

Industry Sector Industry Solutions Division

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Media Summit Metals and Mining

Keynote Speech Bernd Euler

Ladies and gentlemen,
Guests from all over the world,

I am sure you have had an exciting day! We have done our best to give you an overview of where the Siemens metals and mining business is headed. The breakout sessions in particular have certainly given you the possibility to gain a deeper understanding about the areas that interest you most and have provided a platform to discuss different aspects with our specialists.

You are probably thinking: Yet another speech at the end of such a busy program. But don't worry – this will not be a long speech. Seriously, I would like to close the day by looking at an important issue, namely prosperity. How can we secure prosperity for tomorrow and what is the basis for prosperity? And how does the human capacity to invent play a role in all of this?

When we talk about prosperity, Germany is often cited as a yardstick.

Despite the crisis and economic downfall, isn't Germany still a country where milk and honey flow? Just imagine: At the beginning of the year, almost 42 million automobiles were registered in Germany – more than ever before. More and more men and women drive to work in their own vehicles, drive their children to school and use their cars to reach their vacation destinations. Contrary to every trend, Germans are buying more and more household appliances, flat-screen TVs, digital cameras and video game consoles.

Doesn't sound like much of a crisis, does it?

I think it is fully normal for people to want to hold on to prosperity once they have achieved it. Society in Germany is based on knowledge. We don't have – as in other countries – oil, gold, copper or any other mineral resources.

It makes sense to be familiar with the foundation of our prosperity when we are talking about preserving it.

From a German point of view we have to say very clearly: Our prosperity today arose in many ways from yesterday's ideas – from people like Gottlieb Daimler, Rudolf Diesel and Nikolaus Otto. About 100 years ago their ideas laid the foundation for millions of jobs in the German car industry. Today every third euro of research money is earmarked for the preservation and development of this industry. Werner von Siemens and Robert Bosch were the pacemakers for the German electrical goods industry, which still sets standards worldwide. Many of you may not be familiar with the physicist Conrad Röntgen. But the rays he discovered and which bear his name, still build today the basis for imaging processes in medical technology and devices, which have helped millions of people all over the world retain their health.

When we talk about good ideas for the future, I am quite certain that Germany will continue to play an important role. In contrast with the ups and downs of raw material prices, there is always a need for better solutions, better services and better technology. And this is also the case even when the growth regions of tomorrow are China, India, Russia and Latin America.

I therefore hold great confidence in Germany, because we still have what it takes to contribute to the innovations of the future. Countries and companies profit from our developments, not to mention countless people. This requires looking beyond one's own nose. Just like Werner von Siemens connected cities and countries with telephone lines, which linked together technology and business development, today we also have technological ideas that won't become reality for years. I would like to present an exciting project:

Siemens along with many other partners is involved with Desertec, an unparalleled infrastructure project to generate electric power in the deserts of North Africa. In fact, by 2050 around a fifth of Europe's energy needs will be covered by electricity generated by the Desertec project. We have extensive experience in transmitting electricity with low loss over distances of more than 2,000 kilometers. Of course, in order to realize Desertec we still need a great deal of new technological knowledge and many innovations. We have every intention of capitalizing on the knowledge and good ideas of the partners and countries on the way from North Africa to Europe.

Generating electricity in the deserts of North Africa and transporting it to Europe is only possible with a technological, social and cultural network. If a project like this also means securing

technological know-how and employment in Africa and the Middle East, then innovation can also be said to bring nations together.

Ladies and Gentlemen,

This example underlines:

Today as well as 100 years ago: innovation needs a vision that gets people excited. Today innovations are seldom the product of an inventor's ideas developed in seclusion; instead, innovation is a global business in which knowledge is shared across borders.

Especially companies whose business is driven by innovation – Siemens, for example – profit from this global scope. Today we invest almost 5 percent of our turnover in research and development and employ in this sector worldwide more than 32,000 people. We own around 55,000 active patents and our employees make about 30 inventions every business day! These smart minds, which drive our company's development with innovations, are no longer only in Germany. We work with leading universities in Europe, Asia and America, and we also have our own research and development departments in many countries, which are also joined together in a shared network. For a company like Siemens, innovation today is a global resource.

Ladies and gentlemen,

Countries like the United States and Germany are generally known as innovative. The number of patents and invention registrations confirms this assessment. A comparison shows that countries with a large share of innovations are usually strong in economic terms. Countries without innovative strength have a particularly difficult time to join the upper echelons of the successful economic countries. This international comparison makes clear the connection between innovative strength and economic performance.

Or expressed another way: there is a direct link between innovation and the development of a country's society. Innovation is the prerequisite for factories and jobs and for the prosperity of all.

Because smart and inventive people are everywhere, we need to see innovation as a worldwide field. Technological platforms like the Internet are largely responsible for this successful cooperation and they have contributed greatly to a democratization of knowledge.

To be able to communicate in real time with people on all continents around the world and to exchange and transfer knowledge is a cultural revolution equal to the invention of the printing press – and it is commonplace today.

A lot has changed in our world with the division of labor. The slogan “Made in Germany” for example. For decades it stood for solid German workmanship, dependability and for the inventiveness of German engineers.

Today “engineered in Germany” would be more fitting. Many German products are assembled in other countries. Our products depend on the intellectual property of people living and working outside of Germany.

If we’re honest with ourselves, whether the floor assembly of an automobile comes from the Czech Republic or if the motor is assembled in Hungary – we don’t notice any difference at all with the end product. The customer uses innovative products, no matter how and where they are manufactured.

For me it seems important to recognize this connection, since it illustrates the fact that innovation today is a worldwide business – and that we are just one of the players.

Ladies and gentlemen,

Constant innovation is what it takes for a company to grow old and for society to continue to develop and stay on the cutting edge. Especially today in a global world and with a global crisis, a strategy that involves permanent innovation is vital for survival. In global markets the leaders in innovation profit from technological and organizational change while the stragglers can only rely on the benefit of rationalization. For export countries with few raw materials like Germany, this means that we can maintain our standard only as long as we offer innovative products and services that other countries do not have – but desire to have.

More than ever, through innovation new markets are opened up and new market niches are created. Competition among highly developed economies has become a race for innovation. Those who want to be among the frontrunners must adjust their educational systems to reflect the requirements of a knowledge-based society.

In Germany we are committed to education and lifelong learning.

But are we really making progress here?

An example: About 20 percent of 15-year-olds in Germany leave school without marketable skills and become dependent on the welfare systems. The educational expansion that provided Germany with dynamic economic growth in the past decades is stagnating. A comparison from the OECD shows that the number of those entering the German workforce with an academic degree has fallen from first place to midfield. Mathematics and the natural sciences are becoming less

attractive. Every year we urgently look for new recruits from the engineering disciplines – majors that especially in the USA, China and India are growing in importance – not least of all because of new perspectives in these countries as a result of the economic crisis.

Education is the most important prerequisite for innovation – all over the globe. Those who neglect education run the risk of losing their innovation lead. Yet those who foster education have the best possibilities to bring the economy forward with innovations and developments, create jobs and prosperity and contribute to the further development of society.

To close I would like to relate a short story that very well outlines that for successful innovation many factors play a role and must fit together.

“A horse does not eat cucumber salad” – this nonsense sentence has won a place in the history of innovation.

The sentence is from the German mathematics and physics instructor Philipp Reis. He certainly paid more attention in his innovation to how language is transmitted rather than what one transmits.

“A horse does not eat cucumber salad” - This nonsense sentence was understood at the end of the telephone line. The intension of the speaker was that no one should be able to anticipate what the message should be. Because it was the first sentence that was transferred over a distance of 100 meters via telephone. The physics instructor Reis was obsessed his entire life with his idea to communicate using electrical energy. If the public had been as enthusiastic with his idea as he was himself, he probably would have been able to fully enjoy his success and would have become a rich man.

He died at 40 of tuberculosis and the British inventor Graham Bell snatched his idea, developed it further, and won in 1876 the world’s biggest patent war to be named as the inventor of the telephone.

In this short story we find all the answers to the question, “When is innovation successful?” An excellent idea has to be pursued with persistence and single-mindedness.

And add to that speed and timing, since innovation today takes place in competition as well as in cooperation with others – that the competition never sleeps is a well-known fact.

Effort is also needed to make an innovation known, to position it believably, to win acceptance and to convince others of its use.

The next time you use a telephone, recall this story. Nothing has changed our communication behavior more than this seemingly simple innovation that was first a flop – and then a big success.

Cucumber salad – a good cue! Bon appétit! And thank you for your attention. I am sure we will all have a very pleasant evening with many good discussions and perhaps one or two innovative ideas!