



Science is the Future

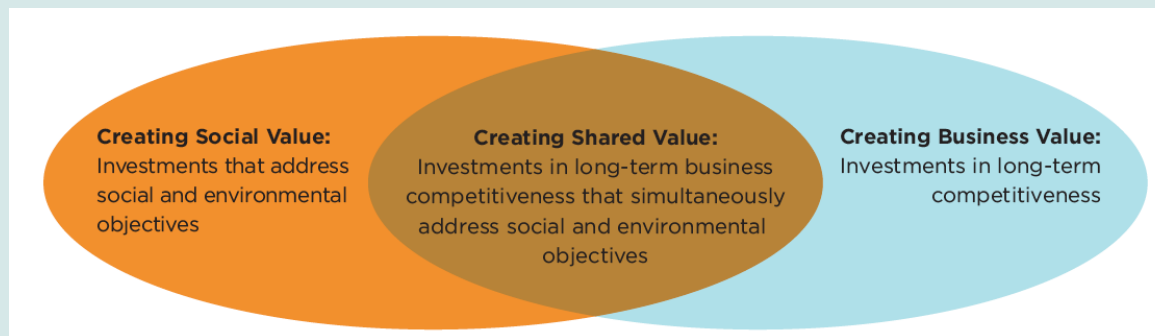
- *School-Business partnership towards **increasing student interest** in Math, Science, Technology and Technical education*
- ***Strategic initiative** to make education more efficient*





Strategic initiative – Shared Value concept*

- Connecting relevant social and business issue
- Shared value is a management strategy focused on companies creating measurable business value by identifying and addressing social problems that intersect with their business.
- The shared value framework creates new opportunities for companies, civil society organizations, and governments to leverage the power of market-based competition in addressing social problems.



* The concept was defined in the Harvard Business Review article "[Creating Shared Value](#)" (January/February 2011), by Professor Michael E. Porter and Mark R. Kramer.



Strategic initiative – Shared Value concept*

„Social“ issue key partners

- Academy of Science
- Ministry of Education
- Ministry of Industry
- National Institute of Education
- Industry confederation
- Chambre of commerce
- Water research institute

„Business“ issue key partners

- Bayer
- Škoda Auto
- IBM



Strategic initiative – social issue & business opportunity in one

- For several years Bayer in the Czech Republic and Slovakia has been facing a lack of young professionals and researchers in the area of natural sciences.
- It is not only in their own Human Resources but also in their potential customers and clients.
- It has become a serious obstacle for the further development of the company, its competitive advantage and future development in these countries. Available data showed that it was not an issue for Bayer only
- Increasing the number of graduates from MST would help Bayer and at the same time the whole society could benefit from this change



Increasing student interest

Technical education in Czech / Slovak Schools (at 2011, when program was designed)

- Science (as a school subject) has not a good image in the Czech Republic
- Records indicate a shortage of young Czechs who opt for a career in the sciences.
- A didactic instructional model at both primary and secondary levels is perceived by pupils to be over theoretical and 'boring'
- Attractive models of pupil teaching and learning such as pupils acting as scientists by investigating, measuring, recording, predicting, analysing and hypothesising are required to increase pupil interest in the sciences.
- Companies operating in the MST sector already perceive the deficiencies of workers in the fields of Physics, Chemistry, Biology, Math, etc.



Increasing student interest

Two „gamechangers“ focus - the goal of 'Science is the Future' programme is

1. demonstrate to pupils that a career in this field has promising future – to show them inspiring and real people in this career
 - **The Skills @ Work Programme**
 - **The Student Mentoring Programme**
 - focused on pupils
 - Visiting places where MST is everyday reality and meeting people „in charge“
 - Meeting HR professionals,
 - the programme was designed for the 8th grade at Czech elementary schools (age 14-15) or 3rd grade at secondary schools (age 17-18). Both these age groups are about to make a decision about their future career so it is really crucial to help these groups understand all opportunities.



Increasing student interest

Two „gamechangers“ focus - the goal of 'Science is the Future' programme is

2. to increase the attractiveness of science and technology in schools
 - **The Management Excellence for Principals, Science teachers and School career advisors**
 - focused on teachers, carier advisors and schoolheads
 - Practical didactical workshop & using aplied MST in school
 - Bettech understanding to labour market



Modules of cooperation with schools

The school-company cooperation is generally framed within the entire school year.

The project coordinator AISIS provides systematic methodical guidelines to both company and school and sees to it that administration at school and industry level is kept to a minimum

The possibilities of involvement are:

- **The Skills @ Work Programme** (primary and secondary schools) – A one-year programme where employees from the link company provide a series of talks and workshops designed to give students a clear insight into possible careers in science.
Program were design
- **The Student Mentoring Programme** (primary and secondary schools) – A one-year programme for a group of talented students where employees from the link company volunteer to mentor the students to support their interest about career in MST.
- **The Management Excellence for Principals, Science teachers and School career advisors** (primary and secondary schools) – Series of educational seminars for local principals and teachers delivered by top business leaders.

Programme outcomes and events (up to the 2015)

7Designed
modules**77**Schools
involved**1500+**Pupils
involved**135**Teachers
involved**260**Events
realized

From the project evaluation:

- 63% of pupils rated the project as "excellent" or "very good,"
- 67% of teachers confirmed that the participation in this project led to the need for further study or interest in natural and technical sciences among students
- For 38% of participants the program influenced their opinion or changed their views on education and career in these fields.



- Next steps and plans for 2016+...
 - Roll out **The Skills @ Work Programme** for pupils (schools) in 1:1 light mode across Czech and Slovak republic
 - Involve more supporting company to **Teachers programme** to deliver it at more locations



Thank you for your attention

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