After the process of Germany’s reunification in 1990 there was only a short boom in Germany’s economy up to 1993. But after this period International competition challenged Germany’s economy, because many structural problems had not been solved during the boom. In the years from 1993 to 1996 Germany experienced a very sharp recession which was accompanied by a serious loss of jobs. Especially in the city of Erlangen nearly 10% of the 70,000 work places disappeared.

In this difficult period the city administration of Erlangen discussed some strategies how to tackle those problems. One strategy was to start a consistent innovation policy which was obviously the right way to act. But we also focused on a second approach with the idea of a SWOT-analysis to identify the strengths and weaknesses of the Erlangen economy and to find out the opportunities and threats.

The amazing result of this analysis was, that already at that time Erlangen had - as for its working population - the highest percentage of people employed in the health sector compared with all other 83 cities in Germany with more than 100,000 inhabitants - so called Großstädte (major cities). So it was obvious, that Erlangen had a unique selling point compared with all other German cities and it was a logical step to emphasize this strength.

In his inauguration speech the author as the then recently elected mayor of Erlangen outlined his plan for the further development of Erlangen: “its my vision - and it should be our common vision - to develop Erlangen as a national capital of medical research, production and services”.

Altough there had been many doubts in the city of Erlangen at the beginning, whether this could be the right approach, but very soon started an intensive discussion and cooperation process started between the different stakeholders such as local politicians, local businessmen and the members of the FRIEDRICH-ALEXANDER

UNIVERSITÄT ERLANGEN-NÜRNBERG - especially with the members of the medical faculty.

A very important milestone of this development was, that the CEO of the Siemens company, Heinrich von Pierer, announced at end of 1997, that his company would make its largest investment in the so-called old “Bundesländer” after the German reunification with an amount of €100 million. This decision was highly supported by national and federal policy as the then Germany’s minister of finance, Theo Waigel, enabled Siemens to buy a 60,000 m² area from the federal government.

But also the Bavarian policy strongly supported Erlangen’s ambition to develop the health sector. In his government statements the then Prime Minister of the free state of Bavaria, Edmund Stoiber, repeatedly announced that “medical technology in Bavaria is Erlangen and Erlangen is medical technology”.

The development of the Medical Valley is strongly connected with the privatization policy of the Bavarian government under the rule of Prime Minister Edmund Stoiber. His mission statement was: “the main task of politics is not to possess assets but to shape the future”. So he developed an innovation strategy for the free state of Bavaria in which all in all nearly €5 billion were invested in innovation projects. This policy is known in Germany as the Bavarian “Hightech-offensive”. Nearly $1 billion were invested in the Erlangen region in innovation projects and modernizing the hospital infrastructure.

On a regional level the „Competence initiative medicine, pharmaceutics and health” was founded. The members of this Network met face-to-face several times every year, connecting specialists from politics, medical business and services and official institutions. The key concept was, that the participants presented their ideas and business plans within a „five minute talk“ to come to a match between ideas and capital. The result of this network were many new coorperations and foundations of new enterprises. Looking back from the year 2020 one can see, that at least 20,000 new jobs have been created in this ecosystem.

Parallel to this network on the regional level the “Forum Medtech Pharma” has been founded on the Bavarian level, organizing cooperations and contacts and informing about the latest trends in the health sector by offering workshops, sessions and fairs.

With this strong commitment of the Bavarian Government one designed and built the new Medical Valley Center (MVC), was designed and built up, which was opened in May 2003 and became already in the first six months Germany’s most successful incubation center. It’s not surprising that it was decided to enlarge this innovation center up to 5.000 square meter within two years. The MVC actually hosts more than 35 startup companies and institutions connected with innovation activities, such as the Medical Valley cluster management and the chamber of industry and commerce.

The unique selling point of this Medical Valley Center is, that it is not only a business incubation center but also a scientific research unit. The central Institute for medical technology and the Institute of biomedical technology literally very close together with the activities of the start up companies in the MVC. The young entrepreneurs and the scientists meet nearly every day in the common cafeteria or in common lecture halls of the MVC.

At the beginning of 2007 the society “Medical Valley European Metropolitan Region Nuremberg” was founded coordinating all stakeholders in politics, business and the scientific community in the region. Still today this organization is still today the motor and coordinator of all activities in the Medical Valley.m

The Medical Valley experienced its next big step to the success, by winning a national excellence competition of the German Ministry of education and Research (BMBF) Prof. Reinhardt who designed the draft together with the dean of the medical faculty, Prof. Juergen Schuettler, received 40€ Mio. and was able to match it with another €50 million from the private sector. Today the Medical Valley is a national Leading Edge Cluster upon its application as a ‘Centre of Excellence for Medical Engineering’

Medical Valley (EMN) is one of the strongest, most active medical technology research clusters in the world. Renowned partners from industry, research, healthcare and politics have come together to form this interdisciplinary network. Their common goal is to come up with successful solutions for the healthcare of tomorrow.

Medical engineering products and services are currently being developed in over 40 projects. These products and services are aimed at making prevention, diagnosis, treatment and rehabilitation in connection with a variety of illnesses more efficient and more effective. Activities in the cluster and communication among the stakeholders are coordinated by the Medical Valley EMN Association, which also supports its members with numerous services.

FAU is a member of Medical Valley and has close connections to many of its partners thanks to its research projects. Furthermore, research and teaching in this field have become a well-established part of the University through the Central Institute of Healthcare Engineering and the medical technology degree programme.

The long-term strategy of the Medical Valley EMN is to optimise the structures of healthcare provision. Medical Valley EMN e.V. brings together all parties to establish an international model region of optimized healthcare provision.

The cluster’s strength is its power of innovation. Businesses and research institutes in the Medical Valley EMN benefit from the short distances to develop best-in-class research and development processes.

These in turn result in competitive advantages and growth opportunities in a global market. Healthcare providers benefit from access to state-of-the-art technologies and cost minimising.

Cluster management encourages these developments and strengthens the market positioning of the brand Medical Valley EMN. Thus the region is associated with excellence in healthcare provision and perceived as more and more attractive both in Germany and internationally.

As the global market share and sales revenues are increasing, the economic power of the region is strengthened. This approach enables us to secure and create jobs.

The Communities of Practice (CoP) in Medical Valley EMN are groups of people that communicate on a regular basis and learn from each other in their particular field. In cooperation with the board of the cluster, the CoP topics are discussed regularly and, if necessary, new communities are established. Thus, the CoPs play an important role to cover the topics that are relevant for the implementation of the cluster strategy und to use them to enable real projects.

The Digital Hub Initiative, developed by the Federal Ministry for Economic Affairs and Energy, seeks to support the establishment of digital hubs in Germany. The underlying idea of establishing hubs is that cooperation between companies and business start-ups within a confined area (like in the Silicon Valley) will boost innovation, especially in the digital age.

Cooperation and networking in a common space is the breeding ground for new innovative products and business models. In this way, a regional “hub ecosystem” can be created where new ideas emerge and digital transformation is taken forward. Therefore necessary are hubs with international appeal / reach are necessary, in which German and international business start-ups, scientists, investors and established companies mutually support and strengthen each other

Facts and Figures

500 companies active in medtech & digital health

70 hospitals + strong outpatient sector

850.000 inpatients treated per year

80 institutes at universities and universities of applied sciences focused on medtech and digital health

20 non-university research institutions in the medtech field