

100 Years of Innovation from Adlershof: Dawns, Damage, and Determination

By Hardy Rudolf Schmitz, CEO of WISTA-MANAGEMENT GMBH (Speech on the occasion of the International Colloquium on Science Parks, Berlin-Adlershof, September 9th, 2009)

We have invited you because this month Adlershof can celebrate a big double O – its one hundredth anniversary as a location for science and technology, research and development, inventiveness and pioneering spirit, as a location for dawns, damage, and determination.

Science and technology parks appear to be similar in many respects, and yet they are like individuals: with differing talents and nurturing backgrounds they are wayward, nonconformist, and constantly in search of solutions for their great assignment. They are often the progeny of farsighted political decisions. They are a paradox: state planned and often state financed to boot they nevertheless present a runway for free market flights.

Science and technology parks are often born of necessity, for instance when old industries disappear: like fifty years ago in North Carolina in the USA where people had to think about possible successors to the tobacco, furniture, and clothing industry; deserted city districts like perhaps in Manchester and Birmingham; or here in Berlin where the old industrial substance collapsed due to failing competitive strength in the wake of German reunification.

And so all these solution seekers recalled the most valuable capital they had access to: the knowledge in the minds of people. In North Carolina it was a triangle of three excellent universities that commenced setting up a science and technology park, now the largest in the USA. And here in Adlershof it was the potential of the East German Academy of the Sciences that we started to utilise eighteen years ago to set up a science and technology park that today is the largest of its kind in Germany.

Dawns, damage, and determination – let me to start with the dawns. It was on 26 September 1909 when on this piece of land - at that time named Johannisthal - Germany's first field for motorised aircraft started operations with a sensational air show. The initiative came from a private entrepreneur. Shortly afterwards the German Empire wanted to prove that it was capable of building not only zeppelins, but also motorised aircraft. However this grand plan was quashed by the English, French, and above all the Americans, with the Wright brothers at the forefront.

Within a very short time Adlershof became home to everybody who was anybody on the budding aviation sector in Germany: Albatros, Fokker, Rumpler, and the company Wright Flugmaschinen GmbH. Here in Adlershof the Wright brothers built sixty aircraft. Anybody wanting a pilot's licence in Germany before the First World War had to take the test either on a Wright flyer or the Rumpler aircraft. In 1912 the German Research Centre for Aviation DVL was set up and settled on this location, and initiated the tradition of German aviation research. Following the Second World War this became the German Aerospace Centre DLR, also represented here in Adlershof.

That was the dawn. A few years later everything appeared to be destroyed again. Initially the First World War proved a tremendous boost to Adlershof when over six thousand fighter planes were built. This tremendous boost was followed by a tremendous crash when in 1919 the Peace Treaty of Versailles very nearly delivered the death blow to the budding aviation sector in Germany. It was hard to know what to do. The fact that Adlershof could continue its history is indebted to the determination of people, their will to venture something new, to look for solutions, and to find these as well.

Seeing that military planes were no longer needed they there and then converted their aircraft, parked passengers in the former machine gun pods, and so opened in 1919 the first German passenger airline from Berlin to Weimar. For this purpose they had specifically set up an airline company that incidentally became German "Luft Hansa" in 1926. When it became clear that there was to be no more military aviation research after 1919, film studios were set up in the empty hangars where hundreds of feature films were made, including such classics like Friedrich Murnau's "Nosferatu". Or cars were built. One clever entrepreneur had brought with him a method for working sheet metal from the USA. In 1929 Adlershof saw its first car roll off the production line, a legendary automobile named "Dixi", built by BMW.

A little later dark clouds once more brewed over Adlershof. In 1933 the National Socialists came to power. From that time on this premise was once again the focus of armament. At that time there was pioneering research, above all into the development of ultra fast aircraft. In this field Germany was a leading capacity. Yet all this research ultimately served a criminal regime. And of course also fighter planes were built in Adlershof. In Adlershof forced labourers slaved away to protract a war that was long lost.

In May 1945 the war came to an end and with this the history of aviation in Adlershof. What remained of aviation research was dismantled and shipped off into the Soviet Union. Yet again: damage.

A few years later this upheaval had again evolved into a new dawn: the premises quickly found new users. Adlershof was now part of the Soviet Sector in Berlin. For the next forty five years three institutions moulded the image of Adlershof:

The first of these institutions was the Prussian Academy of Sciences. In 1946 the Soviet occupying power ordered its reestablishment (it was that easy!). In 1949 the Prussian became the German Academy of the Sciences, and in 1973 the Academy of the Sciences of the GDR. This followed the Soviet example and became operative research institutes with very close ties to industry. It is important to point this out, because this was later to turn out to be a great advantage.

The East German Academy employed 24,000, of whom 5,500 were in Adlershof, including 4,100 highly qualified scientists. The location evolved into the most important research centre for the natural sciences in East Germany and quickly gained a good reputation for instance in optics, chemistry, material research, and not least of all space research.

Just next door the centre for East German state television was set up. Moreover the East German Ministry for State Security – the Stasi – stationed in Adlershof a guard

regiment. In 1989 no fewer than 10,000 people were working in Adlershof, isolated to a great extent from the public.

Over its history of nearly forty years East Germany had to battle with massive economic problems. Science was trying to help the state controlled industry, and important inventions were created. Yet in the end the clever minds in Adlershof were working in a place that looked like many places in East Germany: rundown. Economically the country was ruined: damage.

In 1989, twenty years ago, the Berlin Wall came down. Overjoyed the people of Berlin fell into each others' arms. The stress of the Cold War was over. The whole of Germany was euphoric. But it very quickly became clear that nobody was prepared for the reunification. Yet it had to succeed – quickly.

What happened? On 3 October 1990 East Germany had become overnight a part of West Germany which is a democratic and federal state. We don't have a national academy of sciences, no state regulated television, and no Stasi. All of these East German institutions were therefore disbanded. For Adlershof this would have meant the end – damage, but this time definitely.

And once again: dawn, damage, and determination. Simultaneously.

In 1991 the research institutes of the East German Academy were evaluated. The appraising experts were impressed by the quality of the research. At that time the first proposals were aired to set up a technology park. In the end though only 1300 of the original 5500 employees could resume their previous work. The others had to look for a new job or set up a company.

In 1991 the Academy's premises in Adlershof were transferred to the City of Berlin that at the same time is one of the sixteen federal states of reunified Germany. On the one hand there was great euphoria in the city. There were dreams of a world metropolis between East and West with over five million inhabitants. And there were dreams of a flourishing economy. At the same time however the city lost sixty percent of its jobs in industry. In East Berlin it was much worse: here almost eighty percent of industry vanished.

It was clear: new, modern industries had to be set up. And it was also clear that these industries had to be located in the direct vicinity of science, which in Berlin has a unique density, for instance here in Adlershof. In this respect it was a clever and consistent move by a circle of high ranking Berlin politicians, civil servants, and scientists to urge in March 1991 the setup of an "integrated landscape of industry and science". That was the birth of the science and technology park and the dawn of a completely new Adlershof.

It all began with the scientific institutes. Today there are eleven non-university affiliated scientific institutes here, of which eight have emerged from the former East German Academy. Their services have met with international acclaim. In order to raise the science density further the State of Berlin resolved to relocate the Faculty of Natural Sciences of Berlin's Humboldt University to Adlershof. The university was given an all new campus – with six institutes and a fantastic library, with 140 professors and over 6700 students!

The economic development of Adlershof on the other hand had to start from scratch. Why? There was no industry here. Private entrepreneurialism was frowned on in East Germany. It was suppressed, even forbidden. A professor as an entrepreneur? Inconceivable! Now precisely the opposite was to happen: it was the employees at the Academy of Sciences who were to be the first to venture on the road to independence – because they had lost their jobs, because they recognised their chance. And so a number embarked on the road to free market economy with nothing more than a blueprint in their heads – and with the absolute determination to do something. Politics helped with an incubator and the setup of specialised technology centres for the growth fields of Adlershof.

Today we have about eight hundred companies in our technology park and in the development field. About four hundred of these are highly specialised. Nearly twenty years later there are now about 12,500 employees working in the newly created industries, joined by about 2400 scientific staff. Two thirds of Adlershof's economic vitality comes from companies. To date growth was always between five and ten per cent. The proportion of state aid in turnover is only 4.6 per cent, and the insolvency rate at under one percent is sensationally low. In their special niches a great number of companies have progressed to leading positions on the world market.

WISTA-MANAGEMENT GMBH, the company on whose behalf I'm speaking now, was set up in September 1991. The State of Berlin – our proprietor – commissioned us to make a technology park out of Adlershof. This means redeveloping, demolishing, rebuilding, and keeping an eye out for companies that fit the Adlershof profile, that are therefore involved with the key scientific issues of this location, with light, material, and models. The infrastructure and the urban development were meticulously planned.

Since 1991 the face of Adlershof has undergone a fundamental change. The infrastructure has been redeveloped, a large part of the ramshackle buildings demolished. In their place we had ultra modern technology centres built. The initiator was the innovation and business incubation centre, followed by centres for photonics and optics; environmental, bio-, and energy technology; information and media technology; material and Microsystems technology; and sustainable technologies. These will be joined by a further three centres by 2011: one for microsystems and materials, one for IT and media, and one for photovoltaics.

Since then we have been the heart of a city for science, technology, and media covering 4.2 square kilometres or a little over a thousand acres. This "city within the city" also includes Berlin's largest media location – the former site of East German television – a large landscape park – the former airfield – a residential district, and a lot of space for growth.

It was cleverly and generously planned: starting from the technology park as the core of development we can today offer an additional area of about sixty five hectares. These areas are developed by the public sector. Real estate is discovering Adlershof. Here in Adlershof you can study, set up a company, let it grow, and build your own factory. In the next few years Adlershof will also become a significant production location: two large solar companies, Solon and Sulfurcell (the latter set up here), provide impressive testimony to this.

Dawns, damage, determination, and finally success: Adlershof is a place of dawns, upheavals, and a firm will to venture something new. Now in times of crisis the concept is proving its worth: although our companies are not living on an isle of bliss the repercussions of the crisis are felt here less than elsewhere.

What makes up the success of a technology park? If I had to condense it in the one word I would choose “neighbourhood”. Neighbourhood means vicinity and exchange, means providing platforms for discussions and collaborations, means networking, transfer, and cross disciplines. It is the pooled resources of science, research, and application, of science, industry, and politics.

The “integrated landscape of industry and science” was thoroughly planned, and its drafts long honed. Broad based political support and consistent political action ensured that key decisions could also be implemented.

A lot of money has been invested in the project Adlershof: about €1.7 billion since 1991. Eighty percent of this money came from the most diverse public sources. This is money well invested: Adlershof, the people, and the local companies now contribute over a billion euros a year to the gross domestic product of the State of Berlin. And when I cast an eye over the coming five years, we expect €500 million euros to be invested here, of which €350 million will be from private sources. Many great names are discovering Adlershof.

Adlershof was granted more time for growth than private developers who have to justify profitability cycles. Adlershof could evolve as an organic structure. There was no monoculture exposed without protection to economic swings. The portfolio of the Adlershof companies is stable and dynamic at the same time. And what these companies build are new industries, industries of the knowledge society – for example in optics, photonics, photovoltaics, and microsystem technology. Precisely here is where we focus. Our marketing and our investments are aligned to these growing sectors. That is why we are growing, despite the crisis. We can and shall double our size within the next ten years.