

Future Processing Sp. z o.o.

Future Processing Sp. z o.o. (FP) is a dynamically growing technological company, founded in 2000 by Jarosław Czaja - then a student of Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology, currently President of the Board of FP. The company provides complex services in production of software, including its design, implementation, testing and integration. At the beginning the scope of the company's activity included automatic face recognition systems, medical imaging, intelligent video monitoring and visual inspections and software for data acquisition and analysis in control of physical access and transport, and since 2005 system tools and applications for the financial sector.¹ Future Processing, besides outsourcing services, is also developing its own products, always searching for the best solutions in the category.² It is a perfect example of the Polish company operating on the global software market, which not only managed to compete at the international level, but also created its own: style, dynamics and culture of work, setting new quality in the IT branch and new value on the Polish labor market. The company managed to gain, maintain and systematically expand a circle of regular partners and strategic customers, particularly on the British market, but also in Germany, France and the United States.

The founder of Future Processing Sp. z o.o. - Jarosław Czaja is a programmer and since 2000 an entrepreneur, who managed to turn his own interest and passion into a well developing, profitable and in many aspects unique company on the Polish market.

1.1. Technology

FP is a fast growing technology company, capable to increase its employment by up to 100% per year. The result of so high dynamics, connected with acquiring new customers, is one of the main problems, which the company had to deal with from the beginning - **finding qualified software engineers, who could meet high requirements of the market and FP towards the members of its team**. Jarosław Czaja, a graduate of Silesian University of Technology (SUT), who created the company as a student, was well acquainted with the environment of SUT and high qualifications of students educated there. From the beginning he tried to find at the university and attract to the company, as he says - "wise men"³, who are still working in it. In addition to personal contacts, through which he could offer cooperation to the best, Czaja started looking for ways to tie up with SUT permanently, providing in the framework of cooperation, among others, internships for students, substantial support and organization of competitions for the best algorithmic specialists and substantial help for students writing their theses based on subjects important to FP.

During 10 years of the company's life the cooperation between SUT and FP has developed significantly and has become more formalized through cyclically organized events taking place both in SUT and in the premises of FP. The best programmers in the country take part in them, so FP has an opportunity to present a wide scope of projects undertaken by the company, to show how work in a technological company of the software branch really looks like and also to present its offers related to employment.

Before FP started to cooperate with SUT, such a broad cooperation with other companies did not take place, though of course different companies have occasionally worked in cooperation with the

¹ <http://www.future-processing.com/company-profile.pl.php>

² <http://www.future-processing.com/company-profile.pl.php>

³ Talk with J. Czaja during preparation of this case study.

university. None of them however had such specific and long-term plans and has not shown enough determination to cooperate as FP.

The offer of FP is unique, among others because the primary reason of the proposed and realized cooperation is desire to share knowledge and experience with students, need to promote development of knowledge and skills necessary to work in such specialized companies as FP, and secondarily an ability to select the students who might be invited to closer cooperation.

1.2. R&D activity and cooperation with the scientific community

Jarosław Czaja - inventor, founder and *spiritus movens* of FP started his career path, associated with computers and programming, preceding creation of FP company, in 1998 by working for an American software company Aldec, where he developed and improved skills in an international team of specialists. During his studies at Silesian University of Technology, also started in 1998, Jarosław Czaja also cooperated with Nicolaus Copernicus Planetarium and Astronomical Observatory in Chorzów and with a British company Feedback Data in the UK, where he worked as a software engineer.⁴ During the studies and thanks to the undertaken works he deepened his knowledge and gained experience both as a creator of programs created on order of external companies and as a person ordering and developing new applications. He also had an opportunity to learn different systems of company management, which in the future enabled him to create his own and unique on the Polish market management system of the team of specialists.

Already at the beginning of his professional way J. Czaja had features, which became the determinants of FP's activity - passion, big commitment to high quality, **constant need of development and improvement, ability to exploit occurring opportunities, extraordinary diligence, curiosity and lack of fear of making mistakes.** Among others, thanks to these features in 1999 he won the second prize in the astronomical contest of "Knowledge and Life" for the computer program Sky Navigator, which "task was an automatic analysis of the sky in search of non-star objects (...). Today few people remember about Sky Navigator, but it was the first serious project and also the beginning of FP. Computer vision was (...) to be the unique element of the business."⁵ Jarosław Czaja during the studies has also received a scholarship at The Nottingham Trent University in the UK, where he graduated in computer science and computer project management.

Education connected with a specific specialization, experience gained in a short time, work in an international teams of English and American companies, clearly defined plans and objectives as well as vision of a modern company, innovative in many ways, caused that in 2000, during the third year of studies, Jarosław Czaja together with a group of colleagues founded Future Processing and became its head.

FP company has been developing very fast and in the first two years has acquired the first major contract in the UK to develop a software enabling automatic face recognition. J. Czaja was working in the UK and the first customer of FP was his employer of that time. J. Czaja managed to persuade him to order the project surpassing opportunities of the British company to a small at that time company

⁴ The company's own materials sent by Ms Magdalena Ciszewska – Marketing Manager, whom I thank very much for the offered support and cooperation.

⁵ Future Processing - Historia, <http://www.youtube.com/user/FutureProcessing#p/u/11/8cU1afKzitU>

in Poland.⁶ In less than a year, dividing time between studies and work on the project, the team of FP managed to develop a competitive solution for the best systems (...) in the world. And though identification of persons on the basis of face turned out to be ineffective in uncontrolled action environment, it showed possibilities of the company and consolidated its position on the British market.⁷ Two years later, in 2004, FP expanded the scope of the conducted works of more practical techniques of intelligent video monitoring, which led to acquiring a new partner in the UK and establishing new and, as it turned out later, long-term business contacts. FP has signed a strategic contract with the British company regarding software development in the field of video monitoring. J. Czaja has decided to transform the company into a company with limited liability. One year later, FP clients' portfolio has gained further two companies, which began the process of systematic increase of the number of clients and new programmers in the team of the company. In the same year FP has also moved to new premises. Another important year in the 11-year history of FP, is the year 2007, when the company became a Microsoft Certified Partner, signed major contracts with companies from the financial and transport sector and increased employment to 50 engineers. The employment level in FP has been changing very quickly, what is worth to mention, due to high demands on employees. In 2008 more than 80 people were already working in FP (employment growth of 60% compared to 2007), which was a consequence of, among others, acquiring new customers in the UK. The last few years of the FP's activity is continuation of the original objectives of its creator, i.e. acquiring and constant increase of number of new customers, especially on the British market, expansion of business into new branches such as advertising and packaging industry and further increase of employment. At the end of 2009, employment in FP amounted to more than 100 people⁸ and in 2010 thanks to new contracts the number of people employed in FP has increased by 100%. In 2011 a further dynamic growth of the team was continued, and now, in the middle of the year, employment is more than 300 engineers.

In recent years, with growing number of customers and orders, the employment and structure of the company were changing, new departments were created and the company changed its premises again, in order to ensure good working conditions for the constantly growing team. Initially the business was run in Bytom and then the company moved to Gliwice, where in 2008 Software Development Centre, the first company premises in Gliwice, was opened. In April 2010 Future Processing as the first company has started an unusual investment in New Gliwice - building its own premises - technology park FPark. Beginning of the investment worth 6,5 million PLN preceded the ceremony of signing the inaugural act by **Jarosław Czaja**, president of Future Processing, president of Gliwice **Zygmunt Frankiewicz** and **Bogdan Traczyk**, president of Local Development Agency, from which Future Processing purchased the land for construction. Laying the foundation stone took place during the ceremony, this time it was, as for a company dealing with modern technologies, "Future Stone" i.e. a digital stone in form of a disk. The concept of the new premises of FP is designed so that it matched the needs of the young and dynamically developing team of the company. It is distinguished by not only modern and modular design, spacious offices, but also additional rooms for gym, entertainment room and in the future also a kinder garden for employees' children. The first

⁶ D. Pokusa, Interview with Jarosław Czaja – President of the Board of Future Processing, the material prepared in the framework of „Research on adaptation of Silesian University of Technology students to work in a company”, 09.10.2009, <http://ipij.aei.polsl.pl/article.php?id=10>

⁷ Future Processing - Historia, <http://www.youtube.com/user/FutureProcessing#p/u/11/8cU1afKzitU>

⁸ D. Pokusa, Interview with Jarosław Czaja – President of the Board of Future Processing, the material prepared in the framework of „Research on adaptation of Silesian University of Technology students to work in a company”, 09.10.2009, <http://ipij.aei.polsl.pl/article.php?id=10>

stage of construction ended in June 2011 and the entire investment should be put into service in 2012, one year before the initially planned completion.⁹

Development of the company is also its expansion on the European market. Growing number of customers, especially British, made it necessary to open a trade office in London.

Now (2011) Jarosław Czaja is President of Board of Future Processing Sp. z o. o. and is responsible for management of the company, its development and growth strategy and for establishing relationships with customers. The last job makes him spend 25% of his time in the UK, where most customers of Future Processing come from. President of FP spends the remaining time in Poland, caring for the already 300-people team of engineers consisting of graduates, students and scientists of Silesian University of Technology. Employees of FP are high-class specialists, having knowledge and experience enabling them to undertake and implement ambitious computer projects and propose original solutions to customers.

Founder of FP, Jarosław Czaja says that creation of the company was making the right decision at the right time. He did not have to look for market niches, because in 2000 the market of offshored software services in Poland was very receptive, so the company could find its place on it. Despite such favorable conditions creation of the company itself was not enough to succeed, especially that this branch has been developing in the world for a long time. Particularly active was the Indian market, which is additionally characterized by moderate prices, but also culturally different from the European one. The newly created Polish company from the beginning was distinguished with two elements: quality and cultural (and time) unity with European customers. Similar understanding of ethics and ethos of work, the same approach to commitments, punctuality and many other elements common for business culture of the old continent turned to be important to obtain the first customers. Czaja, thanks to the scholarship received at the British university and previous professional experiences, had established good contacts in the UK, where the company received its first large order, undertaking realization of the project, which was refused by the British company. And although the project regarding automatic face recognition did not meet up the expectations set on it, the Polish company has shown its best side and proved that it is able to undertake ambitious and innovative orders, realizing them in record short time.

1.2. Cooperation with the scientific community

Essentially, it is impossible to talk about the first contact between FP and the scientific community of Silesian University of Technology, because the company was created when its founder was still a student of Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology, just like the first employees of the company. Moreover, according to objectives appointed by J. Czaja, cooperation of FP with one of the best technical schools in the country was an obvious and long-term action, though not immediately divided into tasks, which took place in January 2009, when J. Czaja has created a multi-stage project of cooperation with Silesian University of Technology, entitled "FP closer to the University". J. Czaja was well aware of the fact that through close cooperation with Silesian University of Technology he will have access to the country's best programmers and algorithmics specialists, i.e. potential employees of the company, which in turn, is likely to reflect into an expected and assumed from the beginning high quality of realized projects and offers great opportunities in the future to develop the scientific potential of the company's

⁹ Nina Drzewiecka, In the queue for success. Technology Park is created, 23 April 2010, <http://www.24gliwice.pl/wiadomosci/?p=17646>

team. It is worth to mention that a lot of the first workers of FP are still working there, holding important positions in the company.

The first activities of FP regarding cooperation in a broad sense with the academic community of Silesian University of Technology were focused on finding, as J. Czaja says "wise men", who want to cooperate with the newly established company. They were selected among others by co-organizing with SUT competitions for algorithmic specialists cofinanced and provided with substantial support by FP.

FP also took part in the events organized at Silesian University of Technology. And though FP was known at SUT, among others because of its history and time of its creation, J. Czaja however wanted to promote the company as much as possible and present it to its potential employees, foreseeing perhaps the dynamics of its development (!). The first significant event in which the company was able to participate, took place in 2005. Then FP did not have such perfect tools of promotion as now, but then they had to suffice: advertising wall, enthusiasm and the first success - the project realized by FP on the face recognition system. Since then every year the company is organizing in SUT similar events named FP Academic Day, presenting a wide range of its activities, philosophy of action and informing about the successes. During the all day event many students visit the stand of FP and the company invites them to learn about its job offers, thoroughly informing about the requirements and opportunities offered to their employees.

One of the interesting actions undertaken by FP at the beginning of cooperation with Silesian University of Technology was suggesting by FP the themes of master's theses for students of Faculty of Automatic Control, Electronics and Computer Science. In the framework of cooperation FP had to ensure not only the themes but also substantial support for students who would like to undertake the themes proposed by the company. And though this idea was not fully realized and it was necessary to abandon it for some time, J. Czaja is now thinking of its implementation again.

FP also tried to start at Faculty of Automatic Control, Electronics and Computer Science, under its aegis, a course chosen by the fourth year students. Initially, the thematic scope of the course was connected with the subject of face recognition, which is the theme of the first major project of FP. During subsequent years, and since 2010 under the FP Academy, the students were offered other interesting thematic areas, associated however with the profile of the company's activity.

During development of the company, over the past 10 years, cooperation between FP and the scientific community, with particular emphasis on Silesian University of Technology, was getting closer and closer and becoming more formalized. It should be noted that FP is very creative in the field of ideas regarding other areas of cooperation and the proposed activities are tailored to business opportunities (housing, personal, financial, time) and to the expectations of the scientific partner. Close cooperation of FP with the leading technical schools in the region, is a result of, among others, the fact that employees of FP are not only graduates of these universities but also their current students, which to some extent helps to identify areas, which might be interesting for scientific and academic communities. In addition, the head of FP has a need to share his knowledge and experience gained during the company's existence and implementation of more and more difficult and interesting projects. The proposed initiatives clearly show that he believes in sharing knowledge and new, fresh, often yet unpolished innovative ideas of students, which, after an appropriate substantial treatment may contribute to the development of the company or at least rationalization of the tools used in it. By sharing knowledge and experience with students, the team of FP gives them the opportunity to more quickly overcome certain levels of knowledge, which normally would take many years or would be even impossible, depending on the chosen career path,

and with such an intellectual stimulation and shot of knowledge it can be expected that future years of students will be better prepared to work on the programming market and will approach their work with passion and curiosity of explorers.

In recent years FP changed its premises several times, in each case taking into account the proximity of the academic and scientific center, which is Silesian University of Technology. It is not a surprise that when the company decided in January 2011 to open of the first satellite office, it has chosen Opole for its location because of the proximity of Opole University of Technology. Zbigniew Kawalec - Project Leader and Senior Software Engineer at Future Processing - became the head of office in Opole. Because the office in Opole has to operate on the basis of corporate culture developed in FP main premises in Gliwice, it has quickly become involved in the initiatives undertaken by Opole University of Technology, including organizing in February 2011 the Academic Job Fair, under the patronage of the Rector of Opole University of Technology. During the Fair, the head of FP office in Opole - Zbigniew Kawalec conducted a lecture in the exhibition and conference pavilion of Opole University of Technology, entitled: "Good Software Engineer - and what is it at all?". At the stand of FP it was also possible to find information about the recruitment process and requirements of FP towards its employees.¹⁰

The creator of FP believes in healthy competition, which allows determining one's own abilities and the achieved level of knowledge as well as, through confrontation with the knowledge of others, develops and stimulates the appetite for more. One of the activities in which FP participates actively for years is **support of the League of Tasks and Individual Programming Competition**, organized annually at Silesian University of Technology, which aim is to select the best teams of the university, which could represent it at the Academic Polish Championships of Team Programming and in the International Competition of Team Programming organized under the auspices of ACM.¹¹ Within the League of Tasks FP is involved in development of tasks for the participants of the next editions and is founding the prizes for the best students.

Another initiative of FP in order to promote and verify knowledge and distinguish the best programmers in Poland is **Deadline24**, co-organized from the beginning by Silesian University of Technology in Gliwice. It is an authorial project of the graduates of Silesian University of Technology, and at the time of its creation in 2009, also of the employees of FP: Tomasz Łakota and Mateusz Brzeszcz.

Deadline24 is the only one in Poland so extreme programming competition, which for fans of programming is a challenge in terms of skills, creativity and endurance, because, as its name suggests, the contest lasts 24 hours, without interruptions.¹² Since the first edition, which took place in 2009, the contest is implemented in two stages: the first part is taking place remotely through the website and after qualifying the best teams take part in the finals organized at Faculty of Automatics and Computer Sciences of Silesian University of Technology. The competition involves people thinking outside the box, with above average computer competences. Importantly, participation in the competition is free and organizers (SUT and FP) provide all the participants with place and food as well as very attractive prizes for all members of the teams winning the medal places. In 2010, 51 teams from regions of Pomorze, Mazovia, Małopolska, Wielkopolska, Silesia and Podbeskidzie signed up for the second final of the contest. The winning team received three Nintendo Wii consoles, funded by FP. Other prizes which were awarded in the contest were: USB 2.5 7050gb drives,

¹⁰ <http://www.future-processing.com/company-news.pl.php>

¹¹ <http://www.future-processing.com/company-partners.pl.php> (1/09/2011)

¹² <https://www.deadline24.pl/prehistoria/> (1/09/2011)

PowerBalls Techno and 2GB pendrives. Tasks for the participants were appointed by the programmers of Silesian University of Technology, working every day in Future Processing.¹³ The third edition of the competition was held on 26-27 April 2011 and has traditionally had its final at Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology. 106 teams signed up for the competition, of which, as a result of the first stage - the qualifications, the top 30 teams were selected which took part in the final competition. The first two places were taken by teams from University of Warsaw and the third place - by competitors from Silesian University of Technology. In 2011, the total value of prizes funded by FP was 8.000 zlotys and the contest, which also proves its reputation, has received the patronage of the Rector of Silesian University of Technology. As every year, FP took charge of the organization of the event. Employees of the company have prepared competition tasks and took substantial care of the players, not to forget as well the traditional food for the participants - pizza.

FP is not only encouraging students in interesting and humorous way to test their knowledge and to put it under independent evaluation, but is also promoting acquiring knowledge and improving skills. An initiative matching with this trend and connecting the needs of employees of FP and students of computer science and of related faculties is to invite students of SUT to participate in projects of created in November 2010 **FP Academy** - the internal unit of FP, which aim is to ensure comprehensive development of competences of the company's team and the students of the above mentioned faculties. Good contacts with SUT, both in organizational and substantial terms caused that the activity of **FP Academy** began with a series of six free lectures entitled "Good practices of software creation" which for the fourth year students conducted FP staff invited by Michał Kawulok, PhD, Eng. from the Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology. The lectures were run within the optional course and included such themes as: IT project management, process of software development, user interface, design patterns, code quality and software quality guarantee.¹⁴ The lectures were conducted every two weeks and ended with "The Day of Good Practices", during which FP organized in the company the "open day".¹⁵ Now, continuing this important for FP kind of cooperation with SUT, students of Faculty of Automatic Control, Electronics and Computer Science were offered a participation in optional courses also conducted by Michał Kawulok, PhD, Eng. from the Department of Computer Science of Silesian University of Technology, entitled: "Algorithms for visual inspection in industry." Within the classes, students have the opportunity to get acquainted with the product of Adaptive Vision (brand of FP) - Studio 2.0, which "allows among others completely visually programmed defect detection algorithm in powder capsules for a dishwasher or - just as simple - to create a computer game."¹⁶

FP Academy within activities connected with the company is responsible for coordinating all training activities within the company used by FP team members (including students working in FP). These trainings take place within: **Expert Groups, Workshops, Experts Managers Workshops, Dev Workshops and QA Workshops.**

Expert groups - bodies designed to follow directions of development of the chosen programming or testing themes and delivery of this knowledge to FP team. Changes in functioning of the company and individual projects are suggested on the basis of the provided information. The results of work of the expert groups will be innovative working methods and tools implemented in FP.

¹³ <https://www.deadline24.pl/konkurs/> and <https://www.deadline24.pl/prehistoria/>

¹⁴ <http://www.future-processing.com/fpacademy.php> (1/09/2011)

¹⁵ The company's own materials sent by Ms Magdalena Ciszewska – Marketing Manager.

¹⁶ <http://www.future-processing.com/company-news.pl.php> (31.08.2011).

Workshops - cyclic, practical workshops for Project Leaders and people of the department of Development and Quality Assurance. They focus on the exchange of knowledge about current issues, closest challenges and directions of the company's development.

Experts Managers Workshops - workshops intended for people in charge of managerial functions in the company, which themes are connected with computer projects management, at the same time taking into account business questions and customer relationships.

Dev Workshops - workshops with various themes, aimed at passionates of programming. During the meetings, participants discuss on topics related to tools, libraries, methods that can potentially improve the works during realization of a project and make it even more interesting.

QA Workshops - meetings for people working in the quality department of FP (Quality Assurance) concerning issues regarding operation of this department and the results of discussion have an impact on the work principles of the entire QA department.¹⁷

Another form of realization of the idea of expanding possibilities and skills of students of technical faculties, implemented by FP since 2009, this time in cooperation with IAESTE Gliwice¹⁸, is the participation of FP in the activities of the organization IAESTE Poland branch in Gliwice. **IAESTE Gliwice** operates at Silesian University of Technology, which is the main sponsor of the local branch of the organization and annually provides funds necessary for functioning of the office and for the expenses connected with the statute activity of IAESTE Gliwice. The main field of activity of IAESTE Poland is creation of opportunities for Polish students through internships abroad and establishing contact with students of other nationalities. In addition to organization of student exchanges in the framework of internships, IAESTE Gliwice has created a unique opportunity for students to learn about the potential employer and present him the best qualifications - their knowledge and skills acquired during studies. Such a chance was participation in the first workshop in the framework of **IAESTE Case Week**, during which the classes were conducted by the staff of the potential employer – FP. The company within the workshop "Visual Studio 2010 Team System - a new era of software creation" which took place on 29 April 2010 introduced, among others, a series of iterative software creation system supported by Visual Studio Team Foundation Server 2010 and showed how easily one can manage the testing process and how it can be automatized. "During the workshop many gadgets have been won and at the end the most active person was chosen and received the main prize – high class loudspeakers set 2.1 from Logitech."¹⁹ Workshops conducted by FP in 2010 were the only ones that took place in the framework of IAESTE Case Week. It is worth mentioning that Silesian University of Technology also took part in this initiative, providing rooms where the classes were conducted. Students participating in the workshop praised the professional and friendly approach of lecturers to the subject and to the participants and the conducted surveys proved that they would like to take part in a series of such meetings again. The organizers and partners, encouraged by the positive reception of the meeting's participants, organized IAESTE Case Week also in 2011. This time **IAESTE Case Week** was promoted as "a week of trainings for engineering and

¹⁷ <http://www.future-processing.com/fpacademy.php> (1/09/2011)

¹⁸ **The International Association for the Exchange of Students for Technical Experience** (IAESTE) is the largest academic organization in the world, gathering 86 member countries, more information at <http://www.iaeste.polsl.pl>

¹⁹ <http://www.iaeste.polsl.pl/www/index.php/iaeste-gliwice/aktualnosci/99-caseweek-relacja> (1/09/2011)

research faculties students, conducted by professional trainers from commercial companies."²⁰ The trainings in form of "case studies" i.e. practical trainings on specific examples are prepared by substantial partners of the technology branch. They develop a training program and provide professional trainers. In 2011 in IAESTE Case Week in Gliwice participated two companies: **Future Processing** and **B&R**. FP developed the subjects of two workshops designed for 35 students in total. The workshops were conducted by employees of FP. Dawid Czaban (Security Consultant) has led classes on "Common gaps in protection of web applications" and Piotr Wieszyński (Lead Software Developer & Team Leader) and Łukasz Januszek (Senior Software Developer) – classes "How to write and implement a web application using the new Microsoft technologies and other tools". Books for the most active participants of the workshop were funded by the company and the best participant has received a hard drive with capacity of 1TB. Silesian University of Technology was also involved in the organization of the next edition of the national event IAESTE Case Week, providing, among others, rooms where the workshops were conducted.²¹

In 2010 FP and Silesian University of Technology joined the first celebration in Poland, namely in Gliwice, of the **World Usability Day**, which is realized since 2005 in over 40 countries. On this day all over the world about 200 similar events take place aimed at popularizing the idea of usability and sharing knowledge about it.²² The event in Gliwice was held under the patronage of the Rector of Silesian University of Technology and the Dean of Faculty of Automatic Control, Electronics and Computer Science, and co-organizer of the event was Silesian Universities Consortium. Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology has provided classrooms and workshops, while the Consortium has helped in finding the lecturers. Future Processing as the main organizer was completely responsible for organization.²³ The first World Usability Day was held under the theme "Communication" - understood as public transport, the Internet, advertisement in a newspaper or talking over coffee. In the framework of lectures, workshops and demonstrations conducted by specialists in the world of science and business, prepared for the World Usability Day and addressed to students, high school students and anyone interested in the subject of usability, the aim was to demonstrate the need to create useful and practical solutions as necessary to improve quality and comfort of life.²⁴ Participation in this event was free.

Another project of FP, promoting knowledge and aimed at stimulating students' passion, which is worth mentioning, is **FP Academic Day (FPAD)** which from 15 January 2008 is held several times a year. FP Academic Day had its inauguration at Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology and is held there till now. The main idea of the event is presentation of technologically interesting projects. During FP Academic Day the lectures are conducted about various aspects of programming in practice, for example, during the first FPAD the company presented an interesting system of data acquisition and processing "e-Ticketing" and "Access Control" applications. Moreover the students could participate in the lecture "Designing a

²⁰ <http://www.iaeste.polsl.pl/www/index.php/iaeste-gliwice/aktualnosci/126-iaeste-case-week-gliwice-13-14-kwietnia-2011>

²¹ <http://www.iaeste.polsl.pl/www/index.php/iaeste-gliwice/aktualnosci/127-relacja-z-iaeste-caseweek-2011-w-gliwicach>

²² <http://worldusabilityday2010.pl/idea>

²³ The company's own materials sent by Ms Magdalena Ciszewska – Marketing Manager.

²⁴ <http://worldusabilityday2010.pl/idea>

modern Graphical User Interface in practice" and take part in a special contest for the smartest.²⁵ The second edition of FP Academic Day took place less than four months after the first one (7 April 2008) and its leading theme was the computer vision. This time at the stand of FP an intelligent video surveillance system PiVco was presented. The lectures "Computer vision systems" were also held, during which FP presented its new product Adaptive Vision Studio, not forgetting also about the competition for the smartest. In subsequent years the organization of FP Academic Day has been continued at Faculty of Automatic Control, Electronics and Computer Science of SUT. In 2011 FPAD was also held in two other academic units with which FP has begun cooperation: in Opole (Opole University of Technology) and Sosnowiec (Faculty of Computer Science and Materials Science of Silesian University of Technology). During this triple FP Academic Day, as every year, students were offered participation in the lecture, this time "SQL Server Service Broker - Query Notifications", which was conducted by Sławomir Bryk (Lead Software Engineer & Team Leader) and Bartłomiej Michalski (Software Developer) from Future Processing. For the registered participants of the lecture, who took part in the contest, a surprise has also been prepared - 3 consoles Xbox 360 with Kinect. During the six-hour meeting several contests with prizes were also carried out under the slogan "We pay for mistakes" during which the participants had to find mistakes in the code. The prizes in the contest were the gadgets of FP. In the framework of "Open Day FP" the students were invited to the premises of FP, where they could learn about the company and scope of its projects. Very interesting proposition for the participants of FPAD 2011 was the opportunity to learn about the internship program in FP, promoted as "INTERNSHIP IN FP IS MORE THAN STUDENTS PRACTICES."²⁶ The internship offer is addressed to the "best of the best." During the internship, the participants will be preparing for MCTS exams under the supervision of specialists from Future Processing²⁷ and FP has committed itself to pay for participation in the exams for the best candidates. Participants of the internships will have the opportunity to acquire a **Microsoft certificate** of any certification path at both basic level (MCTS) and extended level (MCPD, MCPIT). These certificates are a recognized confirmation of skills related to Microsoft solutions and acquiring them requires practice and theoretical knowledge.²⁸ Internship in FP also guarantees its participants to acquire an extraordinary experience in a unique technological company (with a unique organizational culture), among others by giving the participants of the internship an opportunity to participate in one of the IT projects carried out by the company on behalf of their foreign customers. Such an experience will show how work of the project team actually looks like. Participants of the internship will decide themselves how much time they want to devote to work and to practical improvement of their qualifications, they will receive remuneration adequate for working time and duties.²⁹ Students who want to participate in the internship program may submit their applications using the form available on the company's website and also at the company's stand during FPAD, where it was possible to submit the application on-line. Participants of internships in FP can be sure that "it will not be a school of making coffee and usage of office equipment".³⁰

Apart from the above mentioned examples of cooperation between FP and academic centres in Gliwice, Opole and Sosnowiec, the company is involved in a number of smaller joint projects, mainly focused around the activities of Silesian University of Technology, particularly Faculty of Automatic

²⁵ <http://www.future-processing.com/career-academic-days-1.pl.php> and <http://www.future-processing.com/career-academic-days-3.pl.php>

²⁶ <http://www.facebook.com/event.php?eid=205981872773209>

²⁷ <http://www.future-processing.com/career-fpad.pl.php>

²⁸ <http://www.future-processing.com/career-work-placement.pl.php>

²⁹ <http://www.future-processing.com/career-work-placement.pl.php>

³⁰ <http://www.future-processing.com/career-work-placement.pl.php>

Control, Electronics and Computer Science. For example on 2 December 2008 the employees of FP conducted a lecture at the conference **IT Academic Day** held at the above mentioned faculty. The lecture was devoted to a new edition of the developer's environment Visual Studio 2010 Team System. In addition to the lecture, FP has prepared prizes for the participants. The company's participation in this event was continued in subsequent years, e.g. on 14 December 2010, during the next IT Academic Day, FP invited the participants to the lecture "WPF - applications of tomorrow available today". The lecture conducted by Michał Adamczyk and Konrad Bałys of FP took place in the auditorium of Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology. In the following year FP participated in the IT Academic Day at University of Economics in Katowice, where on April 13 Michał Adamczyk and Konrad Bałys conducted a lecture about the new approach for creating desktop applications using WPF technology. During the conference FP had a possibility not only to share knowledge but also to present the company. For the visitors of the stand, FP has prepared many attractions. It was possible to take part in the interactive sports tournament, to win a special prize - iPod and to talk with experts of FP about the WPF technology presented during the lecture as well as about work in the technological company. IT Academic Day in Katowice was organized under the project "New Media and Knowledge Technologies" by the Student Scientific Circle "Scientia Ingenium", operating at Faculty of Computer Science and Communications at the Department of Knowledge Engineering of University of Economics in Katowice.³¹

Another example of FP involvement in promotion of the latest technological achievements and close cooperation with Silesian universities is an interactive demonstration of the possibilities offered by Adaptive Vision Studio and computer vision organized by FP during the **Silesian Scientists Night**, which took place on 24 September 2010 at Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology. Silesian Scientists Night attracted eight thousand visitors. At the stand of FP the enthusiasts of technological innovations could personally test the capabilities of the presented system, supported by specialists of Adaptive Vision Studio. FP, as a patron of the event, also supported **BIT FEST**, i.e. IT Festival organized on 26 November 2010 by the Association of Students BEST Gliwice. During the festival, one could take part in presentations of companies from the IT branch, shows of overlocking and in competitions in the area of graphics, programming and knowledge about FP. Prizes in the competition of team programming and knowledge about the company were founded by FP.

According to its program FP promotes knowledge about the company among its potential employees, but always does it in a unique and specific way, showing at the same time a unique organizational culture, which it is proud of. The event, which the best shows the way FP works, is **IT Touring Day**, organized by the company on 15 February 2011 at University of Economics in Katowice. During the event Jarosław Czaja (CEO FP), Ania Janeczek (Junior Software Quality Assurance Engineer) and Krzysztof Bernacki (Marketing and Recruitment Specialist) told about the philosophy of working in FP, answering to the questions: how work can be fun and how fun can be work? how to succeed with this approach? Participants of the meeting could also take part in a competition of knowledge about FP and a competition of technical knowledge. Participants could as well learn how to complete an internship in the company and get informed about the current job offers of FP.

³¹ <http://www.future-processing.com/company-news.pl.php>

The company willingly answers to the invitations of scientific circles, as it was in case of the mentioned **IT Touring Day**, or lectures conducted in February and March 2011 at the invitation of the Scientific Circle for Interactive Graphics. The lectures were held in the auditorium E of Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology. The first lecture was entitled: "Formalising working on a project - good or bad?" and led by Zbigniew Kawalec, Project Leader and Senior Software Engineer at Future Processing.³² The second lecture concerned the methods of ensuring the quality of business applications in the gaming world and was led by Piotr Podskarbi and Kacper Mazek from Quality Assurance department of Future Processing.³³ Another example of involvement in the activities of scientific circles and at the same time promoting FP among students and high school students in Opole is supporting by FP the third edition of Open Opole Championships in Team Programming, held on 15 April 2011. The competition took place at Faculty of Electrical Engineering, Automatic Control and Computer Science of Opole University of Technology and both university students and secondary school students from Opole, Gliwice and Wrocław took part in it.

Continuing cooperation with University of Economics in Katowice, FP participated in the **1st International Week**, an event which gathered lecturers from 7 European countries and Asia and students from 20 countries of four continents, among whom were representatives of 9 universities belonging to the Silesian Public Universities Consortium (approximately 400 people in total). During the event the students had the opportunity to take part in international fair, get informed about the college scholarships and international practices offers as well as exchange experiences with peers from around the world regarding the opportunities and benefits of studying in countries which they represent. The culminating point of the **1st International Week** was **New Media Day**, which gathered lecturers sharing their knowledge with students and representatives of the global business, i.e. companies and institutions operating on international markets, among which was also FP. Representatives of the company shared their knowledge on the latest solutions and presented to the audience a unique organizational culture of the company.³⁴

A completely different kind of broad and unconventional cooperation of FP with Silesian University of Technology and Regional Development Agency is started on 19 October 2010 the first **free means of transport to Nowe Gliwice**, where the premises of FP is situated. The first course from the bus stop in front of Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology was dispatched by prof. Jerzy Rutkowski, PhD, Eng. - Vice-Rector for International Cooperation of Silesian University of Technology. The bus, which according to the timetable runs on weekdays from 8:00 to 16:45, is aimed to help people who work in Nowe Gliwice, among others FP employees, to commute quickly and easily, to work or university.³⁵ As a part of this unusual cooperation Regional Development Agency and FP are financing the transport and the Faculty has made available a parking lot for the bus stop in front of its building.³⁶

From the above presented examples of activities undertaken by FP in cooperation with Silesian universities and organizations of students, or even fans of programming, it can be concluded that, though impressive, this is only the beginning of a broad cooperation and in subsequent years its development can be expected in order to expand or intensify their cooperation. While observing the activities of FP and emerging new initiatives it can be seen that every year there are more actions

³² <http://www.future-processing.com/company-news.pl.php>

³³ <http://www.future-processing.com/company-news.pl.php>

³⁴ <http://www.future-processing.com/company-news.pl.php>, more at www.intweek.ue.katowice.pl

³⁵ <http://www.future-processing.com/company-news.pl.php>

³⁶ The company's own materials sent by Ms Magdalena Ciszewska – Marketing Manager.

including more and more areas both in the substantial and surface area, among others, through such initiatives as Deadline24 addressed to enthusiasts from all over the country, through which FP reaches with its idea and job offers not only the best programmers in Silesia, but in all Poland. While presenting their achievements and substantial preparation of their workers during the international scientific events (e.g. the 1st International Week), FP proves that it is situated among the top programming companies in the country.

1.3. Barriers in development

From the beginning of the company, in cooperation of FP with the scientific and academic community there were no barriers hindering cooperation, because the company's founder - J. Czaja, as well as workers employed by him come from this environment and are well aware of its conditions. Moreover, from the very beginning J. Czaja treated seriously the cooperation first with Silesian University of Technology and in the subsequent period with other research centers of śląskie voivodeship and approached it in different directions, offering various forms of cooperation tailored to the needs of both the company and to the needs, expectations and possibilities of individual universities.

However, taking into consideration many years of experience in mutual contacts between a private company, which is FP, and scientific structures represented among others by SUT cooperating the longest with FP, two major barriers can be indicated to some extent influencing the mutual contacts and initiatives implemented. The first is the **lack of official rules of cooperation with business in force at SUT**, i.e. with dynamic and willing to cooperate private companies, and thus prolonging decision procedures, making it difficult to undertake such cooperation. In private companies the decisions are taken by President / Owner or lower level employees having his power of attorney, or employees assigned to the concrete project. However the simplest decisions regarding cooperation with the university (for example, decisions about the cost of renting space by FP during the annual event at SUT, during which the company presents its achievements and its offer for students), are made only by the Dean. A similar problem concerns decisions regarding the new forms of cooperation with SUT proposed by FP. Each time the problem is discussed in detail, so that finally the dean could decide to undertake the cooperation. Since there are no explicit and clearly defined rules / conditions of cooperation with business, every case or request is considered individually, which unnecessarily increases the decision-making procedures and thus postpones the proposed initiatives, sometimes even hindering their implementation unless one of the university research workers signs the proposed idea and becomes its ambassador at the university, then the procedures are likely to accelerate.

The second barrier is the difference of objectives and principles of operation, others for the private company implementing projects on order of a client and others for the university representing the scientific community whose aim is, among others, personal development and enrichment of their scientific achievements. It is easy to guess that the company realizing a client's order, together with the submission of the project's documentation, usually provides the customer with the whole or a part of copyright regarding results of the project covered by the order. This situation is almost impossible, when one of the partners of the project is a scientific unit, represented by the specific researchers, who wish that the results of their scientific work, including copyrights remained their property. The different approaches to intellectual property matters principally closed FP the possibility to undertake cooperation with the scientific community in the framework of commercial projects, which are the basis of business.

It is true that FP is so well known and recognizable brand and over the years the company has established itself in the scientific community as a responsible and reliable partner that cooperation with many universities do not pose any problems. Nevertheless, the dissonance, which can be seen in the above mentioned fields regarding decisiveness, purposes and principles of private companies and universities, in some way hinders their cooperation and taking into account the objectives of both parties, sometimes even makes it impossible.

1.4. The milestones

Milestones in the history of FP regard many levels of the company's activity. During over 11 years which have passed since its foundation, the company has been expanding, increasing the customers' portfolio and works realized for them, multiplying the number of employees and gaining position on the global software market. The company has also presented itself as a patron of science, closely and from the beginning cooperating with Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology, which results are currently carried out common educational and scientific projects, such as Deadline24, which had his third edition in 2011.

2000 – foundation of Future Processing by Jaroslaw Czaja, then a student of Faculty of Automatic Control, Electronics and Computer Science of Silesian University of Technology.

2002 - October – obtaining by FP the first contract in the UK to develop software for automatic face recognition.

2004 - decision to change the form of business, application for registration of Future Processing Sp. z o. o.

2004 - signing by Future Processing Sp. z o. o. a strategic contract with a British company to develop a software in the field of video surveillance.

2005 - increasing the customers' portfolio of two new customers and consequent increase of the number of employed programmers, so that the FP could meet the undertaken obligations.

2006 - again, this time twice enlarged team of programmers and realized projects.

2007 - signing other large contracts with companies of financial and transport sector and subsequent enlargement of the team of Future Processing. In 2007 the company already employed 50 engineers.

2007 - obtaining by Future Processing the status of Microsoft Certified Partner.

2008 - obtaining new customers in the UK and consequently enhancing the team to over 80 people.

2008 - opening the new Software Development Centre in Gliwice.

2008 - implementation of a complex Quality Management System and getting the certificate ISO 9001: 2000.

2009 - winning the Microsoft Gold Partner status.

2009 - organization for the first time together with Silesian University of Technology of the programming marathon Deadline24.

2010 - in April a construction of new premises - a technology park FPark in New Gliwice - has started.

2010 - in August, in connection with the very rapid development, the strategy, mission and vision were redefined.

2010 - in November, the company's educational project called FP Academy was started.

2010 - educational cooperation with University of Silesia and University of Economics in Katowice began.

2011 - the first Polish satellite office of the company was opened in January in Opole and cooperation with Technical University of Opole has begun.

2011 - in February R&D department of the company was created under the name of FP Lab.

2011 - at the beginning of June the first of three buildings of FPark technology park was put into operation.

2011 - at the end of June employment in the company amounts to 300 people.

1.5. Critical points in the development of the company

Critical moments, related to actions realized with research centers, regard primarily the aforementioned bureaucratic barriers which have arisen already at the beginning and unfortunately have been continued during the cooperation. Bureaucracy and multi-stage decision-making university procedures, especially those related to strategic decisions, make determination and patience necessary to undertake cooperation with the university, because what takes a moment in the company – to make a decision – at the university takes much longer and requires many additional and, from the point of view of the company, often unnecessary documents. Long-lasting procedures, at best, postpone the time of beginning of cooperation or realization of the project, at worst, make its implementation impossible, for example if a deadline for submitting application for EU funding is important.

Another and much more serious problem is the approach described above of FP and the scientific community to ownership of copyright and intellectual values. FP representing a business approach takes into account transferring to the client, on behalf of which the project has been realized, at least part of the copyright, which for the scientific community, caring about the quality of Polish and its own scientific achievements, is very difficult to accept. Admittedly, indirect forms of use of copyright, such as licenses, are acceptable but not a total transfer of the copyright to the client. FP has encountered such a problem during the implementation of a joint project with the Institute for Systems Research of Polish Academy of Science. Negotiations with the Institute had failed and the company has given up a similar cooperation with scientific institutions for a long time.

1.6. Sources of financing and plans for the future

Activities of Future Processing Sp. z o.o. from the beginning were mainly based on the company's own measures, which still remain the basis of its activity. But the company has also reached for external measures, mainly from the EU, among others, from the Operational Programme Innovative Economy (1) or the Regional Operational Programme of Śląskie Voivodeship for years 2007-2013 (2).

The EU funds make it possible for the dynamically developing company to consolidate its position on the international market and to participate in interesting projects, such as: "participation of the company in fairs dedicated to machine vision systems VISION 2009 in Stuttgart"³⁷ (ad.2), where FP is presented as an exhibitor, or "Development and implementation of software for automatic visual inspection systems" (ad.1). FP has benefited from the EU funds also while realizing the project entitled "Business diversification through establishment of modern software production plant for automatic visual inspection systems at Bojkowska Street in Gliwice". The value of the project amounted to 1.770.798,28 zlotys and the grant amounted to 750.000,00 zlotys.

Currently, the company thinks about using its potential and experience in new areas of the IT branch, namely in consulting. During 11 years of operation the company has managed to develop highly specialized managerial staff, whose skills and many years of experience can be used to carry out new tasks.

Extension of the technology park FPark of new buildings is also planned. Taking into account the current dynamics of the company's development, Jarosław Czaja thinks about the next investments, allowing the team working in a comfortable and friendly environment. Rather general plans so far include, apart from office space, a vision of creation of sports center and cafeteria for workers.

The company is also working on its own products in order to give a chance to diversify revenue sources and also to help to build a global brand.

1.7. Summary – key factors of success

The creator of the company is well aware of the factors that made FP an international success. In addition to the adopted action strategy and unrelenting consistency in its implementation, the factors that made FP succeed were included in the mission of the company: "We excite people who care about quality". The earlier statements setting out the specific reason for the company's functioning on the market are still valid: "We are committed to **building lasting relationships with companies** looking for assistance in realization of ambitious and innovative IT projects. We try to **gather experiences, broaden the scope of our skills and continuously improve organizational processes**. We also believe that **the most important factor of success in our business are people** approaching the projects **with passion and commitment**. This results in a higher quality of delivered solutions and bigger customer satisfaction, which will allow us to maintain the dynamic growth of the company and development of members of our team."³⁸

1.7.1. Jarosław Czaja - President of FP

To the aforementioned factors another one must be added, not indicated in the mission, namely the **creator, inventor and *spiritus movens* of the company - Jarosław Czaja**. This is his substantial knowledge, ability to acquire customers and further team members, as well as the ability to determine the direction of more than 300-people and constantly growing team caused that FP is not one of the Polish software companies operating on the IT market, but it is a company distinguished with quality and approach to work and tasks carried out by its employees. Jarosław Czaja spends about 25% of his time in the UK, where the company has its sales office recently. President does not like to waste time, his day is 100% effective, and thus filled right up to the minute. It is not surprising,

³⁷ <http://www.future-processing.com/company-ue.pl.php>

³⁸ Our mission, <http://www.future-processing.com/company-profile.pl.php>

because of Czaja's principle that everything can be done better than it is done and everyone, regardless of position and of the task, should take care of the highest quality of all the activities and responsibilities, of which he is the best example.

1.7.2. "The most important factor of success in our business are people"³⁹

In FP from the very beginning a large emphasis is placed on the appropriate selection of people, creating a team, as well as their constant development. The company was founded by enthusiasts, for whom passion was and remains one of the most important and most expected qualifications, which must show future employees of FP. Approach to work and attention which president of the company attaches to the development of the team is often emphasized in interviews and promotional and informational materials of the company. In the published statements appear, among others, words that perfectly reflect the opinion of Czaja about the employees of the company: *"We are a team (...) of enthusiasts,"⁴⁰ or "for more than 10 years we have consistently built our team of people who realize their own ambitions at work, transforming them to business success of all the organization"⁴¹ or more emphatic "we believe that business success guarantees us surrounding with people who realize their ambitions at work and are not afraid to undertake tough challenges. We give them a chance to improve their skills and exchange knowledge in a creative and committed team, as well as the opportunity to work on interesting projects for clients from all over the world."⁴²*

The employees are also talking very well about working in FP. They emphasize both the high level of realized projects for major international clients, as well as untypical work atmosphere in FP, quick adaptation of new employees and taking over responsibilities and important tasks in the projects: *"(...) In college, for many years I was convinced that I was doing interesting things (...), interesting projects, I participate in programming contests, but it was still somewhere in my mind that after graduation I will find myself (...) in a company, where I will create databases for pharmacies, shops and warehouses, but (...) the reality turned out to be (...) positive, in my work I can deal with interesting problems, solve algorithmic problems associated with artificial intelligence and that's good."⁴³*

"What I like in work for FP is (...) that I have an impact on the image and functioning of the company and this is not the case (...) regarding only for a few employees. Everyone in the company, no matter if working in it for several months or several years, can affect how the company looks like, can affect the processes that are realized in the company. Quite unique is also the fact that on the one hand we have a fairly relaxed, even playful atmosphere and on the other hand it is a well-ordered company, a company that attracts serious, large customers from all over the world (...)."⁴⁴

"I work in FP for several weeks, right from the first week I was drafted into the team that develops mail application for the UK clients. What made me work here, apart from a friend who encouraged me very much, (...) is that the working hours are very flexible and I am able to work remotely. However, already after the first day I turned down the opportunity to work remotely (...) because

³⁹ Our mission, <http://www.future-processing.com/company-profile.pl.php>

⁴⁰ <http://www.caseweek.iaeste.pl/node/214> (2010)

⁴¹ <http://www.caseweek.iaeste.pl/node/214>

⁴² <http://www.caseweek.iaeste.pl/node/214>

⁴³ Michał Czardybon says about his work in Future Processing, 26 June 2010, http://www.youtube.com/user/FutureProcessing#p/u/10/WH_j32X1cm4

⁴⁴ Tomasz Ciapała (project manager, quality agent) tells about work in Future Processing, 26 June 2010, <http://www.youtube.com/user/FutureProcessing#p/u/9/JHRQAucjgM8>

*work at the place with the best IT specialists in our region is something really amazing. I work on conducting tests of the entire application, as well as the automation of these tests. (...), I did not realize that sending e-mails can be so instructive.*⁴⁵

Creative, committed and integrated team was established thanks to a very serious approach of the company to the recruitment process. Having clearly defined expectations towards future employees, the system of adaptation of new people to work in appropriate departments and teams and thanks to the unique organizational culture of the company, Future Processing could give up the support of personnel consulting firms and the recruitment process, despite its scale, is supervised by the best software engineers of the company.

During the recruitment process, besides the required level of competences, the future employee of FP must demonstrate talent, determination and commitment as well as non-university experience which proves the candidate's passion and usually goes far beyond what the university offers.⁴⁶ It is also important that new members of the team demonstrate the ability to learn during realization of successive orders and to learn from their mistakes.⁴⁷ With clear rules of recruitment and high expectations new employees in a short time become rightful members of the FP team and a short time means here a few weeks, only in exceptional circumstances a few months.⁴⁸

The process of full adaptation of a new employee to the assigned duties, as already mentioned, takes up to several months. In this time he is drafted to a project (for example as a beginning programmer), and his work is assessed and supervised by more experienced colleagues. Later the employee is assigned to more and more responsible tasks, such as full responsibility for a specific project's area and contacts with customers. Employees of FP benefit from trainings and courses of a wide range of knowledge, from specialist courses to quality trainings. Once a week English lessons are also conducted, which is the basic language of communication in the branch represented by FP as well as in cooperation with the English speaking customers, which are the majority of the company's customers.⁴⁹ The company applies a flexible approach to working time, stationary or remote work is also possible, but its basis is quality.

The main rule of the company is inculcated into every new person in the team of FP from the first day of work: how you do certain things is really important⁵⁰, because in FP mediocrity is not accepted. President of FP knows that achieving perfection is impossible, but it is important for him to aspire to it and employees, along with the management of the company, should demonstrate a daily concern for the quality of their work. *"We are trying to create products of the highest quality, the*

⁴⁵ Paweł Nowak tells about his work in Future Processing, 26 June 2010,

<http://www.youtube.com/user/FutureProcessing#p/u/8/Y8niKNtDad0>

⁴⁶ D. Pokusa, Interview with Jarosław Czaja – President of the Board of Future Processing, the material prepared in the framework of „Research on adaptation of Silesian University of Technology students to work in a company”, 09.10.2009, <http://ipij.acei.polsl.pl/article.php?id=10>

⁴⁷ Mission <http://www.future-processing.com/company-profile.pl.php>

⁴⁸ D. Pokusa, Interview with Jarosław Czaja – President of the Board of Future Processing, the material prepared in the framework of „Research on adaptation of Silesian University of Technology students to work in a company”, 09.10.2009, <http://ipij.acei.polsl.pl/article.php?id=10>

⁴⁹ D. Pokusa, Interview with Jarosław Czaja – President of the Board of Future Processing, the material prepared in the framework of „Research on adaptation of Silesian University of Technology students to work in a company”, 09.10.2009, <http://ipij.acei.polsl.pl/article.php?id=10>

⁵⁰ D. Pokusa, Interview with Jarosław Czaja – President of the Board of Future Processing, the material prepared in the framework of „Research on adaptation of Silesian University of Technology students to work in a company”, 09.10.2009, <http://ipij.acei.polsl.pl/article.php?id=10>

*best in their categories; we want our programs to be as easy to use, efficient and effective as possible.*⁵¹

The company is also proud of its unique in Poland organizational culture, about which it writes in its materials: "since the beginning of the company we follow our own path, on which there is no place for a very rigid and formalized working environment. While maintaining professionalism at work and putting great emphasis on the development of the team, we give people a considerable freedom of action and real impact on the direction of the company."⁵² Organizational culture of FP is a complex network of relationships and dependencies, resulting from the aforementioned belief that work should be a passion, not a necessity. The company, besides the possibility of learning and development, gives its employees the opportunity to participate in interesting and ambitious international projects, cares about comfort of their work, ensuring appropriate technical and room conditions as well as friendly atmosphere, usually characteristic for small teams, not over 300-people companies. Putting the employees in front of challenges and high requirements concerning high quality of work, the company also offers a choice of working hours and place of work (remote work), resting between the daily activities (game room, cafeteria) and relax after working hours (volleyball, football sections, excursions to the mountains, etc.). The employees also appreciate the often organized internal events, in which everyone willingly participates, for example, project events, the 10th birthday of the company celebrated with grand style and fantasy, or standard holidays which in the company are approached, as everything, with passion and fantasy. An interesting and worth mentioning solution is the game room - the so-called Fun Room, where all popular computer games, darts and billiards are available for everyone or the employees can sit and freely, without fear take a break from work and relax. The company also provides many other facilities, rather uncommon in Polish companies, similar to the organizational culture of the well-known international giant - Google.⁵³ Both companies make great efforts to make the environment in which people spend many hours every day not only ergonomic, but also attractive in its form, surprising and giving opportunity to both develop and rest.

1.7.3. Realization of ambitious and innovative IT projects, gathering experience, broadening scope of skills and constant improvement of organizational processes.

Another element of the company's strategy, which contributed to its undoubted success, is realization of ambitious and innovative projects (including those refused by the competition), broad engineering competences and ability of team members to learn from each other and from the executed orders. It is also important to constantly try to improve work of the FP team, including organizational processes responsible for it.

From the very beginning the activity of FP was oriented on production and offering the customers the highest quality of specialized software and until now it has not changed. However the branch scope of FP clients has changed. Initially, the company's activity was connected with the market of computer vision in medical applications and safety systems (such as medical imaging systems and intelligent monitoring). But in 2007, the first diversification of the company's areas of activity took place and FP undertook projects for the finance and insurance sector and transport services (e.g. smart ticket punchers). In recent years a further expansion of the company's activity took place, which this time included projects for the publishing and advertising market and packaging industry (such as advertising messages broadcast in public transport).

⁵¹ [Future Processing - Praca - http://www.youtube.com/user/FutureProcessing#p/u/6/FLWF0FvOOpY](http://www.youtube.com/user/FutureProcessing#p/u/6/FLWF0FvOOpY)

⁵² <http://www.caseweek.iaeste.pl/node/214>

⁵³ <http://muangthai.pinger.pl/m/943795>

Currently, the company provides comprehensive services in the area of production of software, including its design, implementation, testing and integration. It undertakes realization of ambitious projects for clients around the world, with particular emphasis on the British market, from which a significant part of the company's current customers comes from.

FP initially decided on closer cooperation with Microsoft, which technologies the company is specialized in, with particular emphasis on solutions based on the NET platform. Since 2007 FP is a Microsoft Certified Partner. Currently a large effort in the company is focused on development of projects in other technologies (Java). The company also has experience in creating applications for mobile devices such as smartphones Blackberry or iPhone.

To ensure the highest quality of the developed solutions and undisturbed flow of information in project teams, the company introduced its own system supporting management of IT projects - FP-Dev, which continues to be developed and improved. The company uses modern equipment and software. The employees of the company, in order to acquire new, multi-directional experiences, as a part of their responsibilities and interests are working in different project teams, enjoy the workshops and training courses coordinated by the education unit of the company - FP Academy, which directly affects the ability to solve problems arising during the implementation of project tasks. In order to ensure the best contact with English-speaking customers, related among others to the preparation of project documentation, the company has opened its stationary sales office in London and the employees participate in the weekly English lessons.

Obtaining the highest quality of the executed orders is also supported by the QA department, dealing among others with testing programs developed by FP. In the QA department work the best engineers, often with programming skills, whose job is to find mistakes and gaps in the applications prepared by FP at the stage of their development, before putting them into service to the customers. Working in the QA department is not simply "clicking". In FP it is a creative work, based on solid knowledge and thorough analysis. Therefore the company manages to get better results than its competitors and customers are often surprised by the quality of the received products, which do not contain common and commonly accepted faults.

It is also worth mentioning that the company through close and regular cooperation with the Silesian University of Technology has the opportunity to present its job offers to the best young professionals in the branch, who find their first job in FP, often staying there for many years. In 2010 the cooperation was expanded to University of Silesia and University of Economics in Katowice and in January 2011 - Opole University of Technology. At all these universities the company conducts free lectures and invites students to internships and practices.

1.7.4. Building solid relationships with companies and Silesian University of Technology

The FP philosophy is focused on long-term initiatives. Head of the company - J. Czaja plans first and then tries to consistently realize the objectives placed in front of himself and his team. One of these long-term initiatives is cooperation with Silesian University of Technology. This cooperation is a natural consequence of the scientific and professional way of J. Czaja, the philosophy of determining the direction of the company's development and the belief that close cooperation with one of the most dynamic academic centers will allow a direct contact with the best programmers and algorithmics specialists in Poland. For this purpose, among others, cyclical events such Deadline24 are organized in cooperation with Silesian University of Technology. Such events currently gather not only students from Silesia but also fans from other academic centers in Poland and in 2011 for the

first time from abroad. The company also offers internships for students and suggests master's theses topics. FP also supported the League of Tasks and Individual Programming Competition, organized annually at Silesian University of Technology. For several years it also organizes "Future Processing Academic Day" at Silesian University of Technology.

The importance that FP attaches to the close cooperation with Silesian University of Technology and other research centers, in addition to the consistent implementation of commitments already made, is proved by the fact that in 2009, for internal company's needs, a document entitled "FP closer to the University " was created including concepts and tasks in order to make cooperation between the FP and Silesian University of Technology even closer as well as plan and costs of their implementation. Many of them have been achieved, others required correction, but have not been abandoned.

Cooperation with the academic community, participation in various scientific and educational initiatives, addressed to students and enthusiasts of programming are aimed not only at providing its potential employees with the company's offer and catch from the crowd the best ones, but also, if not primarily, at sharing knowledge and promote among students and future programmers the fundamental value that characterizes the team of FP - passion and commitment. Czaja often stresses in his statements that he loves what he does, so he can draw satisfaction from work. When asked whether he is not afraid of competition, which through multi-directional actions addressed to future entrepreneurs he can prepare himself, he says that he is not afraid, because in his opinion, he would not exist on the market, if it had not had many new ideas, waiting for realization, which always allow him to be one step ahead of others. And furthermore, the company is supported by the specialists' team, established reputation and an everlasting appetite for more.