Our fruit begins to mature

In Slovakia, we currently face a high demand for specialists in the field of information and communication technology (ICT). According to the forecasts of the IT Association of Slovakia and the Košice IT Valley cluster, the number of ICT jobs in the eastern region of Slovakia may increase to 10,000 in the next six years.

That translates to hundreds of open vacancies seeking qualified IT experts on the labor market, which, at the moment, is relatively empty, particularly if they are demanding skilled workers with work experience. Headhunting and overpaying experts working in other IT companies is not a secret anymore. What can be done to change that?

At T-Systems, we predicted such a growth in demand in 2006, when we started with our program of “IT Farms” – three months long, in-house education and training for hired newcomers. We realized, after just a few months of our arrival on the market in Slovakia, that neither vocational schools nor universities are prepared to provide fully qualified graduates with job-relevant skills, which are needed in practice. We didn’t give up, and continued to implement additional educational activities in close cooperation with both regional universities and high schools in the city; for example, annually running Summer University camps. Nevertheless, some of the experience that we needed was still lacking.

Dual vocational education system
Dual vocational education is one of the strategic priorities of the Slovak Government, and according to the Prime Minister, it will be launched in September 2015. However, there are many different viewpoints, descriptions and understandings of the realistic implementation process for such a concept as complex as dual vocational education. From our experience, we define it as an educational system that combines the practical experiences of a learner, gained directly in the company, accompanied with skill development via the theoretical knowledge gained in the vocational school. This system has been running for many years very successfully in many other European countries such as Germany, Austria, Switzerland, and Denmark.

“The object of education is to prepare the young to educate themselves throughout their lives.”
Robert Maynard Hutchins

T-Systems, one of the first pioneers in this field in Slovakia, has designed a dedicated program, launched it and implemented all the typical features of the dual vocational education concept, in close cooperation with the vocational high school for electro-technics (SPSE) in Košice. The first 30 students started a three year post-secondary study course in September 2013, and the next batch is expected to start in September of this year. We can say that the first fruits are slowly beginning to mature.

How does it work
The “dual” students are formally under the umbrella of the vocational school, and we as a company are committed to fulfill all legal requirements based on the law for secondary vocational education and training. The students attend theoretical lessons at school, and they have practical education (or better, hands-on training) within the company, led by our IT experts. T-Systems has created a dedicated premises, as well as a dedicated HW & SW laboratory, that are at the disposal of the “dual” students, so that they can explore and learn from real-life cases in the modern virtual IT infrastructure, which closely mirrors the internal customer infrastructures that our company is maintaining for its clients. In May, the students completed four weeks of practical experience within the operational teams, providing services to our customers, with the support of our internal coaches and mentors. This practical experience helped them to turn their theoretical knowledge and the skills acquired during workshops into reality.

Added value
To help people to develop to a certain requested skill level is a challenge. It takes some time. After a long discussion with our IT experts, schools and managements’ engagement, we have designed the curriculum for both practical and theoretical lessons in order to achieve our desired goals at the end – that is, to have fully prepared, well qualified and practically skilled employees who are ready to serve our customers from the first day at work. This system brings exactly what the employers need and it’s the application of theoretical knowledge into practice during study that makes it stand out from other educational methodologies. The graduate is already ready to enter the labor market while studying, and brings not only the knowledge, but also the practical skills that they have gained.
Challenges and milestones

T-Systems is just at the beginning of a long journey that began back in 2012 with a strategic decision to go into this unexplored territory. We have entered a truly uncharted field in Slovakia. As mentioned, the current vocational legal framework has many serious gaps, which make vocational training less attractive for industrial institutions. A dual education system is not yet defined in this law or any other school law, which we could have followed back in 2012-2013 when we started designing our own program. Fortunately, the iceberg is melting now and things are moving forward in the shape of new legislation for such a system. The legislation is jointly prepared by the Government, industry associations, chambers, schools and employer representatives, and is at the time of writing at a very advanced stage, and well on the way to becoming reality in the next academic year. T-Systems is fully supporting these initiatives through actively participating in their design, shaping and critiquing, as it is one of the few selected pioneers who are already implementing it.

We are very glad that the Ministry of Education, Science, Research and Sport is very actively pushing ahead with this major systemic overhaul, and it’s become one of their top priorities in this period. As the Prime Minister of the Slovak Republic, Robert Fico, said during the government and employer representatives, associations, chambers, schools and employer representatives, and is at the time of writing at a very advanced stage, and well on the way to becoming reality in the next academic year. T-Systems is fully supporting these initiatives through actively participating in their design, shaping and critiquing, as it is one of the few selected pioneers who are already implementing it.

We are very glad that the Ministry of Education, Science, Research and Sport is very actively pushing ahead with this major systemic overhaul, and it’s become one of their top priorities in this period. As the Prime Minister of the Slovak Republic, Robert Fico, said during the investment dialogue between the Government representatives and German investors:

“…I can, however, say that we want to set out a new system of vocational education, that should better connect practice with theory; a system that shall respond to the long-term requirements of the investors and the entire business community, with regard to the quality of our university and high school graduates. We will make the new system effective from the September 1, 2015, thus from the next school year. On this occasion I would like to thank Volkswagen, as well as T-Systems in Košice, for their cooperation in the flagship projects, through which we have already tried certain elements, such as how this vocational cooperation and dual vocational education might work. I want to entirely support the efforts of the Ministry of Education, which aims to bring all of the benefits of dual education to Slovakia.”

Preliminary information

Weekly schedule:

<table>
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<tr>
<th>Academic school year</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
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</thead>
<tbody>
<tr>
<td>1st year</td>
<td>School</td>
<td>Company</td>
<td>Company</td>
<td>School</td>
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<tr>
<td>2nd year</td>
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<tr>
<td>3rd year</td>
<td>School</td>
<td>Company</td>
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<td>Company</td>
<td>Company</td>
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What’s in it for the student:

- Completion of the degree examination
- Written graduate work and its advocacy, and comprehensive test of vocational subjects
- Graduate Diploma
- DiS Title - “Certified Specialist (Information Technologies)”
- Certified testing of the Slovak-German Chamber of Commerce and Industry (in cooperation with Germany)
- Job offer from T-Systems and scholarship while studying
- Opportunity to gain work experience in an international corporation, including networking and intercultural experience
- Collaboration on innovation projects as well abroad

Study subjects:

- Basic ICT skills
- Specialized ICT skills
- Customer orientation
- Languages (EN, DE)
- MS Office user basic skills
- Process management
- Business management & projects
- Written graduate work and its advocacy, and comprehensive test of vocational subjects