differences compared with last year’s audited group are not large - in 2020, the most frequently indicated level of financing was also the acquisition of external funds of PLN 1 - 2 million, which was selected by 19% of respondents. This indicates that the sources of financing medical startups in Poland have remained unchanged since last year.

Interestingly, at the expansion stage, as many as 13 respondents from the 35 most advanced startups (37% of respondents) indicated that they are financed from their own funds - this may mean that over 1/3 of startups in the growth phase have such a profitable business model that it does not require external financing. In this category, there are also projects which obtained the largest funding - 9 startups, i.e. 25% of respondents in this group have financing exceeding PLN 10 million.

What is the current level of financing of your startup at the Growth stage - we are working on acquiring new customers and product development?

<table>
<thead>
<tr>
<th>Level of Financing</th>
<th>Selected Startups</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 mln - 2 mln PLN</td>
<td>3</td>
</tr>
<tr>
<td>2 mln - 5 mln PLN</td>
<td>8</td>
</tr>
<tr>
<td>5 mln - 10 mln PLN</td>
<td>4</td>
</tr>
<tr>
<td>10 mln - 20 mln PLN</td>
<td>3</td>
</tr>
<tr>
<td>500 000 PLN - 1 mln PLN</td>
<td>11</td>
</tr>
<tr>
<td>1 mln PLN - 2 mln PLN</td>
<td>14</td>
</tr>
<tr>
<td>Bootstrapping</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
</tr>
</tbody>
</table>

Among the less developed startups - at the commercialisation stage - undertakings with an average level of financing prevail - respondents most often indicated financing at the level of PLN 1-5 million - such financing was obtained by 69% of startups at this stage of development. Here, own funding is far less popular - only 15% of startups in the commercialisation phase are financed.

Projects at the PoC (Proof of Concept) stage have the lowest level of funding - this shows that investors in the medical sector are not willing to invest funds in projects that have not yet developed the first version of their products. Of course, there were no exceptions to the rule here - one of our respondents in the PoC phase obtained funding at a level exceeding PLN 20 million.

What is the current level of your startup’s funding at the MVP stage (Minimum Viable Product - a product version which has enough functionality to meet expectations of the first customers and gather feedback for further development of the product)?

<table>
<thead>
<tr>
<th>Level of Financing</th>
<th>Selected Startups</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1 mln - 2 mln PLN</td>
<td>1</td>
</tr>
<tr>
<td>2 mln - 5 mln PLN</td>
<td>4</td>
</tr>
<tr>
<td>5 mln - 10 mln PLN</td>
<td>1</td>
</tr>
<tr>
<td>10 mln - 20 mln PLN</td>
<td>1</td>
</tr>
<tr>
<td>500 000 PLN - 1 mln PLN</td>
<td>11</td>
</tr>
<tr>
<td>1 mln PLN - 2 mln PLN</td>
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<tr>
<td>Bootstrapping</td>
<td>14</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
</tr>
</tbody>
</table>
Selected statistics
based on survey results

What is the current level of your startup’s funding at PoC stage (Proof of Concept - product version that shows its feasibility, but it does not yet meet the basic requirements of the customers)?

- 7 bootstrapping
- 6 1 min PLN - 2 mln PLN
- 5 500 000 PLN - 1 mln PLN
- 4 more than 20 mln PLN
- 3 lower than 500 000 PLN
- 2
- 1
- 0

What are your financing sources? (you can choose multiple)

- Funds from founders (bootstrapping)
- EU grants
- Organic growth
- National VC
- Private investors
- Incubation programmes
- Other investors
- Foreign VC
- Accelerators
- Others
- IPO
- Seedfunds
- Crowdfunding

Among the medical startups examined, by far the most popular form of financing is the financing from the funds of the founders (the so-called bootstrapping), which is used by as many as 62% of startups. The Report’s authors point to a significant increase in the share of this category compared with the data from 2020, when only 31% of respondents financed themselves with their own resources. This shows, on the one hand, the great belief of the founders of startups in the projects being created, and, on the other hand, it may indicate difficulties in supplementing the startup budget with external funds.

Another most popular financial category includes grants - EU grants are used by 39 startups (34% of respondents), national grants - 36 respondents (31% of respondents), incubation and accelerator programs, respectively 13% and 9% of respondents. Organic growth as a source of funding is indicated by 30 respondents, which, in the opinion of the Report’s authors, is a very high result, given the high costs of creating a product dedicated to the medical industry, as well as relatively high barriers to entry into the sector.

A very small number of Polish medical startups are still of interest to foreign investors - only 10 startups (9% of respondents) obtained such funding. The funds of private persons (business angels) are used by 24 startups (21% of respondents). Little more projects were invited on board by national VC (27 startups, 23% of respondents). This shows that a relatively significant proportion of private individuals are willing to bear the risk of investing in medical startups, which may be due to the desire to allocate capital in this segment of the highly social utility economy (impact investment).

IPO (stock exchange entry) is still a very rare way of raising capital among Polish medical startups - only 2 respondents used it. None of the respondents benefited from crowdfunding, which dynamically develops in other industries - the reason is perhaps that products dedicated to the medical industry are usually of low usefulness for healthy people, which may hinder the successful crowdfunding campaign.

Are you currently looking for financing?

- 22% YES
- 78% NO

Nearly over a quarter of respondents indicate that they are currently looking for funding. This may be caused by the gap in financing projects from public funds of more than PLN 1 million, which startups can obtain from the programs mentioned above, limited access to foreign investors and small activity of domestic VC in the area of health care, which is perceived as capital intensive and risky. Given the rather positive impact of the pandemic on the medical sector
and the sometimes excellent financial results of innovative companies in the medical sector, the Report’s authors are counting on increasing access to finance for medical startups in future years.

There is a correlation between the startup development phase and the financing needs - only 8% of projects in the PoC phase indicate that they are actively looking for an investor, while as many as 29% of projects in the growth phase are looking for ways of recapitalising the company.

Do you generate recurring income from the sale of the main product / service?

Only 40% of respondents declare that they generate recurring revenues from the sale of the company’s main product or service. This is in correlation with the indicated stages of startup development, where 53% of respondents indicated that a startup is at the stage of growth or commercialisation - this means that 13% of respondents achieved the first revenue from the sale of the company’s product but it is not yet recurring revenue. Once again, this shows the long way in which startups in the medical sector have to go to market the product and achieve stable monthly cash flows.

The success indicators defined by the audited startups clearly show growth oriented parameters - 37% of the Report participants indicate the number of startup’s solution users, 25% - revenues, 19% - capital raising, and only 3% (4 respondents) indicate profit. This shows that growth understood as a broad adoption of their solution is more important to medical startups presented in the Report, while the financial result remains on the second plan.

Are you currently present on the foreign markets commercially?

Just over half of the respondents (56% of startups) are not yet present on foreign markets but have plans to internationalise business. More than 1/3 of the respondents already operate on foreign markets through signed letters of intent, signed commercial agreements or registered foreign market revenues. Only 3 investigated startups do not have internationalisation plans; Polish startups clearly realise that the domestic healthcare market is too small to achieve considerable success. It is satisfactory that 17% of all Polish medical startups are successfully offering their products commercially abroad.
Network entrepreneurship
EIT Health Analysis

The aim of the study was to show the network of cooperation within the framework of the Polish ecosystem but also to create recommendations for individual market actors. Visualisation of the number and importance of links can help to understand the potential development scenarios of both startups and business environment institutions.

The analysis also takes into account the importance of individual nodes and network links by defining additional indicators:
- **closeness** is the ability to acquire new contacts,
- **betweenness** indicating the validity of an entity as a broker of information between different parts of the network,
- **eigen centrality**, i.e. the level of influence of the partners of the organisation in the network,
- **density**, which is responsible for the ratio of its relations with future potential relations,
- **transivity**, i.e. the overall likelihood that neighbouring network nodes will be interconnected, thus revealing the existence of closely interconnected communities (or clusters, subgroups, teams).

At the end of 2020, the EIT Health carried out a study on an ecosystem supporting startups in Poland. An analysis based on publicly available data from the startups websites and the main stakeholders of the health system identified key nodes and links that are essential axes for the development of medical and health innovation in the country. The study includes links between almost 550 entities that have been particularly active in the development of innovative projects in the last 5 years.

**Methodology – network entrepreneurship**

The methodology was based on an analysis of the network of links around startups, which entered into relations with other market players, such as investors, hospitals, research units or government agencies. The number of links (nodes) decided about the position in the so-called *page rank*, which defines the position in the ecosystem based on the number of links and other indicators analysed in the Report. Among the organisations that had the highest page rank ratio were, inter alia, National Centre for Research and Development, Polish Agency for Enterprise Development and EIT Health. The methodological assumptions of the EIT Health analysis are based on the so-called entrepreneurship network. This is an approach that presupposes that business value creation in modern societies can only be achieved if entities enter into diverse links and cooperation networks. Only such a network approach guarantees effective business development (entrepreneurship).

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1 Data was sourced exclusively from official sources such as websites.
2 The entrepreneurship network is based on a narrative based on a network model and not on a transactional model. Its basic principles are: set a common and ambitious target for the whole network, convince key people in the network, increase and aggregate confidence in the network and cooperate openly and generously. The EIT Health study has used an authoritative methodology using an algorithm to calculate the number of links, the proximity of individual nodes or their complexity.
Startups in the analysis

The analysis included data on links for 163 startups from Poland. The collected data was presented, just like the entire network, in the form of graphical links. It should be noted that, among the analysed startups, more than 30% had at least 5 important links with other organisations. This, of course, translates into higher values of closeness indicators. On the other hand, only 19 startups in the sample analysed had at least 10 links, which shows that the network entrepreneurship level is still relatively low and that the main startups’ relationships are limited either to institutions financing their activities or regionally concentrated.

However, in the entrepreneurship network methodology, it is crucial for startups to use the network to strengthen awareness of their brand. Startup usually does not have a large budget and marketing
resources, and in the initial phase it is necessary to deliver to a significant number of customers (doctors, patients), investors or business environment institutions or regulators. Startup should ensure the best possible diffusion of information on its product and service. Neither the number of links nor the betweenness factor is important but the eigen centrality. In other words, if startups intelligently establish relationships with key organisations in the network with the highest eigen centrality index, there is a chance that more people and institutions will learn about its innovation.

The above figure illustrates the comparison of two startups:
StethoMe and Dr Omnibus. While the first has more links of 21, its eigen centrality ratio is lower (0.19) than Dr Omnibus: 17 connections and 0.23 respectively.

**Business environment institutions**

Several dozen institutions of the business environment have been taken into account for the analysis. The data obtained made it possible to create a graphic presentation of the interconnections, clusters and contact networks. According to the network entrepreneurship methodology, organisations were analysed against key indicators, i.e. closeness, betweenness and eigen centrality. In addition, the rank page was defined for them, i.e. the overall position in the network and the importance for its functioning. The table below shows four organisations which have at least 20 links with other organisations in the network.

<table>
<thead>
<tr>
<th>Organisation name</th>
<th>Closeness</th>
<th>Betweenness</th>
<th>Eigen centrality</th>
<th>Page rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Centre for Research and Development</td>
<td>0.4054</td>
<td>51184.44</td>
<td>1.0000</td>
<td>0.0396</td>
</tr>
<tr>
<td>Polish Agency for Enterprise Development</td>
<td>0.3800</td>
<td>37188.16</td>
<td>0.7256</td>
<td>0.0320</td>
</tr>
<tr>
<td>EIT Health</td>
<td>0.3058</td>
<td>7222.74</td>
<td>0.2365</td>
<td>0.0126</td>
</tr>
<tr>
<td>Technology Entrepreneurship Foundation</td>
<td>0.3519</td>
<td>17498.36</td>
<td>0.3450</td>
<td>0.0119</td>
</tr>
</tbody>
</table>
The most important indicator is closeness, as it reflects the real possibility of acquiring new partners in the network. Organisations usually have limited resources, their objectives are set in time and their business objectives must be achieved in accordance with an internal strategy. It is therefore worth noting with whom further relations are established. To do so, it is necessary to use the betweeness index, which will help make a decision with whom it is worth cooperating. Below is a simulation for EIT Health, which links the entity to 15 other organisations in the network with the highest betweeness index.

It turned out that the selection of further links in the network based on the betweeness index is crucial. In the case of EIT Health, the importance of the organisation in the network has been improved five times, i.e. not only the number of links has increased but also the closeness ratio from 0.30 to 0.44.

**Final conclusions**

The Polish network entrepreneurship ecosystem is still characterised by low internal maturity. This means, inter alia, that the density ratio is relatively low. EIT Health also analysed an ecosystem of links in Hungary during a similar period and results were very similar, which may be influenced by many macroeconomic factors (e.g. the level of investment in the ecosystem) but also by social factors, such as a culture of cooperation. In addition, the transitivity rate in Poland is low. Complex nets, especially small size networks, often have a high transitivity value and a small diameter. This means that the flow of information of major importance to the network as a whole is simpler and more efficient. Networks are developing faster on the basis of common values and objectives. For example, the absence of one of the significant network partners, such as an important institution responsible for financing or business development/validation, may result in a significant reduction in the value of such an ecosystem. It is therefore worth investing in building initiatives that provide common goals and values conducive to the development of new links.

The success and development of networks do not depend solely on bilateral transactions between persons and organisations but must go significantly beyond the specific interests or individual success indicators. Achieving the objectives resulting from the methodology, entrepreneurship network, improves individual indicators of network partners, i.e. page rank, betweeniness, closeness and eigen centrality. A more functional ecosystem contributes to making full use of the ‘win-win’ strategy in establishing and implementing relations between persons and organisations. The Top Disruptors in Healthcare Report is one of the initiatives that significantly support startups in the development of their network of connections and may have a direct impact on improving the indicators of network partners.
Review of the innovative medical startups in Poland
Aether Biomedical
Limited Liability Company.

www.aetherbiomedical.com

Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
We have caught the wave: we certified our product as a first-class medical device and obtained the CE marking, we started selling, we acquired satisfied customers, we signed distribution agreements with prosthetic centres from India and Portugal, and we are in the process of finalising agreements with distributors from Spain, the Netherlands, Denmark, Italy, Nigeria, Sri Lanka and Norway. We managed (despite the pandemic) to collect seed round of PLN 3.3 million from Sunfish Partners – the German-Polish venture capital fund, as well as the Indian Chiratae Ventures and Joyance Partners fund with California and UK branches. We successfully implement the research and development project on another, improved version of Zeus product (bionic prosthesis for persons after amputation or with congenital absence of upper limbs) under the care of the NCRD. Earlier, we were in TOP10 startups from the robotics industry and IOT at TechCrunch Disrupt Berlin and in the final of the Polish edition of the prestigious Chivas Venture competition.

Zeus is the main product that we are currently working on and which will be the basis for the creation of other modern medical devices in the near future, as well as the extension of activities to include the exoskeletons and telemedicine industry, as our mission is to create a coordinated rehabilitation mechanism such as the RehabOS operating system.

How did the Covid-19 pandemic affect your business?
6 - equivocal impact.

Describe the influence of Covid - 19 on your business.
The pandemic had a significant impact on the operation of our company. Above all, it delayed and sometimes prevented the supply of certain components needed for production, so we had to find alternative solutions. The finalisation of the product certification process and its entry into sale has been delayed. This situation also had a positive impact in certain issues because, among other things, due to the need to switch to hybrid work (remote + at the premises for production purposes, with all forms of safety and caution), we started working in the Framework Scrum, which optimised our work and allowed us to significantly increase our efficiency at every level. Covid-19, too, did not prevent us from bringing together the financing round, which we consider to be an unprecedented success.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Medical devices, Rehabilitation.

Information on the solution

What is your product/service?
Zeus is a CE marking device which is sold in Poland and India. We are currently registering distributors throughout Europe, and we are finishing FDA’s approval of placing on the US market at the beginning of next year.

4 - you significantly better in than other similar or currently used solutions on the market?
As the studies of people after amputations show, this is a community that is worth fighting for. There are about 10 million people in the world who have lost their upper limbs but only 5% of them have access to prostheses. The main reasons for this are their high price and their lack of satisfaction with their functionality and their usefulness.

Zeus is a multifunctional bionic hand prosthesis for persons after amputation of the upper limb with intuitive control and sensory feedback for the user. It is characterised by a high grip force (up to 152 N, which makes it the strongest prosthesis currently available on the market), high resistance (up to 35 kg), resistance to impact and fully configurable design. Everyone may be the designer of his or her product. By giving users the opportunity to customise prostheses, we wanted to breathe their personality into them and make them feel more confident and efficient.

Zeus was created to fill this gap, i.e. the absence of a highly advanced and functional hand prosthesis, which is financially within the reach of the hand of people who need it most. Our secrete is to create a product that is equally efficient and at the same time cheaper than other bionic prostheses by 40%. The highest quality at an affordable price is the key that opens the door to many markets and helps 95% of people after amputations and born without an upper limb to improve their everyday lives and return to work.

What distinguishes you from the competition?
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Aether Biomedical
Limited Liability Company.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Aether Biomedical acts as B2B business, selling Zeus prosthesis to prosthetic centres, which then form a prosthetic funnel individually (depending on the level of amputation) and adjust the product to patients and provide training. This represents almost 70% of the market. Other distribution channels are non-governmental organisations, CSR programs and military units.

Today, the market of prosthetics and orthotics is valued at EUR 7.2 billion, the bionics occupies 10% of the entire market but now, with a growing CAGR of approximately 10% per year due to technological progress in Machine Learning, Digital Signal Processing and Additive Manufacturing, improving the refund conditions and increasing demand for functional hand prostheses, it is a very lucrative market that will only gradually grow.

Our market strategy varies from country to country, and we cooperate with many stakeholders, such as distributors, refund operators, certification bodies and prosthetic centres, to place Zeus on the market.

Indicate the institutions with which the startup most often cooperates.
Investors, Research Institutes, Regulators.

What is the current level of funding for your startup?
PLN 5 million - PLN 10 million.

What sources of funding do you have?
Grants from national funds, Grants from European funds, Other investors (e.g. industry investors), national VC, foreign VC, Accelerators.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.
AIDA Diagnostics
Limited Liability Company.

https://aidadx.io/

Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
We have started the process of implementing our solutions to hospitals.

How did the Covid-19 pandemic affect your business?
6 - equivocal impact.

Describe the influence of Covid - 19 on your business.
The pandemic situation highlighted the problems of blood availability and recognised the value of systems that help manage the blood economy properly. Due to Covid-19, hospitals became less accessible, which postponed the dates of the planned clinical trials and thus the completion of the work on one of our main products, CDSS.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
AI/machine learning, Medicine.

Information on the solution

What is your product/service?
Model of prediction of blood component demand, CDSS, communication chat for hospitals.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
There are currently no solutions that we are offering. We can only present the results of our solutions and what we are trying to do. We are seeing a loss in the blood economy of up to 20% depending on the state. In the case of Poland, this means even tens of millions of zlotys each year, which have a chance to be saved.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The product is bought by a hospital, it is proposed in the subscription model, and the users are doctors and employees of blood banks and serology departments.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Research Institutes, Accelerators.

Finance

What is the current level of funding for your startup?
PLN 2 million - PLN 5 million.

What sources of funding do you have?
Private Investors (natural persons - Business Angels), Private Investors (private persons), Incubation Programs.

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA.

What factors decide about choosing the country of expansion?
Number of blood units transfused, level of advancement of hospital service systems.
AILIS Breast Cancer Prediction Technology

We are in the process of transforming the Limited Liability Company into Joint-Stock Company.

www.ailiscare.com

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
9 - positive impact.

Describe the influence of Covid - 19 on your business.
The COVID-19 pandemic accelerated the digitisation of medical services, including telemedicine, and openness to modern diagnostic methods. Covid has also shown how important it is to automate and use AI in medicine in the face of a decreasing number of doctors and/or limited access to traditional medical services. This major step and digitisation in the field of medicine makes our innovative solution easier to be implemented and adapted in our target markets.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, Medical devices, AI/machine learning, Medical data
We are not and will not be a medical entity but we will provide diagnostic services - we create a system for monitoring breast health, which allows very early detection of cancer lesions - has the potential to detect lesions even before they appear within other leading screening methods.

Information on the solution

What is your product/service?
AILIS is used for early detection of women’s breast cancer lesions. It is a comprehensive system for monitoring breast health, which allows for detecting breast abnormalities in women at a very early stage of their development, and also predicting the likelihood of such changes occurring in the future. The system consists of a device based on the Parametric Dynamic Imaging (hardware) method and AI algorithms which automate the analysis of results and allow for making a very precise diagnosis. The supported system is a mobile application for users and a platform for remote consultation with specialist doctors. Our solution shortens the diagnosis time to 15 minutes and offers very comfortable, painless, touchless and safe breast testing (without radiation). This is a breakthrough not only at the level of the method itself but also at the level of approach to women, respect for their needs and a sense of dignity.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Diagnosis rate - in the USA, women have to wait for the results of mammographic examination for a few weeks, and we receive the result in 15 minutes. By automating the diagnosis process through the use of AI, we also relieve radiologists at work, who already start to be lacking in the world.
Effectiveness in the examination of the so-called dense breasts - over 40% of women in the world have a dense breast construction (as much as 70% in Asia), which is difficult to test in mammography. Here, dense breast construction is not an obstacle at all and does not reduce the sensitivity of the examination.
Costs - the cost of detecting one breast cancer taking into account only the working time of radiologist in the case of mammography in the USA is USD 1,562. In AILIS, we reduce this ratio to USD 6.
Comfort - our examination is fully comfortable and safe, women who have been examined so far say that it is even relaxing. This is a great advantage, unlike existing screening methods, which are often painful or at least unpleasant. We are changing the approach to the examinations and needs of women by offering them a service that will provide them with positive experiences and make them want to be examined more frequently.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The service is addressed to women (end user). Sales are possible in the subscription model. Nor do we exclude cooperation with insurance companies wishing to include their customers in preventive monitoring.

Indicate the institutions with which the startup most often cooperates.
Investors.
AILIS Breast Cancer Prediction Technology
We are in the process of transforming the Limited Liability Company into Joint-Stock Company.

Finance

What is the current level of funding for your startup?
PLN 5 million - PLN 10 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, Grants from European funds, Private Investors (natural persons - Business Angels), Private Investors (private persons).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Acquisition of capital + obtaining the necessary certificates.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
USA, Great Britain, Germany, China, Asia.

What factors decide about choosing the country of expansion?
Potential of the target market.
Have you participated in the previous edition of the Report?  
Yes.

How did the Covid-19 pandemic affect your business?  
2 - negative impact.

Describe the influence of Covid-19 on your business.  
It delayed both the supply of equipment and limited the possibility of conducting laboratory tests.

Indicate the current stage of development.  
PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work?  
Medical devices, Laboratory tests.

What is your product/service?  
Bioreactor for stem cell culture.

Does the product/service have a CE certificate?  
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?  
The use of our bioreactor will make it possible to shorten time and increase productivity in the culture of mesenchymal stem cells.

Do you have a business model already developed?  
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.  
One-off payment for bioreactor and subsequent sale of one-off culture inserts.

Indicate the institutions with which the startup most often cooperates.  
Investors, Universities, Research Institutes.

What is the current level of funding for your startup?  
PLN 500,000 - PLN 1 million.

What sources of funding do you have?  
Own funds of the founder (bootstrapping), Grants from national funds, Private Investors (private persons).

Are you currently looking for funding?  
No.

Do you generate repeated revenues from the sale of the company’s main product/service?  
No.

What are the key measures of your success at this stage of your development?  
Number of users.

Are you now commercially present on foreign markets?  
We are not present but we are planning to be.

What countries are important for the success of your business?  
EU countries.

What factors decide about choosing the country of expansion?  
Small competition.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

AnyRobot
Limited Liability Company.

www.anyrobot.com

Current needs
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. COVID-19 became an accelerator of business development. The management staff is willing to optimise boring and recurrent tasks in order to motivate employees and multiply their potential.

General information on the organisation
Indicate the current stage of development. Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Robotics, AI/machine learning, Medical data.

Information on the solution
What is your product/service? AnyRobot is a user-friendly, inexpensive tool to automate processes (RPA). It works well in every industry – robotisation supports everyday work in healthcare, production, logistics and many other areas. Process robotisation is an efficient solution using the possibilities of machine learning (ML) and artificial intelligence (AI). AnyRobot does not replace people but it takes over the boring tasks that nobody likes. This allows employees to create unique values and to deal with tasks that bring mutual benefits.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Our solution ensures full service - from business consultation and identification of processes, through optimisation and automation of processes, support and care to the implementation process. We also provide staff training and change management assistance.

Do you have a business model already developed? Yes.
If so, describe your business model briefly, taking into account who is a user and who pays. Users are usually medical corporations and hospitals. Payment - robot licence model.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors, Financing Institutions.

Finance
What is the current level of funding for your startup? Bootstrapping.

What sources of funding do you have? Founder’s own funds (bootstrapping), Private Investors (private persons), Organic growth (financing from revenues).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? Yes.

What are the key measures of your success at this stage of your development? Revenues.

Foreign expansion
Are you now commercially present on foreign markets? Registered foreign market revenue.

What countries are important for the success of your business? EU countries, USA, Great Britain, Latin American countries.

What factors decide about choosing the country of expansion? Knowledge of the market and well-established network of contacts.
Aurero
Limited Liability Company.

https://aurero.com

Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Very dynamic development.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid-19 on your business.
Covid has made our recipients aware that any implementation or training can be carried out remotely, which was reflected in cost optimisation. At a time of pandemic, cloud solutions have become a desired commodity, and the pre-pandemic fear of the new has lapsed.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Pharma/Dietary supplements, Telemedicine, Tool IT - independent IT application, Medical data.

Information on the solution

What is your product/service?
End-to-end platform for comprehensive management of medical facilities, integrating suppliers of specialist solutions.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
As the only one on the market, we have such a broad portfolio of projects so that our target group can replace all its existing tools with one comprehensive Aurero solution.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We operate in the SaaS model, medical facilities are the end users. However, we are trying to design our solutions with the conviction that a patient is the recipient of our systems because he/she is (or at least should be) at the heart of the health care system.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities.

Finance

What is the current level of funding for your startup?
PLN 500,000 - PLN 1 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Private Investors (natural persons - Business Angels), Other investors (e.g. industry investors).

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
Signed letters of intent.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Specificity of the health care system.
BioCam
Limited Liability Company.

https://biocam.pl

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
2 - negative impact.

Describe the influence of Covid-19 on your business.
Delays in the supply of electronic and optical equipment from China, delays in negotiations and formalities with the hospital and the Bioethics Committee in the context of the medical experiment. All this translated into delays in the project schedule. Infections and quarantine of key personnel of the company, including the CTO. Forced switching to remote work, which in the case of hardware work is not always fully possible without downtime at work and in the project schedule.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, Medical devices, AI/machine learning.

Information on the solution

What is your product/service?
BioCam deals with capsule endoscopy and we would like to popularise it as a low-invasive, patient-friendly alternative to gastroscopy and colonoscopy and programs for screening cancers and alimentary system diseases.

We provide a new system of capsule endoscopy for observing and diagnosing alimentary system diseases. The system that is completely safe and not invasive and capable of recording the entire digestive tract. It can be easily used by patients at home and physicians can monitor results in real time.

We allow the examination to be carried out remotely - patients do not have to attend in person a medical facility and may carry out the examination at their homes. This ensures both comfort and safety of the examination. Traditional endoscopic treatments also pose an increased risk of SARS-CoV2 transmission. Our solution allows safe diagnosis during the pandemic. No competition product allows a remote examination with an endoscopic capsule.

We create a platform for data aggregation - the platform will allow to collect and automatically analyse very large amounts of medical data from research by means of the telemedical platform. No entity has yet undertaken to make such a base.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We shorten the test time - currently the time of examination with an endoscopic capsule together with a physician’s analysis is even between 6 and 12 hours. Thanks to the use of artificial intelligence, we can shorten the examination and its analysis to 20-40 minutes, saving time for both the patient and the doctor, thereby relieving the healthcare system.

We reduce the costs of the examination - currently the costs of the endoscopic capsule itself amount to approx. PLN 2500. In addition to the costs of the examination, this amount increases to PLN 6 thousand. We want our examination to be available to every patient who needs it - which is why the cost of the entire examination with our capsule will be approx. PLN 1,000 - it is an amount that will enable our solution to be reimbursed.

Hardware advantage: 3D positioning, precise temperature measurement, stopping at the disease lesion site.

Software advantage: possibility of automatic image analysis - detection of disease lesions and bleeding in real time.

Key distinguishing marks: AI, HD image, Bluetooth, reduction of examination costs, retention at the site of change, imaging - entire alimentary system, real-time analysis, NBI imaging, 3D positioning, automatic image analysis, temperature measurement, innovative software.

An additional distinctive functionality of Biocam endoscopic capsule is:
• precise positioning of the capsule inside the patient – this function allows to accurately plan the site of the surgical procedure in the case of detecting a lesion,
• precise temperature measurement – allows to detect potential inflammatory focuses,
• retention at the site of change by means of a strong permanent magnet by medical staff – allows accurate indication of the place of change to a surgeon.

In addition, the considerably distinguishing functionality of the Biocam software prototype is: automatic image analysis - detection of disease lesions and bleeding,
• high intuitiveness of the interface – it was created after many consultations with medical personnel.
BioCam
Limited Liability Company.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Licensing technology to industry partners – corporations.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Accelerators.

Finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), national VC.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Bringing the technology to examinations on patients, verified technology working in real conditions, interest and partnerships of industry corporations, implementation pilot programs.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Above all, we are interested in highly developed countries, where innovative medical technology has the chance of the greatest scalability and fastest entry into the market.
BioMinds Healthcare
Limited Liability Company.

www.biominds.pl

Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. Our system solves problems with access to rehabilitation services. COVID has increased interest in our solution.

General information on the organisation

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Telemedicine, AI/machine learning, AR/VR, Rehabilitation.

Information on the solution

What is your product/service? BioMinds XR product system ensuring simultaneous, individually adapted motor therapy, adapted cognitive therapy, treatment of everyday life activities, alternative communication (restoring the patient’s subjectivity in social situations - from the most basic social unit such as the family to the possibility of functioning in social situations requiring discussion) and psychological therapy (post-traumatic stress therapy). This comprehensive therapy (including movement, cognitive, psychological and social dimensions), through the use of small size devices (VR/AR goggles), is possible anywhere and in every body position. This is important for people at an early stage of illness when they have to stay in a lying or semi-lying position and are normally not covered by classic rehabilitation at that time. In occasional cases where this rehabilitation is possible, it does not take place in the expected time dimension (short-term stimulation repeated several times during the day). Using realistic graphics – in line with the Montessori Lifestyle approach and the Reformed Snoezeelen approach, it is still important from an emotional and social point of view to deliver aesthetic and realistic experiences to the patient. The realistic graphics bring the patient closer to the fullest possible immersion in the real social situation. The innovation of the communication module involves an advanced use of the latest communication technologies AR/XR/VR/MR - techniques that extend the surrounding reality are either inexpensive or so easy to use (intuitive) that they completely change the way people communicate with the linguistic difficulties resulting from a neurological disorder, and ensure the possibility of permanent use without complications in hospitals, houses and therapies.

Does the product/service have a CE certificate? No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? The solutions existing on the market supporting neurological rehabilitation in an uneven manner involve cognitive therapy vs. motor therapy (for cognitive therapy, the advantages include: C-eye, Afa-system; for motor therapy: FitMi Home Therapy, Rapael Smart Glove, Healim VR, VR Stroke Rehabilitation, Neuro Rehab VR). Within any of these systems, it is not possible to internally modify the degree of involvement of the relevant function within the same task - which is ensured by the BioMinds XR solution.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Based on statistical data and possible acceptable prices by users; „Cost Effectiveness Model NICE Clinical Guidelines, No. 162., National Clinical Guideline Centre (UK), London: Royal College of Physicians (UK); 2013 May 23”, “Assumed GDP per capita in Euro area in 2019 from Eurostat”, and the average amount of reimbursement per neurologist per patient in Europe of an average of EUR 3600, and assuming that on average 2.5% of doctors are considered to be the first to install innovative systems, it was assumed that the corresponding versions of BioMinds Healthcare XR are the main revenue stream.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors, Regulators, Accelerators, Incubators.
BioMinds Healthcare
Limited Liability Company.

**Finance**

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, Private Investors (private persons).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

**Foreign expansion**

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, China, Japan.

What factors decide about choosing the country of expansion?
Market size and number of customers.
BIOTTS S.A.
Joint-stock company.

www.biotts.com

Current needs

Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? We have received a Quick Path, we have obtained an investment fund, we have hired new employees.


Describe the influence of Covid-19 on your business. Delays in raw material delivery.

General information on the organisation

Indicate the current stage of development. Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Pharma/Food supplements, Biotechnology.

Information on the solution

What is your product/service? Medicines, food supplements, cosmetics.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Possibility of transmitting all drugs from each group through the skin and the possibility of transferring each particle through the skin.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Sale of licenses.

Indicate the institutions with which the startup most often cooperates. Investors.

Finance

What is the current level of funding for your startup? PLN 10 million - PLN 20 million.

What sources of funding do you have? Own funds of the founder (bootstrapping), Grants from European funds, Private Investors (private persons), National VC.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, USA, Great Britain, Germany, China.

What factors decide about choosing the country of expansion? Sale of licenses.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

BrainScan
Limited Liability Company.

www.brainscan.ai

Current needs

Have you participated in the previous edition of the Report? Yes.


Describe the influence of Covid - 19 on your business.
No greater influence, possibly hindered contact with hospitals.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
AI/machine learning, analysis of CT imaging tests of the brain.

Information on the solution

What is your product/service?
Automatic analysis of CT imaging tests of the brain.

Does the product/service have a CE certificate? Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Vertical approach in terms of the number of body parts and horizontal in terms of the number of lesions recognised.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
A tele-radiological network or a medical unit, using the results of automatic classification of a radiologist, is the payer.

Finance

What is the current level of funding for your startup? PLN 5 million - PLN 10 million.

What sources of funding do you have? Own funds of the founder (bootstrapping), Grants from national funds, National VC.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Revenues.

Foreign expansion

Are you now commercially present on foreign markets? Commercial agreements signed (e.g. distribution).

What countries are important for the success of your business? EU countries.

What factors decide about choosing the country of expansion? Certificates held.
Have you participated in the previous edition of the Report? 
No.

How did the Covid-19 pandemic affect your business? 
4 - equivocal impact.

Describe the influence of Covid-19 on your business. 
The pandemic slowed down the implementation of projects at Universities.

Indicate the current stage of development. 
Commercialisation stage - we have the first payers.

In what areas does your startup work? 
Telemedicine, Wearables - not medical devices, Education, brain-computer interfaces, neuroinformatics.

What is your product/service? 
Fully own (IP) equipment and software of EEG/BCI systems for industrial, scientific research and education:
- Wired and wireless amplifiers and headset EEG with software for psychophysical experiments and brain-computer interfaces,
- Complete EEG/BCI teaching laboratory that we can implement from scratch (hardware, software and teaching materials) according to the Customer’s requirements and expected profile of students,
- A worldwide unique reaction testing device via SSVEP,
- Polish Interactive Alternative Communication System PISAK.org,
- Services of a specialist team of active neuro computer scientists in the scope of consultation of research / commercial projects and implementation of BCI/ExG technology.

Does the product/service have a CE certificate? 
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? 
As one of the very few companies in the world, we have complete (hardware and software) EEG and BCI solutions based entirely on our own IP, supported by publications in prestigious scientific journals, and a unique and recognisable team of neuro computer scientists in Poland, capable of implementing research and education solutions, also in Polish and experienced in conducting R&D projects. Our products are among the best in the world, with high price competitiveness, partly thanks to low marketing expenditures. Some products are unique in the world (Blinker, new headset).

Do you have a business model already developed? 
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. 
Software equipment: universities, research laboratories, BCI enthusiasts (one-off payment). 
Research services: research companies (e.g. payment for consultations and equipment rental).

Indicate the institutions with which the startup most often cooperates. 
Universities, Research Institutes.

What is the current level of funding for your startup? 
PLN 5 million - PLN 10 million.

What sources of funding do you have? 
Founder’s own funds (bootstrapping), Grants from European funds, Organic growth (financing from revenues).

Are you currently looking for funding? 
No.

Do you generate repeated revenues from the sale of the company’s main product/service? 
Yes.
BrainTech
Limited Liability Company.

What are the key measures of your success at this stage of your development?
Popularity in media, scientific publications confirming the quality of the systems offered.

Foreign expansion

Are you now commercially present on foreign markets?
Yes, the first retail sale outside the EU was completed.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
First of all, the interest of distributors.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Breast Idea
Limited Liability Company during formalisation.

https://breastidea.com

Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. Increased emphasis on medical teleconsultations.

General information on the organisation

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Telemedicine, Tool IT - independent IT application.

Information on the solution

What is your product/service? Online application for anthropometric measurement of breasts.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Price, easy availability, clinical orientation, handing over full control in the hands of a specialist.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. B2B. Product sold to clinics or individual practitioners of plastic/oncological surgery, in the SaaS model (software as a service). The final user is a specialist physician.

Indicate the institutions with which the startup most often cooperates. Hospitals, Research Institutes.

Finance

What is the current level of funding for your startup? PLN 500,000 - PLN 1 million.

What sources of funding do you have? Private investors (private persons).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.

Foreign expansion

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, USA, South Korea.

What factors decide about choosing the country of expansion? Number of plastic surgeries performed.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
3 - negative impact.

Describe the influence of Covid-19 on your business.
We have experienced difficulties in the delivery of components.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, Rehabilitation.

Information on the solution

What is your product/service?
Respiratory rehabilitation system, which enables treatment of asthma and COPD, among others, based on breathing controlled games. The system consists of a portable device that connects to a phone, computer, tablet on a mobile basis.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Only stationary, large mechanical respiratory rehabilitation devices are available on the market, and our product enables convenient rehabilitation in domestic conditions, using interactive games.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The device is bought by persons after recovering from SARS Cov-2 infection and persons with asthma and COPD (one-off payment), making monthly subscription for access to breathing controlled games.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutes, Financing Institutions, Accelerators, Incubators.

Finance

What is the current level of funding for your startup?
PLN 2 million - PLN 5 million.

What sources of funding do you have?
Grants from European funds, national VC.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion?
First of all, reliable data on lung diseases in society.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

CancerCenter
Limited Liability Company.

https://cancercenter.ai

Current needs

Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? We have developed a platform for histopathology - https://pathoplatform.cancercenter.eu with a module for assessing the Gleason grading system in prostate gland assessment and a radiology tool: radiology.cancercenter.eu.


Describe the influence of Covid-19 on your business. The pandemic forced remote consultations and increased the interest among physicians and medical centres in our solution.

General information on the organisation

Indicate the current stage of development. Commercialisation stage - we have the first payers.

In what areas does your startup work? Telemedicine, AI/machine learning, Medical data, Education, Oncological diagnostics.

Information on the solution

What is your product/service? Tools to support oncological diagnostics in:
1) histopathology:
   PathoPlatform (https://pathoplatform.cancercenter.eu)
   PathoCam (https://micro.cancercenter.ai)
2) radiology and oncology (https://radiology.cancercenter.eu):
   through web-based tools for analysis, annotation, making available histopathological preparations, dicom photographs (MRI, CT, PET) and AI algorithms/machine learning.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? We already have many cooperating units, a ready platform and a tool for digitisation.

Finance

What is the current level of funding for your startup? PLN 2 million - PLN 5 million.

What sources of funding do you have? Founder's own funds (bootstrapping), Grants from national funds.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company's main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.

Foreign expansion

Are you now commercially present on foreign markets? Signed letters of intent.

What countries are important for the success of your business? EU countries, USA, India.

What factors decide about choosing the country of expansion? Potential for commercialisation and contacts with physicians/institutions.
Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? Over the last year, we have acquired new customers in Poland and abroad. Thus, we have also enlarged the Cardiomatics team. We are constantly developing our software to meet the needs of an increasing number of users. We have seen a three-fold increase in users.


Describe the influence of Covid - 19 on your business. Cardiomatics offers state-of-the-art digital analyses of holter ECG data based on artificial intelligence. Thanks to Cardiomatics, healthcare professionals quickly receive Reports that are easy to read and use smarter diagnoses and better work flows. However, the Cardiomatics analysis process usually involves the necessity for patients to come to a medical facility and connect Holter. During the first wave of the pandemic, a significant part of clinics was closed and the ECG analysis movement decreased by about 50%. Fortunately, this has not taken a long time. Patients returned quickly and physicians resumed ECG tests. Moreover, despite the pandemic, we are seeing better circumstances for implementing our solutions and we are carrying out much more analyses than we have done so far. The coronavirus pandemic has resulted in a rapid increase in the acceptance of digital solutions in the healthcare system for both patients and healthcare professionals. Cardiomatics is a tool for automating cardiological diagnostics, ensuring high quality of analyses, therefore doctors more and more often decide to use our solution to transfer human resources where they are most needed.

What is your product/service? Cardiomatics is an AI based tool that supports cardiological diagnostics. Medical workers shall send ECG signals of any length through a dedicated online platform that are analysed by advanced algorithms. As a result, a reliable Report is created automatically, on which a doctor can base further diagnosis.

Does the product/service have a CE certificate? Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? The ECG signal analysis is automatic and very fast. The user can send signals from different devices without the need to install additional software on their own computer.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. The main users of Cardiomatics are doctors, the service is reimbursed. Business model: subscription model (per device per month) and pay per use (for each generated Report). We also cooperate with prestigious scientific centres (the Warsaw Medical University, University of Basel), which use the Cardiomatics solution in their research work.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors, Universities, Financing Institutions.

Finance

What is the current level of funding for your startup? PLN 2 million - PLN 5 million.

What sources of funding do you have? Grants from domestic funds, Private Investors (natural persons - Business Angels), national VC.
Cardiomatics
Limited Liability Company.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Conducive legal regulations related to the required certification on individual markets and reimbursement system beneficial to physicians.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?

The most precious value of the CH technological group is its Scientific Team. We have great respect for the national and global medical achievements, which we are allowing ourselves to develop and complement with advanced technological and innovative solutions that will significantly translate into increasing patient health and the functioning of medical facilities. As the only company in Europe carrying out the startup, we are conducting such extensive research and development works, and we associate such a large group of scientific institutions. Against the background of the competition, we are distinguished primarily by our holistic approach to the problem of healthcare, and our care for details and patient satisfaction are crucial. Above all, the mission and saving human life are to become the cornerstone of our activities.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.

Within Copernico Health, due to the wide spectrum of building its Technological Group, the customer model and portfolio differ from each other in individual segments of its activities.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutes, Regulators, Accelerators, Incubators.

What is the current level of funding for your startup?
30% of the financial commitment.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, National VC, Incubation Programs.

Are you currently looking for funding?
Yes.

Copernico Health
Limited Liability Company.

www.copernico.group

Have you participated in the previous edition of the Report?
Yes.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid-19 on your business.
Covid-19 allowed our startup to expand our service portfolio and diversify activities focusing primarily on promoting good human development.

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Biotechnology, Wearables - not medical devices, IT Tool - independent IT application, Internet Platform (marketplace), AI/machine learning, Medical data, Laboratory tests, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity, Education, Rehabilitation, Gynaecology, Food, Genetics.

What is your product/service?
Due to the characteristics of startups, we cannot yet identify all our designed products/services. Three different brands have already been created under Copernico Health: Asklepios Cure - focusing on the problem of wound treatment, with the use of plasters with ASU technology, Steriproof - ensuring safe disinfection of surface, tools and human skin and Lullaby - paediatric products that ensure the sustainable development of infants from the first days of their lives.

Does the product/service have a CE certificate?
No

What is the current needs?

General information on the organisation

Finance

What is the current level of funding for your startup?
30% of the financial commitment.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, National VC, Incubation Programs.

Are you currently looking for funding?
Yes.
Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA.

What factors decide about choosing the country of expansion?
Population, demand for individual products and services.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

**Current needs**

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
10 - positive impact.

Describe the influence of Covid-19 on your business.
The pandemic initiated the development of our startup, which is directly related to COVID-19. Together with our student friend, we have set up the startup, which helps laboratories and pharmaceutical companies construct better RT-PCR tests and mRNA vaccines. Thanks to our AI models, which, among other things, foresee virus mutations, it is possible to construct tests and vaccines with higher efficacy.

**General information on the organisation**

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Biotechnology, AI/machine learning, Medical data, Laboratory tests.

**Information on the solution**

What is your product/service?
Our first product is a tool to verify the effectiveness of the RT-PCR test (among others, by giving primers, hybridisation temperature). It makes it possible to verify how virus mutations affect and will influence the effectiveness, sensitivity and specificity of the virus. In the near future, we also intend to introduce a system that proposes concrete changes to primers in order to better align the test with the geographical region concerned. SARS-CoV-2 mutates differently in different regions, so the best solution is to adapt the test to a small region.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Machine learning and AI are only appearing slowly in the medical industry, all the more in genetics. In our opinion, ML and AI revolutionise 21st century medicine, just as statistics revolutionised 20th century medicine. Nobody is currently using such advanced learning models, nor does they have such access to the data that we have. This gives us a significant advantage over other companies. In addition, we have world-class mentors, such as Prof. Krzysztof Pyrć, Prof. Henryk Michalewski, who help us use our models best.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Pharmaceutical companies and laboratories that develop RT-PCR tests are the end users. The model is subscription, there will be 3 different versions (with different functions and prices). Of course, we provide these services in the B2B model.

Indicate the institutions with which the startup most often cooperates.
Investors, Universities, Research Institutes.

**Finance**

What is the current level of funding for your startup?
PLN 500,000 - PLN 1 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Private Investors (natural persons - Business Angels), Organic growth (financing from revenues).

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company's main product/service?
No.

What are the key measures of your success at this stage of your development?
Number of users.
Foreign expansion

Are you now commercially present on foreign markets?
We have signed letters of intent.

What countries are important for the success of your business?
EU countries, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Mainly market size.
Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. Beneficially - progress in digitisation. The increase of companies’ activity on the Internet leads to intensified marketing actions, which entails the compliance risk in which our product can help.

General information on the organisation

Indicate the current stage of development. PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work? Pharma/Dietary supplements, Dietary Services, Biotechnology, Telemedicine, Tool IT - independent IT application, Medical Data, Blockchain, Laboratory Tests, Compliance.

Information on the solution

What is your product/service? A system based on blockchain technology making it possible to transfer, manage and use sensitive data in a safe and transparent manner.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Applying blockchain technology that significantly improves the safety and transparency of operations. Cooperation with public trust actors, enhancing confidence in the whole system (creating a trusted third party in line with EU guidelines). A wide range of applications - from marketing consents to medical data of patients, ending with compliance with GDPR.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Users: all entities interested in managing sensitive data, while at the same time reducing compliance risk. Sales in the subscription model.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors, Universities, Research Institutes, Financing Institutions, Regulators.

Finance

What is the current level of funding for your startup? PLN 1 million - PLN 2 million.

What sources of funding do you have? Founder’s own funds (bootstrapping), Grants from European funds.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.

Foreign expansion

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries.

What factors decide about choosing the country of expansion? Legal conditions for sensitive data management.
Diagu.ai
Limited Liability Company.

https://diagu.ai

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid-19 on your business.
Many medical entities and medical staff participate in the Diagu project. The COVID-19 pandemic had an impact on slight delays in contacts between project partners actively fighting on the front line with the pandemic. On the other hand, some of the people, the doctors in quarantine, actively supported the development of our product by using free time to support our goals and develop the solution.

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Pharma/Food supplements, Dietary services, Telemedicine, AI/machine learning, Medical data, Laboratory tests, Education.

What is your product/service?
Our product is the Diagu System made available through API, which enables the use of machine learning to predict medical diagnosis. Based on the patient's laboratory data, a medical Report for the physician is prepared, containing descriptions of individual reference values and suggestion of diseases or recommendations for further tests.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The project focuses on blood laboratory tests but with the development of the platform, it is possible to add further studies that will allow for better prediction. The use of artificial intelligence makes it possible to observe links between individual studies, which may remain unnoticed by humans.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Our product complements the results of laboratory tests with prediction of artificial intelligence. A doctor receives suggestions that reduce his/her time to make a final effective diagnosis.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutes, Financing Institutions.

What is the current level of funding for your startup?
PLN 500,000 - PLN 1 million.

What sources of funding do you have?
National VC.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company's main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Effectiveness of prediction, contracts for the sale of the solution, project partners, international activities.

Are you now commercially present on foreign markets?
UK, US, DE, PL, UA - markets on which we are currently working and building networks of contacts, partners and customers.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, Ukraine.

What factors decide about choosing the country of expansion?
Situation of the medical sector, number of potential customers.
Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. We felt the negative impact of the pandemic: difficult contact with customers, as well as lack of willingness to invest in new innovative products among customers.

General information on the organisation

Indicate the current stage of development. Commercialisation stage - we have the first payers.

In what areas does your startup work? Biotechnology, Medical devices, AI/machine learning, Medical data, Blockchain, Laboratory tests, Clinical trials.

Information on the solution

What is your product/service? eCRF diCELLa Clinical Trials - a web-based application used to create and manage CRF (Case Report form), it is dedicated to non-commercial early phase clinical trials involving high participation of researchers at the study design stage. diCELLa Image Service – a platform for automatic analysis of photographs in the cloud. The platform contains dedicated algorithms prepared for use in the laboratory. In addition, we provide advanced photography and data analysis services using the latest machine learning techniques for data exploration, classification and prediction.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Our web solutions are secured by blockchain. AI solutions achieve much better results and much better effectiveness.

Do you have a business model already developed? Yes.

Finance

What is the current level of funding for your startup? PLN 2 million - PLN 5 million.

What sources of funding do you have? Founder's own funds (bootstrapping), Grants from national funds, Grants from European funds, national VC, Incubation Programs, Accelerators.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? Yes.

What are the key measures of your success at this stage of your development? Revenues.

Foreign expansion

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, USA, Great Britain, Germany, China.

What factors decide about choosing the country of expansion? We are open to any markets/countries.

If so, describe your business model briefly, taking into account who is a user and who pays.

eCRF diCELLa Clinical Trials – one-off payment together with payment for maintenance during the study period. End-users: study sponsors, physicians and researchers.
diCELLa Image Service – possibility of subscription by individual users. Licensing for institutions. End-users: scientists, lab assistants. AI services – valued depending on the problem to be solved.

Indicate the institutions with which the startup most often cooperates. Universities, Research Institutes, Accelerators.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
We have envisaged a pandemic, so some of the solutions that we thought about we are planning to put into practice more quickly.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, Internet Platform (marketplace), AI/machine learning, Medical Data, Education.

Information on the solution

What is your product/service?
Virtual doctor, medical consultations, video-visits, arrangement of online visits, software for physicians and clinics.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our solution is complementary, combining also other medical applications on one platform as an innovative operating system.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Ordinary user, doctor, companies, institutions.

Indicate the institutions with which the startup most often cooperates.
Universities, Research Institutes.

Finance

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder's own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, China, Asia, Africa, South America and North America.

What factors decide about choosing the country of expansion?
The potential of a given market is decisive.
Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. Covid-19 was a turning point for us. Due to restrictions on mobility and high rates of infections and deaths in Brazil, where we sold HealthPoint devices, we have slightly modified their functionalities. In addition to the possibility of issuing medicines and supplements, we have adapted our solution so that it can deliver masks, disinfection fluids and other personal protective measures.

General information on the organisation

Indicate the current stage of development. Commercialisation stage - we have the first payers.

In what areas does your startup work? Pharma/Dietary supplements, dietary services, telemedicine, medical devices, AI/machine learning.

Information on the solution

What is your product/service? Dr Poket HealthPoint means mobile, maintenance-free pharmacies that meet the expectations of the modern world. They allow the whole packaging or individual doses of medicines to be dispensed in sterile medical cups for direct consumption. In addition, personal protective equipment and other products may be delivered. In these particularly difficult times, we extended our devices to include functionalities supporting ongoing communication with residents, the possibility of touchless measurement of patient temperature and even conducting telemedical consultations with a doctor.

Does the product/service have a CE certificate? No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Currently, there is no device on the market for issuing single doses of medicines, in medical cups, to be taken directly. Not to mention modern, extensive devices using artificial intelligence for diagnosis, patient information support, consultation. The solutions present on the market, such as Italian pharmashop24, Romanian pilot implementation of machines issuing medicinal products (o’fresh) are usually vending machines which do not differ from the machines known to us for snacks or beverages. Dr Poket HealthPoint is not just a device issuing/selling medicines. This is part of an extensive platform providing information on contraindications, dangerous interactions between medicines, providing full medical information on the measures delivered. The devices are designed to measure temperature, a 40-inch multimedia screen can perform educational functions and self-functioning devices can be remote medical facilities for wide population of people living far from large urban centres.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.

Potential customers: public health organisations, pharmacies, manufacturers of supplements, chemists, pharmaceutical companies, schools and universities, offices, hotels.

Business model: Our current business model is based on the lease of equipment and long-term subscriptions, including system implementation, product replenishment and maintenance. In addition, it is possible to sell statistical data of interest to the customer and conduct marketing campaigns via the devices. Prices depend on the target market, the number of ordered devices and non-standard functions ordered by a customer - using an analytical platform, camera with AI module, etc. Soon, we want to grant a licence for the production of the equipment to external manufacturers and to focus solely on developing more additional paid software functions, generating better cyclical revenues. Currently, the monthly cost is approx. USD 250-500 per month for the device, depending on location, customer requirements or number of devices.

Indicate the institutions with which the startup most often cooperates. Universities, incubators.
**Finance**

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Founder’s own funds (bootstrapping), grants from national funds, grants from European funds, national VC.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Number of partners / contracts / products issued.

**Foreign expansion**

Are you now commercially present on foreign markets?
Signed letters of intent.

What countries are important for the success of your business?
USA, Brazil.

What factors decide about choosing the country of expansion?
Potential interest, contacts established so far, legal regulations.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

EasyWound
Scientific Society.

http://leczenieran.umed.pl

Have you participated in the previous edition of the Report? No.


General information on the organisation

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? IT Tool - independent IT application, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity, Education.

Information on the solution

What is your product/service? There was a great need for the medical community, including nurses and doctors, as well as students, patients and their carers, to popularise knowledge on recognition, diagnosis and treatment of chronic wounds of various aetiology. Currently, there are no guidelines, clear recommendations for wound treatment. Chronic wounds are a key problem for ageing population and the spread of civilisation diseases, such as diabetes among older people. Early intervention, care and wound education will help reduce the scale of the problem, increase patient satisfaction and eliminate social costs resulting from spending on chronic wounds treatment, including surgical treatment and amputations. Mobile application supporting comprehensive diagnostic and therapeutic activities in the treatment of chronic wound. Step by step, depending on the answers given, it carries through the stage of diagnosis, in-depth diagnosis and wound treatment, contains components of patient education. The application is dedicated to physicians, nurses, students, patients and their carers. Recommendations concerning the procedure have been developed by a team of experts of the Polish Scientific Society for Treatment of Wounds and Organisation of Care.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? There is currently no such solution on the market. Moreover, it can be scaled up to medical practice or for teaching, educating purposes of patients and carers to other countries.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
1. Sponsors - in the initial period planned acquisition of sponsors who will invest their medical devices in the treatment and care of chronic wounds.
2. Premium – a future way of monetization, taking into account the possibility of buying a premium package containing more available diagnostic and therapeutic pathways for other disease units or extended in terms of additional information.
3. Sale of applications - on market terms, to an interested company for the purpose of locating their products or creating a product for their customers or selling them as a module for an existing application (e.g. iWound – based solely on teleconsultations) or selling on market terms, e.g. for the National Health Fund (they create independently similar applications for patients).

Indicate the institutions with which the startup most often cooperates. Hospitals, Universities, Financing Institutions, Regulators.

Finance

What is the current level of funding for your startup? Bootstrapping.

What sources of funding do you have? Founder’s own funds (bootstrapping).
EasyWound
Scientific Society.

Are you currently looking for funding?  
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?  
No.

What are the key measures of your success at this stage of your development?  
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?  
We are not commercially present and we are not planning to be.
EDU-LEK
Limited Liability Company - Capital company.

https://start.poz1.pl/

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid - 19 on your business.
It did not affect because startup started operations during the pandemic.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
AI/machine learning, Education.

Information on the solution

What is your product/service?
POZycja Pierwsza – a web-based application supporting the work of a POZ/NPL physician during the patient’s visit by means of exemplary procedures in over 170 disease units, ready-made prescriptions with the trade name of the drug with adjusted dosage, recommendations for the patient ready to print or send via an email message, a disease search engine based on key words and many other.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
A product adapted to work directly with the patient, created by practitioners, addresses only important issues and shows proven solutions based on guidelines and scientific publications.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The model is based on a doctor’s subscription fee – 1-, 3- or 6-month access renewed by means of quick payments.

Indicate the institutions with which the startup most often cooperates.
We are currently not cooperating with institutions.

Finance

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of active users.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
Germany

What factors decide about choosing the country of expansion?
Number of first contact physicians.
**Current needs**

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
3 - negative impact.

Describe the influence of Covid-19 on your business.
The Covid-19 pandemic significantly reduced the number of contacts with the startup environment, limited the possibility of participating in startup events and contact with potential investors.

**General information on the organisation**

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Medical devices, robotics.

**Information on the solution**

What is your product/service?
Innovative spinal implants with variable functionality adapted to individual patients are the product.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Spinal implants adapted to the individual needs of a specific patient to treat chronic persistent spinal pain significantly more effectively, to reduce post-operative pain and to accelerate recovery after surgery.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Direct customers - hospitals, surgical centres all over the world (single purchasing, tenders), medical distributors, users - spine surgery specialists - neurosurgeons, orthopaedists.

Indicate the institutions with which the startup most often cooperates.
Hospitals, investors, financing institutions, accelerators.

**Finance**

What is the current level of funding for your startup?
Less than PLN 500,000.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Incubation Programs.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Technological development.

**Foreign expansion**

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA.

What factors decide about choosing the country of expansion?
Market size.
Farada
Limited Liability Company.

https://farada.eu

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
During the pandemic, there were no conferences and company meetings, which limited the promotion of our solution.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Robotics.

Information on the solution

What is your product/service?
The aim of our company is to produce and deliver a globally unique medical transport system by air, which allows to maintain the cold chain. In particular, blood samples, blood bags, vaccines, interferon, insulin, anaphylactic drugs and small organs such as, e.g. kidneys are transported.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our drones were the first to transport medical samples in Poland between hospitals distanced more than 65 km away from each other.

Do you have a business model already developed?
Not entirely.

If so, describe your business model briefly, taking into account who is a user and who pays.
We use the payment per kilometre of transported medical samples.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Research Institutes.

Finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Grants from European funds.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, Germany.

What factors decide about choosing the country of expansion?
First of all, aviation law.
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. Raising public and institutional awareness of the need to develop solutions to ensure the best possible effectiveness of remote medical consultations.

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Telemedicine, Tool IT - independent IT application.

What is your product/service? The innovative FemiBox solution allows a physician to conduct a remote imaging of foetal mobility, has a system aggregating medical data, while taking care of the child and mother at the same time. The package consists of the following elements: FemiWEB – midwife telemedicine platform; FemiAPP – personalised application along with an electronic pregnancy card; FemiBAND – band monitoring the well-being of a woman; FemiVISION – home USG device.

Does the product/service have a CE certificate? No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Currently, there is no comprehensive medical device on the market that allows a physician to conduct a remote imaging of foetal mobility, has an e-card pregnancy system that aggregates medical data from various specialists, while taking care of the child and mother at the same time.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. The business strategy is based on two models:
1. Cooperation with private medical facilities and individual medical practitioners (B2B segment) - lease of FemiBox package.
2. Cooperation with pregnant women (B2C segment) - sale of monitoring band and sale of application subscriptions.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors, Financing Institutions, Incubators.

What is the current level of funding for your startup? PLN 500,000 - PLN 1 million.

What sources of funding do you have? Founder’s own funds (bootstrapping), Grants from national funds.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Capital acquisition.

Are you now commercially present on foreign markets? Signed letters of intent.

What countries are important for the success of your business? EU countries, USA.

What factors decide about choosing the country of expansion? Progress of medical care for pregnant women.
**Current needs**

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
Delays and difficulties in the implementation of research projects and contracts with customers but at the same time greater openness to telemedicine bore fruit in the form of new customers.

**General information on the organisation**

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Telemedicine, Medical devices, AI/machine learning.

**Information on the solution**

What is your product/service?
FindAir ONE

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We allow real-time monitoring, not retrospective monitoring.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Users: patients with chronic lung diseases.
Customers: hospitals, research centres, telemedical platforms, clinics networks.
Form of payment: one-off and subscription.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities, Research Institutes.

**Finance**

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Grants from European funds, national VC, Organic growth (financing from revenues), Incubation Programs, Accelerators.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Revenues.

**Foreign expansion**

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Regulatory issues, knowledge of the structure of the medical market.
Have you participated in the previous edition of the Report? 
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? 
The company has developed dynamically by: introducing new products and services corresponding to the needs of the market, increasing production capacity, increasing employment, finding many new domestic and foreign customers, as well as business partners in Poland and abroad. The company’s turnover has also increased significantly.

How did the Covid-19 pandemic affect your business? 
10 - positive impact.

Describe the influence of Covid - 19 on your business. 
The profile of the company and personnel consisting mainly of Polish scientists in the period preceding the pandemic enabled us to respond quickly and effectively to the needs of the market. The company developed in two directions - diagnostic and production. Geneme Labs – the department responsible for diagnostics has resiliently developed a service part and became one of the largest Covid-19 diagnostic laboratories on the Polish market. In addition, scientists working in GeneMe as one of the first in the country developed and placed on the market the most accurate and WHO recommended diagnostic tests for detecting SARS-CoV-2 by means of RT-PCR method and rapid FRANKD screening by means of RT-LAMP method. Currently, the company develops a network of laboratories, while performing production and being a supplier of diagnostic tests all over the world.

What is your product/service? 
Diagnostic kits for detecting SARS-CoV-2 virus: RT-PCR and FRANKD rapid screening test (RT-LAMP).

Does the product/service have a CE certificate? 
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? 
Geneme, as one of the few companies in the world involved in diagnostics, is self-sufficient. Thanks to synergy between R&D, production and diagnostics, our scientists can turn their ideas into real products which, thanks to the production capacity we developed in the previous year, can be produced on a large scale and sold worldwide. Everything that will be developed and produced can also be introduced as a service by having a network of laboratories. Production in Poland and the USA.

Do you have a business model already developed? 
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. 
The idea of Geneme, which Dawid Nidzworski, the founder, had from the very beginning was to increase the availability of genetic diagnostics for each patient, regardless of the region of the world in which he or she is. At present, the company’s development is intended to ensure that in the territory of the country our diagnostic laboratories can offer such tests in an accessible way to anyone who needs them. The development of manufacturing industries and the search for distributors around the world give us hope that our solutions will once be easily accessible to everyone. Diagnostic tests are purchased by other laboratories, distributors and even national governments. Sales models shall be suitably adapted to the needs of a particular contracting party.

Indicate the current stage of development. 
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? 
Biotechnology, Laboratory research, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity.

Indicate the institutions with which the startup most often cooperates. 
Hospitals, Investors, Research Institutes.
Finance

What is the current level of funding for your startup?
PLN 10 million - PLN 20 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Private Investors (natural persons - Business Angels), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Arab countries and Africa.

What factors decide about choosing the country of expansion?
Product demand, market regulations, product market authorisation requirements.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Genomtec
Joint-stock company.

www.genomtec.com

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
We have placed on the market the first products aimed at the diagnostic laboratory segment, continuing work on the key POCT solution (Point-of-Care Testing), bringing them closer to the commercialisation process.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid-19 on your business.
The COVID-19 pandemic turned economic life upside down. Many industries have suffered greatly during spring lock-downs, and now too. There are also such entities which gain in these difficult times. From our perspective, the coronavirus pandemic has contributed to the dynamic growth of the molecular research market. In addition, there were circumstances that favoured diversification of our business. Thanks to our knowledge and capabilities, we were able to develop and introduce ultra-fast tests in LAMP technology for sale. It has also raised public awareness. The current pandemic has shown an increasing demand for molecular analysis equipment. Also in places where many people are present at the same time, i.e. schools, work establishments or airports and stations. Our innovative Genomtec ID solution is capable of guaranteeing this. That is why interest in us and our flagship solution has increased considerably.

What is your product/service?
POCT system (Point-of-Care Testing) for genetic diagnosis of infections. We also offer laboratory genetic tests for SARS-CoV-2.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Technology SNAAT® (Eng. Streamlined Nucleic Acid Amplification Technology), thanks to the appropriate design of the diagnostic system, i.e. the combination of LAMP and microflow techniques and a contact-free heating system by means of photons, allows for isolation, purification, compaction of genetic material together with isothermal amplification and detection of specific DNA or RNA fragments of the pathogen in a record short time - even in 15 minutes, with effectiveness equal to or exceeding current PCR laboratory techniques. This is the uniqueness of SNAAT® technology which has been devised and is further developed by Genomtec. Thanks to ability of SNAAT® technology to multiply (detect multiple diagnostic purposes) on a microflow card, up to five pathogens can be detected simultaneously in one diagnostic test. The combination of the isolation, purification and concentration stages of nucleic acids carried out with a passive microflow card (lack of built-in electronic, electrical elements) causes that SNAAT® technology enables a significant reduction in the detection limit of tested nucleic acid while reducing the cost of producing disposable reaction cards at the same time. Excellent diagnostic parameters, such as sensitivity, specificity and repeatability, achieved using SNAAT® technology, are combined with the resistance of the amplification response process to inhibitors often present in biological samples, e.g. blood, medicines, etc. Therefore SNAAT® is an exceptional technology designed for diagnosis close to the patient (Eng. Point-Of-Care Testing, POCT).

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The business model assumes technology licensing or operational takeover by the industry partner.
**Genomtec**
Joint-stock company.

Indicate the institutions with which the startup most often cooperates.
Investors, Financing Institutions, Regulators.

**Finance**

What is the current level of funding for your startup?
PLN 10 million - PLN 20 million.

What sources of funding do you have?
Grants from national funds, Grants from European funds, Stock Exchange, National VC.

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company's main product/service?
No.

What are the key measures of your success at this stage of your development?
Technological readiness level.

**Foreign expansion**

Are you now commercially present on foreign markets?
Commercial agreements signed (e.g. distribution).

What countries are important for the success of your business?
EU countries, USA, Great Britain, China.

What factors decide about choosing the country of expansion?
First of all, regulatory issues, estimated revenue levels and patent protection issues.
Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Further development of the technology, acquisition of new industry partners, expansion of the team by approximately 10 persons, implementation of 2 corporate pilot programs, commencement and completion of the medical experiment, acquisition of several new private investors and VC fund.

How did the Covid-19 pandemic affect your business?
1 - negative impact.

Describe the influence of Covid-19 on your business.
For a few months - the inability to set up the company - a US branch. Impossibility of finalizing the next investment round by not being able to meet and test physically, which drastically reduces our potential because our commercialisation focus is on highly developed countries. Delays in the supply of electronic and optical equipment. Dramatic delays in carrying out the medical experiment, which was awaited by a large number of cooperating entities and, above all, investors. Due to the lockdown and pandemic, we had half a year of stagnation in patient studies. All this translated into delays in the project schedule. Infections and quarantines of key personnel of the company, including the CEO and CTO. Forced switching to remote work, which in the case of hardware work is not always fully possible without downtime at work and in the project schedule.

What is your product/service?
GlucoActive is a manufacturer of innovative technology for portable, non-invasive glucose meters using innovative optical measurement methods. Our devices are designed for diagnostic, prophylactic, diabetic and sporting purposes. We now have technology and equipment in place in clinical trials. GlucoActive developed a technology for non-invasive blood glucose concentration measurement.

Devices in the manufacturer’s portfolio:
- GlucoStation - fixed equipment intended for B2B, such as medical facilities, pharmacies, hospitals. It allows patients to measure glycaemia only by pressing their hand to the device.
- GlucoFit - a portable device in the form of a band enabling immediate and continuous measurement of glucose.
- GlucoWear - a hand watch that quickly, accurately and painlessly measures glucose levels. The key features of the product are the mobility of the device, convenience of use, it will also be able to perform the functions of a sports tracker, monitor the quality of sleep and activity during the day. Our solution makes measurements without the need of puncturing, pain or other inconveniences. Automatic measurement lasting only a second, in real time recorded on the device and in the cloud. It also allows a doctor to check your condition remotely and, if necessary, invite you to visit him/her.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our advantages over competition:
• non-invasive and automatic measurement,
• no need for daily finger puncture, bearing pain and blood contact,
• significantly increasing the quality of life of people with diabetes,
• this is a telemedical solution that makes it possible to limit the patient’s contact with a physician and remote diagnostics - which is extremely important even in the days of COVID-19 epidemic.

The device has the chance to become the first on the market, as none of the producers has so far led to sale. The product has a very high market potential because it solves a serious social problem related to the low quality of life of people with diabetes. Due to the very large number of patients with diabetes (according to the WHO it is 422 million patients worldwide). There are
no non-invasive solutions on the market - all current solutions need contact with blood. We are seeing a gradual ageing of the population all over the world. We see an increasing public awareness of health prophylactics and the fight against diabetes, as well as increasing detection of diabetes and an increase in the popularity of innovative diabetes monitoring solutions – e.g. new semi-invasive CGM systems offered by Freestyle Libre and Dexcom G6.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Our business model is based on technology licensing. Our products will be introduced in many countries at the same time, due to cooperation with global partners in the medical devices industry. We want to use the expanded sales, distribution and marketing networks of our commercialisation partners, while enabling the company to focus on further product development and mass production of the equipment. We want to have many commercialisation partners with exclusive sales rights for selected regions, such as the EU, the USA, Asia.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutes, Accelerators.

Finance
What is the current level of funding for your startup?
PLN 2 million - PLN 5 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, Grants from European funds, Private Investors (natural persons - Business Angels), Private Investors (private persons), national VC, Accelerators.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Accuracy of the device measurement.

Foreign expansion
Are you now commercially present on foreign markets?
We have signed letters of intent.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, China.

What factors decide about choosing the country of expansion?
Our products will be introduced in many countries at the same time, due to cooperation with global partners in the medical devices industry. We want to use the expanded sales, distribution and marketing networks of our commercialisation partners, while enabling the company to focus on further product development and mass production of the equipment. We want to have many commercialisation partners with exclusive sales rights for selected regions, such as the EU, the USA, Asia.
GlukanMed
Limited Liability Company.

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Throughout the year, we have carried out a project aimed at verifying the concept of plasters with beta-glucan. In addition, the project has been completed with the production of a plant that will enable us to obtain beta glucan from oats. We have also developed a formula for stable dissolution of oat beta-glucan.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
The first lockdown was a challenge in terms of the implementation of the first phase of projects, also due to the fact that companies cooperating with us suspended their activities in an attempt to adapt to the pandemic situation.

Indicate the current stage of development.
PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work?
Pharma/Food supplements, Aesthetic Medicine/cosmetics.

What is your product/service?
We are at the stage of verification of the original idea, its evaluation. The implementation of the project enabled us to see the opportunities and threats of the hitherto prevailing plan. Ultimately, we want the manufactured product to support the treatment of skin melanoma.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
There is currently no company on the market dealing with the use of beta-glucan for cancers.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Our product is intended for people in the course of diagnostics of skin melanoma and for all people with the diagnosis. It can be purchased in a pharmacy. The amount of used product depends on the length of the diagnostic process and treatment.

Indicate the institutions with which the startup most often cooperates.
Research Institutes, Accelerators.

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Grants from national funds.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Revenues.

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Legal aspects, morbidity rates and social awareness of skin melanoma.
Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. The Covid-19 pandemic strengthened the implementation of business and its business context due to the adaptation of business and functionality of the solution to current market needs.

General information on the organisation

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Telemedicine, Tool IT - independent IT application, AI/machine learning, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity, Education.

Information on the solution

What is your product/service? HealthBot is an alternative to the patient's impatient telephone channels of communication with a medical entity, causing frustration of patients and loss of revenue for a medical entity. HealthBot provides and supports communication channels for medicinal entities such as Messenger, WhatsApp, chat via a website with full integration into the consulting-room system. The solution has several functionalities. It makes it possible for the patient to obtain basic information about the work of a medical entity – within the scope of services, reception hours and schedules of physicians, supports booking for a visit, obtaining an e-prescription and conducting patient satisfaction questionnaires. HealthBot is also a remote diagnosis that enables the patient to identify symptoms, and the physician to take earlier and more effective diagnostic and therapeutic measures, as well as to indicate faster dates of visit based on symptoms. HealthBot is at the same time education and support for coordination and continuity of treatment by providing the patient with appropriate messages. The need for its implementation has been verified by a market investigation, including a study of patients' preferences to benefit from such a solution.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Currently, there is no such a solution on the market that has so many functionalities while simultaneously integrating with consulting-room systems and provides support for different patient communication channels with a medicinal entity. The solution can be scalable to other countries.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. The service will be sold as Software as a Service as part of a direct subscription to medicinal entities for monthly or annual subscription. Monthly costs will amount to several hundred zlotys per month, depending on the selected modules. The target group is determined by the number of 21,665 POZ and AOS medicinal entities in Poland and the number of patients in Poland amounting to 38,382.6 million people, including the number of people using the Internet – i.e. 17,811.58 million people.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors, Universities, Financing Institutions, Accelerators, Incubators.
HealthBot
Limited Liability Company.

Finance

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder’s own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Innovation against the background of the existing market solutions and confirmed market need.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What factors decide about choosing the country of expansion?
The level of technological advancement of other medicinal entities and the patency of their communication channels.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Helfio
Limited Liability Company.

Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? Together with the entire team, we have changed the direction of development, focused on developing a solution that will help people minimise the risk factor of cardiovascular diseases by using personalised therapy.


Describe the influence of Covid-19 on your business. In fact, the pandemic has confirmed our belief that the direction we are heading is the right one.

General information on the organisation

Indicate the current stage of development. Commercialisation stage - we have the first payers.

In what areas does your startup work? Telemedicine, AI/machine learning.

Information on the solution

What is your product/service? A platform that, when analysing user data for modifiable risk factors for cardiovascular diseases, will personalise healthy lifestyle therapy for a given person and will help to support patients in their everyday lives.

Does the product/service have a CE certificate? Not applicable / Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? A comprehensive platform that combines healthy lifestyle with the health of the user/patient, personalises healthy lifestyle therapy depending on the patient’s medical history.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. The platform will make profit from monthly B2C subscription and B2B business cooperation (medical facilities, work establishments).

Indicate the institutions with which the startup most often cooperates. Investors.

Finance

What is the current level of funding for your startup? bootstrapping.


Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.

Foreign expansion

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, USA, China.

What factors decide about choosing the country of expansion? Countries where cardiovascular diseases are an important social problem.
Have you participated in the previous edition of the report? Yes.

If you participated in the previous edition of the report, what was the change in your business during the last year? A single-person business company was transformed into Addictions.ai Sp. z o.o. with plans to be converted into a joint-stock company soon and to enter the stock exchange. We have moved from MVP to the commercialisation stage. We have extended the scope of therapeutic assistance and support to other areas/mental dysfunctions. Apart from alcohol addiction, we also help in areas such as depression, nutrition disorders, anxiety states, employee support, child support. We have a team of our own therapists who, with the support of external partners (psychiatric hospitals and academic units), develop special therapeutic programs enabling comprehensive care combining online psychotherapy with automated functionalities supporting the therapeutic process and education. We have developed comprehensive services for employees of large companies, including therapeutic programs and dedicated educational content (texts, video, webinars, podcasts, etc.). We are creating intervention programs for companies and organisations implementing mass redundancies. All projects implemented are accompanied by parallel work on the use of self-learning mechanisms (AI).


Describe the influence of Covid-19 on your business. The pandemic highlighted the long-standing problems related to the psychological condition of Poles and caused their significant intensification. The growing needs in this area concern both adults and children. More and more companies look for psychological support for their employees. Poles are among the most stressed societies. Employers' losses are increasing due to the rising number of redundancies caused by mental problems (including those intensified due to the pandemic). We note the growing interest of companies in psychological assistance for their employees. Mental problems among children and adolescents are increasing under the influence of COVID-19. These groups, especially those in need of support, have drawn our attention and we decided to extend our therapeutic areas to include 'Employee support' and 'Child support'. Covid-19 also opened therapists to a new form of psychotherapy and intensified research into the effectiveness of psychotherapy online. The conclusions of these studies indicate at least comparable efficacy of this form of psychotherapy with stationar-
**Helping Hand** *(brand)*
**Addictions.ai** *(brand owner)*

Limited Liability Company.

Business Model 3: B2C Market Place - commission on individual therapy, charged after each session.
Business Model 4: B2G - programs dedicated to public health institutions and cities.

Indicate the institutions with which the start-up most often cooperates.
Hospitals, Investors, Universities.

**Finance**

What is the current level of funding for your start-up?
PLN 5 million - PLN 10 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Private Investors (natural persons - Business Angels), Private Investors (private persons), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

**Foreign expansion**

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, China.

What factors decide about choosing the country of expansion?
Market potential, availability of therapists, competition.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

HigoSense
Limited Liability Company.

https://higosense.com/pl

Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
We are on the eve of market entry.

How did the Covid-19 pandemic affect your business?
6 - equivocal impact.

Describe the influence of Covid - 19 on your business.
Telemedicine has become widespread.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, Medical devices, Internet Platform (marketplace), AI/machine learning, Medical Data.

Information on the solution

What is your product/service?
Higo is a breakthrough telemedical service, which introduces a new definition of ‘medical visit’. Physicians no longer need to take patients in a consulting-room because thanks to Higo patients will collect medical data about their health status themselves.
Higo visit instead of a regular visit, not only during the pandemic, but also in the case of common diseases.
The patient is able to obtain and transmit high-quality digital health data in a simple, intuitive manner:
• Measurement of temperature by means of a non-contact infrared thermometer
• Auscultating of lungs, heart and abdomen (digital stethoscope)
• Imaging of throat, ear and skin (medical camera)
Higo will then send the results to your doctor who will make a diagnosis based on them. The patient is diagnosed, informed about further proceedings, receives an e-prescription, e-referral or e-sick leave certificate. All this at home, without direct contact, without the risk of infection.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Higo is able to collect more physical examinations. Thanks to its idea of operation, quality of tests performed, intuitiveness of use, Higo significantly shortens the time for diagnosis. According to studies, for a physician it takes about 4 minutes on average.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Financing Institutions, Regulators.

Finance

What is the current level of funding for your startup?
More than PLN 20 million.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Grants from European funds, Private Investors (natural persons - Business Angels).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.
What are the key measures of your success at this stage of your development?
Capital acquisition.

Are you now commercially present on foreign markets?
Distribution agreements during negotiations.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Presence of private medical operators, presence of health insurance companies; interest of state institutions in wider access to GP doctors.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid-19 on your business.
The pandemic was a spark that contributed to the creation of our startup. The Białystok TenderHut technology group created the product – Holo4Med. It is already a registered company which, after less than half a year, generated the first revenues from its activities in 2020.

General information on the organisation

Indicate the current stage of development.
PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work?
Telemedicine, Wearables - not medical devices, IT Tool - independent IT application, AI/machine learning, AR/VR.

Information on the solution

What is your product/service?
Holo4Med offers software with the same name, using Mixed Reality capabilities in telemedicine and improving teaching and work of medical units.

Key software options:
Virtual reception and medical interview
The receptionist with the use of goggles equipped with a set of cameras and sensors may scan the identity document, thus entering data in the system without touch and assigning PESEL (Personal Number) to the patient card. The interview conducted by medical staff will also be automatically entered into the system and the doctor receiving the patient will have a complete set of information necessary for further treatment. Such solutions limit the physical contact with the patient to a minimum, improving the entire patient admission process.

Medical proceedings
During the patient’s visit with Mixed Reality spectacles, a doctor may consult the case of a patient who stays in the consulting-room remotely with a specialist physician – for example dermatologist. This technology will allow the specialist doctor to conduct a detailed interview with the patient, see the skin change and decide with the doctor to continue the treatment. In addition, a doctor has access to the patient’s full medical records, including the results of in vitro tests and imaging diagnostics. Results from these examinations shall be presented to the doctor in the form of cumulative trends.

Video consultations at hospital wards, including SOR-Emergency Wards.
The possibility of consulting physicians of various specialisations about diseases with the use of the Mixed Reality goggles, together with the connection with modern diagnostic tools, significantly shortens the time in which further medical proceedings are undertaken. Doctor’s recommendations are entered automatically into the system and the necessary data, such as the history of a disease, will be displayed to the doctor before his/her eyes.

Data exchange – a projection directly from e.g. an operating block, enabling the transmission of the field of vision along with integrated medical data, marking areas and recording the whole. Helps in medical consultations and in the education process.
Teaching assistance – preparation of medical scenarios based on current patient data, assistance in assessing the correctness of medical activities.
Help to prepare treatments using the integration of advanced medical programs together with their visualisation.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The Holo4Med solution includes a wide process of managing medical data at hospital wards. It helps to quickly assess the patient’s clinical condition, eliminate medical errors, and manage the movement of patients at SOR wards. It contributes significantly to improving the safety of medical staff and patients.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The recipients of our solution are: Clinical and Specialist Hospitals, Medical Education Centres, Emergency Medicine Wards, Outpatient

www.Holo4Med.com
Holo4Med
Limited Liability Company.

Networks, clinics with large patient traffic. End-users of the solution are medical staff members (doctors, nurses). The solution will be sold in the SaaS model.

Indicate the institutions with which the startup most often cooperates.
Hospitals.

Finance

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder’s own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, China, Scandinavia.

What factors decide about choosing the country of expansion?
Level of healthcare.
Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?

Business growth of 200% and portfolio development, acquisition of funding in round A, international expansion.

How did the Covid-19 pandemic affect your business?

7 - positive impact.

Describe the influence of Covid - 19 on your business.

Positive impact on the development of B2B business and new partnerships, Negative impact on the implementation of home visits for patients, positive impact on the scale of delivery of telemedical services.

Indicate the current stage of development.

Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?

Telemedicine, Tool IT - independent IT application, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity.

What is your product/service?

Medical services in the form of teleconsultations, home visits and stationary visits for own patients and customers of insurance companies, medical consultations with delivery of medicines to the patient’s door, medical subscriptions.

Does the product/service have a CE certificate?

Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?

High availability of physicians (24/7/365), geolocation technology that allows to shorten the time of reaching the patient, distribution channels, innovative operating model, speed of service delivery, operational excellence, end-to-end offer for the patient.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.

The business model is based on 2 complementary components: B2B2C – customer service of insurance companies and medical centres purchasing medical services in the form of subscription or one-off payment; B2C – sale of medical services to direct customers in the fee-for-service and subscription models.

Indicate the institutions with which the startup most often cooperates.

Investors.

What is the current level of funding for your startup?

PLN 10 million - PLN 20 million.

What sources of funding do you have?

Founder’s own funds (bootstrapping), foreign VC, Organic growth (financing from revenues).

Are you currently looking for funding?

No.

Do you generate repeated revenues from the sale of the company’s main product/service?

Yes.

What are the key measures of your success at this stage of your development?

Revenues.

Are you now commercially present on foreign markets?

Registered foreign market revenue.

What countries are important for the success of your business?

EU countries.

What factors decide about choosing the country of expansion?

Strategic potential.
Human Biome Institute

Limited Liability Company.

Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. Business development assumed launching sales to hospitals, healthcare facilities. As a result of the freezing of all pro-sales, tender activities and focusing only on the treatment of patients with COVID by healthcare facilities, treatment of all other diseases has been significantly eliminated, even potentially life-threatening diseases. Patients were shifted to outpatient treatment and the aim of most facilities was to achieve ad hoc remission of symptoms, without the most effective treatment methods if they required hospitalisation. Therefore, the planned sale, despite the obvious existence of morbidity and prevalence at the level at least from last year, the group of hospitalised patients have significantly decreased and patients received chronic symptomatic therapies.

General information on the organisation

Indicate the current stage of development. Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Pharma/Food supplements, Biotechnology.

Information on the solution

What is your product/service? Preparations of intestinal microbiota, live biotherapeutics in the future, personalised probiotic cocktails, bacterial consortia (LBP).

Does the product/service have a CE certificate? No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Own scientific research in the field, a scheduled R&D plan in a completely new field, based on own experience and results, professionalism and development. Details after signing the NDA if you want to invest.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. The product is purchased by medical entities, medical professionals, patients in the future. The final recipient is the patient - a broad population group.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors, Research Institutes, Financing Institutions, Regulators.

Finance

What is the current level of funding for your startup? PLN 2 million - PLN 5 million.

What sources of funding do you have? Grants from national funds, Private Investors (private persons), Other Investors (e.g. sector-specific investors), Organic growth (financing from revenues).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? Yes.

What are the key measures of your success at this stage of your development? Number of users.

Foreign expansion

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, the Polish market itself is promising.

What factors decide about choosing the country of expansion? Universal applicability of therapy.
Current needs

Have you participated in the previous edition of the Report? 
Yes.

How did the Covid-19 pandemic affect your business? 
6 - equivocal impact.

Describe the influence of Covid - 19 on your business. 
During the pandemic, it turned out that it is particularly important to eliminate paper in hospitals, as it may be associated with the transmission of the virus from hand to hand. Thanks to it, our solution is implemented in many health care centres.

General information on the organisation

Indicate the current stage of development. 
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? 
Medical data, medical documentation.

Information on the solution

What is your product/service? 
We offer the solution for keeping all kinds of electronic medical records, including those signed by the patient, such as patient’s consent. We achieve this using digital pens or tablets to write and sign documentation.

Does the product/service have a CE certificate? 
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? 
First of all, we offer a platform thanks to which documents can be signed on any electronic device that enables this - laptops (e.g. Microsoft Surface), tablets (e.g. iPad), electronic signature devices (e.g. Wacom), digital pens on paper. Our services are integrated with practically all authors of HIS software in Poland (e.g. CGM, Asseco, Comarch).

Do you have a business model already developed? 
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. 
We are currently looking for a better business model because the current business model is not satisfactory to us. Our product is bought by a hospital in a one-off payment model for the licence (and/or equipment) and is maintained as a percentage of the value of the licence.

Indicate the institutions with which the startup most often cooperates. 
Hospitals, universities, research institutes, regulators.

Finance

What is the current level of funding for your startup? 
PLN 5 million - PLN 10 million.

What sources of funding do you have? 
Grants from domestic funds, private investors (natural persons - Business Angels), national VC, organic growth (financing from revenues).

Are you currently looking for funding? 
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? 
Yes, but they are minimal in the context of company size and implementation revenues.

What are the key measures of your success at this stage of your development? 
Revenues.

Foreign expansion

Are you now commercially present on foreign markets? 
We are not present but we are planning to be.

What countries are important for the success of your business? 
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion? 
The decisive factor is the level of computerisation of health care system.
Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. During the Covid-19 pandemic, there was an increase in awareness of the need for telemedicine and other tools supporting medical care.

General information on the organisation

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Telemedicine, Tool IT - independent IT application, Internet Platform (marketplace), AI/machine learning, Medical Data, Education.

Information on the solution

What is your product/service? WEB + mobile application, supporting coordinated care for patients with chronic illnesses and senior citizens in their homes. Achieving good quality of integrated care is a recognised difficulty in many health care systems in the world. The iCare project aims to create a tool to improve the lives and work of carers of palliatively ill people so as to ensure that the patient is provided with multidisciplinary home care in the best possible way. Access to relevant patient health data, i.e. the amount of fluids and food administered, medicines given, hygiene activities performed or medical procedures, and coordination of visits, purchases and expenses, may support persons involved in daily care of the patient even if they deliver remote care.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Apart from the standard functions of telemedical applications, i.e. remote consultations or electronic medical documentation, our solution aims to thoroughly analyse the data supplying the application and, on this basis, to create predictive models that will inform in advance about the possibility of occurrence of certain critical events, i.e. strokes, heart attacks or fainting. Prediction of diseases and events and informing carers in advance is a value that will directly influence the quality and safety of patients’ lives.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. The business model is based on a subscription to the use of the application (family carers involved in care and medical personnel). We also assume cooperation at an institutional level (hospices, care homes, hospitals) and a government level (NFZ-National Health Fund).

Indicate the institutions with which the startup most often cooperates. Hospitals.

Finance

What is the current level of funding for your startup? PLN 500,000 - PLN 1 million.

What sources of funding do you have? Founder’s own funds (bootstrapping), Grants from European funds.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, USA, Great Britain, Germany, China.

What factors decide about choosing the country of expansion? Developed awareness and culture of senior care.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? Despite the difficult situation associated with the Covid-19 pandemic, the startup has succeeded in strengthening its position on the medical market by acquiring new retail outlets and expanding its cooperation to public and non-public healthcare units. Last year, we were involved in educational projects of medical staff organised by specialised associations particularly in the fields of diabetology, nephrology, surgery and orthopaedics. Currently, we actively participate in the Nationwide Wound Treatment Course of the Polish Society for Wound Treatment (2021), participating in active education of medical personnel on innovative solutions having a significant impact on treatment processes.


Describe the influence of Covid - 19 on your business. The Covid-19 pandemic mainly influenced the ability to perform daily activities, such as personal visits to medical units. The inability to personally present a service or a system significantly prolongs the time for establishing cooperation and implementing the offer.

Indicate the current stage of development. Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Medical devices, IT Tool - independent IT application, Internet Platform (marketplace), Education, Rehabilitation.

What is your product/service? We promote and implement treatment concepts based on innovative alternatives to gypsum stiffenings - #Smartgips. In doing so, we focusing on ensuring that the patient is able to return to health as safe as possible by offering products and concepts that support the treatment process, proven in the most demanding medical markets in the world. We focus on 95% of the duration of treatment in which the patient stays outside medical and rehabilitation units, offering, in addition to the highest safety, the maximum possible comfort at this difficult time for patients (HOME CARE). By thinking comprehensively about the way to return to health, we provide patients with multimedia instructions and proposals for rehabilitation exercises that the patient can do in domestic conditions, thus speeding up active return to full health.

Our latest service aimed at post-traumatic and post-operation patients is the recently launched #Smartgips Replastering Point, where we offer the replacement of traditional orthopaedic gypsum or light gypsum with innovative smart-plasters, and we offer professional selection of relief shoes used in the Diabetic Foot Syndrome (DFS).

Does the product/service have a CE certificate? Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? According to our original assumption, we offer only products and services that are innovative on the Polish medical market, such as the #Smartgips Replastering Point, where it is possible to replace traditional gypsum dressing with comfortable and even waterproof #smartgips after a consultation. This is a completely new service, which complements and slightly develops the existing offer of medical/orthopaedic stores offering sale/dispersing of orthoses and medical products. This offer is addressed to commercial patients who would like to switch their traditional, inconvenient gypsum dressing to comfortable and safe #Smartgips, which allows access to injury each time or even to start rehabilitation much earlier than in the traditional treatment route (gypsum + orthosis).

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Our business model offers various possibilities of cooperation: from franchise (#Smartgips Replastering Point) to direct supply of specialist medical units or retail clients - online store, stationary point.

Indicate the institutions with which the startup most often cooperates. Hospitals, Clinics, Private Medical Practice, Research Institutes.
Finance

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Organic growth (financing from revenues).

Are you currently looking for funding?
We are interested in learning about the possibility of cooperating and co-financing our startup.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of partners.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we do not exclude this possibility after examining needs and opportunities beforehand.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Law, ease of communication and the standard of living of the society of the country concerned.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
10 - positive impact.

Describe the influence of Covid - 19 on your business.
The COVID-19 pandemic has had a strong impact on the medical services market, accelerating the processes of digitisation in health care, thereby also increasing the need for artificial intelligence and telemedicine solutions, such as ours. On the other hand, it has completely changed the way in which we work. Previously, we actively participated in industry events meeting customers all over the world. At present, we do not have this possibility, which forces us to look for new channels of access. The system of organization of work within the company has also changed, and since March 2020 the entire team has completely switched to remote mode.
This new reality poses many challenges to us but despite the adversities, we are trying to see opportunities and possibilities for further development. Just before the announcement of the pandemic, as a technology and medical company with many years of experience in implementing artificial intelligence solutions for the initial diagnosis and triage of patients, we decided to help the health care systems overloaded with the COVID-19 pandemic. In April 2020, we released a tool assessing the risk of SARS-CoV-2 infection on the basis of the Reported symptoms. The COVID-19 Risk Assessment application based on WHO guidelines was created within just three weeks, using all the company’s resources. For the first months of the pandemic with the help of a tool that has been implemented by over 450 organisations, including the Ministry of Health in Poland and Ukraine, over 1.5 million interviews were conducted.

Information on the solution

What is your product/service?
We offer a platform for initial medical diagnosis and triage, which enables optimization of the patient’s path by sending him/her for appropriate assistance, in due time (staying at home, visit to a specialist, telemedical consultation or urgent need to Report to SOR-Emergency Ward).
Currently, the main solution of Infermedica is the so-called checker symptom, which enables patients to take part in a preliminary medical interview. Artificial intelligence suggests the most appropriate action to be taken in a given case. Depending on the severity of symptoms, a doctor’s visit or call, self-care or visit at the emergency ward may be recommended. Infermedica helps patients to make the most appropriate decisions about their symptoms, while at the same time allowing healthcare companies to save money, making sure that patients who require treatment use adequate services.
Up to now, more than 7 million users worldwide have used our platform; we cooperate with more than 70 companies, including Allianz Worldwide Partners, Microsoft, Global Excel, Médis, PZU Zdrowie, Sana Kliniken or Everyday Health.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our platform is available in API form, which makes it possible to create our own solution based on our engine for initial diagnosis. In addition, we offer 18 language versions, which makes it possible to help a wide range of patients around the world.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We operate in the areas of B2B, B2E, B2G and offer our products in the subscription model. Our solutions are addressed to healthcare systems, networks of hospitals, clinics, telemedical companies, and health insurers. The end user is mostly the patient.

Indicate the institutions with which the startup most often cooperates.
Health care systems, medical insurers, IT companies, hospitals.
Infermedica
Limited Liability Company.

Finance

What is the current level of funding for your startup?
More than PLN 20 million.

What sources of funding do you have?
Other investors (e.g. industry investors), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, in particular the DACH region, and the USA.

What factors decide about choosing the country of expansion?
Size and structure of the market and readiness to implement innovative digital health solutions.
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jakszczepic.pl
Limited Liability Company.

https://jakszczepic.pl

Current needs

Have you participated in the previous edition of the Report?
Yes

If you participated in the previous edition of the Report, what was the change in your business during the last year?
We have professionalized our activity by setting up a limited liability company, as well as expanded our recognition and number of users.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid - 19 on your business.
During the epidemic, many children had limited access to vaccination, which caused many delays in the vaccination process. The fact that many new children started to need individual vaccination calendars has made many new doctors use our tool.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Pharma/Dietary supplements, IT Tool - independent IT application.

Information on the solution

What is your product/service?
Currently millions of children in Europe are not properly vaccinated. Trivial situations such as forgetfulness of parents or foreign journeys during vaccination periods are often the reasons. During the coronavirus epidemic, the problem increased dramatically, as the closure of the clinic caused delays in vaccination of many children. In such a situation, an individual timetable for future vaccination must be prepared for the child in order to maintain full effectiveness and safety. Unfortunately, its manual creation requires an experienced doctor who will take many factors into account and will have at least several minutes of time. There are few such doctors, so as a result, access to individual calendars is limited for children from outside large cities and from less wealthy families. That is why we have decided to create the jakszczepic.pl application, thanks to which every doctor and nurse can generate an individual vaccination calendar for the child in less than one minute, consistent with the latest scientific knowledge.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Since the beginning of the creation of jakszczepic.pl, we have thought about gaining foreign markets. That is why we created universal algorithms that are easy to adapt to the guidelines in force in other countries. We are currently introducing our application to the US market (catchvax.com), so we are the first tool of this kind in the world that serves more than one country. Compared to the traditional manual creation of vaccination schedules, our main advantage is the availability and simplicity of use, so that every doctor and nurse can plan optimal vaccination dates for the child.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We offer a subscription model (monthly/annual). The application operates in the freemium model, where a part of the option is free of charge and a part - paid. Physicians and nurses are the users and buyers. In addition, we plan to derive revenues from advertisements.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities, Accelerators.

Finance

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Incubation Programs.
Are you currently looking for funding?  
No.

Do you generate repeated revenues from the sale of the company’s main product/service?  
No.

What are the key measures of your success at this stage of your development?  
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?  
We are not present but we are planning to be.

What countries are important for the success of your business?  
EU countries, USA, Germany.

What factors decide about choosing the country of expansion?  
Market size and market interest in optimising the vaccination process.
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Kroton
Natural person running a business activity.

www.kroton.info

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
We have carried out fewer orders and we received fewer inquiries about our services.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, Medical devices, Education, Medical simulation.

Information on the solution

What is your product/service?
Trainers for laparoscopy and endoscopy.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our products are characterised by higher quality of reflection of human tissues and organs.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Users and payers are hospitals, medical simulation centres and medical universities.

Finance

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder’s own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Profit.

Foreign expansion

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, China.

What factors decide about choosing the country of expansion?
Mainly the market for our products.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid - 19 on your business.
2020 is the best time in the history of our company. Covid forced us to accelerate the development of our applications, especially those related to supporting the work of doctors, enabling them to diagnose and support the treatment process remotely, including our CarnaLife System and CarnaLife Holo applications. Despite Covid restrictions, we have acquired further Clinics and Hospitals. MedApp generated record sales revenues, generating a net result of 187% higher than in 2019. Our technologies and services are a response to the challenges faced by medicine in the face of coronavirus, i.e. mainly limited access to medical visits and diagnostic tests.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, Medical devices, IT Tool - independent IT application, AI/ machine learning, AR/VR, Medical data, Education, Big data Analysis, 3D Holography.

Information on the solution

What is your product/service?
MedApp is a listed technology company in NewConnect, whose innovations revolutionise the way in which human lives can be treated and saved. The company offers unique software-related solutions supporting image diagnostics and new generation digital medicine services. The first product placed on the market by the company was CarnaLife System. It is an advanced digital medicine platform that enables the physician to assess and monitor the health state of patients with different diseases and to consult remotely at any time of the day and in any place. Depending on medical indications, patients under the care of staff using the CarnaLife System measure glycaemic level, blood pressure, perform ECG tests, temperature measurement, pulse oximetry, etc. The platform also allows to collect data on a mood and other parameters related to monitoring neuropsychiatric symptoms. CarnaLife Holo is an innovative technology of three-dimensional visualisation of imaging medical data, supporting planning and carrying out invasive surgical procedures. With the help of the HoloLens 2 goggles of Microsoft, your doctor sees in the real space a three-dimensional hologram reflecting the structure of the imaging anatomical area. The user may interact with the hologram displayed, inter alia by rotating it, scaling it, moving or entering anatomical structures - using gestures and voice commands, without losing sterility and the need to cooperate with an additional technician. The goggles are an auxiliary, interactive screen available during treatment planning and anywhere in the treatment room, at any time during it. The CarnaLife Holo application is used, inter alia, in the area of intervention radiology, cardiology, oncology and orthopaedic medicine.

MedApp also develops innovations that support the training of medical personnel. Thanks to the HoloComm application using cloud resources, the analysis of selected anatomical models presented as holograms makes the science of anatomy and pathomorphology more effective. The application allows to display various contents simultaneously. These may be three-dimensional models, pdf files, films or audio recordings with which the user may interact. The HoloComm is designed to train and educate doctors, medical students and students of related majors such as Medical Physics, Rehabilitation or Biomedical Engineering, and all other majors with anatomy, pathomorphology or clinical classes in the program of studies.

Current functionalities, i.e. the possibility of remote cooperation with practically any number of participants, displaying 3D models (FBX / STL files), images (JPG / PNG), PDF files, films (MP4) and volumetric models (DICOM), the possibility of drawing in 3D space and adding annotations, sending photographs from the HoloLens camera and voice communication, make the application, apart from medical purposes, capable of selling, teaching, examining, presenting, designing.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The solutions offered by MedApp distinguish, in comparison with the competition, in terms of the scope of the functionalities offered, as well as the speed of their implementation and the possibility of adapting them to the expectations of individual users (both in the context...
of CarnaLife Holi, CarnaLife System and HoloComm). The medical applications have CE IIb certificates enabling their use in the EU, the Middle East or Africa. The technological solutions used by MedApp will enable the company to cooperate with market leaders in MedTech, including Microsoft (MedApp has the status of MRPP Partner and Silver Partner), Johnson&Johnson and GE HealthCare.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
In the case of the medical applications, our customers are hospitals/Medical Centres/Clinics, and the system users – medical personnel and patients. For the applications dedicated to education, customers are educational centres, universities and recipients - scientific staff and participants of the classes (including students).

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Financing Institutions.

What is the current level of funding for your startup?
More than PLN 20 million.

What sources of funding do you have?
Private investors (private persons), Exchange, Organic Growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

What countries are important for the success of your business?
EU countries, USA, Germany, Persian Gulf countries.

What factors decide about choosing the country of expansion?
CE II B certificate held.

Are you now commercially present on foreign markets?
Commercial agreements signed (e.g. distribution).
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid - 19 on your business.
The Sars-CoV2 pandemic has increased the scope of telemedicine medical services. This mainly concerned the use of the telephone channel. At the same time, we can talk about an increase in the implementation readiness of medical care facilities for telemedical systems, as well as acquaintance of patients with no physical presence of a physician during the service.

General information on the organisation

Indicate the current stage of development.
PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work?
Telemedicine, AI/machine learning, Medical data, Education.

Information on the solution

What is your product/service?
Voice solutions, including dialogue systems, for patient service (voice-bots, smart assistants) and automation of diagnostic and decision-making processes. Other systems based on natural language processing technologies used in medical care.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our solutions are characterised by:
- the business logic of our projects is based on a unique combination of medical knowledge, clinical reasoning and optimisation of user experience;
- the solutions developed are the result of synergy of knowledge and experience of an interdisciplinary team of specialists in medical communication, including practitioners, specialists in NLP and process automation.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The business model assumes selling our products to healthcare facilities in the form of a subscriber (SaaS, on premise).

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities, Research Institutes.

Finance

What is the current level of funding for your startup?
Less than PLN 500,000.

What sources of funding do you have?
Founder's own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
The indicator of success at this stage is the increasing number of data sets obtained, including text corpuses.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Linguistic.
Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
6 - equivocal impact.

Describe the influence of Covid-19 on your business.
Covid-19 did not have any greater influence on our business. Awareness among representatives of Medical Universities about the need to have modern solutions has probably increased. In the case of our startup, innovation concerns accessibility to the patient and practising medicine from every place on the Earth.

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
AI/machine learning, Education.

What is your product/service?
Virtual patient application, providing students of medicine and physicians with a safe environment to effective learning the problem-based medicine.

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Retention.

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Canada, Australia, Ireland.

What factors decide about choosing the country of expansion?
We pay attention to the official language, and initially we focus our attention on the English-speaking countries, and then we plan other languages: German, Spanish, Italian, French.
Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
3 - negative impact.

Describe the influence of Covid - 19 on your business.
Closing borders, as well as limiting industry events, limited direct forms of reaching the customer to virtually zero. Face to face meetings have so far been the main form of acquiring leads.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, Medical devices, Internet Platform (marketplace), Medical Data.

Information on the solution

What is your product/service?
Software for medical facilities in the field of EMD (Electronic Medical Documentation), imaging and management of the facility’s operation, as well as gynaecological device - VC HD-1000 Videocolposcope.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Software: A imaging function from most available diagnostic devices that allows recording the test and accurate analysis of image frame by frame. A number of planimetric tools available in the program to identify worrying elements. A specialised FC/LS module dedicated to ophthalmologists, which allows comparison of performed tests and supports diagnosis. The online registration module for the facility will also be available soon, thanks to which patients will be able to register at a given facility 24/7 and improve the experience related to registration.
Device: a very good quality/price ratio, option to connect an additional monitor - an opportunity to discuss the examination with the patient during it; colour filters which are applied live to the image from the camera and help to see changes invisible to the naked eye. Possibility of individually adjusting the device to the needs of the facility.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Products are purchased by medical facilities (from private medical centres, through private specialist centres to public hospitals). The payment for the licence shall be one-off. In addition, an annual subscription may be purchased for the update and technical support package. The end users of our solutions are mainly specialist doctors but also medical personnel (registrars, assistants, nurses and midwives).

Indicate the institutions with which the startup most often cooperates.
Hospitals.

Finance

What is the current level of funding for your startup?
Less than PLN 500,000.

What sources of funding do you have?
Grants from national funds, grants from European funds, Organic growth (financing from revenues).

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Profit.
Are you now commercially present on foreign markets? We get individual orders from abroad directly from end users. We have one permanent distributor in Australia.

What countries are important for the success of your business? EU countries.

What factors decide about choosing the country of expansion? Mainly similar standards, easily accessible location, unified law in the EU.
Medical Cloud
Limited Liability Company.

www.medical-cloud.pl

Current needs

Have you participated in the previous edition of the Report? 
No.

How did the Covid-19 pandemic affect your business?  
5 - equivocal impact.

Describe the influence of Covid-19 on your business.  
COVID-19 has shown us that the adopted business model of remote work perfectly matches the reality of the current business.

General information on the organisation

Indicate the current stage of development. 
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? 
Telemedicine, Internet Platform (marketplace), AI/machine learning, Medical data.

Information on the solution

What is your product/service? 
Radiological Research Exchange – an innovative e-service implemented by an IT system built in three-layer architecture; implementation of an electronic market for the trading of individual study descriptions or contracts for packages of professional radiological investigation consultations.

Does the product/service have a CE certificate? 
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? 
Currently, there are several dozen companies operating on the domestic (Polish) market, which carry out a remote description of radiological investigations. Voxel, Luxmed Diagnostyka, Tomma or Eurodiagnostic are among the most popular. Currently, each supplier on the market requires the purchase of its own software and operates in only one specific unit and allows access to a single facility. Such software shall be capable of reading and describing the tests. The solution we are proposing does not in any way limit the number of centres and contractors describing investigations. In addition, the investigation exchange will be a web-based application that will not require the purchase of additional computer components, and a computer or laptop of the normal class will be needed to start it. The use of the platform will be free of charge. Fees will be incurred for the purchase of a description of a given study or contract for test packages.

Do you have a business model already developed? 
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. 
Two groups will be able to access the system. The first includes medical facilities such as hospitals, out-patient clinics, clinics and private units that carry out tests for patients and need descriptions of these investigations. The second group includes radiologists or companies employing radiologists.
Access to the web platform for medical facilities will be free of charge and will not require the purchase of a licence. Revenue will be generated by purchasing a specific description of the test photograph for the patient. In order to ensure the flexibility of fees on the platform, several forms of payment will be available: online, credit card and traditional transfer paid on a pro-forma/prepayment basis, which will also enable the use of exchange algorithms once the individual settlement account of the facility is credited. We assume the creation of a payment system within which payments from medical entities will be converted into tokens. The token pool will be settled on individual orders for the described tests. They will not lose value over time, nor will they be assigned for a specific period. Each test will be assigned a token weight which, when generating an order, is automatically taken from the pool. Remuneration will be spent from contributions from medical units for radiologists describing investigations. The platform will generate profit from the margin charged on the purchase of a specific test. Precise price estimates concerning revenues are planned to be prepared during the addition of demo versions and using tests and their statistical values issued by medical facilities.

Indicate the institutions with which the startup most often cooperates. 
Hospitals, Investors, Research Institutes, Accelerators, Incubators.
What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Grants from European funds, Incubation Programs.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain.

What factors decide about choosing the country of expansion?
Easy to transfer and commercialise the platform.
Top Disruptors in Healthcare

Review of the innovative medical startups in Poland

Medical Inventi
Joint-stock company.

www.medicalinventi.pl

Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business.
The pandemic influenced our activities in several ways. It limited the possibility of completing clinical trials at the planned time, extending the period of recruitment of patients. Personnel shortages in business partners caused delays in purchasing and launching a technological line for the manufacture of the product on an industrial scale, and the restrictions caused by the epidemic in the functioning of hospitals forced to postpone the planned marketing campaign and mass sales of the product.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Biotechnology, Medical devices.

Information on the solution

What is your product/service?
FlexiOss® is an innovative bioactive bone substitute composite. It is an original solution for modern 3rd generation implantation preparations in terms of composition biocompatible with bone tissue, bioactivity, impact on bone tissue regeneration and support of bone reconstruction, as well as surgical handiness and elasticity. It is a product innovation on a global market scale, as evidenced, for example, by international patent protection. In terms of composition and properties, it is similar to bone tissue, is characterised by biocompatibility, bioactivity and non-toxicity. Due to high and varied porosity, it may be scaffolding for osteogenic cells from bone loss walls and due to high ionic reactivity (bioactivity) can significantly influence bone reconstruction.

It is a fluid absorbing material (such as blood, plasma, drug solutions) which can serve as a carrier for biological substances, especially antibacterial drugs, which reduces systemic use of antibiotics during the operation-related period. Implant FlexiOss® exhibits elastic properties, good surgical handiness, it can be adjusted to the desired shape during the treatment in a moist condition. It is susceptible to individual adjustment to the dimensions (shape) of the completed loss during the operation by cutting or bending. Thanks to its compactness, it does not move and does not separate from the implantation site. The ease of its use, i.e. forming, cutting and filling bone losses, gives a great deal of freedom to the operating person to fill large losses of irregular shape. This surgical handiness and the possibility of dripping the material with medication solutions (e.g. antibiotics) and patients’ blood (haemostatic activity) have met with great interest in the tested group of physicians. Thanks to its properties, the biocomposite can facilitate the work of doctors repeatedly carrying out multi-hour operations. The composite does not contain animal constituents, unlike many commercial bio-materials based on animal collagen. In addition, the preparation may be dripped with antibacterial and/or tissue growth-conducive substances as scaffolding for osteoblasts. From the point of view of the patient, FlexiOss® provides the possibility of proper recovery of bone tissue, low risk of infection and healing discard, avoidance of allergies and inflammatory focuses.

Does the product/service have a CE certificate? Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
It is characterised by three main distinctive features:

• The first one is surgical handiness (i.e. convenience for a surgeon due to flexibility to shape and adjust accurately to the shape and size of the loss). Other hydroxyapatite preparations used in medicine are applied in the form of powders, granules and moulders and are not surgically handy (inconvenient).

• The second feature is the highly developed specific surface area of the ceramic phase (characterised by significant microporosity), resulting in a significant degree of adsorption of ions from fluids surrounding implants and accelerated mineralisation (the so-called bioactivity), which promotes the intensification of implant ossification in vivo.

• Reduction of the risk of viral contamination and the risk of immunological reactions through the use of sugar polymer.

Do you have a business model already developed? Yes.
If so, describe your business model briefly, taking into account who is a user and who pays.
The final recipients of FlexiOss® will be patients, while potential customers will be surgical units (hospitals, clinics) and veterinary clinics and dental surgery centres. The bone substitute implants are widely used in hospital centres and specialist clinics. The areas in which synthetic implants are used (to which the bone substitute composite FlexiOss® belongs) include traumatology, orthopaedic surgery, neurosurgery, plastic surgery, maxillo-facial surgery and periodontology.
The sales model will depend on the market served. Medical Inventi S.A. plans to supply the orthopaedic market in Poland directly through Medical Representatives. The dental market will be commercialised by Distribution Strategists and will be handled by a dedicated person in the Sales Department. Sales in both foreign orthopaedic and dental markets will be based on local distributors.

Indicate the institutions with which the startup most often cooperates.
Investors, Universities, Regulators.

Finance

What is the current level of funding for your startup?
PLN 10 million - PLN 20 million.

What sources of funding do you have?
Grants from European funds, Private Investors (natural persons - Business Angels), Other investors (e.g. industry investors).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Increasing number of centres using the product + acquired capital for further product development (own contribution to grant projects) and sales.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
Countries of the EU, USA, the so-called Arab countries.

What factors decide about choosing the country of expansion?
Ability to exploit the competitive advantages of the product, size of the market, regulatory aspect, patent protection.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
6 - equivocal impact.

Describe the influence of Covid-19 on your business.
The company has acquired an investor and designed and constructed, at its request, special, self-cleaning, safe medical facilities intended for taking swabs and a mobile laboratory for the analysis of samples. The pandemic significantly influenced the change in the approach of entities operating on the medical services market, which resulted in a considerable interest in our telemedical solutions.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of products.

In what areas does your startup work?
Telemedicine, medical devices, robotics, mobile medical facilities.

Information on the solution

What is your product/service?
Mobile telemedical modules meeting medical sanitary conditions. The modules may be used as sites for: patient service with medical staff, telemedical consultation, diagnostic sampling and analysis of test results. The latest solution is the telemedical box - a free-standing facility enabling the launch of a medical diagnostics point in each space. The box facilitates remote medical consultation with tests and measurements of parameters such as body weight, pressure, ECG, temperature, blood oxygen saturation, and allows for flu examination or auscultation.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We offer a unique solution on the Polish market. We create solutions and a system for providing medical services outside traditional distribution channels using state-of-the-art technological and IT solutions.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
As part of the B2B sector, we sell our modules to medical entities that want to expand the range of services offered. We are also working on a product proposal for individual customers able to use advanced telemedical solutions.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Financing Institutions.

Finance

What is the current level of funding for your startup?
PLN 500,000 - PLN 1 million.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Other investors (e.g. industry investors), organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Acquisition of as many orders for products as possible.
**Foreign expansion**

Are you now commercially present on foreign markets?
Signed letters of intent, cooperation documents, as well as orders for several products.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, Russia, Ukraine, Arab Gulf countries.

What factors decide about choosing the country of expansion?
Size and interest in the product on a given market.
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Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
9 - positive impact.

Describe the influence of Covid - 19 on your business.
The coronavirus pandemic has clearly shown how important the rate of response and the exchange of experience between doctors and healthcare professionals is.

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Online platform (marketplace), AI/machine learning, Medical data, Education, Communication between health sector representatives (mainly physicians).

What is your product/service?
MedICE is a tool for communication among healthcare sector participants. The tool will enable patients to be consulted quickly, will facilitate obtainment of the second opinion and will increase competences while increasing time and cost efficiency, thus falling within the Value Based Healthcare (VBHC) concept. This solution will be particularly useful in rare, difficult or urgent cases. It will facilitate the democratisation of access (zero waste) and will address, inter alia, the problem of insufficient health infrastructure.

MedICE is a compatible tool:
- application for consultation between specialists (quick, simple, convenient, secure), enabling the exchange of information in a free time by a doctor (zero waste) using video, audio, image, file, text; for computers, smartphones and tablets;
- knowledge platform with a combination of key industry information, containing professional materials taking into account user preferences, aggregated database of events and network of contacts (combining joint universities, etc., as a model of the American tool, which has been extremely successful among doctors).

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The MedICE solution is an innovative project, has a comprehensive scope of application of process and product innovations. At present, there is a lack of a similar solution in the single market at the national level – and the need for medical consultation in the health sector is very high. Created within the intelligent communication and expertise platform project for representatives of the sector will use artificial intelligence technology (AI) and machine learning (ML) to support the process of automation of search and sharing of medical knowledge in the tool. MedICE is a med-tech tool and uses innovative solutions in the area of artificial intelligence, machine learning, teleconsultation and data processing. The innovations used have the national and European range and, on certain levels, also global scope. The development of the market for medical services and the scale of complexity of individual diagnostic and therapeutic issues results in the production of large amounts of information. There is no uniform format for coding and data collection on the market.

Thus, there is a need to implement and apply remote tools enabling professional communication between doctors and other medical market participants, enabling efficient and adequate exchange of knowledge and information. There is a growing need for dialogue between all actors in the health care system, which aims to improve it and increase its effectiveness.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
B2B (a possible B2B2C variant in the future). A freemium model (free access for doctors) and diverse streams from, among others, the subscription model but also based on access to Reports, internal advertising and marketing of services are assumed.

medICE
Limited Liability Company.

https://medice.app
Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Incubators.

**Finance**

What is the current level of funding for your startup?
PLN 500,000 - PLN 1 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, Grants from European funds, Private Investors (natural persons - Business Angels), Private Investors (private persons), Incubation Programs.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Number of users.

**Foreign expansion**

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Partnerships and similar specificities of the healthcare market.
**Current needs**

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
The year 2020 for Medidesk was a breakthrough year, as a result of the global crisis related to the pandemic, we are definitely getting stronger and prepared for further expansion - both in terms of the Polish market and foreign markets.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid-19 on your business.
The pandemic has affected the lives of each of us. From a business point of view, the main change resulted from reduced mobility, meetings. Therefore, meetings with Customers mainly moved to the Internet. But not only - what seemed very difficult before proved to be a success - that is, the implementation and launch of remote applications, training provided remotely or educational webinars for the target group - managers, owners of medical facilities, persons working on registration and responsible for the management of registration.

**General information on the organisation**

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, IT Tool - independent IT application, Education, Patient Service.

**Information on the solution**

What is your product/service?
Medidesk is a SaaS application dedicated to the medical industry. A comprehensive tool for handling and analysing patient applications via various contact channels - telephone, email, contact form on the website. It allows efficient management of the medical facility, monitoring of business indicators and all marketing channels.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The Medidesk application, as the only such a web-based tool on the market, comprehensively analyses incoming and outgoing traffic of a medicinal entity from communication channels such as telephone, email, online forms. The tool allows to monitor the intensity of telephone traffic, the effectiveness of medical registration work, the effectiveness of marketing campaigns, the subject of issues Reported by patients. The owner of a medical entity or the manager responsible for managing the work of registration may analyze business indicators at a medical facility on an ongoing basis (online) from any place with access to the Internet.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The Medidesk application is dedicated to registering medical healthcare providers, hospitals and aesthetic medical institutions, dentistry or rehabilitation. The service is provided in the subscription model (depending on the number of application users and the size of registration of a medical facility). Apart from the application implementation itself and training of the facility’s staff in the field of application functionality, we carry out research into the potential of the registration department and train teams in the field of effective registration and efficient customer service.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities.

**Finance**

What is the current level of funding for your startup?
Bootstrap.

What sources of funding do you have?
Founder’s own funds (bootstraping).
Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Specific market characteristics of medical facilities, customer needs, competition, potential of a given market.
Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
During the last year, the company's main product has been developed strongly, and thus the Telemedical Mediguard Platform, which is currently available and implemented in many medical facilities without significant changes, can be used to monitor the health of persons on a mass basis, including in the fight against COVID-19 pandemic. The architecture of the system designed for national purposes can serve between 200,000 and a few million user/patient accounts ready to operate within one week of the launch of the project. All implementation and training are carried out remotely. In recent months, the system has been equipped with many additional functionalities that have improved remote diagnostics, telecare and monitoring patient health state in hospital or domestic conditions.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
Events in recent months have a significant impact on the functioning of Mediguard and the perception of telemedical solutions in the medical environment. With direct contact with doctors, we are observing with concern its negative effects on the economy as a whole. At the same time, the situation has led to a significant increase in interest in tools for remote monitoring of patients among medical entities. The mass implementation of remote diagnostics and teleconsultation is now an opportunity to control the development of the epidemic. It is also very important to ensure the safety of doctors by minimising direct contact with people infected with the virus. Telemedical solutions are the most effective method of screening and automatic indication, based on automatically collected health data, of persons requiring medical intervention. We have a great deal of questions about cooperation from those who are aware of how great support telemedicine is, how much time and how many resources can be saved by the skilled use of telemedicine in practice. We must realise that telemedicine is not only a remote communication between a doctor and a patient. The use of telemedicine offers the possibility of early diagnosis of diseases, enables effective health prophylactics. In addition, it improves the effectiveness of treatment through more information on the patient's state of health. This does not only apply to people who are already ill but also to healthy people, where health monitoring can save lives of people of different ages, especially in the current situation of the pandemic - especially now telemedicine can be applied in all areas of widely understood medicine and is needed to save health and life, detect diseases, treat and rehabilitate. An additional role for us in the current situation is to educate all environments in this area, so that the implementation of telemedicine no longer raises doubts and resistance to innovative changes but brings benefits in the protection of health and life as soon as possible. It is important that the Mediguard Telemedical Platform can now be used for mass monitoring of people in the fight against COVID-19 pandemic without significant changes.

General information on the organisation
Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, Rehabilitation.

Information on the solution
What is your product/service?
The main product of the company has been developed for several years as the Mediguard Telemedical Platform, i.e. a universal tool for remote monitoring and collection of many types of medical data of patients, their automatic analysis and presentation in a legible form to supervisory or medical personnel. Mobile applications cooperating closely with the telemedical platform are used in communication with monitored persons/patients. Applications installed free of charge on the individual smartphone of the user/patient, apart from the basic functions of collecting medical data, allow, among others: conducting videoconsultations by the physician with a patient, reminding you about the dates of examinations/taking medicines and arranging visits with a specialist. The entire system of the telemedical platform is based on a safe and scalable Microsoft Azure environment - thanks to this, we provide adequate computational power and multilingualism adapted to the scale of a given project.
The system can be used according to the needs and application scenario. The service in the form of access to the Telemedical Platform, mobile application and set of devices is divided into specialisations, i.e. hybrid rehabilitation, cardiologic monitoring, COPD, diabetologic monitoring, etc.
Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Currently, there is no similar comprehensive solution on the Polish market that would allow for the comprehensiveness of the telemedical solution. Mechanisms made available by the Mediguard Telemedical Platform:
- influence the effectiveness and quality of work of medical personnel, optimising the work of physicians;
- allow to obtain prompt and comprehensive information on the state of health of patients and medical personnel who, in the event of irregularities, can react immediately;
- save time and money - it is estimated that the application of the Mediguard system will eliminate 11% to 30% of visits to the clinic with specialists and reduce the time of medical visits;
- increase patients’ satisfaction, which leads to more willingness to be monitored in terms of health state by healthy people, which will help in an early stage to react and motivate healthy lifestyles;
- give a chance to rehabilitate (especially cardiology/hybrid) persons currently excluded on the basis of their place of residence;
- allow close people to be reliably informed about the state of health and the history of the patient’s disease, which is not offered by competitive solutions.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The product in the form of a service - a comprehensive telemedical solution is currently purchased by medical units (hospitals, clinics, etc.). The most influential stakeholders from the point of view of making decisions when implementing new solutions in the treatment process are the management staff members of hospital and specialist doctors. They are therefore the purchasers of this solution.
The beneficiaries of the remote monitoring and healthcare solution are both healthy people and patients treated with various types of illness (who receive help more quickly), doctors (who can diagnose and treat more patients), persons providing medicine-related services (e.g. nurses), owners and entities managing medical facilities. The product and associated services are available in a one-off sales model or a subscription fee model.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities.

finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Grants from national funds.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
We are planning expansion by starting cooperation with partners and distributors on the target markets, especially in Western Europe. The current market for our services is Poland, due to the best knowledge of the health care system and the implementation of the telemedical solutions offered. The planned expansion to foreign markets will be carried out starting with the acquisition of potential partners in a given country, allowing them to operate in this direction.
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Mediprintic
Limited Liability Company.

www.mediprintic.pl

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid - 19 on your business.
Mediprintic sp. z o.o. was established in March 2020. Thanks to the pandemic, many events and projects were possible online, thanks to which the team was able to take part in many specialist trainings and accelerator programs which had a positive impact on business development.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Medical devices, medical data, rehabilitation.

Information on the solution

What is your product/service?
Mediprintic Sp.z o.o. plans to introduce an innovative set of medical devices facilitating treatment of forearm injuries. The set consists of:
- SETTER - a device enabling to accelerate and improve the fracture setting process in a manner controlled by a physician and set the position for normal bone fusion in the case of a given type of injury;
- MEDICAL SCANNER - scans the hand and forearm after the injury, and then creates a virtual hand and forearm model on the basis of which the patient's orthosis model will be made;
- ORTHOSIS - its structure ensures adequate stiffness of the hand and forearm in order to stabilise them, you can bath in it without the need to wrap the hand in a plastic bag or foil, its open-work structure ensures the lightness of the dressing and prevents itchy skin.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
What makes the Mediprintic project stand out against competition is a high comfort of treatment through the unprecedented ability to maintain hygiene and rapid return to full efficiency. And a light, tailored structure with high stiffness with a simultaneous possibility of rehabilitation.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
During the incubation process, we managed to create a communication strategy consisting of direct relations with hospital directors and heads of hospital orthopaedic departments. The setter with the scanner will be delivered as a set in the form of a subscription or direct purchase to a branch, the orthosis will be delivered to the patient, clinic or ward. It was verified that the target customer is a private branch or orthopaedic office with high income patients.

Indicate the institutions with which the startup most often cooperates.
Hospitals, investors, universities, financing institutions, regulators, accelerators, incubators.

Finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Founder’s own funds (bootstrapping), grants from national funds, private investors (private persons), incubation programs, accelerators.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.
**Mediprintic**
Limited Liability Company.

What are the key measures of your success at this stage of your development?
Capital acquisition.

**Foreign expansion**

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Health care system and contacts gained.
Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Product of the company, i.e.: Hospital MediWell Telemedical Kiosk as a stationary diagnostic device intended to carry out tests by patients themselves or with the assistance of medical staff is of great interest.
The last year, due to the pandemic and the restrictions in contacts with representatives of medical units, stopped the majority of activities. Therefore, MediWell’s team focused on product development and adjusting the entire solution to the reported needs of potential Clients.

How did the Covid-19 pandemic affect your business?
3 - negative impact.

Describe the influence of Covid-19 on your business.
Activities related to the main product of the company, i.e.: Hospital Telemedical Kiosk have recently focused mainly on pre-marketing. In recent months, this activity has slowed down the prevailing pandemic, which has prevented direct meetings with the medical community (80% switch to remote work). Therefore, the relations with potential recipients of the kiosk (clinics, hospitals) were mainly deepened. Remote cooperation with medical staff allows to slowly finalize kiosk functioning scenarios and to complete most of the works on adapting the IT environment of the telemedical kiosk to the requirements of medical facilities. The current situation, i.e.: the still prevailing pandemic may, of course, pose a threat to the implementation of the plans but on the other hand it may be an opportunity to acquire new Customers open to the telemedical solution proposed by the Company.

What is your product/service?
The Company’s product is the Hospital MediWell Telemedical Kiosk as a stationary diagnostic device intended for the performance of tests by Patients themselves or with the assistance of medical personnel. It has an integrated group of medical devices that provide consistent, automatic feedback about the state of health – the device allows to perform a number of tests at the same time, such as pressure level, ECG, body oxygenation, etc.
The performance of tests is very simple, and the test process guide is the application displayed on a monitor embedded in the kiosk. The installed application with the function of automatic transmission of data from diagnostic devices, after analysis of the collected data, indicates deviations from the adopted standards. The application predicts health risks and allows to obtain test results in the form of Reports sent to the indicated telephone number in the form of SMS or email address.
Additionally, integration of MediWell with hospital systems enables physicians to access the results of studies conducted in the kiosk by their Patients and to conduct an additional analysis.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Currently, there is still no similar comprehensive solution on the Polish market that would allow for conducting research in one place comprehensively, with the use of built-in devices, on a maintenance-free basis and would provide feedback in the form of a Report. Similar projects only allow you to carry out tests on your own and then consult your doctor. The devices are not integrated or assembled within the kiosk (a set of separate individual measuring instruments by means of which the patient conducts the tests during the consultation). In addition, they do not have a system for collecting test results. At MediWell, the research process is fully automated with an accessible mobile application for data collection and analysis through data transmission to a dedicated platform. As no human factor is required (the process is fully automatic), the variable cost of the test process is not generated. Integration of MediWell with medical facilities’ systems is also an important distinguishing feature, which makes it possible for your doctor to have access to the results of tests conducted in the kiosk by Patients.

Do you have a business model already developed?
Yes.
If so, describe your business model briefly, taking into account who is a user and who pays.
The recipients (payers) are medical units (hospitals, clinics, blood donation centres, sanatoriums, care homes, etc.). The end users of the solution are both healthy people and Patients treated with various types of illness. Physicians, persons providing medicine-related services (e.g. nurses) and owners and entities managing medical facilities have access to the collected data through integration with systems of medical units. Business activity is based on sale of the Kiosk to medical facilities in a one-off transaction with an additional maintenance fee or in a monthly subscription model. The test performed by a patient may be free of charge or paid. Marketing content (sale of additional health services), which may be an additional source of income and an instrument for educating society in healthcare, may be placed in the MediWell Kiosk.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities.

Finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Grants from national funds.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Completion of works on the target kiosk model - modular development.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Completion of production works and acquisition of the first Customers. The current market for our services is Poland due to the best knowledge of the health care system and the first implementations carried out. Once the first Customers have been acquired in Poland, the planned expansion to foreign markets will be implemented in countries where Partners will be able to obtain possible cooperation.
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. Due to the pandemic, Mednavi has ceased to develop its activities owing to the lack of funds for further development. Just before the pandemic, we prepared Mednavi to acquire a new Investor or sell it to a larger entity that will develop the portal. But it did not happen. Although the pandemic has shown that Mednavi does not only have to be associated with oncology- it may concern all chronic diseases, and treatment paths - important for patients - can be extended.

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Medical data.

What is your product/service? We show all available treatment paths and facilities that offer them.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? We believe that knowledge reduces stress. Knowledge is part of an effective therapy.

Do you have a business model already developed? We do not have a model.

If so, describe your business model briefly, taking into account who is a user and who pays. We do not have a business model, Mednavi does not earn at this moment. The best solution would be an advertising model.

Indicate the institutions with which the startup most often cooperates. Hospitals.

What is the current level of funding for your startup? PLN 1 million - PLN 2 million.

What sources of funding do you have? Private Investors (natural persons - Business Angels).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Capital acquisition.

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, Great Britain.

What factors decide about choosing the country of expansion? Countries which have a similar healthcare system as in Poland.
Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. The pandemic hindered or completely prevented traders from visiting hospitals, clinics, medical and physiotherapeutic consulting rooms. Therefore, we can see that the above entities are looking for expert engineering advice and valuations of hardware technologies in line with the guidelines of the National Health Fund (NFZ) and the Ministry of Health in online conditions. The current situation has a positive impact on the development of our undertaking.

General information on the organisation

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Medical devices, Internet Platform (marketplace), Medical Data, Education.

Information on the solution

What is your product/service? Our product is an innovative ICT tool supported by elements of artificial intelligence. The platform will support medical units in selecting equipment or complete Med-Tech technologies: in relation to legal, ministerial requirements and by providing the possibility of compiling medical devices for the implementation of dedicated medical procedures. The system is intended to serve as virtual support in the field of medical engineering in the selection, purchase, maintenance, retrofitting of medical equipment and technologies - in order to optimise the costs incurred by the healthcare system.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? No similar or identical solution on the market. Personalised intellectual resources – experts whose knowledge and experience is able to develop the product. A lot of experience in cooperation with medical units, the MedTech industry and research teams/institutions. Optimisation of costs of equipment purchasing.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. The customers are medical units, i.e. private medical practitioners, group medical practitioners, private hospitals and clinics and public hospitals – they are customers in the subscription model. The end-users are persons managing the medical unit or responsible for the apparatus in the unit. In addition, if a lease or loan is taken over via our platform, we receive % on the value paid out by a bank.

Indicate the institutions with which the startup most often cooperates. Hospitals, Universities, Research Institutes.

Finance

What is the current level of funding for your startup? PLN 500,000 - PLN 1 million.

What sources of funding do you have? Founder’s own funds (bootstrapping), Grants from European funds, Incubation programs.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.
Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Market size, market prosperity, competitiveness and innovation.
**Current needs**

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid - 19 on your business.
The development of COVID - 19 allowed the technological industry to develop telemedicine activities.

**General information on the organisation**

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine.

**Information on the solution**

What is your product/service?
Telemedical platform providing a secure, encrypted, high-quality audio/video connection for conversations with patients. It has additional functionalities, such as visit management system, extended schedule and schedules of physicians, payment system, personalised website of the consulting-room and many other that we can provide at the request of the facility.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
As the only telemedical platform, we offer basic service - allowing for free account maintenance and audio/video consultations.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The product is addressed to physicians and medical facilities. The business model focuses on monthly payment per doctor (user). In addition, it will be possible to purchase an annual licence. Medical facilities can freely choose the number of licences which can be freely modified.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Financing Institutions.

**Finance**

What sources of funding do you have?
Private investors (private persons).

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

**Foreign expansion**

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain.

What factors decide about choosing the country of expansion?
Development of the medical sector in a given country and Internet users.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Medtransfer
Limited Liability Company.

www.medtransfer.pl

Current needs

Have you participated in the previous edition of the Report?
No.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
The pandemic and Covid-19 had a positive impact on our business because they triggered our Startup.

How did the Covid-19 pandemic affect your business?
9 - positive impact.

Describe the influence of Covid-19 on your business.
The current situation has shown how important it is to send the tests in a contactless way. We can show how useful our solution is.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, AI / machine learning, Medical data.

Information on the solution

What is your product/service?
Medtransfer is an online platform enabling convenient and secure transmission of large files with the results of imaging tests (e.g. magnetic resonance) using a time-limited, password-protected link. These files are usually so large that they cannot be sent by email. This solution is particularly important for patients with reduced mobility or reduced immunity, and during the COVID-19 pandemic and social distance — for each of us.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Solution stability, DICOM web browser, PACS/HIS integration.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Patient, physician and medical facilities.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutes.

Finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), national VC.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
An increasing number of users.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Law, Regulations, Competition in the Market.
Current needs

Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? Due to COVID-19, a large number of barriers to online medical education have been broken. This has resulted in a greater interest in our platform.


Describe the influence of Covid-19 on your business. The pandemic has broken some of the barriers to online medical education, thereby encouraging the use of other learning tools, including our platform. We have noted more users.

General information on the organisation

Indicate the current stage of development. Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Internet platform (marketplace), Education.

Information on the solution

What is your product/service? Social eLearning platform for the exchange of medical knowledge. The platform is available in 5 languages - English, French, German, Spanish and Polish. Users may publish video content, photographs, courses or make specialised medical events available.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? There are over a quarter of a million medical professionals on our platform who share knowledge, ask about and discuss medical cases on a daily basis.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Medical professionals from all over the world are end users of our solution. Companies that want to reach them are the main customers.

Indicate the institutions with which the startup most often cooperates. Higher education institutions.

Finance

What is the current level of funding for your startup? Financing from revenues.

What sources of funding do you have? Organic growth (financing from revenues).

Are you currently looking for funding? No.

Do you generate repeated revenues from the sale of the company's main product/service? Yes.

What are the key measures of your success at this stage of your development? Number of users.

Foreign expansion

Are you now commercially present on foreign markets? We have a registered revenue from the foreign market.

What countries are important for the success of your business? EU countries, USA, Great Britain, Germany, China.

What factors decide about choosing the country of expansion? The platform is developing organically and it is the users that other countries depend on.
MIDAS
Medical Image Dataset Annotation Service
Limited Liability Company.

https://midas.radiato.ai

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
Positive impact.

Describe the influence of Covid-19 on your business.
Thanks to online activities and work from home, the team has gained more time to develop the idea. On the other hand, the verification of the solution became more problematic, as we had a problem in arranging meetings with doctors, as well as meetings were repeatedly postponed.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Medical data.

Information on the solution

What is your product/service?
A tool for the collection, management and safe export of medical data, enabling photographs to be annotated and statistics to be generated automatically.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The key distinguishing mark is automatic creation of statistics without the need to export data, which is lacking in the competition. The application has a universal recording format and allows for full anonymization of data in real time.

Do you have a business model already developed?
Not entirely.

If so, describe your business model briefly, taking into account who is a user and who pays.
The product is purchased by a research unit, a hospital or a team dealing with the annotation of medical photographs. We use the subscription model. The end user is a physician dealing with annotation.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities, Research Institutes.

Finance

What is the current level of funding for your startup?
Less than PLN 500,000.

What sources of funding do you have?
Foreign VC.

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain.

What factors decide about choosing the country of expansion?
Systematic law on the protection of medical data in a given region and the cost of obtaining data.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
6 - equivocal impact.

Describe the influence of Covid - 19 on your business.
During the pandemic, our startup began scientific projects devoted to searching for genes responsible for the severe course of Covid-19 disease. The second phase of the project involves discovering genes that ensure resistance to the disease. Cooperation with a consortium that conducts research worldwide resulted in the publication of a scientific article in the Nature magazine. The project has met large response of residents of various regions of Poland. More than 2000 people applied for the project. In addition, the pandemic has contributed to the better organisation of the work of the entire team.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Biotechnology, Medical devices, AI/machine learning, Laboratory tests.

Information on the solution

What is your product/service?
We offer Banking and BioBanking of biological material. Banking is dedicated to individual oncology patients and BioBanking is carried out as part of scientific projects. The tissue is stored in a buffer that protects the genetic material from degradation and ensures the high quality of isolated DNA that can be used for genetic testing. We offer oncology patients whole genome diagnostics, which is carried out using artificial intelligence and proprietary bioinformatics tools. Whole genome diagnostics are performed based on the method of sequencing the whole WGS genome (Eng. Whole Genome Sequencing). The test makes it possible to know the genetic cause of cancer and, on this basis, to identify a personalised therapy that has the best chance of success for a given patient.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Most of the genetic studies available to oncologic patients include a small part of the DNA sequence (approximately 0.1%). As few on the market, we are sequencing the whole genome, which examines 99.9% of DNA. Thanks to the use of artificial intelligence, we can extract from a large number of data this information that is clinically relevant to the patient and can influence the correct selection of a personalised therapy. Thanks to the functioning of the Polish BioBanking Centre in MNM Diagnostics structures, we ensure the comprehensiveness of services related to the protection of biological material and entire genome diagnostics.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Oncologic patients are the users of our service. In order to perform the whole genome diagnostics, physician’s recommendation is necessary. A patient is a payer of the service.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutes.

Finance

What is the current level of funding for your startup?
PLN 5 million - PLN 10 million.

What sources of funding do you have?
Private Investors (natural persons - Business Angels), national VC, foreign VC, revenue

Are you currently looking for funding?
Yes.
MNM Diagnostics
Limited Liability Company.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
Commercial agreements signed (e.g. distribution).

What countries are important for the success of your business?
USA, Germany.

What factors decide about choosing the country of expansion?
Market size.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

**Mobilemed** *(B2C)*
**Corporate Wellness** *(B2B)*
 Owned by Mobile Medical Services Sp. z o.o.

www.mobilemed.pl
www.corporate-wellness.pl

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**Current needs**

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid - 19 on your business.
Increase in B2C sales, decrease in B2B sales and development of mobile services.

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**General information on the organisation**

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Dietary services, Telemedicine, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity, Education, Rehabilitation.

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**Information on the solution**

What is your product/service?
Medical services provided with access to the patient/company and online.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We are the largest network of mobile physiotherapeutic services - with access to the patient’s home. We have an application for managing mobile visits. We operate in 102 towns with a team of 146 physiotherapists.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Mobilemed - one-off payment for an individual customer.
Corporate - Wellness - one-off or subscription services.

Indicate the institutions with which the startup most often cooperates.
Investors.

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**Finance**

What is the current level of funding for your startup?
We are now ready to sell the startup.

What sources of funding do you have?
Organic growth (financing from revenues).

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

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**Foreign expansion**

Are you now commercially present on foreign markets?
We are not commercially present and we are not planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Legal factors.
Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Extension of the team by 3 persons, commencement of generating repeatable revenues.

How did the Covid-19 pandemic affect your business?
6 - equivocal impact.

Describe the influence of Covid-19 on your business.
Travel limitation - smaller participation in conferences and getting to know new potential customers. More interest in our product due to its profile, greater involvement of programmers in Healthcare-related projects to help combat Covid.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Biotechnology, IT Tool - independent IT application, AI/machine learning, Laboratory tests.

Information on the solution

What is your product/service?
SaaS.

Does the product/service have a CE certificate?
Not applicable/Not required.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We have different models. Chemists working on drug discovery are the end users of the solution.

Indicate the institutions with which the startup most often cooperates.
Investors, Research Institutes, Financing Institutions.

Finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Private Investors (natural persons - Business Angels), Private Investors (private persons), Foreign VC, Seedfunds.

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company's main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
Commercial agreements signed (e.g. distribution).

What countries are important for the success of your business?
USA, Great Britain, Germany, Switzerland.

What factors decide about choosing the country of expansion?
Leaders in drug discovery.
Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
There was no change in relation to the Report.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid-19 on your business.
Our business creates radiological software supporting the work of doctors. At a time of the pandemic, health services have not become less important but on the contrary. In addition, there have been greater opportunities for remote work.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, AI/machine learning, Medical data, Other: medical diagnostics (not as a medical entity).

Information on the solution

What is your product/service?
Radiological software optimising the work of physicians (radiologists, orthopaedists) by using artificial intelligence methods in the diagnosis of locomotor system disorders.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Using artificial intelligence methods in the radiology of the locomotor system - only a few companies in the world offer products in this scope (mainly concerning degenerative disease or fractures). Scientific facilities. Work at the largest orthopaedic clinics in Poland, knowledge and orthopaedic experience. Cooperation with an outstanding specialist in image analysis (also medical).

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The users are doctors, hospitals and other medical facilities pay in the subscription model.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities, Research Institutes, Incubators.

Finance

What is the current level of funding for your startup?
PLN 500,000 - PLN 1 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, Incubation Programs.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
USA.

What factors decide about choosing the country of expansion?
Market uniformity and size.
Nano-implant
Limited Liability Company.

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
Nano-implant Sp. z o.o. is a spin-off university company, among the founders of which are employees of the Faculty of Chemistry of Nicolaus Copernicus University in Toruń (Aleksandra Radtke, Ph.D., Professor of Nicolaus Copernicus University and Ph.D. Piotr Piszczek, Professor of Nicolaus Copernicus University) and a surgeon recognised in Poland and abroad – Professor, MD, Ph.D. Waldemar Jędrzejczyk – a former employee of the Medical Department of Collegium Medicum of Nicolaus Copernicus University. Other co-shareholders are Centrum Transferu Technologii UMK Sp. z o.o. and persons specialising in printing anatomical models in 3D technology. The medical sector at the time of the pandemic is in a rather difficult situation, as the world of doctors is determined mainly to fight the existing epidemic. Our company continues to look for recipients of services (mainly recipients of pre-operative anatomical models and recipients of R&D results) and actively participates in R&D projects.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Medical data, laboratory tests.

Nano-implant was established in order to launch the technological line of new generation medical titanium implants, the so-called „tailor-made”, based on individual medical documentation of the patient.

Information on the solution

What is your product/service?
Among the currently existing medical implants on the market are standard implants, manufactured on a mass scale for dental purposes, plates/bolts for the purpose of maxillofacial surgery and orthopaedics, which require mechanical adjustment to a specific patient and implants personalised by physicians through surgery, based on polymer 3D anatomical models.

Does the product/service have a CE certificate?
Implant coatings must be certified, technological documentation that forms the basis for the certification process may be prepared based on testing for the company that will buy the technology. In the case of anatomical, pre-operational models, however, the CE certificate is not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Recently, examples of personalised implants, ready for being implanted, developed in 3D technology have emerged in the world and Poland. Nano-implant goes further with its product, as another aspect is added to personalisation: an innovative coating that gives the implant high biocompatibility and anti-inflammatory character.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
If there is interest in our services, we will be happy to present a model for companies interested in cooperation.

Indicate the institutions with which the startup most often cooperates.
Hospitals, investors, universities, research institutes, incubators.

Finance

What is the current level of funding for your startup?
PLN 2 million - PLN 5 million.

What sources of funding do you have?
Founder’s own funds (bootstrapping), grants from European funds, incubation programs.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.
Nano-implant
Limited Liability Company.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets?
Signed letters of intent.

What countries are important for the success of your business?
EU countries, USA, Great Britain.

What factors decide about choosing the country of expansion?
Rich knowledge.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Nestmedic
Joint-stock company.

Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? Product development, marketing and changes in the company’s team.


Describe the influence of Covid - 19 on your business. Increased demand for tele-medical solutions has contributed to increasing awareness of mobile CTG in addition, demand for equipment has increased.

Indicate the current stage of development. Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Telemedicine, Medical devices.

What is your product/service? Pregnabit - mobile CTG.

Does the product/service have a CE certificate? Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? We have full service, i.e. a device for testing a heart action of a child, a platform where the results are recorded and described, and a service, i.e. assessment of CTG tests. The apparatus is intuitive, small.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. We have two business models:
1. B2B2C - the device is sold to medical units, medical centres and midwives, and then used to patients.
2. B2C - the devices are rented directly from MCT (a subsidiary of Nestmedic, a medical entity) for patients at home.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors.

What are the key measures of your success at this stage of your development? Number of users.

Are you now commercially present on foreign markets? We have commercial agreements signed (e.g. distribution agreements).

What countries are important for the success of your business? EU countries, USA.

What factors decide about choosing the country of expansion? Number of births, perinatal mortality rate, level of funding and health care model.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Neurality
Limited Liability Company.

www.neurality.pl

Current needs
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. COVID-19 propelled telemedicine and „opened people’s eyes” to the opportunities offered by ML/AI and SaMD.

General information on the organisation
Indicate the current stage of development. PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work? Medical devices, AI/machine learning.

Information on the solution
What is your product/service? SaMD solution for automatic and objective diagnosis of hearing loss by analysing brainstem auditory evoked potentials.

Does the product/service have a CE certificate? No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? The use of algorithms for ABR classification is at 97% of accuracy, this has been proven in a number of scientific works, and the application has been implemented at the WIM Clinic.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Subscription model. End-user, ABR techniques, audiologist and EEG equipment manufacturing companies. As there are currently no audiologists, hospitals can buy our solution and attach it to the current equipment. A technician without an audiologist will be able to obtain results from our solution - diagnosis. In addition, our solution allows the automatic ABR screening tests, it can support audiologists in diagnosing results of examinations provided by technicians, it can operate online and offline. The solution may also be a simple application for patients who want to perform the so-called „second opinion” - they will simply make a photograph by phone (ABR course) and receive a diagnosis. In addition, the solution can be used as a data archiver.

Indicate the institutions with which the startup most often cooperates. Hospitals, Universities.

Finance
What is the current level of funding for your startup? Bootstrapping.

What sources of funding do you have? Founder’s own funds (bootstrapping).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Technological: MVP and a certificate.

Foreign expansion
Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, USA, Great Britain, Germany, China, Middle East.

What factors decide about choosing the country of expansion? Hearing problems are already a civilisation disease, in each developed country there are no audiologists - this is the main factor, plus the financial situation of a given market, e.g. hospitals in Poland have a „small wallet” but hospitals in foreign countries can afford an additional cost increasing the quality of their services.
Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
3 - negative impact.

Describe the influence of Covid-19 on your business.
Covid-19 caused delays in implemented projects. When creating devices for the healthcare industry, we cooperate with medical centres which, focusing on the fight against the pandemic, closed all other forms of activity, preventing us from conducting research and conducting tests. Lockdown forced our company to reorganise work, which for the last year was mostly performed on a remote basis. This made it difficult to carry out this part of the tasks, which requires access to the technical facilities at the company’s registered office. Access to new investments is also difficult – some investors have suspended or delayed their programs due to market uncertainty. The beneficial effect of the Covid-19 pandemic is the dynamic development of telemedicine and hospital to home solutions. This trend is consistent with the direction of development of Neuro Device products, so we are glad to see the growing demand for such devices.

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Biotechnology, Telemedicine, Medical devices, Wearables - not medical devices, Marketing place, AI/machine learning, Medical Data.

What is your product/service?
Voic, a pioneering system for the comprehensive rehabilitation of people suffering from aphasia, is a key product currently being developed. It has been designed for easy use by professionals in medical institutions and in domestic conditions by patients themselves, making treatment more accessible and cheaper. The key element of Voic is electric brain stimulation. This solution combines logopaedic therapy with neuromodulation, which makes rehabilitation effects appear faster. Treatment itself becomes more accessible and less stressful for patients.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
1. Voic is a system dedicated to the treatment of a specific disease – aphasia.
2. Voic ensures higher quality and effectiveness of speech disorder therapy (aphasia).
3. Voic is a complete system consisting of a stimulator (transcranial electrical stimulation) and a dedicated platform with therapeutic exercises (online therapy).
4. Voic makes it possible to monitor the progress of therapy.
5. Voic is a hospital to home solution, it is cost-effective and available 24/7.
6. Voic is applicable on both B2B and B2C markets.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The business model assumes first entry into the US market and then further English-language markets (UK, Australia). We plan to charge a one-off fee for the stimulator and introduce a subscription model with monthly fees for the online platform with therapeutic exercises. The payers will be centres carrying out an aphasia therapy, and in the next step individual customers.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities, Research Institutes, Regulators.

What is the current level of funding for your startup?
Above PLN 20 million.

What sources of funding do you have?
Other investors (e.g. industry investors).
Neuro Device Group
Joint-stock company.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Obtaining positive results from clinical trials, i.e. confirming the effectiveness of the therapeutic method.

Foreign expansion

Are you now commercially present on foreign markets?
We sell our other product on foreign markets - nurostym tES. We are planning to enter the foreign market with Voic.

What countries are important for the success of your business?
USA.

What factors decide about choosing the country of expansion?
Market size, official language, maturity of the med-tech market, availability of funding.
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business.
The company’s main revenues are based on the sale of rehabilitation equipment to hospitals and rehabilitation centres. This has been negatively affected by the pandemic, as investments in such equipment have decreased. On the other hand, acceptance and openness to telemedical solutions have increased considerably, which we hope will translate into easier sales of products that have just been developed.

Neuroforma
Limited Liability Company.

www.neuroforma.pl

Current needs

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, Internet Platform (marketplace), Rehabilitation.

General information on the organisation

Information on the solution

What is your product/service?
Neuroforma is a hybrid rehabilitation system consisting of:
Neuroforma for Facilities - a site for interactive movement and cognitive exercises in an extended reality, using 3D cameras (mature product, over 200 implementations and 10,000 practising patients).
Neuroforma for Patients - a software for interactive movement and cognitive exercises using Internet cameras, operating in a browser, on any device (MVP level).
Neuroforma for Specialists - a panel for the management of telerehabilitation of their patients, enabling them to be monitored, to check results, order matched exercises and asynchronous communication, operating in a browser (MVP level).
This system allows comprehensive patient care, starting with stay in a rehabilitation facility, through individual classes with physiotherapist and convenient remote care even many months after leaving the facility. Through interactive exercises and supervision of a specialist, the system supports the motivation of patients to exercise systematically, resulting in a positive impact on patient health (confirmed by clinical studies).

Does the product/service have a CE certificate? Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We have created a clinically verified hybrid rehabilitation system that enables continuous rehabilitation on a huge scale (there is no need for sensors for home exercises in the browser - a computer or tablet with camera and Internet is sufficient). The system consists of a solution for facilities (we are the leader of such solutions in Poland), thanks to which patients can exercise in the centre. After leaving, they may continue similar interactive exercises at home under the remote supervision of a specialist. The use of the camera and AR technology has a better impact on patients due to the use of their own image rather than avatars or models.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Rehabilitation facilities purchase a position (through distributors of medical equipment) for stationary work (one-off payment + support) and access to the telerehabilitation panel (annual subscription). Facilities pay for each patient who uses telerehabilitation or domestic exercises without supervision (monthly subscription). Smaller facilities, individual therapists, companies providing telemedical services, NGOs for access to the telerehabilitation panel (monthly subscription) and each patient who is under their care and takes advantage of telerehabilitation (monthly subscription). The end users are patients. In the future - individual patients pay for access to the database of interactive exercises in the browser without supervision of the therapist (monthly subscription). Such access may also be sponsored as part of prevention by NGO or insurance company.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Universities, Research Institutes, Accelerators.
Neuroforma
Limited Liability Company.

**Finance**

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Grants from European funds, Private Investors (private persons), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

**Foreign expansion**

Are you now commercially present on foreign markets?
We have a registered revenue from the foreign market.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
In the case of Neuroforma for Facilities - availability of a local distributor who is able to engage in the promotion and sale of the product. In the case of telerehabilitation - public readiness, technological level of equipment used and Internet access.
Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
6 - equivocal impact.

Describe the influence of Covid-19 on your business.
On the one hand, the COVID-19 pandemic made it difficult for us to work within conducted clinical trials, i.e. it forced the recruitment process to be changed and, for safety reasons, reduced the potential pool of patients. On the other hand, the current epidemic situation has shown the role of tele-medical solutions in caring for the elderly: visits by psychologist, psychogeriatrist, cognitive function trainings and other activities for safety reasons have been suspended or significantly reduced in many care facilities, which has naturally demonstrated the real, greater need for new technologies to tackle cognitive disorders in this group of patients.

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Medical devices, AI/machine learning, Rehabilitation.

What is your product/service?
Medical device, together with a system for training cognitive functions of the elderly. The solution consists of a band with EEG sensors, tablet and an additional tablet terminal.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We are distinguished by:
- Medical certification.
- Tests on patients - the device has been tested in a group of nearly 200 patients.
- Possibility of operating on your own or by personnel not trained in EEG biofeedback therapy: using dry electrodes, intuitive, simple application on the tablet.
- Training protocols and game scenarios adapted to the needs of the 60/65+ group (the first EEG-biofeedback device on the medical market for training cognitive functions of persons above 65 years of age).
- Interactive games and boards used in training, developed by experts and evaluated by representatives of the 65+ group.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The user is a senior. Payer - in the first stage of market entry: care facilities, in the next stage - reaching individual customers (user: senior, payer: senior citizen’s child at the age of 35-50).

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutes.

What is the current level of funding for your startup?
PLN 5 million - PLN 10 million.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Grants from European funds, Private Investors (private persons).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.
YOT Maps (product: NeuroPlay)
Limited Liability Company.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets?
We have signed letters of intent.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion?
First of all: the need for and the level of development of the care sector (senior citizens' homes) on a given market, command of the market by the founders; acquisition of customers and partners in the field of distribution on a given foreign market.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid - 19 on your business.
Increase in revenues.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Pharma/Dietary supplements, IT Tool - independent IT application, AI/machine learning, laboratory tests.

Information on the solution

What is your product/service?
The product is software using artificial intelligence algorithms to identify and count bacterial colonies on Petri dishes.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The use of the algorithm allows automated microbiological testing, eliminating the need for traditional identification of samples by a microbiologist, thereby reducing the costs of the process and increasing its efficiency. The developed software is ready for use in any laboratory (the only requirement will be to have a photographic camera) or in combination with existing automation systems for analysis of microbiological samples, the end effect of which is to photograph the Petri dish (e.g. MicroTechnix). The algorithm prepared has >95% effectiveness.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Due to the characteristics of the market, two models for the sale of system licences were developed:
Licences directly offered by NeuroSYS to the end users of the system - in such a model we receive remuneration on account of licence for using the system and on account of implementation works (adaptation of the software);
Licenses offered by NeuroSYS partners as a supplement to their basic offer - in such a model we receive remuneration on account of licence for using the system. Implementation works are performed by the Partner.

Indicate the institutions with which the startup most often cooperates.
Universities, funding institutions.

Finance

What is the current level of funding for your startup?
PLN 2 million - PLN 5 million.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Grants from European funds, Organic growth (financing from revenues).

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Currently, revenue is the main measure.

Foreign expansion

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, USA, Germany, Norway.

What factors decide about choosing the country of expansion?
Personal contacts.
**Current needs**

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business.
Increased interest and demand in my industry, more innovations, greater public awareness of the need for development in the direction of my product.

**General information on the organisation**

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Pharma/Dietary supplements, Telemedicine, IT Tool - independent IT application, Internet Platform (marketplace), Medical data, Blockchain, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity, Rehabilitation.

**Information on the solution**

What is your product/service?
Platform/application.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
On the one hand, we are directing our solution to a unique medical group, adapting it specifically to their mode and form of work. On the other hand, we want access to home healthcare to be universal and easier than it currently is. Our startup is not just about software but provides information about who needs a given kind of help and how the services of various specialists can support the everyday lives of these people. At the moment, the need for domestic healthcare is growing sharply due to a number of factors, such as the current pandemic situation, the growing number of ageing populations.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Our product is purchased strictly by the patient - it is the patient that pays for domestic medical care services to a nurse or a carer via our portal. However, we charge a minimum commission for each transaction. We also consider introducing an additional subscription model for premium accounts.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Accelerators.

**Finance**

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder’s own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

**Foreign expansion**

Are you now commercially present on foreign markets?
Signed letters of intent.

What countries are important for the success of your business?
EU countries, Germany.

What factors decide about choosing the country of expansion?
Social awareness and the demand for our services, an ageing society in a given country, extent of expenditures in a given country for domestic care.
Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid - 19 on your business.
More and more people come to us with complications after COVID-19, we focus on additional activities that could support our company’s development, which would result in the introduction of equipment into hospitals so that patients can start rehabilitation already in hospital. The situation related to the pandemic influenced my business, as people who have recovered from COVID-19 and use the oxygen therapy offered by o2fit come to us. According to studies by US scientists, rehabilitation should be included at an early stage of COVID-19 disease. The equipment fits in with the “post-covid” rehabilitation, which can be started already in hospital, this would allow patients to leave hospital faster, which is now crucial.

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Medical devices, Rehabilitation during and after covid 19, oxygen therapy.

What is your product/service?
Oxygen therapy using the e.w.o.t. method (exercises with oxygen therapy) - exercises combined with oxygen therapy during which we train, e.g. on a stationary bicycle, running track, etc.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
In fact, we do not have competition in this model of operation.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Introduction of equipment into hospitals and clinics so that everyone can have access during the disease (heart disease, covid, COPD, rehabilitation, etc.), which translates into faster return to health. Our services are purchased by people with health problems, elderly people and sportsmen (one-off payment) - sanatoria, health clinics, medical consulting-rooms, hospitals, rehabilitation centres, health centres, individual user, etc. are the end users.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Research Institutes, medical and rehabilitation clinics, sanatoria, equipment could be used in isolation rooms or covid wards.

What is the current level of funding for your startup?
Bootstrapping, financing from our own resources, we are seeking subsidies from the EU/Poland.

What sources of funding do you have?
The own funds of the founder, the bank credit and the subsidy we apply for.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Acquisition of capital, public awareness, transfer of knowledge of the e.w.o.t. method, society must learn about this service and the beneficial effect of oxygen and exercises, combining these elements makes health, physical and mental results very beneficial to the user.
Foreign expansion

Are you now commercially present on foreign markets?
Signed distribution agreement.

What countries are important for the success of your business?
We are currently focusing on the local market.

What factors decide about choosing the country of expansion?
At present, we are not planning development outside Poland.
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. Covid-19 was a catalyst that accelerated technological transformation and created the need to facilitate access to medical data.

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? AI/machine learning, Medical data.

What is your product/service? oWatch, which is intended to enable the safe storage and structuring of all medical data on the telephone, so that the patient can make access to the full medical history available to the doctor during the visit/televisit. In this way, we want to shorten the time of visits, increase the effectiveness of diagnoses and reduce the cost of healthcare.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? USP of oWatch is to provide patients with full access to the storage, management and sharing of their medical data.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. oWatch operates in B2B2C model, offering SaaS solution. The price for business customers for access to patient data during the visit is PLN 99.90/month/position. B2C customers have free access to the application.

Indicate the institutions with which the startup most often cooperates. Hospitals, Regulators.

What is the current level of funding for your startup? Bootstrapping.

What sources of funding do you have? Founder’s own funds (bootstrapping).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, USA.

What factors decide about choosing the country of expansion? Expansion should not start with a small country; we will start with a country that is in a similar time zone; we will only consider countries where there are many representatives of our target group.
Pain Assessment System (PAS)
Limited Liability Company.

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
2 - negative impact.

Describe the influence of Covid-19 on your business.
Difficult contact with regard to parts and difficult cooperation with universities in order to improve equipment.

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine.

What is your product/service?
System and device for measuring pain in patients in medical facilities.

Does the product/service have a CE certificate?
Yes.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The PAS consists of: main station, tablet application, docking station and 8 pilots. Customers - medical facilities have the option to purchase in one-off payment model. The PAS is intended for use by a patient.

Indicate the institutions with which the startup most often cooperates.
Hospitals.

What is the current level of funding for your startup?
The Company does not use external financing.

What sources of funding do you have?
Founder’s own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Profit.

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Maintaining standards such as those in the EU.
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Panatila
Limited Liability Company.
(during registration at the time of filling in the questionnaire)

https://panatila.com
https://medif.ai

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid-19 on your business.
The Covid-19 pandemic has further highlighted the existing shortages of medical staff, often overworked or working beyond capabilities. This time has shown how important it is to act effectively, as well as global communication and cooperation between health professionals to save patients' health and lives. In view of the current situation, there is a need to support health care with AI solutions that have become more important. The Medif.ai application is a mobile medical assistant dedicated to physicians that supports them in their daily duties, enabling them to improve the effectiveness of their therapy. Covid-19 has strengthened the fundamental values of the solution’s creators, namely the rapid and effective acquisition of the knowledge needed at the time, better diagnosis and effective therapy; more time by reducing bureaucracy, support through access to the European network of specialist doctors, lack of linguistic barriers. At the same time, the need for basic functionalities has been deepened, such as: voice transcription during a medical examination, safe author’s social network of doctors, possibility of real-time chat, access to a translation database, high class medical publications, information, guidelines, transparency in the possibilities of choosing drug therapies thanks to motor for recommendations of medicines, ECG analysis.

What is your product/service?
Our product is SaaS (Software as a Service) application Medif.ai - a mobile medical assistant. The AI solution aims to provide unique access to knowledge and improve the working conditions of medical personnel. The main functionalities of the application are:

• possibility of making automatic notes from real-time personal examination based on speech recognition,
• drug recommendations engine helping to select the best treatment method,
• ECG analyst to help detect electrocardiogram abnormalities,
• access to translated, verified scientific publications in order to quickly find similar cases in the world and to implement adequate treatment,
• effective PES learning, thanks to tests generated on the basis of information from patient’s personal examination,
• secure social network without advertisements (knowledge sourcing) and a communicator for physicians,
• diagrams, cockpits, epidemiological compilations.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Medif.ai is primarily a solution for doctors, which is supposed to support them in their daily work in an intelligent but accessible way. We help doctors to acquire knowledge effectively and quickly. 80% of the solution builds medical knowledge, the remaining 20% are artificial intelligence algorithms that allow easy and accessible use of this knowledge.

The entire project is based on a lean startup methodology whereby the user is involved in the entire process already developed at the initial creative stage in order to better align the functionality of the application with the current needs of the market. One of Medif.ai’s functionalities is a secure social network integrating physicians dealing with similar clinical cases worldwide and offering a solution to ensure that language barriers are overcome, thanks to automatic translation of the text in the mother tongue. An innovative functionality is also the possibility of effective PES learning, which is also aimed at promoting education. Medif.ai is also supposed to give a signal to young people who wonder about their career path that...
Panatila
Limited Liability Company.
(during registration at the time of filling in the questionnaire)

it is worth working in medicine because they will be supported by tools that can make them feel sure at work and minimise the stress associated with it.

Our long-term objective is to change the working conditions of doctors in Poland, change the paradigm of treatment to health management and increase the remuneration of medics thanks to savings achieved through cost synergies thanks to SaaS products/applications in Medif.ai ecosystem.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The subscription model is planned.
A payer in the form of an operator/medical entity is currently being considered.
Efforts will be made to involve the public payer.
At present, the end user is a doctor, without limitation of specialisation.
At a later stage of project development, it is planned to add functionalities for all medical personnel involved in the treatment process and tools for hospitals and pharmaceutical companies and pharmacies.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Financing Institutions, Regulators.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Local legal regulations and processes on the diagnostic and therapeutic path. Sales and marketing costs.

Finance

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder’s own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
MVP construction.
Current needs

Have you participated in the previous edition of the Report? Yes.


Describe the influence of Covid - 19 on your business. No possibility of personal meetings with Customers.

General information on the organisation

Indicate the current stage of development. Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Pharma/Dietary supplements, Telemedicine, IT Tool - independent IT application, Education.

Information on the solution

What is your product/service? Pictograms and software, and research/examinations.

Does the product/service have a CE certificate? Yes.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Customer, pharmaceutical company, pharmacies.

Indicate the institutions with which the startup most often cooperates. Higher education institutions.

Finance

What is the current level of funding for your startup? We finance ourselves.

What sources of funding do you have? Product sales.

Are you currently looking for funding? No.

What are the key measures of your success at this stage of your development? Number of product users.

Foreign expansion

Are you now commercially present on foreign markets? Commercial agreements signed (e.g. distribution)- Greece.

What countries are important for the success of your business? EU countries - mainly Lithuania, Hungary, Czech Republic, Slovakia.

What factors decide about choosing the country of expansion? Interest in the product by a given country.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid - 19 on your business.
More attention for medical projects among investors. The change in the rules of the game also offers more opportunities to look for business partners.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Medical devices.

Information on the solution

What is your product/service?
PhotoBioCure - injectable biomaterials for reconstructing soft tissues. After injection, the material changes the form from the viscous paste to an elastic solid, through photo-crosslinking method using a mild UV beam for live tissues. This characteristic allows the formation of a personalised polymer implant, i.e. a size adjusted to the size of the tissue defect, in situ in vivo. Most importantly, the material slowly resorbs allowing the tissues to be reconstructed.

PhotoBioCure is currently being developed in the reconstruction of hernia. The aim is to replace commonly used nets, which in the long term often produce side effects, e.g. chronic pain.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
PhotoBioCure revolutionises the process of operation of hernia:
1. liquid injected material is administered at the site of the defect protecting the hernia hole,
2. under the influence of safe UV light, the material is transformed into an elastic patch,
3. the material is biocompatible and does not require additional fixing,
4. unlike synthetic nets, the material forms scaffolding for natural tissues and is sometimes biore sorbed.

Given the high proportion of patients with short and long-term complications after surgery of hernia, up to 20%, PhotoBioCure offers an opportunity to improve the comfort of patients and treating physicians.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Pre-clinical studies have been completed but first in man and clinical trials should be conducted to place the product on the market. As of today, the company allows different business models depending on cooperation models built with strategic partners. The talks are ongoing.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities.

Finance

What is the current level of funding for your startup?
PLN 2 million - PLN 5 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, Grants from European funds, Private Investors (natural persons - Business Angels), Seedfunds.

Are you currently looking for funding?
Yes.
PolTiss
Limited Liability Company.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Advance of the clinical trial process.

**Foreign expansion**

Are you now commercially present on foreign markets? PolTiss has been designing the product for the international market from the beginning. Current talks with foreign partners.

What countries are important for the success of your business? EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion? Market potential, openness to new therapies, admission procedures.
**Current needs**

Have you participated in the previous edition of the Report?  
No.

How did the Covid-19 pandemic affect your business?  
3 - negative impact.

Describe the influence of Covid - 19 on your business.  
No possibility of travelling and participating in international fairs, conferences and possibility of promoting. No possibility of meetings with customers (hospitals, doctors, physiotherapists) and presentation of the equipment. No funds are available for rehabilitation, in hospitals most of the funds were allocated to the fight against Covid19.

**General information on the organisation**

Indicate the current stage of development.  
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?  
Medical devices, Robotics, Rehabilitation.

**Information on the solution**

What is your product/service?  
Prodrobot - an automated walking trainer.

Does the product/service have a CE certificate?  
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?  
Our device, as the only one in the world, has 5 types of rehabilitation exercises in line with the model walk. Compared with competition, our device does not use the running track, which increases the number of patients who can use it (persons with limits of load on ankle joints).

Do you have a business model already developed?  
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.  
Our users are patients with a wide range of limitations associated with walking dysfunction, posture defects and lower limbs. These are paediatric patients 110-150 cm tall. A device for adult patients will soon also appear. Indirect recipients are robot operators, i.e. physiotherapists, doctors, parents/carers. The customers (i.e. the entity which decides to purchase) are public hospitals and facilities, private rehabilitation centres, private physiotherapeutic practitioners, private persons, distributor companies, foundations.

Indicate the institutions with which the startup most often cooperates.  
Hospitals, Investors, Financing Institutions.

**Finance**

What is the current level of funding for your startup?  
PLN 2 million - PLN 5 million.

What sources of funding do you have?  
Grants from European funds, Other investors (e.g. industry investors), Organic growth (financing from revenues).

Are you currently looking for funding?  
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?  
Yes.

What are the key measures of your success at this stage of your development?  
Revenues.

**Foreign expansion**

Are you now commercially present on foreign markets?  
Registered foreign market revenue.

What countries are important for the success of your business?  
EU countries, USA, Great Britain, Germany, China.

What factors decide about choosing the country of expansion?  
Demand for robotic devices.
Prokinetic system
Limited Liability Company.

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Product development - new graphic design of instructions and packaging. Extending the presence of the product in Poland in the western Pomeranian, Pomeranian regions.

How did the Covid-19 pandemic affect your business?
3 - negative impact.

Describe the influence of Covid-19 on your business.
Obstruction of product presentation and lack of possibility of direct contact with customers in medicinal facilities

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Medical devices, Rehabilitation.

What is your product/service?
We manufacture the „Balancer System” device used in Motor Rehabilitation to eliminate fear of falling.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
There are no devices on the market that address the problem of Fear of Fall. We address the problem that other companies, physiotherapists and insurers are just starting to be interested in. Post-falling treatment methods, and especially anti-falling prophylactics, are becoming more and more popular due to the ageing of the population and the consequences of the pandemic.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Medical institutions will buy our product. One-off payment, in installments or leasing (we have a signed agreement with a bank allowing our customers to apply for leasing). The price of the device is affordable so that most customers will purchase it for cash or in 3 installments. The end user is a physiotherapist and a patient.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Research Institutes.

What is the current level of funding for your startup?
Less than PLN 500,000.

What sources of funding do you have?
Grants from European funds, Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, UAE, Republic of South Africa, Norway/Scandinavia.

What factors decide about choosing the country of expansion?
As of today, we are at the stage of implementation of grants supporting the preparation for expansion.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Proteo
Sole proprietorship.

www.proteo.com.pl

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Compared with the previous year, we have first developed technologically, expanded the range of products and possibilities of personalising the prosthesis of the lower limb. Our company has also begun to be more and more recognisable, among other things, through greater emphasis on promotion in social media. We have also taken a major step forward in terms of cooperation with foreign partners, which may in the future make it possible to scale business outside Poland. An additional bonus was the fact that next year we ended with sales growth, which will certainly help to further develop the company and implement further innovations.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid - 19 on your business.
The pandemic has caused that we placed even more emphasis on online campaigns and on awareness raising and knowledge transfer to patients on the internet. We have increased expenditure on Facebook and Google Ads advertising and this has produced the intended results. In addition, we completed the previous year 2020 with an increase in revenues, the development of business contact networks in Poland and abroad, and an increase in our technological capabilities. However, the negative consequences cannot be overlooked – any information about the disease or death of our patient was a painful experience for us, and the pandemic itself had devastating global effects.

What is your product/service?
Lower limb prosthesis, lower limb prosthesis funnel and lower limb prosthesis cover.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
As the first company in Poland and one of a few companies in the world, we have fully implemented additive technologies (3D printing), computer modelling (CAD) and 3D scan for the production of prosthetic funnel, i.e. the most important element of lower limb prosthesis. We are also probably the only facility offering public funding to patients, which has completely departed from conventional technologies. The main problem of lower limbs prosthetics is precisely the creation of a prosthesis funnel, it is this element of prosthesis that determines whether the patient feels comfortable in the prosthesis. If the prosthetic funnel is incorrectly made, too heavy or incorrectly adjusted, the patient will not use the prosthesis and will be doomed to the wheelchair. Innovative technologies help to improve the process of creating a prosthetic funnel, as well as allow for greater control at every stage of design.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Our customer is every patient after amputation of the lower limb. Thanks to a contract with the National Health Fund, our every customer/patient in Poland receives refunds for the prosthesis of the lower limb, and additionally may seek funds from PFRON (National Fund for the Rehabilitation of the Disabled), which ultimately make the prosthesis fully financed from public funds. Obviously, a patient in a commercial service can finance it alone or make his / her own contribution to public funds by buying even more advanced prosthesis.

Indicate the institutions with which the startup most often cooperates.
Hospitals.
Proteo
Sole proprietorship.

Finance

What is the current level of funding for your startup?
The company is maintained from revenues.

What sources of funding do you have?
Financing from revenues (customers).

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Profit.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Ukraine, Russia.

What factors decide about choosing the country of expansion?
There are amputees in each country and we are therefore taking into account the possibility of marketing our products.
Quantum Innovations
Limited Liability Company.

www.quantuminnovations.pl

Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
We started the implementation of the second project - a new device for cardiac surgery.

How did the Covid-19 pandemic affect your business?
4 - equivocal impact.

Describe the influence of Covid - 19 on your business.
Delaying animal testing. Sometimes delays in reagent delivery.

General information on the organisation

Indicate the current stage of development.
PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work?
Medical devices.

Information on the solution

What is your product/service?
Appliances for use during cardiac surgery.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The Heart Sense system can replace ECG skin electrodes during heart surgery - it detects heart ischaemia more quickly and accurately.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The product is to be purchased by hospitals with cardiac surgery wards. The product is intended for use in the most frequently performed heart surgery in the world - coronary artery bypass.

Indicate the institutions with which the startup most often cooperates.
Investors, Universities, Research Institutes, Accelerators.

Finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
National VC.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company's main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, India, Japan, Australia and New Zealand.

What factors decide about choosing the country of expansion?
IP protection. Developed cardiac surgical centres.
RemmedVR
Limited Liability Company.

ww.remmed.vision

Current needs

Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? We have developed sales on the market in Poland and other countries of the European Union. We have regular customers using our service. We have started implementing our solution in the US.


Describe the influence of Covid -19 on your business. From quarter to quarter, we recorded a 50% increase in sales of our solution and an increased interest in domestic therapy.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Telemedicine, Medical devices, AR/VR, Education.

Information on the solution

What is your product/service? Telemedical platform for remote rehabilitation and diagnostic services in VR. The therapeutic set consists of: software – a set of engaging visual exercises in the form of therapeutic games in VR, a control panel for remote monitoring, monitoring of progress and regulation of therapies, and equipment – the first and only one in the world, medically certified headset VR, equipped with eye-tracking, 6DOF hand-tracking. Thanks to the RemmedVR solution, parents do not have to travel to the consulting-room several times a week; doctors – for the first time in history – can conduct home therapy on the basis of objective data, and young patients can play absorbing games rather than exercise incomprehensible exercises.

Does the product/service have a CE certificate? Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Advantage of RemmedVR service over competition: possibility of fully remote treatment of visual defects, making the entire therapeutic program available for home use under full supervision of the therapist, certification of the entire solution (hardware and software), lack of initial costs to be covered in advance – clinics/therapists pay only if the patient uses the therapy, clinics do not incur any costs of implementation of RemmedVR solution due to subscription settlement. Patients taking treatment every day at home will be treated 2–4 times faster than using stationary therapy at the clinic 1–2 times a week. The therapy is on average 2 times cheaper than standard visual therapy and 4 times cheaper than Vivid Vision therapy. Therapists will serve 4–6 times more patients remotely than on a stationary basis, thus increasing revenues.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. RemmedVR provides a system and a set of business customers (B2B), currently reaching specialised sight therapy consulting-rooms. In this way, the product is mainly used by ophthalmologists and orthoptists (so-called visual rehabilitators). The whole process is as follows: instead of treating patients in the consulting-room, the medical facility orders the system for a patient, calibrating goggles remotely and setting exercises in virtual reality. In this way, the whole therapy can take place at home, while ensuring that it is fully effective. The cost of the entire service for the clinic shall be paid on a subscription basis.

Indicate the institutions with which the startup most often cooperates. Investors, Universities, Research Institutes, Financing Institutions, Accelerators, Incubators.
RemmedVR
Limited Liability Company.

Finance

What is the current level of funding for your startup?
PLN 10 million - PLN 20 million.

What sources of funding do you have?
Grants from national funds, Grants from European funds, national VC, foreign VC, Incubation Programs, Accelerators.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion

Are you now commercially present on foreign markets?
Yes, we have conducted the first commercial tests at pilot clinics in the USA and we start commercialisation since 04.2021.

What countries are important for the success of your business?
USA, India.

What factors decide about choosing the country of expansion?
Number of visual therapy specialists and degree of technological advancement of the therapy.
Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. Due to the COVID-19 pandemic, we were somewhat forced to turn to the Polish market. Earlier, we were oriented towards foreign customers. The review of the Polish radiological market has made us quickly aware of the new niches that we have easily occupied.

General information on the organisation

Indicate the current stage of development. Commercialisation stage - we have the first payers.

In what areas does your startup work? Internet platform (marketplace), Education.

Information on the solution

What is your product/service? We create an independent radiologiapolska.pl portal. We are the fastest growing community of doctors and electroradiologists clustered around radiology. We train, combine and integrate the radiological and electroradiological environments, using new media for this purpose.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? We are creating new spaces to strengthen medical cooperation.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. One-off payment, the user is a doctor, electroradiologist or student.

Indicate the institutions with which the startup most often cooperates. Higher education institutions.

Finance

What is the current level of funding for your startup? Bootstrapping.

What sources of funding do you have? Founder’s own funds (bootstrapping).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? Yes.

What are the key measures of your success at this stage of your development? Revenue and the ever-increasing number of medics interested in radiology in our base.

Foreign expansion

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries.

What factors decide about choosing the country of expansion? Cultural proximity.
**Current needs**

**Have you participated in the previous edition of the Report?**
Yes.

**How did the Covid-19 pandemic affect your business?**
5 - equivocal impact.

**Describe the influence of Covid - 19 on your business.**
The effect of the pandemic was small - the biggest minus was the limited activity of physiotherapists in a certain moment.

**General information on the organisation**

**Indicate the current stage of development.**
Commercialisation stage - we have the first payers.

**In what areas does your startup work?**
Telemedicine, Robotics, IT Tool - independent IT application, AI/machine learning, AR/VR, Medical data.

**Information on the solution**

**What is your product/service?**
RSQ Physio - an application for maintaining medical records for physiotherapists.
RSQ Doctor - an application for maintaining medical records for physicians.
RSQ Clinic - an application for administration in medical facilities.

**Does the product/service have a CE certificate?**
Not applicable/Not required.

**What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?**
RSQ Physio and RSQ Doctor reduce the time needed to complete medical records. Medical data of patients is stored in one of the safest data centres in Europe (beyond.pl). The applications are updated on an ongoing basis in relation to legal and administrative changes. In this way, we provide users of our applications with complete data security and certainty that they fill in medical records in accordance with the applicable law.

**Do you have a business model already developed?**
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The purchasers of our products are physiotherapists and doctors who run both single-person consulting-rooms and larger medical facilities (our customer is Rehasport Clinic). Our products are sold in the subscription model (monthly fee).

**Indicate the institutions with which the startup most often cooperates.**
Hospitals, Investors, Research Institutes.

**Finance**

**What is the current level of funding for your startup?**
PLN 1 million - PLN 2 million.

**What sources of funding do you have?**
Grants from national funds, Grants from European funds, Private Investors (natural persons - Business Angels), Private Investors (private persons).

**Are you currently looking for funding?**
Yes.

**Do you generate repeated revenues from the sale of the company’s main product/service?**
Yes.

**What are the key measures of your success at this stage of your development?**
Number of users.

**Foreign expansion**

**Are you now commercially present on foreign markets?**
We are not present but we are planning to be.

**What countries are important for the success of your business?**
USA, India.

**What factors decide about choosing the country of expansion?**
First of all, the market size and its development.
**Rytme**
Limited Liability Company.

**Current needs**

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
At this stage, the pandemic has no greater influence.

**General information on the organisation**

Indicate the current stage of development.
PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work?
IT Tool - independent IT application.

**Information on the solution**

What is your product/service?
Application supporting patients in the implementation of medical recommendations and lifestyle modification.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Involvement of a medical team, evidence based medicine, combination of education with tools to apply the change.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The product is intended for individual patients, and the offer will also be addressed to companies wishing to offer the solution in the form of benefits for employees and medical corporations wishing to use the solution for their patients.

Indicate the institutions with which the startup most often cooperates.
Accelerators, Incubators.

**Finance**

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder's own funds (bootstrapping).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

**Foreign expansion**

Are you now commercially present on foreign markets?
It is not yet this stage of product development.

What countries are important for the success of your business?
EU countries, USA.

What factors decide about choosing the country of expansion?
The product will be available in language versions, open access.
Current needs

Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? We have developed new algorithms, increased number of implementations, generate revenues and supplemented our business model, which currently perfectly responds to market demand.


Describe the influence of Covid-19 on your business. The healthcare sector is now more open to the implementation of new technologies.

General information on the organisation

Indicate the current stage of development. Commercialisation stage - we have the first payers.

In what areas does your startup work? Pharma/Food supplements, Telemedicine, AI/machine learning, Medical data, Laboratory tests, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity.

Information on the solution

What is your product/service? Artificial intelligence algorithms supporting physicians in diagnosing rare diseases.

Does the product/service have a CE certificate? Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? We focus on the diagnostics market of rare diseases, while many companies, such as ours, focus on typical diseases such as heart failure, dia-

betes or oncology. We have decided to specialise to a great extent. Our competitors in the area of rare diseases focus on a system based on rules that is less effective, i.e. has lower sensitivity and specificity. Our aim is different. Firstly, we focus on artificial intelligence algorithms (supervised learning) based on historical data sets (patients with and without diseases). Secondly, we use all medical records of patients, i.e. not only symptoms but also tests, laboratory results, imaging diagnostics results, prescribed medicines, associated diseases (all medical records).

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Our business model is based on two types of customers: (ii) healthcare providers interested in early diagnosis of patients with rare diseases in order to save costs, both those related to diagnosis and treatment (the earlier the diagnosis, the cheaper the treatment), (i) pharmaceutical companies interested in creating new medicines for rare diseases and clinical research.

Indicate the institutions with which the startup most often cooperates. Hospitals, Accelerators.

Finance

What is the current level of funding for your startup? PLN 2 million - PLN 5 million.

What sources of funding do you have? Own funds of the founder (bootstrapping), Grants from national funds, national VC, Organic growth (financing from revenues).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? Yes.

What are the key measures of your success at this stage of your development? Number of medical data analysed (patients).
Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
USA.

What factors decide about choosing the country of expansion?
The form of financing health care and emphasis on efficiency and savings.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

SDS Optic
Joint-stock company.

www.sdsoptic.pl

Current needs
Have you participated in the previous edition of the Report?
Yes.

How did the Covid-19 pandemic affect your business?
5 - equivocal impact.

Describe the influence of Covid-19 on your business.
There have been delays in the clinical trial process.

General information on the organisation
Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Medical devices.

Information on the solution
What is your product/service?
Optical fibre microprobe for breast cancer diagnostics.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We perform real time tests (in vivo). The result is numerical, no cancer tissue procurement.

Do you have a business model already developed?
No.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutions, Regulators.

Finance
What is the current level of funding for your startup?
More than PLN 20 million.

What sources of funding do you have?
Grants from national funds, Grants from European funds, Private Investors (natural persons - Business Angels), national VC.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Capital acquisition.

Foreign expansion
Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain.

What factors decide about choosing the country of expansion?
Size of the medical market.
SensDx
Joint-stock company.

www.sensdx.eu

Current needs

Have you participated in the previous edition of the Report?
Yes.

How did the Covid-19 pandemic affect your business?
2 - negative impact.

Describe the influence of Covid - 19 on your business.
The pandemic has destroyed some of the plans and schedules and changed the market.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Telemedicine, Medical devices.

Information on the solution

What is your product/service?
Rapid diagnostic tests of different protein biomarkers.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We are distinguished by the accuracy, speed and simplicity of service.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We use the Razor-Razorblade model.

Finance

What is the current level of funding for your startup?
Above PLN 20 million.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Grants from national funds, Grants from European funds, Other investors (e.g. industry investors).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, Germany.

What factors decide about choosing the country of expansion?
The plan and the possibility of easier entry into a given market by the conditions in a given country.
Have you participated in the previous edition of the Report?
No.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Coronavirus has made the medical industry more willing to implement digital, remote solutions. Thanks to this change, we have highly developed our presence in the hospital segment, where the bands are used as a call system, a system for illustrative measurement of vital parameters. 2020 is also the year of opening up to the individual market and starting direct online sales in the B2C segment.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid - 19 on your business.
Coronavirus has made the medical industry more willing to implement digital, remote solutions. A few hospitals have used our solution to improve patient care.

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, Medical devices.

What is your product/service?
The telemedical band and telemedical system for remote care of users of the band. We also offer a telecare service - so 24/7 band user monitoring by rescuers at the telecentre.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The telecare service provided by professional personnel at the telecentre, certification, production in Poland, induction charging.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Three segments in which SiDLY operates:
1. Local self-government / institutional market. Local self-governments or foundations purchase the bands together with telecare service for care over residents, senior citizens or other groups of persons. Users get the band if they are qualified for the program.
2. Hospital market.
   Hospitals purchase the bands together with a telemedical system (without telecare) as a modern call, geolocation system and allowing for an illustrative measurement of vital functions.
3. Individual market.
   Direct sales to the individual customer of the band together with telecare service. As part of the development of this segment, we establish cooperation with insurers, companies offering employee benefits, etc.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors.

What is the current level of funding for your startup?
PLN 10 million - PLN 20 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from domestic funds, Private Investors (private persons), national VC, sales revenues.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.
What are the key measures of your success at this stage of your development?
Increasing revenue and in consequence - more Clients.

Foreign expansion

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Maturity of the health system, knowledge of similar telemedical solutions, abundance of a typical customer, ease of occurrence on the market, size of the market.
Have you participated in the previous edition of the Report? Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year? Adding a new product to the offer: Oscillating waistcoats for respiratory tract drainage.


Describe the influence of Covid - 19 on your business. Lockdown caused problems with the delivery of components for the construction of equipment.

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Telemedicine.

What is your product/service? Infant and Child Monitoring System (thermometer, SP02 and base station).

Does the product/service have a CE certificate? No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? As the only one, we have a thermometer and SP02 system for children who connect to a dedicated database, which makes it possible to send data to external systems in hospitals.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. The user is a Patient. Hospital pays. One-off payment plus subscription.

Indicate the institutions with which the startup most often cooperates. Hospitals.

What is the current level of funding for your startup? PLN 500,000 - PLN 1 million.

What sources of funding do you have? Founder's own funds (bootstrapping), Grants from European funds.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.

Are you now commercially present on foreign markets? We are not present but we are planning to be.

What countries are important for the success of your business? EU countries, Germany.

What factors decide about choosing the country of expansion? Countries in the EU.
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business.
The lack of any events results in limited networking opportunities, which is crucial at the stage of developing young startups and acquiring investors and early customers. We also hoped for a pilot screening in the prevention of injuries to Achilles tendon based on major running events (e.g. marathons), which unfortunately do not take place.

Indicate the current stage of development.
PoC (Proof of Concept - version of the product which shows its feasibility, it does not meet the basic requirements of customers yet).

In what areas does your startup work?
AI/machine learning, medical imaging and radiology.

What is your product/service?
SmarterAchillesMRI - AI software for automatic assessment of selected Achilles tendon state parameters in Magnetic Resonance imaging. Based on a simple image sequence, it assesses structurally the morphology of tendons and surrounding tissues. It may support a radiologist in describing a tendon or ankle joint imaging study, or provide a basis for screening and health monitoring services, as well as quantitative validation of treatment.
The software operates in the SaaS model and can be implemented in the cloud or locally according to the customer's needs.

Does the product/service have a CE certificate? No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Currently, only subjective descriptive evaluation of the complete radiologist (30-60 min) of the RM study is used.
Our solution provides an automatic, repetitive, structured and quantitative assessment. The results of the tests shall show a numerical deviation from the standard and shall ensure comparability. In addition, it shortens the time of test description within the scope of assessment of basic morphological parameters of Achilles tendon. It also allows for a significant reduction of data acquisition time based on a fast gradient sequence T2* (~3-5 min acquisition), which opens up the possibilities of screening and increases the availability of RM tests.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We plan an implementation model assuming integration of the software with existing RIS/PACS or AI Marketplace platforms. The final recipients are RM imaging facilities and teleradiology workshops. Indirectly, orthopaedic and sports medicine clinics. The two main implementation segments are radiology and sport. In radiology, the end-user is a radiologist drawing up a description of the RM test of Achilles tendon or ankle joint. In sport, the consumer, a healthy and physically active person, is the final recipient of a rapid test service with automatic Reporting.
In most of the planned implementation models, the fee for the processing of the test shall be borne by the medical imaging facility or the consumer using the diagnostic or screening service.
We assume 5 financing streams:
In the B2B2C screening model, the offer for consumers is based on SmD software and RM equipment of the facility. The consumer is a payer, the company and imaging facility share the revenue.
In the monitoring model for professional sportsmen, the screening service is enriched with an analytical layer. The offer for sports clubs is based on cooperation between SmD and the imaging facility. The sports club is a payer, the company and imaging facility share the revenue.
In the radiologist support tool model, the sales unit is to generate the assessment of a single test. In direct implementation at the customer’s premises, it is a direct B2B relationship. The imaging facility / clinic is a payer.
In analogy to item 3), When implemented through AI Marketplace, this is an indirect B2B2B relationship. The imaging facility / clinic is a payer, marketplace takes the commission.
In the strategic cooperation model with a large supplier of B2B2B radiological solutions, the direct customer is the supplier/integrator. Fi-
nal customer - the imaging facility/clinic pays the supplier, the supplier pays SmD in the selected model.
Horizontally, we assume the following models to the financing streams: Pay-per-use, i.e. fees for each image test processed in the SaaS model, Subscription, i.e. the possibility of buying quantitative or time packages, Licences, i.e. the possibility of exclusivity for a selected part of the market.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Accelerators.

Finance

What is the current level of funding for your startup?
Less than PLN 100,000.

What sources of funding do you have?
Founder’s own funds (bootstrapping) + public services (e.g. acceleration).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Number of tests processed in pilot programs and collected for AI needs.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany, Switzerland.

What factors decide about choosing the country of expansion?
Openness to AI innovation. Needs scale (number of tests performed vs. availability of radiologists). Easiness in establishment of contacts.
SmartMedics
Limited Liability Company.

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
First of all, the team’s expansion, moving the company’s registered office to a place with an appropriate production hall. During the pandemic, we have obtained a contract with a global leader which manufactures medical devices - this enabled the company to develop further and we are now a contract manufacturer thereof.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid -19 on your business.
We have seen a marked increase in interest in the area of patient monitoring remotely by the fact that the patient does not want or cannot come to a hospital in person. We are seeing a growing belief that live consultation is not always required and there are remote and telemedical solutions that facilitate diagnosis and save time and money for the patient.

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, Medical devices, AI/machine learning, Medical data, Rehabilitation.

What is your product/service?
SmartMedics innovative system is the result of the work of a team of young Polish scientists, engineers and doctors, regulatory experts combining scientific experience with a practical implementation approach in the field of medical innovations.

The company’s product is a set of 18-lead ECG Patch integrated with a wireless ECG module and a dedicated mobile application. Unique Patch contains all necessary ECG electrodes, which makes it significantly easier to perform one of the most basic and commonly used medical examinations. This is particularly important given that, as data shows, only 49% of nurses and 16% of doctors are able to perform the ECG correctly.

SmartMedics innovation causes that thanks to integration of all electrodes in one Patch it is possible to place it a simple and fast manner (approximately 15 seconds) in patient’s body, while decreasing the risk of erroneous arrangement of the electrodes at the same time. SmartMedics product is distinguished by several unique functionalities: total lack of cables, transparency for X-rays, as well as high stretchability - which makes it a unique product on a global scale. The SmartMedics electrode system can ultimately also be used to perform Holter tests or cardiac stress tests. In addition, in the future, the system will be integrated with a mobile application that will enable continuous monitoring of health outcomes and, for example, consultations with a physician online. The system also has the capability to use solutions for patients undergoing rehabilitation and cardiological telerehabilitation. After the infarction, the patient will not have to go to hospital every day for 2-3 weeks (this is currently the case). Thanks to the SmartMedics system, the physician will be able to issue training recommendations through the application and remotely monitor the progress of rehabilitation.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Patch SmartMedics is a revolution from the perspective of the patient. Firstly, the lack of cables will significantly increase the comfort of ECG testing and will make electrodes not move because they will be placed in a single Patch. This will allow both a comfortable ECG study in a hospital and daily activity, e.g. in Holter test or cardiological telerehabilitation. This is a significant advantage over existing competition. Secondly, SmartMedics technology does not cause any skin irritation and is completely safe for the patient, which is particularly important when carrying an electrode for a long time, e.g. 24 hours. SmartMedics technology also significantly reduces the risk of infection during hospital stay. This is due to the fact that SmartMedics patch is wireless, while traditional ECG uses many cables that are a carrier of bacteria, often causing hospital cross-infection. What is particularly important in the context of SmartMedics, as much as 20% of heart attacks are not detectable using traditional 12-lead ECG. The large-scale application of an 18-lead ECG system will signifi-
Significantly facilitate the test procedure and will consequently contribute to increasing the detection of potential myocardial infarctions. So far, there are no similar solutions on the market that would allow the simultaneous recording of all 18 leads.

**Do you have a business model already developed?**
No.

**Indicate the institutions with which the startup most often cooperates.**
Hospitals, Investors, Research Institutes, Regulators.

**Finance**

**What is the current level of funding for your startup?**
PLN 5 million - PLN 10 million.

**What sources of funding do you have?**
Grants from national funds, Grants from European funds, Other investors (e.g. industry investors), foreign VC.

**Are you currently looking for funding?**
Yes.

**Do you generate repeated revenues from the sale of the company’s main product/service?**
No.

**What are the key measures of your success at this stage of your development?**
Capital acquisition.

**Foreign expansion**

**Are you now commercially present on foreign markets?**
We are not present but we are planning to be.

**What countries are important for the success of your business?**
EU countries, USA, Poland.

**What factors decide about choosing the country of expansion?**
Mainly demand for our products and competition in the market (the less/fewer the better).
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid - 19 on your business.
Solvemed Group is a company dealing with software as medical equipment. The company was created with a view to remote cooperation. Members of our team operate all over the world. The pandemic had one positive side for us - when the world was blocked, all forms of activities related to acceleration, fundraising and cooperation were transferred to the network. We did not have to be physically present to have access to programs or funding. We also believe that domestic work has enabled cooperation with professionals with technical capabilities because they had more time to cooperate with startups. We are still working online, developing the team and the company quickly. Covid made this a new normality!

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Medical devices, AI/machine learning.

Information on the solution

What is your product/service?
Neuroscience AI engine.
Solvemed develops a neurobiological artificial intelligence specialising in discovering and analysing ocular biomarkers in order to create the first tool in the world to diagnose, monitor and stratify neurodegenerative patients, with particular emphasis on Parkinson’s disease. Focusing on dynamic pupilometry and blinking pattern data, we are now expanding our repositories and artificial intelligence analyses to include other biomarkers important in neurology and ophthalmology, such as optical coherent tomography, contrast sensitivity, subtle eyelid movements, tracing the viewing point, among others. In addition to the artificial intelligence analysis, we make available a collection of ocular biomarkers by digitising standard ophthalmological tools, with the main focus on pupilometry. Over the last decade, pupillometers have become recognised non-invasive quantitative tools supporting diagnosis and clinical proceeding in a wide range of clinical conditions, especially in neuroophthalmology. The biggest challenge is to:
  a) reduce costs and increase the speed of pupilometric measurements in order to enable large-scale data collection with high precision,
  b) develop sensitive and specific algorithms that translate figures into clinically relevant observations (no one has implemented AI into such data in the context of neurodegenerative disorders before us).
In order to meet these challenges, we have developed a specialised mobile application that stimulates the patient’s eyes and intercepts and sends video to our fully integrated cloud database and provides initial analysis in less than one minute. Films from both eyes may be recorded in one measurement by means of a rear or front telephone apparatus. When a front camera is used, the telephone screen may be used for continuous stimulation and / or for displaying additional guidance to the patient and / or for additional types of stimuli such as different wavelengths of light and visual tracking tests. Whereas, the rear camera can be used under less standardised measurement conditions (e.g. outside a clinic or patient’s home), for example in a football pitch for rapid detection of brain concussion.
Platform for clinical trials.
In addition to our diagnostic and (remote) monitoring capabilities, we use our biomarker datasets and proprietary analysis of artificial intelligence to support the clinical development of new medicines. Our data interception by means of smartphones and the integrated database allow innovative test modes, including home data collection and patient monitoring. Moreover, our early and accurate detection of PD increases the recruitment of patients for PDs tests, while our biomarkers can serve as new significant endpoints in the study. Most importantly, thanks to our analysis of eye data, we can divide patient cohorts into losses in order to identify subgroups of patients who respond positively to experimental therapy in order to maximise the chances of approving new medicines. Therefore, our system can act as a diagnostic aid, providing personalised medical interventions to doctors.

Does the product/service have a CE certificate?
No.
What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?

Extensive analytical capabilities of ML for patient stratification applications - we go beyond diagnostics and disease motoring, and collected the best ML talents and data science, as well as established industry relations in order to develop possibilities of analysis of data from clinical trials.

Patent application securing the method of processing pupilometric data for cholinergic system diseases. We are currently in the process of submitting two further patents concerning the interception of data by smartphones from new digital ocular biomarkers in neurology.

Comprehensive ocular data repositories through the (exclusive) agreement on data sharing with UCL Hospitals and the agreement on data sharing with Oxford University. The datasets shall include data from pupillometry from 7 years and the possibility to collect prospective data generated by the day-to-day clinical practice of cooperating neuroophthalmologists.

Moreover, we are currently building a unique and comprehensive ophthalmological database, combining, among other things, a number of biomarkers, a reflex of the pupil light, an optical coherent tomography, blinking, contrast sensitivity, subtle movements of the eyelids, movements of viewing points.

Do you have a business model already developed?
We are working on this.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors, Universities, Research Institutes.

Are you now commercially present on foreign markets?
Signed letters of intent.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion?
The geopolitical situation conducive to the development of MedTech and HealthAI, R&D and adaptability of health system technologies in the country, presence of leading clinicians and KOL in neurology and neuroophthalmology, growing landscape of financing with the abundance of VC and PE activities, presence of big pharma ecosystems, big tech, biotech and medtech for the rapid development of products.
StethoMe
Limited Liability Company.

https://stethome.com

Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
StethoMe has changed its strategy over the last year, focusing mainly on the B2C market, for which StethoMe is offered, which supports the process of monitoring chronic respiratory diseases, with an emphasis on the control of exacerbations of asthma in children.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid-19 on your business.
The Covid-19 epidemic undoubtedly poses a challenge for each business but due to our specificity, as a medical device operating in the field of telemedicine and remote monitoring, as well as pulmonology, Covid-19 contributed significantly to increasing the Company's visibility in the eyes of direct customers, as well as healthcare providers or public parties.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, Medical devices, AI/machine learning.

Information on the solution

What is your product/service?
StethoMe® is the first system to detect respiratory abnormalities, which is based on medical algorithms cooperating with wireless stethoscope and a dedicated application. The solution is designed to monitor and handle patients with chronic respiratory diseases remotely, with particular reference to the asthma population. Thanks to the use of unique technologies to control the quality of the study, StethoMe® can be used by patients in domestic conditions. The parameters analysed change their values at the time of occurrence or exacerbation of the disease. Combination of stethoscope StethoMe® and AI algorithms allow for an auscultation test, sound recording and accurate analysis thereof. The test result generated by the AI module in the cloud is visible immediately to the patient. At the same time, the entire study is sent to a platform where a physician can analyse it.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The device and algorithms of artificial intelligence have received a Class IIa medical certificate in the EU. It is currently the only certified system with dedicated artificial intelligence algorithms for diagnosing respiratory pathology in the world. Clinical value has been confirmed in numerous scientific studies and publications in the field of medicine and technology. StethoMe AI allows 29% more accurate detection of pathological sounds caused by respiratory infections, asthma and the like. By comprehensiveness of measurements, the system is the only one to classify asthma exacerbations in accordance with GINA guidelines (Global Initiative for Asthma).

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The solution is dedicated to the individual customer market, which is able to purchase StethoMe solution in the subscription model for a period of 12 months or 24 months. The Customer may independently purchase the solution on StethoMe's website. The solution is also available to medicinal entities and healthcare providers.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Investors.

Finance

What is the current level of funding for your startup?
Above PLN 20 million.

What sources of funding do you have?
Grants from national funds, Grants from European funds, Private Investors (natural persons - Business Angels), national VC, foreign VC.
StethoMe
Limited Liability Company.

Are you currently looking for funding?  
No.

Do you generate repeated revenues from the sale of the company’s main product/service?  
No.

What are the key measures of your success at this stage of your development?  
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?  
The company is preparing for further commercialisation of the product in the EU, starting with the sale of the solution to individual customers in France, Great Britain and Italy.

What countries are important for the success of your business?  
EU countries.

What factors decide about choosing the country of expansion?  
Frequency of the incidence of asthma in the population, the status of the advanced health care market in terms of adoption of e-health solutions, the state of legal solutions in the field of telemedicine, model of functioning and financing of public health care services.
Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Extending the offer, expanding the team, increasing sales and turnover, acquiring new business partners.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid-19 on your business.
Transfer of communication with customers to the online sphere, launching a webinar cycle, opening up new production capacities, as well as new concepts for product demand in Poland and abroad.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Biotechnology, Medical devices, Robotics, AI/machine learning, AR/VR, laboratory equipment.

Information on the solution

What is your product/service?
Laboratory equipment, biotechnological equipment, intravital microscopy, holotomography, tissue engineering, exosome isolation, AI microscopic imaging software.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We are the only distributor of Cellink in Central and Eastern Europe, we have one of the most developed machine parks for additive technologies in Poland, and we also take part in leading R&D projects in Poland.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
One-off payment and after-sales care. The end users are laboratory staff members.

Indicate the institutions with which the startup most often cooperates.
Investors, Universities, Research Institutes, Financing Institutions, Incubators.

Finance

What is the current level of funding for your startup?
The company is self-sufficient in financial terms.

What sources of funding do you have?
Founder’s own funds (bootstrapping), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, USA, China.

What factors decide about choosing the country of expansion?
First of all, sales potential and simplicity in logistics.
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. Telemedicine remains one of the fastest growing health sectors. Thanks to digital patients, who naturally and comfortably accepted the possibility of contacting physicians online, as well as the COVID-19 global pandemic, telemedicine increased sharply. Telemedicine was initially a business providing only services, offering videoconferencing tools tailored to medical cases of use but essentially comparable to existing general videoconferencing tools in the package with integrated electronic patient cards. For TakesCare, Covid-19 time has confirmed the legitimacy of our approach in the area of patient support, cooperation with partners and the technology created. In our activities, we focus on the educational element, which is why, in this regard, Covid certainly caused that we had an easier task. On the other hand, there have been many new companies on the market offering similar services, the quality of which leaves much to be desired. We do not want to be equated with the so-called fastfood of telemedical services. We focus on quality and professionalism. In business terms, we have fixed monthly revenues, an ever-increasing base of individual customers, as well as business customers and partners. We are technologically developing our platform with new functionalities, as well as integration services with other solutions, including, in particular, telemedical devices. Therefore, 2021 for TakesCare will be the next logical step in integrating a selected team of physicians who offer consultations directly through telemedical platforms which will adapt a vertical integrated approach to patient care covering a number of activities on the patient - medical carer - specialists line before and after online consultation. By providing comprehensive solutions in a specific patient indication or for a specific patient problem. The latter is what is called a vertically integrated micro provider or, in short: VIMPRO. The importance of this approach is to use the strengths of classic telemedicine while addressing telemedicine weaknesses by successfully adding functions such as digital therapy (DTx), coordinated care, drug policy management including prescription medicines (Rx), predefined monitoring and prevention pathways for specific groups of civilisation diseases. The VIMPRO model has a high margin potential as a result of having a whole value chain in which they can influence and optimise margins at each stage. Furthermore, built-in patient retention mechanisms, such as regular medical checks with continuous adaptation of patient treatment or subscription services for the supply of products, result in recurring revenues and multiplication of patient’s living values. Naturally, this approach extends the possibilities of reaching customers, for whom it is essential to provide themselves and the nearest with remote care supported by technology and dedicated medical carers. Process automation will allow for the implementation of subscription services adapted to specific patient groups, at a shorter time and at a reasonable price. 2021 will be the year of further rapid development of startups, and this approach they already have in their offer and technology. Startups that know how to reach the end customer and partners, e.g. medical operators, insurers, pharmacies with an offer that meets their expectations. In the long term, only the VIMPRO approach will win the care in digital medicine and its fraction, i.e. telemedicine. In TakesCare we have been operating in this model since 2019.

Indicate the current stage of development. Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work? Telemedicine, Internet Platform (marketplace), Medical data, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity, Education.

What is your product/service? Virtual medical care dedicated to you. Patients and healthcare professionals receive a fully digital cooperation service and virtual prophylactic care. As Health / InsurTech marketplace, we create a strong position and experience of patients. We want to focus on effective prophylactics, diagnostics and treatment of chronic diseases, infections and mental health. We are looking after the patient at every stage of his / her path to good health. From the appointment of the visit, through its performance, receiving a diagnosis and prescription – to booking and receiving medicines at a pharmacy, without queue. Thanks to our service, it is possible to contact a specialist by video conference, chat or telephone. In addition, the history of visits and medical recommendations, which allow health prophylactics and continuous monitoring of health, is collected in one safe place. Our flagship product includes healthcare packages, and at each stage. Furthermore, built-in patient retention mechanisms,
for services available only online. Physicians are provided with convenient solutions for running a virtual consulting-room. We quickly and safely integrate the telemedical platform with business partners.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We are distinguished in the following terms:
2. Business model - time of introduction of new services to the market.
4. Technology and functionality.
Availability of the service in the FFS and subscription model. We are distinguished, first and foremost, by an approach to health care at a distance and holistic looking at the process of care for patients' health. The services we offer are addressed to the patient at every stage of care for health - from pro-health prophylactics, through treatment and monitoring of health state, to maintaining its indicators at the appropriate level. When creating the services, we are guided by their availability to everyone, in any place and at any time in/at which they are located. Thanks to modern technical solutions, we are able to quickly and safely implement our solutions for business partners. The usual integration time is 7 working days in which we provide a fully operational and ready system. In addition, we introduced online healthcare packages in Poland as the first, within which a patient can configure the necessary services freely and to build his/her plan for health like of toy blocks. We are not another telemedical platform that allows you to consult your doctor remotely. Thanks to the possibilities offered by modern technology in medicine, we build lasting relations with patients, their families and care for their health 24 hours a day, offering a wide range of medical services. Reduction of costs for the patient, specialist, partner by at least 20%. Increasing efficiency without loss of quality at least 30%, reducing the costs of subscription care by 15%.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We operate in the B2B2C model. The source of the company’s revenue is the fee for the services provided plus the commission charged on the telemedical service carried out on the platform in the subscription model and FFS, as well as the payment for the technology used by customers and business partners.

Indicate the institutions with which the startup most often cooperates.
Insurers, Banks, Telco, medical facilities, Companies/Individual Customers.

What is the current level of funding for your startup?
PLN 500,000 - PLN 1 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Accelerators, revenues from the services provided.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company's main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues, level of the quality of services rendered, number of users, number of partners, renewable paid subscriptions, margins.

Are you now commercially present on foreign markets?
We are not present but we are planning to start operations in 2021.

What countries are important for the success of your business?
EU countries, Great Britain, Germany, Asia, Central and Southern America, Africa, India, Asia, Spain, Italy, Turkey.

What factors decide about choosing the country of expansion?
Numerical force, language, technological maturity, legislation.
Have you participated in the previous edition of the Report? No.

How did the Covid-19 pandemic affect your business? 5 - equivocal impact

Describe the influence of Covid-19 on your business. The pandemic made everyone aware of the essence of automation in business but the share of innovation spending in the customer decreased with a drop in turnover.

Indicate the current stage of development. PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work? AI/machine learning, Medical data, Provision of health services (prophylaxis, diagnostics, treatment) as a medical entity, Prediagnostics, Health Analysis, speech analysis.

What is your product/service? A tool for pre-diagnosis of civilisation diseases based on voice analysis.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? High effectiveness in diagnosing diseases (up to 85 per cent), experience in providing voice solutions (many successful national implementations).

Do you have a business model already developed? No.

If so, describe your business model briefly, taking into account who is a user and who pays. Product in the production phase, intended to be sold in a flexible model (licence fee per month or one-off fee for major implementation).

Indicate the institutions with which the startup most often cooperates. Hospitals, Universities, Research Institutes.

What is the current level of funding for your startup? More than PLN 20 million.

What sources of funding do you have? Founder’s own funds (bootstrapping), Grants from national funds, Grants from European funds, Organic growth (financing from revenues), Accelerators.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? Yes.

What are the key measures of your success at this stage of your development? Revenues.

Are you now commercially present on foreign markets? Signed letters of intent.

What countries are important for the success of your business? EU countries, Germany, Spain, South America, Japan.

What factors decide about choosing the country of expansion? Success in customer acquisition, scalability.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid-19 on your business.
The pandemic has led to a significant increase in the interest of telemedicine. More and more medical entities, doctors and medical specialists are starting to use telemedical solutions for the treatment of their patients. This increases universal access to telemedical services that were niche in our country before the outbreak of the pandemic. At the same time, a significant proportion of patients started using telemedical solutions. Before the pandemic outbreak, the awareness of patients about telemedicine was low, especially in our country. Our product is a platform linking patients with physicians and medical specialists and enabling video-consultation. The interest in our product has therefore significantly increased. Competition on the market has also significantly increased, which forced us to speed up our work on our solution. We have finally only succeeded in putting the platform on the market in February this year.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Telemedicine, Internet Platform (marketplace).

Information on the solution

What is your product/service?
Healthyly is an innovative software enabling medical specialists to work in the form of teleconsultation and patients to find and undergo consultations without having to leave home. Our platform is adapted both to doctors, psychotherapists, psychologists, dieticians and physiotherapists as well as patients in each age group. Through Healthyly, we provide a guarantee of payment for each specialist. An additional added value for a specialist is the possibility of acquiring a new customer through our service. The calls made by the platform shall be fully encrypted to ensure the security of both sides and the data flows shall be only and exclusively on secure servers located in the European Union. We do not interfere in the rates of doctors, specialists or facilities or in their availability on the platform.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Main competitive advantages in MVP version:
• Automation and payment guarantee, thanks to cooperation with Dotpay. Our customers do not have to integrate payment tools themselves or handle two solutions - one for teleconsultation and the other for payment.
• Evaluation system based on recommendations. After each visit, the patient has the opportunity to recommend a doctor or a medical specialist. Doctors and specialists with the greatest number of instructions are promoted on the platform. Resignation from the standard system of assessments in the form of comments and scales from 1 to 5 is intended to prevent doctors and medical specialists from fraudulent assessments, and the patient will not feel harmed when the administrator deletes his or her assessment.
• Commission based payment system - in this case our customer bears the cost of using the platform when he / she earns himself / herself. Thanks to this, he / she can use our platform, while cooperating with others, without being bound by fixed fees.
• Videoconversation tool directly on the platform optimises the work of a medical specialist and allows for a more effective form of contact with the patient than a phone or chat.

In the full version of the product, we also envisage adding two innovative functions:
• Patient File - enabling access to medical records for patients on our platform, directly from their account, and the possibility of making their files available to physicians and specialists on the platform.
• Telediagnostics project, which will increase the scope of feasible medical services on the platform by monitoring patients and through diagnostics.
Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Currently, the business model is based on a commission for consultations on the platform. Registration on the platform is free of charge for patients and doctors, medical specialists and medical facilities. Payments for patients are only made when booking a visit. On the other hand, we charge fees for consultations agreed by physicians, medical specialists or institutions. The commission shall be charged automatically during payments.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Accelerators, Incubators.

Finance

What is the current level of funding for your startup?
Less than PLN 500,000.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from national funds, Private Investors (natural persons - Business Angels), Incubation Programs.

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, Germany.

What factors decide about choosing the country of expansion?
Size of the telemedical market and competition in the relevant market.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

# Telemedico
Limited Liability Company.

Have you participated in the previous edition of the Report?
Yes.

How did the Covid-19 pandemic affect your business?
9 - positive impact.

Describe the influence of Covid - 19 on your business.
Indeed, the demand for telemedicine - remote contact with a specialist - has increased in order to secure health needs safely and quickly.

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Dietary services, Telemedicine, Medical devices, AI/machine learning, Medical data, Laboratory tests, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity.

What is your product/service?
Remote medical consultations with doctors of several dozen medical specialities 24 h/365.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Own highly developed tele-medical platform system with convenient functionalities for users, i.e. AI supporting therapeutic decisions of patients and physicians, global service in all geographical areas, consultations in 10 languages, integrated medical devices for remote patient diagnostics.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Customers of insurance companies as part of health, life, property, tourism, assistance policies are the main Customers. We also cooperate with financial and pharmaceutical companies and the broadly taken health market.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Financing Institutions, Regulators.

What is the current level of funding for your startup?
More than PLN 20 million.

What sources of funding do you have?
National VC, foreign VC, Organic growth (financing from revenues), Accelerators.

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Revenues.

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, Great Britain, Germany, Russia, Ukraine.

What factors decide about choosing the country of expansion?
Legislation, health insurance system.
Tixon Care
Limited Liability Company.

www.tixoncare.com

Current needs

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business. High interest in e-health services. Change in maturity and patient readiness for digital services.

General information on the organisation

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Pharma/Food supplements, Telemedicine, Medical devices, Wearables - not medical devices.

Information on the solution

What is your product/service? Lekoster - an intelligent platform for monitoring medicines at home and travel.

Does the product/service have a CE certificate? No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Lekoster is unique thanks to its comprehensiveness in the management and protection of medicines at home. It will support the ongoing process of digitisation of currently implemented pharmaceutical care in Poland, especially in the field of monitoring and increasing the effectiveness of drug dosing. Lekoster will help to improve the quality of treatment at home. It will reduce the problem of the decline in the quality of medicines and their adverse effects resulting from improper storage in conditions not consistent with the guidelines, such as high temperatures. Monitoring access to medicines will increase safety and reduce child poisoning with medicines and abuse of and addiction to medicines among senior citizens. The solution will reduce the problem of adherence and polypragmasy.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Sale of IoT Lekoster devices as part of packages with B2B partners, e.g. pharmacy networks, private health facilities and local self-governments, insurance companies. Subscription of premium automated functionalities for users, e.g. pharmaceutical care. Telecare services co-financed by local self-governments from Regional Operational Programs and insurers - senior citizens’ care service.

Indicate the institutions with which the startup most often cooperates. Universities, funding institutions.

Finance

What is the current level of funding for your startup? PLN 500,000 - PLN 1 million.

What sources of funding do you have? Founder’s own funds (bootstrapping), Grants from European funds.

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.
Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, Great Britain.

What factors decide about choosing the country of expansion?
Support and maturity of eHealth services after COVID, in particular advanced pharmaceutical care services.
Have you participated in the previous edition of the Report? No.


Describe the influence of Covid-19 on your business. The pandemic has allowed the public to see how private medical care on the part of nurses, midwives or medical carers effectively fills the shortages in state health care. Thanks to this, they started looking for help on their own, including through our portal.

Indicate the current stage of development. MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work? Telemedicine, Internet Platform (marketplace).

What is your product/service? A portal for searching for nurses/midwives/medical carers and physiotherapists in the patient’s vicinity, enabling you to enrol for home, online visits or a visit in a consulting-room.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Our distinctive feature is the active exercise of the nursing profession at the patient’s home, knowledge of the domestic care environment in Poland, as well as the behaviour of patients and their families in search of care at home. Moreover, as a member of the nurse community, we have the opportunity to reach a wide range of specialists, knowing their needs and expectations.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays. Specialists (nurses, midwives, medical carers or physiotherapists) have the opportunity to purchase a subscription that enables them to appear on our portal. In addition, it is possible to buy a plus package that allows to distinguish a specific specialist on the list that the patient sees in the search results. The patient does not bear any costs of using the portal.

Indicate the institutions with which the startup most often cooperates. Universities, Research Institutes.

What is the current level of funding for your startup? Bootstrapping.

What sources of funding do you have? Founder’s own funds (bootstrapping).

Are you currently looking for funding? Yes.

Do you generate repeated revenues from the sale of the company’s main product/service? No.

What are the key measures of your success at this stage of your development? Number of users.

Are you now commercially present on foreign markets? We are not commercially present and we are not planning to be.
Top Disruptors in Healthcare
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TwójPsycholog
During the establishment of a limited liability company.

https://twojpsycholog.pl/

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact

Describe the influence of Covid - 19 on your business.
Unfortunately, the pandemic has led to a significant deterioration in the mental health of society as a whole. Fear of illness of their own or their relatives, uncertainty as to employment or loss of work, feeling alone and being cut off from their relatives have resulted in an increased number of crises and an increased incidence of mental disorders, particularly anxiety disorders. As a result, more people are looking for access to the mental health professionals that our portal offers.

General information on the organisation

Indicate the current stage of development.
MVP (Minimum Viable Product - a version of the product that has sufficient functionality to meet the expectations of the first customers and provide feedback for further product development).

In what areas does your startup work?
Internet platform (marketplace).

Information on the solution

What is your product/service?
Marketplace - a portal linking people seeking psychological assistance with mental health specialists - psychologists, psychotherapists. CRM - a system for managing psychological consulting-room for private, single-person consulting-rooms and larger psychological centres.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Psychological assistance not only online - as we know from our research, people are not willing to be treated online. Although the pandemic temporarily changes the situation, both patients and therapists strongly prefer on-site meetings. Most of the competition focuses heavily on online psychotherapy. Optimising the work of the consulting-room - apart from combining mental health specialists with patients, we also place a strong emphasis on digitisation of the mental health area by providing a solution that helps manage the psychological consulting-room more effectively.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The paying party is our market-place supply-side - psychologists and psychological centres. Due to the fact that they gain the highest value - acquiring new patients and optimising the work of the consulting-room - our model assumes a monthly subscription fee (depending on the size of the consulting-room), a commission from the client obtained by the platform and a margin on online payments. Ultimately, we will expand the offer with payments from patients, including through a low paid, first psychological consultation.

Indicate the institutions with which the startup most often cooperates.
Investors.

Finance

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), private investors (private persons), national VC.

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.
During the establishment of a limited liability company.

What are the key measures of your success at this stage of your development?
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Approach to psychotherapy and the level of development of these services in the selected country - degree of area privatisation, number of specialists.
Top Disruptors in Healthcare
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uPacjenta
Limited Liability Company.

https://upacjenta.pl/

Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Extending the scope of services, brand rebranding, increasing the availability of services in subsequent cities, significantly increasing the number of patients and visits on the website. During 2020, the team increased from 40 to 140 people.

How did the Covid-19 pandemic affect your business?
10 - positive impact.

Describe the influence of Covid - 19 on your business.
COVID-19 had a significant impact on the activity and development of uPacjenta. Among other things, we introduced to the offer antibody tests, antigenic tests and respiratory tract swabs using the RT-PCR method. We have set up a dedicated team that is secured, among other things, in the biosecurity suits, FFP3 masks, and face covers, carries out coronavirus tests in patients' homes. From May to December, we performed 48,634 tests on COVID-19. We have also added to our offer the performance of tests on COVID-19 at the registered offices of companies throughout Poland. Recently, we have also launched a delivery store where you can buy tests on COVID-19 with delivery to your home. We are constantly expanding our offer and making every effort to make the procurement system as flexible and patient friendly as possible. We are therefore actively investing in new technologies and UX/UI research, which we are conducting in cooperation with the best specialists in the industry.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Above all, we have an innovative model based on an application where patients can order services, and specialists can read them and deliver them, thanks to their panel. This allows for faster scaling. As the only ones, we enable online consultation of results with specialists through a dedicated platform. Among the entities operating in a similar way, uPacjenta operates on the largest scale, as our services are provided in more than 20 Polish cities. As the only entity, we carry out tests on COVID-19 and prophylactic actions at the registered offices of companies throughout Poland.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The business model is Two-Sided Marketplace with e-commerce elements. On one side of the platform, we gather people willing to provide medical services and on the other hand patients who want to order them. The service is sold via the website and the hotline. The offer includes over a thousand laboratory tests, as well as several dozen individual packages and tests on COVID-19. The cost of the service depends on the selected test and location to which the specialist must get. The project is scalable and revenue grows dynamically in proportion to the development of the startup itself. Two

When placing an order, the patient chooses on his / her own what tests he / she wants to perform, sets the date and time, as well as the place of sampling. He may also decide which specialist will carry out the collection process. This extremely convenient and innovative solution means that even those who face mobility problems on a daily basis can carry out regular blood tests without hindrance. Our services are eagerly used by parents of young children, elderly people and businessmen who are busy. The service is available in 20 Polish cities. Apart from home blood tests, uPacjenta also offers tests on COVID-19 in homes and companies. Importantly, prophylactic actions and coronavirus tests are carried out throughout Poland at company sites. Recently, we have also launched a delivery store where you can buy tests on COVID-19 with delivery to your home.

General information on the organisation

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, IT Tool - independent IT application, Internet Platform (marketplace), Laboratory tests, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity.

Information on the solution

What is your product/service?
From the very beginning, our activities are based on domestic blood tests, which can easily be ordered by users at any indicated address.
years ago, we employed only a few people, and now we already have
140 employees. In our marketing strategy, we rely on the develop-
ment of loyal customer networks and building awareness of the ser-
vice among new ones.
The main group of recipients are pregnant women, parents of young
children, elderly people and their carers, disabled people and busi-
nessmen. These are people who, for various reasons, have limited mo-
bility, feel safe home or have no time to carry out tests. Patients may
pay for the provision of the service online or in cash during the visit.

Finance
What is the current level of funding for your startup?
A viable company financing itself from revenues.
What sources of funding do you have?
Organic growth (financing from revenues), Incubation programs,
accelerators.
Are you currently looking for funding?
Yes.
Do you generate repeated revenues from the sale of the
company’s main product/service?
Yes.
What are the key measures of your success at this stage of
your development?
Number of users.

Foreign expansion
Are you now commercially present on foreign markets?
We are not present but we are planning to be.
What countries are important for the success of your busi-
ness?
EU countries.
What factors decide about choosing the country of expan-
sion?
Similar health market as in Poland, i.e. a large percentage of spending
out of pocket on the health sector, and especially on laboratory tests.
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upmedic
Upmedic operates as part of pacode sp. z o.o.

https://upmedic.io

Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
8 - positive impact.

Describe the influence of Covid - 19 on your business.
Better understanding of the benefits of telemedicine by medical facilities. Much greater awareness of how well-structured medical records facilitate a diagnosis.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Telemedicine, IT Tool - independent IT application, AI/machine learning, Medical data.

Information on the solution

What is your product/service?
Software optimising information flows in medical facilities and accelerating the development of high quality medical records.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our system keeps descriptions of the course of the disease at the level of a single observation, which makes it possible to compare the patient’s state between examinations and contextual search. Documentation templates created with physicians accelerate the work of a physician three times.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
User: physician, in some cases patient (sending documentation, responding to the survey before the examination), pays: facility.

Indicate the institutions with which the startup most often cooperates.
Hospitals, Accelerators.

Finance

What is the current level of funding for your startup?
Less than PLN 500,000.

What sources of funding do you have?
Founder's own funds (bootstrapping), Grants from European funds, Organic growth (financing from revenues).

Are you currently looking for funding?
No.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?
Commercial agreements signed (e.g. distribution).

What countries are important for the success of your business?
EU countries, Germany, Canada.

What factors decide about choosing the country of expansion?
Number of doctors, technological level of development of the healthcare system.
Value MED
Sole proprietorship.

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business.
The pandemic limited direct contacts and therefore limited the possibility of meetings with potential investors.

General information on the organisation
Indicate the current stage of development. PoC (Proof of Concept - version of the product which shows its feasibility. It does not meet yet the basic requirements of customers).

In what areas does your startup work? Telemedicine, IT Tool - independent IT application, Internet Platform (marketplace), Medical Data, Education.

Information on the solution
What is your product/service? A social platform dedicated to health system participants and application for interdisciplinary specialist consultations. Value MED is a response to the needs of: improving the flow of information, conducting discussions, exchanging knowledge in line with the value based healthcare concept, and lobbying modern solutions for the health care system.

Does the product/service have a CE certificate? Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market? Value MED is a pioneering solution adapted to the specificities of the Polish market and the only solution containing all functionalities in one place, including it provides:
- Physicians, nurses and midwives, representatives of other medical professions:
  - with access to the most important information concerning the health sector in one place,
  - with quick access to the database of conferences, workshops, rallies and other events of various organisers,
  - with the possibility of quick specialist consultation and exchange of documentation on difficult medical cases in real time.
- Business (medicine, pharmacy, technologies, law):
  - with the possibility of lobbying new solutions and innovations,
  - with access to all system participants in one place,
  - with space for dialogue and cooperation with doctors and scientists,
  - with the possibility of recruiting highly qualified employees.
- Other system participants (administration staff, representatives of institutions, universities and students of medical majors, patient organisations and others):
  - with the ability to build contact networks,
  - with the possibility of creating bottom-up content and dialogue with other market participants,
  - with access to industry information, job announcements, event base.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The product is dedicated both to individual users who are able to choose a free or paid premium account and business users (companies, organisations, institutions, media, event companies, etc.). Sources of revenue: subscribers of premium accounts, advertisers, business partners, paid access to applications of interdisciplinary specialist consultations.

Indicate the institutions with which the startup most often cooperates. Hospitals, Investors, Universities, Research Institutes, Financing Institutions, Regulators, Accelerators, Incubators.

Finance
What is the current level of funding for your startup? Bootstrapping.

What sources of funding do you have? Founder’s own funds (bootstrapping).
Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Acquisition of capital for development.

Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
The Czech Republic, Slovakia, Hungary, Ukraine.

What factors decide about choosing the country of expansion?
Model of functioning of the healthcare system, as well as cultural conditions and the need to improve communication between system participants.
Top Disruptors in Healthcare
Review of the innovative medical startups in Poland

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid-19 on your business.
From the point of view of the company’s operation, the impact is small. We manage, without major obstacles, to carry out the works on an ongoing basis. As one of our key solutions is the method of remote delivery of prostheses of the upper limb, the pandemic is an additional argument for such a safe procedure. However, Covid-19 caused some problems in the supply chain.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Biotechnology, telemedicine, medical devices, robotics, AI/machine learning, medical data, education.

Information on the solution

What is your product/service?
We are working on a change in the area of prosthetic solutions of the upper limb by means of:

- relatively cheap cosmetic prosthesis TOLKA with functional capabilities (all joints can be set thanks to the internal mechanism). This is a passive device bearing the CE certificate,
- robotic hand TOLKA PRO with 11 degrees of freedom, precision of setting the finger angle to 1 degree, FPGA based electronics, together with a hybrid controller - myoelectric and speech coupled in the mobile application,
- convenient prosthetic funnels using a new type of 3D filament,
- remote stump measurement, 3D modelling and 3D printing of prosthetic funnel,
- extensive and very elastic system for learning and comparison of various neuron networks - we are on the right path to automate the production of prosthetic funnels based on scans in MRI magnetic resonance. We have taught a network to identify individual tissues on the basis of DICOM files, regardless of the apparatus used. The system has great potential in other areas related to the analysis of medical images but also in other areas.

In the perspective, however, I do not see a competitive advantage in the protection of the patent technical solution. The TOLKA and TOLKA PRO prosthesis will not be subject to patent protection but an industrial design may be reserved.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
TOLKA PRO - it is the first prosthesis with 11 degrees of freedom, it has the greatest potential of manual capabilities but due to greater possibilities, it requires more extensive control than myoelectric signals - hence hybrid with voice commands coupled in the mobile application. Prosthetic funnels - a completely new design and production method - 3D scan, 3D printing, using secure materials. The funnels are lighter, in case of damage it is enough to print a new one, and small changes (hydration, time of day, mass of operation, growth) may be regulated by a change of 3D model without the need to visit (COVID19). In the case of information obtained from MRI, we have a data based funnel - we know where we cannot apply pressure (vein) and where greater is possible (fat). Remote delivery of the whole - no one delivers prostheses straight to home, without the need for the customer to leave it.

Global coverage - within a pilot program we have delivered 9 prostheses in the war zone to prove that, when they arrived there and are comfortable, we can deliver them everywhere - also as a product to support people excluded in poor areas and deprived of access to classic solutions.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We are working on two tracks to expand the sales of functional cosmetic prosthesis, „plus” (as we call it) in Poland by strengthening brand recognition, reaching customers directly, building knowledge that prostheses can be replaced more frequently than every 3 years (NFZ (National Health Fund) co-financing, PFRON (National Fund for the Rehabilitation of the Disabled) funding), contacts with prosthetic companies (cooperation offer). The person responsible & liable for these activities shall be the person after amputation.
We are looking for the possibility of supplying TOLKA prostheses as part of the aid project in areas where very many people have no chance of receiving a prosthesis (we have an estimate of 10 000 people in northern Syria). Scaling supply is a question of the possibility of obtaining funding for the project (UNHCR, UNOCHA, Polish Medical Mission, PCMP and other aid organisations). TOLKA is supposed to allow the construction of sales, in the second stage, after the completion of the works and after obtaining a robotic certification of TOLKA PRO’s hand, we will offer an upgrade.

Indicate the institutions with which the startup most often cooperates.
Investors, Research Institutes, Regulators.

Finance
What is the current level of funding for your startup?
PLN 2 million - PLN 5 million.

What sources of funding do you have?
Grants from national funds, grants from European funds, private investors (private persons).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Revenues.

Foreign expansion
Are you now commercially present on foreign markets?
Signed letters of intent.

What countries are important for the success of your business?
EU countries, Portugal, Spain, Greece, Cyprus, Turkey, the Middle East, and in the next steps Central Asia and Africa.

What factors decide about choosing the country of expansion?
The lack of availability of the solutions offered, a large market (number of amputations), underdeveloped or limited for some health care sector are decisive.
Current needs

Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
We started the process of commercialising our solution and sold the first devices.

How did the Covid-19 pandemic affect your business?
2 - negative impact.

Describe the influence of Covid-19 on your business.
On the one hand, the pandemic has severely limited our activities. All medical facilities - our potential customers - closed to all commercial contacts. So tragedy. But there was an unexpected wicket. Blessing in disguise. Patients who have been severely going through COVID-19 have shown neurological disorders and need mental support. And our therapeutic solution VR TierOne works perfectly well in this case. We started cooperation with the first branch for convalescents in Poland (and in Europe) in the MSWiA (Ministry of the Interior and Administration) hospital in Głuchołazy. That is how it started. Discussions are currently underway with other such institutions in Poland.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Medical devices, AR/VR, Medical data, Rehabilitation.

Information on the solution

What is your product/service?
The VR TierOne solution we have designed consists of two parts: a medical device and a therapeutic cycle. The medical device allows us to move to the Virtual Garden of Renaissance created by us, full immersion in Virtual Reality, carry out an effective therapy under these optimum conditions.

The therapy consisting of a two-week cycle of 8 sessions of up to 20 minutes in length is the time of participation of the patient in a therapeutic virtual story abundant in appropriate metaphors, messages and selected tasks improving the patient's mental condition.

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We deal with the mental sphere and we have documented it by means of examination results (evidence based solution). We ensure a high level of immersion. We offer the medical device adapted to the rehabilitation process.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Our customers are hospital centres of neurological, cardiological, pulmonary, post-covid rehabilitation, rehabilitation clinics, old age homes, care homes. We offer purchase for cash, instalments, leasing and subscription model – payment for the session. The end user of the solution is an individual customer – a patient who is treated by our customers.

Indicate the institutions with which the startup most often cooperates.
Hospitals.

Finance

What is the current level of funding for your startup?
PLN 5 million - PLN 10 million.

What sources of funding do you have?
Founder's own funds (bootstrapping), Grants from national funds, Grants from European funds, Other investors (e.g. industry investors), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.
Do you generate repeated revenues from the sale of the company’s main product/service?
No.

What are the key measures of your success at this stage of your development?
Revenues.

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries, USA, Great Britain, Germany.

What factors decide about choosing the country of expansion?
Number of potential customers, customer wealth, cultural proximity.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
10 - positive impact.

Describe the influence of Covid-19 on your business.
The medical industry has become more open to the search for technological solutions.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
IT Tool - independent IT application, AI/machine learning, Medical data.

Information on the solution

What is your product/service?
Artificial intelligence instead of reception.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
We are adding biometrics to scoring patients into screening programs.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
Our users are patients, including elderly people excluded digitally. Medical facility pays. We settle flexibly but only for the answered phone.

Finance

What is the current level of funding for your startup?
PLN 2 million - PLN 5 million.

What sources of funding do you have?
National VC.

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.

Foreign expansion

Are you now commercially present on foreign markets?
Registered foreign market revenue.

What countries are important for the success of your business?
EU countries, northern African countries.

What factors decide about choosing the country of expansion?
List of contacts.
Current needs

Have you participated in the previous edition of the Report?
No.

How did the Covid-19 pandemic affect your business?
7 - positive impact.

Describe the influence of Covid - 19 on your business.
The pandemic had a very significant impact on the course of the planned works. Our device, in sterile form, is ultimately intended to monitor temperature in the vicinity of post-operative wounds and detect early inflammation, including sepsis. During the pandemic it turned out that one of the main symptoms of Covid19 infection was an increase in body temperature. We quickly decided to change the direction of development and preparation of the sensor in a non-sterile version with an easy and convenient mounting system. Preparation of the sterile version would last much longer.

General information on the organisation

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Telemedicine, Medical devices, AI/machine learning, Medical data.

Information on the solution

What is your product/service?
Our product is a certified system for remote and continuous monitoring of body temperature - WARMIE. WARMIE Sensor is a battery operated wireless temperature sensor designed to measure and monitor human body temperature continuously. The measured temperature value is transmitted wirelessly to the application installed on user’s smartphone enabling reading the temperature and recording its changes. Battery operation allows continuous monitoring of temperature for many weeks. The system has a Class IIb medical device certificate, which means that it can be used in unconscious patients at intensive care wards.

Sensor properties:
- accuracy: the results can be presented to hundredth parts of degree, the measurement accuracy is 0.3/0.4 degrees Celsius,
- intelligence: the medical algorithm recalculates temperature changes for a specific sensor mounting location,
- safety: the sensor is made of biomedical materials, the elements used for production have the required certificates,
- convenience: the sensor is mounted on a convenient band, which is easily put on and removed,
- small size: the sensor has the following dimensions: 3.2 cm x 2.5 cm x 0.7 cm,
- speed: WARMIE24 application connected with the sensor sends notifications each time when a significant temperature increase is recorded,
- battery operation: the life of the sensor battery is approx. 4000 h, depending on the frequency of sensor connections to the phone,
- system openness: sensor software can be integrated with other systems (open API).

Does the product/service have a CE certificate?
Yes.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our solution is distinguished by measurement accuracy: 0.3/0.4 degrees Celsius. A convenient method of mounting the device on the body (comfortable band, easily removed and put on). The application operates in the background, the sensor saves data (1,000 records) even after disconnection with the application. After the reconnection, the application synchronises temperature values. The viability of the battery of our solution is approx. 4000 hours (depending on the frequency of phone connections with the sensor, the time of battery operation may change). In addition, the sensor’s API openness allows integration with other systems.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
We plan to sell to an individual customer, as part of a one-off payment, the buyer is a parent, an adult, and the users can be children (over 3 years of age), adults. Another group includes companies wishing to integrate into our device, including them in their system. In this case, the payers are companies, users - their customers.
The last group includes medical facilities, the purchasers will be hospitals, users - patients.

Indicate the institutions with which the startup most often cooperates.
Investors, Accelerators.

**Finance**

**What is the current level of funding for your startup?**
Bootstrapping.

**What sources of funding do you have?**
Own funds of the founder (bootstrapping), national VC.

**Are you currently looking for funding?**
Yes.

**Do you generate repeated revenues from the sale of the company’s main product/service?**
No.

**What are the key measures of your success at this stage of your development?**
Revenues.

**Foreign expansion**

**Are you now commercially present on foreign markets?**
We are not present but we are planning to be.

**What countries are important for the success of your business?**
EU countries, Great Britain, Germany, India.

**What factors decide about choosing the country of expansion?**
Obtaining a certificate for sale in a given region (legal). Acquisition of a representative in the region concerned.
**Current needs**

Have you participated in the previous edition of the Report? No.


Describe the influence of Covid - 19 on your business.
Wellbee is a platform whose mission is to remove barriers to access to psychotherapy, combining customers with individually selected therapists. COVID has led to a significant increase in interest in our services, as people in need of psychological support have the opportunity to consult when they need it and wherever they are, which is particularly important in the context of limited social contacts and lockdowns. At the same time, many specialists have seen that services provided online in most cases are as effective as offline services.

**General information on the organisation**

Indicate the current stage of development.
Commercialisation stage - we have the first payers.

In what areas does your startup work?
Telemedicine, Internet Platform (marketplace), AI/machine learning, Medical data, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity.

**Information on the solution**

What is your product/service?
Platform increasing the effectiveness and availability of psychotherapy with the use of a technology supporting better matching of the Customer with a given specialist.

Does the product/service have a CE certificate?
Not applicable/Not required.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
Our processes and solutions make it possible to better adapt the psychotherapist to a given Customer and the challenge he/she faces.

Do you have a business model already developed? Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
In the case of individual Customers, the Customer is both a payer and a user. In the case of solutions for companies, the payer is the company (various settlement models: subscription, one-off payment for visit packages, co-payment), and the end users of the solution are employees.

Indicate the institutions with which the startup most often cooperates.
Investors, Universities, Research Institutes, Financing Institutions.

**Finance**

What is the current level of funding for your startup?
PLN 1 million - PLN 2 million.

What sources of funding do you have?
Own funds of the founder (bootstrapping), Grants from domestic funds, Private Investors (natural persons - Business Angels), Private Investors (private persons), national VC.

Are you currently looking for funding? No.

Do you generate repeated revenues from the sale of the company’s main product/service? Yes.

If so, in what amount?
Several dozen thousand zlotys a month.

What are the key measures of your success at this stage of your development?
Number of visits.

What was the average change of month to month of this indicator in the last 6 months of the company’s operation? 65-70%.
Foreign expansion

Are you now commercially present on foreign markets?
We are in the process of negotiating with one of the large international companies that is present in many countries in the CEE region to provide mental support for workers. We estimate that the chances of signing the contract are high.

What countries are important for the success of your business?
EU countries, CEE and CIS countries.

What factors decide about choosing the country of expansion?
1) Level of market development in mental health area,
2) Availability of local specialists with appropriate qualifications,
3) Presence of Business Customers.
Have you participated in the previous edition of the Report?
Yes.

If you participated in the previous edition of the Report, what was the change in your business during the last year?
Adding a new web portal, adding tele-consultations to services.

How did the Covid-19 pandemic affect your business?
2 - negative impact.

Describe the influence of Covid - 19 on your business.
Suspension of development plans, reduced availability of doctors, reduced interest in services.

Indicate the current stage of development.
Growth (expansion) - we work on acquiring new customers and further development of the product.

In what areas does your startup work?
Telemedicine, Provision of health services (prophylactics, diagnostics, treatment) as a medical entity, Rehabilitation.

What is your product/service?
Home visit/Internet portal.

Does the product/service have a CE certificate?
No.

What distinguishes you from the competition? What are you significantly better in than other similar or currently used solutions on the market?
The brand we have created is recognisable among customers and recommended by physicians. We adapted our product to the Polish market, we do not reproduce the paths of companies operating on the Russian or American market. We have many options for contracts and variants of cooperation with doctors, which allow us to make full use of the call centre working time and doctors’ on-call time.

Do you have a business model already developed?
Yes.

If so, describe your business model briefly, taking into account who is a user and who pays.
The product is purchased by a patient, physician, insurance company, clinic - we are both the owner of the platform and the medical entity. When the customer is a patient, he / she makes a one-off payment, he / she will subscribe to a monthly package of services in further development. When the customer is a physician, we provide him / her with patients, ensure contact with the patient, then the contract is in force, and Wezwijdoktora.pl charges a commission for the service. When the customer is an establishment or insurance company, we are a contractor, a subcontractor of services - home visits. Therefore, the user of the service is both the patient and the doctor.

Indicate the institutions with which the startup most often cooperates.
Financing Institutions.

What is the current level of funding for your startup?
Bootstrapping.

What sources of funding do you have?
Founder's own funds (bootstrapping), Organic growth (financing from revenues).

Are you currently looking for funding?
Yes.

Do you generate repeated revenues from the sale of the company’s main product/service?
Yes.

What are the key measures of your success at this stage of your development?
Number of users.
Foreign expansion

Are you now commercially present on foreign markets?
We are not present but we are planning to be.

What countries are important for the success of your business?
EU countries.

What factors decide about choosing the country of expansion?
Economic conditions of residents, distance from the border with Poland.
Top Disruptors in Healthcare

Review of the innovative medical startups in Poland

Report Authors

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