

# ESET: FROM LIVING ROOM TO GLOBAL PLAYER IN ANTIVIRUS SOFTWARE

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**E**SET, spol. s r.o.\* is a global vendor of security software for companies of all sizes and households. Its software solutions deliver instant, comprehensive protection against evolving computer security threats. The company pioneered and continues to lead the industry in proactive threat detection. Founded by six Slovak IT engineers in the Slovakian capital Bratislava in 1992, ESET has grown into one of the top five global players in the antivirus software market. How did it accomplish such amazing growth? How did it successfully market around the world mission-critical software that was originally developed in Slovakia?

## BEGINNING BEHIND THE IRON CURTAIN

During the Cold War (1945–1989), two young Slovak programming enthusiasts, Peter Pasko and Miroslav Trnka, were asked to help sort out a virus problem at a Slovak nuclear power plant. They were indeed able to discover the virus, one of the world's first. They dubbed it 'Vienna' and wrote a programme for its detection and elimination that formed the basis for their first antivirus product named NOD. NOD stood for 'Nemocnica na Okrají Disku' or 'hospital on the edge of the disk'. Inspired by a popular Slovak TV series with the same title, NOD was the first antivirus software with graphical user interface and an integration of detection, fixing and prevention. The whole production process of NOD – recording, labelling and packaging of diskettes – took place in the living room. They distributed their programme mostly for free in a small network of friends and IT enthusiasts. Selling to state-owned companies was complex and difficult, due to a bureaucratic sourcing process. Exporting was impossible. Thus the two inventors had a brilliant product, yet limited opportunities for commercialization under the given political conditions.

\*spol. s r.o. refers to private limited liability company (LLC), according to Slovak law.

In 1989 the communist regime in Czechoslovakia ended in a non-violent revolution, known as the Velvet Revolution. After 42 years under communist rule, the country became a democracy and opened up to the Western world. The new government started the transformation of a (mostly) state-owned and centrally planned economy into a market-based economy with private entrepreneurship as a key element. The transformation process was accompanied by a re-orientation of exports from former Eastern bloc countries toward Western markets. At this time many Czechoslovak products were of mediocre quality, selling at a discount and with some difficulty in the West. The GDP per capita was about 25 per cent of that of neighbouring Austria. The first years after the system change were chaotic. Private businesses were expanding quickly in Czechoslovakia, but legislation and administration lagged behind.

Because the internet was not yet developed, software sales relied on physical distribution. Computer viruses had a limited spread and the security software industry was in its infancy. NOD was still a side business for the founders, whose company was run out of an apartment in Bratislava. Domestic sales grew slowly but continually. In 1990, they started selling NOD in Austria via a local distributor and under the name 'Stopvir'. Although the export business was not very successful in the beginning, in 1991 the first million in local currency (about US\$36 000) in revenues was earned.

## ESTABLISHMENT OF ESET

In 1992, ESET, spol. s r.o. was founded by Rudolf Hruby, Peter Pasko and Miroslav Trnka in Bratislava, in the Slovak part of the then Czechoslovakia, as a privately owned limited liability company (LLC). At this time, the founders did not focus on antivirus software alone. They also saw a business opportunity in developing bookkeeping software. In the early years of the transition process, thanks to the enormous pent-up demand, almost any business was offering attractive growth to entrepreneurs. Although computer usage was still in its infancy, the demand for applications in all types of functional and sectoral areas was growing.

In 1993, their home country, Czechoslovakia, broke up, creating the Czech Republic and the Slovak Republic. Suddenly, ESET lost a large part of the former home market, which forced the founders to look for new export markets. In the same year, Trnka began contributing to the column 'Virus Radar' in the leading Slovak periodical *PC Revue*, which helped to build ESET's reputation as an antivirus specialist. In the following years, improved versions of NOD were launched. A turning point was winning the first *Virus Bulletin* award in 1998. *Virus Bulletin* is a British magazine dedicated to providing PC users with regular information about the prevention, detection and removal of computer malware. When this renowned magazine praised ESET for its quality, international users became aware of the company and foreign distributors started to ask for sales agreements.

However, the Slovak origin of the company still posed a psychological barrier to prospective foreign buyers and, as a consequence, restrained the growth of sales in foreign markets. Software originating from a relatively unknown, former Eastern bloc country was not perceived as a reliable high-performance product. Management discussed how they could counter this negative country-of-origin effect. In 1999 ESET LLC was established in San Diego, California, in the United States, with the help of Anton Zajac. This subsidiary was upgraded to be the international business centre for ESET, being responsible for all foreign markets. By selling its software through the US subsidiary, ESET got rid of the negative country-of-origin associations, and international revenues began to rise. This dual structure was terminated in 2008 through a merger of the US subsidiary with its parent ESET, spol. s r.o. In the meantime, ESET had established itself as a leading player in the industry, and was valued above all for its competence and not its country of origin anymore. The choice of the US as a location for the international business centre was also driven by the fact that it was the largest and leading IT market of the world, with a progressive IT industry and demanding customers who would stimulate ESET's innovation efforts.



## RAPID INTERNATIONAL EXPANSION AND GROWTH

From the year 2000 on, the company showed remarkable growth. In 2002 the global auditing and consulting company *Deloitte* added *ESET* to its rankings of fastest growing companies, namely 'Deloitte Technology Fast 50 in Central Europe' and 'Fast 500 in EMEA' (Europe, Middle East and Africa). This growth of sales was driven on the one hand by demand, as viruses became a widespread threat through the fast evolution of the Internet, and on the other hand by the improved international presence. In 1990, estimates of new and different computer viruses ranged from 200 to 500 per year. In 2000 the number was 50 000. In 2010 the estimate was 2 million. In 2015, *ESET* records more than 300 000 new pieces of malware *per day*. All statistics show that the number is exponentially growing. A higher penetration of computers, new devices such as smartphones and tablets, widely available mobile broadband technology, cloud computing, and intensified usage have increased the exposure of computer users to malware. The need to protect against these cyber threats has fuelled the sales of *ESET*: sales volume in local currency grew from 2000 to 2014 by a factor of 480! While foreign sales accounted for less than 30 per cent of overall sales in 2003, this share grew to 97 per cent in 2014.

In its first 15 years, the company grew organically. However, in 2008 and 2010 *ESET* acquired two companies in the field of information security services and anti-spam systems. In 2008, *ESET* bought the Czech security company *Setnet* in order to expand its offering to information security services. Two years later, *ESET* acquired *Comidom Software*, a Slovak software company acclaimed for anti-spam solutions. By acquiring *Comidom*, *ESET* increased its capacity for developing advanced security solutions. In the words of Miroslav Trnka, *ESET*'s then CEO:

*ESET* is a research and development-oriented company that is going to benefit from this merger by tapping into the potential of this manufacturer of advanced anti-spam solutions. Building on the team of skilled programmers and researchers, we envision introducing new activities, along with injecting new potential into the development of security software.

## PEOPLE AND CULTURE AS A BASIS OF SUCCESS

Highly talented and motivated employees are central to *ESET*'s success. Andrew Lee, CEO of *ESET* North America, emphasizes this aspect:

Great software is the product of great people. *ESET* seeks to recruit people who are not only some of the brightest and best at what they do, but who also fit the positive culture of trust, integrity, innovation, effectiveness and cheerfulness that drives everything that we do as a company. Throughout our organization, each employee is a carefully selected fit for the role, and as such is a key to our success.

This attitude is also expressed in the mission statement: 'Intelligent people develop intelligent products for intelligent customers.' In order to attract and retain this type of employee, *ESET* has to pay salaries according to West European standards. Team building events, skills training, language courses, pension schemes and health insurance contribute to a high level of employee satisfaction and low employee turnover. Owners and management cultivate an informal and personal style in the interaction with their employees and try to know not only their professional skills and strengths, but also their personal life.

Due to the fast growth of the company it became more difficult to find excellent software programmers in Slovakia alone, a country of five million inhabitants. Therefore, *ESET* opened a new R&D centre in Krakow, Poland, in 2008. The purpose was to strengthen its research base and to accelerate innovation in countering the growing volumes and sophistication of cyber threats. Krakow is a major centre of education in Poland and Central Europe, with around 210 000 students and well-known technical universities. It is

a place where the IT community is very strong and well organized (with about 320 IT firms), Krakow has even been dubbed as 'Europe's Silicon Valley'.

*ESET*'s portfolio of products serves all types of computer users – home users, small- and medium-sized companies, and large corporate and institutional customers. NOD32 Antivirus is the basic product for homes and businesses. *ESET* Mobile Security protects smartphones. *ESET* Smart Security, the flagship consumer product, provides a comprehensive protection combining antivirus, firewall and anti-spam. Cybersecurity for Macs was developed for *Apple* users. The superior antivirus performance of *ESET* is documented in several tests by industry magazines. The NOD32 Antivirus programme holds the world record for the largest consecutive number of the Virus Bulletin 'VB100%' awards since 1998, and has never missed a single 'in-the-wild' virus (a virus that spreads uncontaminated among infected computers in the general public) since the launch of the test.

A distribution network of partners and resellers parallel to sales offices in all major markets secure a presence in more than 180 countries worldwide. More than 100 million people use *ESET* security software. Almost 1000 employees generated a turnover of €328 million in 2014, nearly all of it outside of Slovakia. The company grew by close to 139 per cent over five years (2010–2014). According to *IDC*, a global market intelligence firm in the information technology sector, *ESET* held fifth place in the global antivirus market in 2013, with a market share of 4.5 per cent (Table 1). With an annual growth rate of 23 per cent, *ESET* has grown six times faster than the whole market.

The foundations of *ESET*'s strategy have not changed markedly since its inception. Despite its growth from a 'living room' company to a global player, it continues to be driven by an entrepreneurial spirit and built on technological competence. The goal is to develop high-performance, mission-critical security solutions for private and business users to keep out all known and emerging forms of malware. The focus on research and continuous product development is crucial for the superior performance of its NOD product. Top management and employees are living these values, creating a culture that is characterized by responsibility, reliability and innovation. Antivirus business is built on the user's trust and this is mirrored in the culture of *ESET*. What changed over the last 23 years is the scope of operations. A broader range of solutions is offered today to home users, companies of all sizes, and mobile phone users worldwide. In February

Table 1 Worldwide antivirus vendor market shares (by revenue, 2013)

Vendor	Market Share
1. Symantec	31.5%
2. McAfee (an Intel company)	15.6%
3. Trend Micro	9.7%
4. Kaspersky Lab	7.6%
5. ESET	4.5%
6. Sophos	3.5%
7. AVG Technologies	2.9%
8. IBM	2.2%
9. F-Secure	2.0%
10. Panda Security	1.7%

Source: *IDC*, Charles J. Kolodgy, Worldwide Endpoint Security 2014–2018 Forecast and 2013 Vendor Shares, August 2014, p. 4.



2015, ESET launched an all-new range of next-generation business security products that offer maximum proactive protection with enhanced usability for all sizes of company, highlighting the new strategy focus on business customers.

The international scope of the business is not only reflected in a larger volume and share of foreign sales but also in R&D centres on all continents. ESET runs malware research and R&D centres in Europe (Bratislava, Kosice, Krakow and Prague), the Americas (Buenos Aires, Montreal and San Diego) and Asia (Singapore). Spreading its malware research centres over many time zones allows ESET to respond effectively to the rise of cyber threats and technological challenges. This is the only way to learn quickly about new cyber threats and to monitor trends. It also gives access to programming talent and knowledge hubs that are located all over the world.

Sources: (1) Company Report of ESET, spol. s r.o., Amadeus (Bureau van Dijk) database, March 2015, and personal interviews with M. Trnka and B. Ondrásk in February and March 2015; (2) K. Dyoa & J. Svejnar, 1992, Stabilization and transition in Czechoslovakia, in O. Blanchard, K. Froot, & J. Sachs eds., *The Transition in Eastern Europe*, Volume 1 (pp. 93–122), Chicago: University of Chicago Press; (3) ESET website, March 2015, [www.eset.com/about/history/](http://www.eset.com/about/history/) and [www.eset.com/us/](http://www.eset.com/us/); (4) IDC, Charles J. Kolodgy, Worldwide Endpoint Security 2014–2018 Forecast and 2013 Vendor Shares, August 2014, p. 4; (5) M. Trnka on the History of ESET, 2012, Presentation at the 4 Grow East Congress, March 7, Vienna, Austria; (6) IDC, 2014, Worldwide Endpoint Security 2014–2018 Forecast and 2013 Vendor Shares, report, August.

1. How could entrepreneurs in Slovakia create a leading global player in the antivirus software industry?
2. From a resource-based view, what are ESET's sources of competitive advantages?
3. From an institution-based view, country of origin images reflect the view and perceptions of (potential) customers regarding the roles of the game in the country of origin. How does this affect companies in Central and Eastern Europe?
4. What can companies do to address negative country of origin perceptions?

## INTEGRATIVE CASE 11

# THE LG-NORTEL JOINT VENTURE

## Bill Turner, Joe Bentz, Steve Caudill, Christine Pepermintwalla and Ken Williamson *University of Texas at Dallas*

Peter MacKinnon, chairman of the recently formed LG-Nortel joint venture (JV), is back in his Dallas office after two hard weeks in South Korea (hereafter Korea). Next week, he is off to Europe for a well-deserved vacation with his family. In his office, MacKinnon surrounds himself with family photos, awards and souvenirs from around the world. He is highly dedicated to the LG-Nortel JV and currently spends two weeks each month in Korea. When in Dallas, he leaves the headquarters in Korea in the capable hands of LG-Nortel JV CEO Jae Ryoung Lee.

MacKinnon tackles his work and personal challenges with 100 per cent dedication, as shown in his drive to make the LG-Nortel JV a success. He has a passion for life, and is one of those executives who 'works hard and plays hard'. This is evident by the ice hockey stick sitting an arm's length from his desk chair and the fact that he plays in three hockey leagues when visiting Korea. Finding a balance between work and personal life remains a challenge with the current heavy workload and extended travel to Korea each month.

Having travelled around the globe and having been an expatriate in Europe previously, MacKinnon is no stranger to international travel. He describes some interesting cultural aspects of doing business in Korea and highlights 'respect' and 'knowledge for the cultural differences' as important. He is keenly aware of the dynamics of the corporate culture in Korea and its implications on the success of the JV, given the mixed management of Koreans and a few North Americans living in Korea.

*This case was written by Bill Turner, Joe Bentz, Steve Caudill, Christine Pepermintwalla and Ken Williamson (University of Texas at Dallas, EMBA 2007) under the supervision of Professor Mike Peng. The purpose of the case is to serve as a basis for classroom discussion rather than to illustrate the effective or ineffective handling of an administrative situation. The authors thank Mr Peter MacKinnon for his time and for sharing his expertise and experiences. The views expressed are those of the authors (in their private capacity as EMBA students) and do not necessarily reflect those of the individuals and organizations mentioned. © Bill Turner. Reprinted with permission.*