## "WHITE ANTS CAN BUILD THEIR NEST BECAUSE IT IS SOMEHOW CODED IN THEIR GENES." – INTERVIEW WITH ATTILA ÜRMÖSSY, HEAD OF TELEKOM IT NEARSHORE CENTER OF IT SERVICES HUNGARY

Q: First, can I ask you to introduce yourself for the readers and how your career path fits into the history of your company.

A: My name is Attila Ürmössy. I've been working in the field of informatics for a very long time. There was an apparent dichotomy when I chose profession because informatics had been more of a hobby to me. I was more interested in the management, organisation and other tasks related to informatics. Therefore, when I had to decide what to study I was tempted to choose the faculty of information technology. In the end, I decided to study transportation systems management because I believed that the application of scientific results is more interesting than science in itself.



Q: Which university did you attend?

A: I attended the Budapest University of Technology and Economics which I've never regretted ever since. In those days large transportation companies were the ones that had advanced IT infrastructure. In practice, they had the most up-to-date information systems in the domains of freight and goods transport and passenger transport. It was the most effective learning curve with a lot of practical knowledge. At that time, there were mostly networks of PCs and the idea was to create a network covering the whole country. This shows how widespread and important transportation is. As I've mentioned earlier I attended the Budapest University of Technology and Economics but from an early age I had been interested in informatics. In high-school we started a self-development group to popularise informatics

among students. After finishing my university studies I started working at Siemens then I went abroad. There I had a very different job. I designed motorways and maglev at a German transportation planning company. The design process was heavily supported by IT systems which sped the process up with the help of various algorithms. As a result the company became considerably more competitive. When my working visa expired I came back to Hungary and I started working at Porsche Hungary, which is a large car importer. I worked there for ten years in different areas. At one point, I realised that I have the makings of an economist. I was working as a controller – directly reporting to the managing director – and I was put in charge of the construction of a huge storage building. It was a greenfield investment and we had logistics, transportation, financial and project management tasks but with a bit of luck we managed to complete the project within the allocated budget and time.

Q: Which is quite rare.

A: Yes, it is. That's why I said luck also played a part in the project success...

Q: Was it the Volkswagen Porsche?

A: It was the Volkswagen, Audi ....

Q: And then?

A: What do I work at the company? I started to work here in 2008, so I've been employed by ITSH – that is the IT Services Hungary – for 6 years. The company is a subsidiary of T-Systems International, which carries out 'nearshore' activity, offering services to the international customers of T-Systems International. In the first 3 years, I was working in TSS, then when the internal IT transferred some of its activities to Hungary I was doing the two jobs side by side for a while. When it became too overwhelming, I started to focus on the internal IT. So, today I have double responsibility at the company. On the one hand I'm the representative of the Telecom IT TSI for Hungary. In this position I manage the internal IT systems of T-Systems International and in some ways the internal systems of Deutsche Telekom AG. We provide applications in the area of security and other services in the areas of infrastructure management, licence management and order management. On the other hand, I'm responsible for the management of the local IT including processes and quality management. This is a double role because I have to act as a global and a local manager which I really

enjoy. To find the global optimum that is also an optimum for the local company. I don't cast my vote either way. I always aim at finding the optimum solution. I think that if we introduce a product locally which is good and we can improve it even further it will be beneficial for the global concern as well.

Q: How independent are you?

A: In what regards?

Q: For example, in regard to the introduction of the developments you've mentioned.

A: Since we are responsible for the technical implementation of these systems including the operations and the application management, we have quite a lot of influence on the systems we use and this way we have major contribution to organisational efficiency.

Q: How big is your team?

A: At the moment 160 people report directly to me.

Q: That is a really serious work.

A: This year our turnover will be around HUF 3 billion and I hope there will be an increase next year.

Q: Is it purely intellectual?

A: Yes, it is. It doesn't include any hardware licence.

Q: Could you tell us a few words about the history of the company in Hungary?

A: The IT Services Hungary was called T-Systems earlier. It was the shared subsidiary of T-Systems International and the Hungarian Telecom. Mainly it was operating as an IT service in Hungary. In 2006 a decision allowed T-Systems to continue providing IT services to the local market. IT-Systems is a new company. It is basically a spin-off company of T-Systems and it carried on the international line and had a dynamic growth. If we take, for example,

the number of employees today, we can see that it is close to four thousand. In the last 6 years there has been a constant increase of 5 to 6 hundred per year. It had of course positive as well as negative consequences. The internal IT system also had to adjust to these changes. Basically, the company has to deal with everything a global IT service provider has to do: desktop first level support, computing, telecommunication, system integration, project management, service management...

Q: Where is the Head Office?

A: It is in Bonn. Practically it is the Deutsche Telekom AG.

Q: I would like to continue with a more general topic and I would like you to share your opinion independently from your area of work. My first – quite general question is – how you would define the digital environment. What does the future hold for the digital environment?

A: I often talk to members of the younger generation. I tell them stories about my childhood when there weren't any computers, mobile phones and there wasn't Google or Wikipedia. And then they ask how on earth we could live without them. We IT specialists know how to handle this situation because we were brought up with it. Younger generations were born into the age of computers and they are naturals with computers. I think there are two important things to mention here. One is that there is big data, the centralisation of data. There is more and more electronic data available which hadn't been the case earlier. The other is the process by which telecommunication is becoming more and more mobile and it's penetrating into the media. These two major changes shift the world to a fully digital existence. I'm not sure for example, that the paper-based version of your journal will be read by many but the electronic version will certainly reach wide readership. Or if we take a look at my book-shelf, and see the number of books I've bought in the last 10 years and compare that to the number of books I had bought previously. We can see a big difference. At the same time we can take a look at my e-book reader and see how often I purchase e-books ... So, I think that in our everyday lives there has been a strong shift to a digital world. Or we can look at the way we used to organise our holidays a few years ago. We booked accommodation by flipping through travel catalogues in travel agencies. Today, all we have to do is to browse the Internet and find the perfect holiday. Digital mobility is part of business and consumer society. Electronic payment is essential part of life. We can pay for products and services bought online or we can sign contracts online or prepare bills. In every walk of life the shift to digital is very powerful.

Q: Is it an absolute process? Do you think it is going to spread to all walks of life?

A: Well, I have the feeling that there are a lot of areas in which I think going digital is unstoppable and as a result there is huge acceleration. I also feel, that the knowledge behind the new digital era – all the skills and abilities needed to operate the system – are somewhat neglected. I read an interesting article not long ago in the Der Spiegel. Comparisons in 1990 and in 2010 were made between how well young and old generations can use computers. It was shocking to see that the IT knowledge of the young generation – the knowledge of how a computer works, how to write computer programs – was much more solid back in 1990 than the IT knowledge of the same generation in 2010. We would have thought that in 20 years the IT knowledge of the society has improved a lot. In fact it hasn't. The use of IT tools has escalated of course, but expertise hasn't improved. If anything it has decreased. I believe that there will be a shift to more simple things becoming less valuable and more complex brain works that allow business value to increase becoming more valuable. The reason for that is that more complex processes cannot be automated or digitalised, but ...

Q: You've nearly replied fully for my next question but could you give a one-sentence-answer for the question regarding the impact of the shift to going digital on the public at large and on the business models.

A: As you said I've already touched upon these issues. The two are related, the more wide-spread the internet connections of the digital world are – the number of mobile and smart phones, phones with data connections and the number of competent users, those who pay their bills over the internet – the more business models will change along with changes in the supply chain.

Q: How proactive is this change? Or is it more reacting to changes in the environment?

A: There are new models which are proactive. Let's say a car without a driver or a plane without a pilot is a conscious innovation. But in many cases companies follow suit. If something works well, for example in the pharmaceutical industry then let's copy that digital innovation in another industry or production etc. These are mainly adopted practices.

Q: How do you use the notion of digital identity in your circles? The digital identity of individuals is a popular notion today and it is also dealt with scientifically. Our digital activity

draws our digital identity and it is worth investigating and also it is useful building our identity consciously.

A: I don't have a definite answer for this question. I'm not very fond of social media, but the younger generations would find it impossible to live without it.

Q: Why are you not fond of it?

A: Why am I not fond of it? My family and work life are clearly divided and I believe that social media would blur the lines between them. I'm rather conservative when it comes to this question but I sense that for the younger generations, private and professional lives are more intertwined. It might lead to further social changes in the area of work – the way we work – and our productive time that is the time we spend by being employed somewhere in 40 hours a week or we get benefits only for the value we create. In the long run it might have advantages but I think it is not yet the case...I have a metaphor for this: white ant nests. White ants can build their nest because it is somehow coded in their genes. Today, I think these genes – the innate coded power which would make the use of social media more conscious – are missing...

Q: Maybe it emerged too fast.

A: ....as an outsider I think the whole social media is a drifter still being shaped through finding its meaning and ways it can add value.

Q: By all means it is an opportunity from a business aspect.

A: It is an opportunity from a business aspect indeed.

Q: Then it's going to work. Presumably.

A: Presumably, it's going to work. I'd say it's surely going to work because it finds business opportunities today. The question is how comfortable people will feel themselves about it in 10 or 20 years' time. And if something was seen in one way 20 years ago will be seen differently in 20 years' time. We don't know whether it is still reasonable. If I think about myself, I'm fortysomething today and I'm sure I thought about these things very differently when I was twenty-something.

Q: I have similar experience in market research. I think that market research as an industry is trying to find its role. It feels that market research is in a way forced out of a form of communication in which it should play a part and it is still searching for...so it is an exciting technological, social and ethical challenge how to be part of it. I believe that other industries have similar dilemmas. Is it well worth doing something with the issue of social media, or is it something that is going to fade away.

A: I think that it will always be the case that when something starts it will go on. The question is whether there will be a divergence or a fundamental rejuvenation. I think that there is a business case for market research. Through collecting data new markets can be built. So, I believe that there is market value for those who want to sell. It is still a concern how much of a value is it for those who buy the products and services. I myself prefer finding relevant information about something before I purchase it. But I like choosing my own sources. I don't like buying anything out of the blue. I wouldn't go for a holiday just because there is a bargain offer. If I want to go for a holiday I look for the best offer on the market.

Q: And again, you just about answered my next question. I meant to ask you how you evaluate the role of social media. So, let me continue with the executive information systems which are of great importance for readers of our management journal. What kinds of changes have taken place on the market of executive information systems recently?

A: For quite a long time I've believed that the market for executive information systems has been dominated by robust systems and I think this is still the case today. But it seems that the winds of change have begun to blow. There are two reasons for that. One is that the younger generations are entering these companies. Two is that the world has become more dynamic than in the previous 30 years. It is more turbulent today, and even large companies admit that it is very difficult to plan for even medium term. Earlier a 3 or 4-year-plan was taken more seriously whereas today even large companies focus more on the forthcoming year. As a result new companies enter the market with new services trying to force out those services that had been considered unique not long before. It will be true to the market of executive information systems as well where new platforms will appear which will be suitable to develop new integrated systems. These will be suitable to be integrated with other island systems although they should comply with certain standards. I think that in about 10 to 15 years this market will have gone through considerable changes and will have been rearranged, partly because large companies will think differently and products will be different, too. It is much

easier to operate a new technology product according to the expectations towards new technology and turn it into a system with business advantages than to continue a system with legacy in an old technology. All in all I think there will be big changes.

Q: And how much change will it produce in the company strategy?

A: I wouldn't start with company strategy instead I would say the biggest change will be produced in company culture. Short-term, faster decision-making will require more independence on behalf of the leaders on the top of the hierarchy. It means that leaders will have more determining roles in the lives of companies so the previously more regulated issues will become a bit more result and goal-oriented. Results will be given high priority. Strategies of course will follow this trend. Business strategy as well as IT strategies will adjust to changes. Therefore, if we made a reference back to where we started our conversation and think about mobility and the attitude we have towards our employees, how to attain their loyalty, what are employee benefits paid for. These types of changes can well be part of a 10 to 15 year time horizon. When the classic so called robot-work will be really done by robots the employment policy and the marketing – the way products and services are passed to customers – of companies will be affected.

Q: Yes. My next question is whether the role of IT managers has changed recently in more developed countries and here in Hungary. Are there major differences between them?

A: Well, let's start with the Hungarian situation...So, in the Hungarian market there are mostly subsidiaries of western companies which results in a strong dependency in terms of IT decision-making. The role of central systems – as a result of the role of unified European and worldwide systems – is more limited to the role of executive information systems. On the other hand, I think that IT Executives have more opportunities if they like us provide IT services for the subsidiaries of a global company such as DT AG. These IT Executives can implement higher level practices used by the parent company. It is a more complex task requiring higher qualification, more experience and consequently we can add more to the global operation. Informatics not only provides a window to the world for customers but also for employees. So, your location, whether you sit in London, Berlin or Rome is becoming more and more irrelevant. Accordingly, if a company operates as an internal IT services provider... will open a window of opportunities in Hungary as well. Maybe this role isn't called CIO because CIOs direct from the HEAD CO but still considerable value can be added even

from Hungary. IT directors working in the headquarters have major challenges. They have to ensure operation safety which means that those systems which serve 24/7 the end users or those business partners close to them have to be stable and reliable. They also have to make sure that the operation is economically viable and then there is the unstoppable flow of new ERP systems which grow like mushrooms. There is pressure for more complex services and portfolio because those who become employed by large companies often find it difficult to solve a problem as company members. They think that they can do something in a much more easy way as private individuals. They lig in push three buttons and the information is there...It creates a dichotomy between preserving stability and business support and provide services for innovative employees who are highly qualified end-users. This dichotomy is a real challenge.

Q: Is Hungary in the frontline or is there a gap between developed countries and us?

A: You mean Hungarian companies?

Q: In the field of IT management.

A: From an IT aspect? It's interesting. I think that thanks to the Hungarian shared service centres we do have considerable experience in the field of managing IT service provision. It is similar to experience we gained in car manufacturing. The top management of Hungarian car manufacturers have remarkable experience. The same can be applied to executives working in IT. They also have a lot of experience in managing these things. There is still room for improvement in our end-to-end thinking.

Q: How well can the Hungarian IT education keep up with these requirements?

A: I think that IT education in Hungary has always been more theoretical than other more western forms of education. Pragmatics has always lagged a little bit behind. It is not much different today. It is not something that can be changed in the course of a few years. Those finishing school have a high level of expertise but they lack experience. This was the main reason why we started cooperation with the University of Pannonia. Our goal is to ensure that students with high level of theoretical knowledge also have something tangible, practical knowledge that can be used in the field of IT management. I think it is beneficial for all participants. It's definitely great for us employers because we can employ people we already know

and they also know what our expectations are. Moreover, they learn global employer expectations. It is truly beneficial for us. The same applies to students who one day become employees. They can profit from the practical knowledge they learn. I think universities can also be proud of being able to train students who are ready to be employed straight away after completing their studies.

Q: What is your opinion as a technical professional about the triad of engineering information technologists, software information technologist and business information economist? These are the three main program directions in higher education today.

A: What I see is that there are technical professionals who are the best in their field in terms of technology as well as planning and operation. It isn't sure that it's advisable to assign them management or financial tasks. But these technical professionals are the ones who later might say that having all the professional skills under their sleeves they also want management and financial experience. Looking at it from a different angle: how much is the value of knowledge which cannot be sold in the market. The same can be applied to products which are of high quality but marketable. I think it's wrong to look for people who are very good at everything. It's more appropriate to think in structures which work like spur wheels that can transmit power to one another and revolve together. There is no IT management without the right circle of professionals. And without



the relevant financial and economic qualification there is no viable business model.

Q: Anyway, do you need a lot of engineering information technologists or business information economists?

A: We have more and more positions which are in practice about managing systems. These systems are often full IT supply chains which need to be managed and optimised. We need

professionals who are able to communicate and build networks globally from India to South-Africa from Brazil to Russia. They are also required to understand not only the IT goals and significance of these systems but also the economic ones. This is the trend at our company.

Q: Last, I would like ask you how strongly are big data, cloud, ERP present in innovation? I mean in company innovation.

A: ITSH I think is a typical operational company which is more similar to a car manufacturer than an innovative car designer company. So, these aren't the leading topics in our company now. But only when these are connected we can create something that truly works. If some-body starts the design process of a car without making sure if production is possible then that car might not be economical to produce. I think the same about what you asked. When it comes to big data or cloud computing, well trained specialists are important who are able to manage and plan it well and can also operate the system well. This is not the majority today, but we get more and more requests where highly qualified specialists are needed. Also, when we created our IT strategy until 2018, we address our local responsibilities. We included what activities and practices we would like to focus on in order to achieve our goals. There are also issues we must deal with in order to remain competitive with our prices so we can keep providing IT support for other parts of our organisation.

Q: Do you think that the benefits of the ERP systems can be measured? Is this a kind of investment into employees? Can the short-term return be calculated? Many of the newly emerging phenomena become trendy but for a while it isn't possible to estimate how much they are worth and how much should be invested in them.

A: Those who know me also know that this topic is one of my manias. As IT is having a more decisive role in society its ability to shape society is getting stronger and stronger, too. IT will be an issue for companies that requires more and more investment and it will cost more... Yes, more than likely it will happen because the real value of IT will be manifested in other business areas. So long as IT supports a business process its impact will be shown on the business side. If we recall what we said earlier that the world is accelerating and quick decision-making is a must then I think that the trend will be that decisions made will have to be realised in a shorter period of time. Moreover, financial realisation will also be paramount. I doubt that large companies will invest in IT systems which have 10 to 15 years of return. Instead it is more likely that they would invest in IT systems with a maximum return of 3 years. The

reason for this is that by the time the implementation of a 4 or 5 year-long IT project is over the technology is outdated. By then there would be systems that are faster and provide better support for the company. I think that these can be measured and not only can be measured but must be measured. It is vital to ensure the short-term rate of return.

Q: Finally, to unwind a little bit. I would like to ask you to give a message to higher education institutions offering programs in economics because education is always more conservative. You must have felt it when you went to university. They keep track of reality in a certain extent bit they are still more conservative. What do you think should be a useful message coming from the IT industry for universities offering programs in business and economics?

A: Well, this isn't an easy question...at the end of the interview. For whom? University leaders or students?

Q: Those who have the power to improve the future of higher education.

A: I think today's dynamic world changes the way universities operate as well. The teaching methods used at universities can be more frontal requiring more standing in front of the blackboard or can be more cutting-edge using technologies such as e-learning systems etc. On the one hand my message is that if we talk about business information economists and also teach it we have to be open to new things that make learning easier for students. This is the methodological aspect the other is the content aspect. As we can see the content is changing dynamically too although there are some stable content elements. The task is to find the balance between old and new. Timeless pieces of information or those relevant for a longer period of time have to be kept and taught along with the new ones. Also, we should make sure that we constantly revise the material we teach. Again let me refer back to what I said earlier: a rate of return calculation is exactly the same as it was 30 years ago. It is of course true that the time requirement of the rate of return is considerably shorter today. Methods often remain the same but thresholds change over time. It's great if someone knows how to calculate a rate of return but one also has to know how to interpret the numbers. Is 4 years as rate of return acceptable or not? These things change.

Q: Do you think that e-learning is going to squeeze face-to-face teaching out from mass education? There are some who predict exactly that. I've just read an American study claiming that mass education is sooner or later going to follow the e-learning method because of econo-

mic and technological reasons. It is simply technologically more efficient. Also, the users of e-learning materials will get used to it.

A: I think that an entertaining e-learning material will surely squeeze out old-fashioned and dry learning materials. But if we believe that education has disciplinary function as well then I think e-learning will never provide the right substitution in mass education. Maybe the role of teachers and professors will change too and they will have to teach a little bit more discipline. Students will also have to learn how to use e-learning materials. Roles will change undoubtedly. Language barriers will also play a part in this story because those who speak English have different opportunities from those who don't. Here in Hungary it is going to happen a bit slower because we have a small population of about 10 million. Large countries with a billion people can invest much more.

Q: Do you mean that we should teach in English? Like for example in Finland where master programs are all in English?

A: Maybe. I would say that the range of universities can be easily extended. This way they can become more international. A university in the Balaton Uplands can have a range that covers the whole of Europe. What is needed though is high level of English knowledge and up-to-date teaching material and methodology. The European integration certainly marks out this direction. It's not at all sure that geographical location will determine where students actually sit etc. Those who open to internationalisation and become pioneers will be the winners of the change. Of course the experience of those is also needed who had been professors and leaders in higher education institutions. They must have a deeper understanding of these trends than me. But I firmly believe that internationalisation is becoming more extended.

Q: Thank you for the interview.

A: You're welcome.