

YOURI - A NEW WAY TO INNOVATION: YOUNG TALENTS CREATE SOLUTIONS TO CARE FOR NATURE

Mag. Dr. Iris Straßer

STRASSER & STRASSER Consulting GmbH, St. Veiter Straße 1 A-9020 Klagenfurt
Tel +43/463/507755-0 / FAX +43/463/507755-55 / is@strasser-strasser.at / www.strasser-strasser.at

Abstract “JUVI Jugend.Verantwortung.Innovation” (a German acronym for youth, responsibility, and innovation “YOURI”) is a special sub-project of Verantwortung zeigen!, that connects schools and companies. A team of the most talented students of a particular school programme (e.g. Federal Secondary College of Engineering) develops completely new ideas and solutions to a task the company has given. The students spend a week at the company, with full-time coaching by the Verantwortung zeigen! team. YOURI has been carried out very successfully 5 times in 2008/09. Within the last year some “YOURI”-projects confronted the young talents with nature-caring missions. Verantwortung zeigen! is a regional business initiative in southern Austria, initiated and coordinated by STRASSER & STRASSER that connects companies and non-profit organizations in various activities, facilitates their engagement concerning corporate social responsibility and sustainability and coordinates several regional cross-sector projects. The leading company of the regional initiative STRASSER & STRASSER gives continuous opportunities to share experience in CSR and also offers some new solutions for their partners to improve their social and environmental responsibility. Four examples point out how companies benefit from creative, sometimes even free-spirited, ideas of the students addressing care for nature and improving their sustainability. Each time a team of excellent students of a higher school in Austria was invited to develop new and innovative solutions for difficult tasks that the company is forced to deal with. The first example shows a company of the cement industry, searching for new climate proofing building materials. The second example will give insight, which ideas young people presented in behalf of a company that manufactures and markets Pipe Systems worldwide. The students tried to find an environmentally friendly way to recycle the waste of centrifugally cast glass-fibber reinforced plastics which are used for the production of the pipes. Then Straßer will show, how a team of 14 young experts developed a comprehensive program to reduce the energy input for a large non-profit organisation in Carinthia. And finally the case will be shown how students have developed concepts for an “electricity-eye”, a monitoring system to reduce the power consumption in households in behalf of a Styrian power authority.

Keywords: *environment, innovation, young talents, Carinthia, good practise.*

YOURI - NOVA POT DO INOVACIJ: MLADI TALENTI USTVARJAJO REŠITVE, DA SKRBIJO ZA NARAVO

Povzetek “JUVI Jugend.Verantwortung.Innovation” (nemška kratica za mladino, odgovornost in “YOURI”) je poseben podprojekt projekta Verantwortung zeigen! – povezuje šole in podjetja. Tim zelo talentiranih dijakov nekega izbranega šolskega programa, npr. Zvezne srednje tehnične šole, razvija povsem nove zamisli in rešitve za neko nalogo, katero je zadalo podjetje. Dijaki prebijejo en teden v podjetju, ves čas skrbi za njih tim projekta Verantwortung zeigen! Program YOURI si izvedli zelo uspešno petkrat v obdobju 2008/2009. Zadnje leto je YOURI soočil mlade talente z nalogi skrbi za naravo. - Verantwortung zeigen! Je regionalna poslovna pobuda v južni Avstriji. Pobudo je dalo in dejavnost usklajuje podjetje STRASSER & STRASSER. Povezuje podjetja in neprofitne organizacije pri raznih dejavnostih, pomaga jim pri angažiranju glede družbene odgovornosti podjetij (DOP) in sonaravne trajnosti ter usklajuje več regionalnih med-sektorskih projektov. STRASSER & STRASSER je vodilno podjetje glede regionalne pobude in nudi nenehne priložnosti, da ljudje pridobivajo in izmenjujejo izkušnje glede DOP; ponuja tudi nekaj novih rešitev, da si partnerji podjetja izboljšajo svojo družbeno in okoljsko odgovornost. Štirje primeri kažejo, kako imajo podjetja korist od ustvarjalnih, včasih celo samosvoje mislečih dijakov, ki posvečajo pozornost dkrbi za naravo in izboljševanju svoje in njihove sonaravne trajnosti. Vedno gre za tim odličnih dijakov neke srednje šole v Avstriji, ki so ga povabili, naj razvije nove in inovativne rešitve za težke naloge, s katerimi se je podjetje prisilno soočiti. Prvi primer kaže podjetje iz industrije cementa, ki išče gradbene materiale, ustrezne novemu podnebjju. Drugi primer omogoča vpogled v zamisli, ki so jih mladi ljudje predstavili v imenu podjetja, ki izdeluje in trži cevi po vsem svetu. Dijaki so poskusili iznajti okolju prijazen način recikliranja plastiko, lito centrifugalno in okrepljeno s steklenimi vlakni. Nadalje bo avtorica pokazala, kako je tim 14 mladih strokovnjakov razvil zelo celovit program, da bi znižali porabo energije, za veliko neprofitno organizacijo na Koroškem. Zadnji prikazani primer zajema dijake, ki so razvili koncept za ‘električno oko’, kar je pripomoček za opazovanje porabe energije, za neki oblastni organ za energijo na Štajerskem.

Ključne besede: okolje, inovacija, mladi talenti, Koroška, dobre izkušnje

1. The regional CSR-initiative Verantwortung zeigen!

Verantwortung zeigen! is a regional business initiative in southern Austria, initiated and coordinated by STRASSER & STRASSER that connects companies and non-profit organizations (NPOs) in various activities, facilitates their engagement concerning corporate social responsibility (CSR) and sustainability and coordinates several regional cross-sector projects. Currently, about 550 executives from 100 companies are in close contact with the initiative, and many of them regularly participate in the dialogue.

The private initiative motivates regional companies and NPOs to develop their social and ecological responsibility and sustainability as well as regularly reporting on successful projects and activities.

2. YOURI - a new way to innovation

“JUVI Jugend.Verantwortung.Innovation” is the German acronym for *youth, responsibility and innovation*. “YOURI” is a special sub-project within the initiative Verantwortung zeigen!, that connects schools and companies. A team of the most talented students of a particular school programme (e.g. Federal Secondary College of Engineering) develops completely new ideas and solutions to a progress-oriented task the company has given. The students spend a week at the company, with full-time coaching by the Verantwortung zeigen! team. At the last day of the YOURI-week the students close their work by presenting a bunch of new ideas to the management and the executives of the school.

YOURI has been carried out very successfully 5 times in 2008/09, most tasks confronted the young talents with nature-caring missions.

The following four projects will show the various range of topics and also, on the basis of one project, a five-day chronology of the work of the students.

3. Read more about some nature-caring YOURI projects

3.1. Students propel the cement industry right into the future

In the first YOURI project commissioned by a south Austrian company of the cement industry, the “Wietersdorfer & Peggauer Zementwerke”, six excellent students of Villach technical college spent one week discussing and elaborating future-oriented ideas in the field of innovation for new building substances in the context of climate protection.

Their results were finally presented to a number of managers and the school leaders.

In the course of the project, the students tackled problems such as the potential of applying renewable resources in the field of thermal insulation while also analysing regional availability. One particularly fascinating idea was that of an algae reactor – the concept being that the CO₂ released during clinker production would turn into algae when exposed to the sun which, in its turn, could be used as an energy supply in the production of cement – a cycle made for the future. The students also verified, that a German university just had finished the development of a pilot algae reactor and made contact.

“We never dreamed that our work would be taken so seriously, and our ideas might be so important to the company,” interjected a student. “We have all learned a lot from the project”.

The head of division of HTL Villach, as the college is called in German, Mr. Miklautsch who was the one to co-ordinate the project internally, perceived it as a special opportunity when he said, “YOURI projects enable us to focus on promoting skilled students, and this also helps the industry to create responsible innovation. A truly great project!”

3.2. Solutions for the recycling of glass-reinforced plastics (HOBAS pipe systems)

As part of the second YUORI-project, the Carinthian manufacturer of pipe systems HOBAS invited nine ambitious students from “TGM – Die Schule der Technik” (Vienna's largest technical high-school) to spend a week working on the subject of recycling GRP (glass-reinforced plastics) waste and giving the company some young, innovative ideas.

First the students met their contacts at company and gained an initial insight into the company on a tour of the plant. Detailed information on the task in hand gave the students an idea of what they could expect over the following few days. What the company wanted the young plastics engineers to do was to develop ideas for recycling production waste consisting of glass-reinforced plastics and thus help to make the processes at HOBAS more sustainable and eco-friendly.

The students spent their first day with making preparations: the team sounded out their initial ideas and carried out some research work. By the end of the day, they had an overview of the company and were prepared for the interviews scheduled for the next day.

Day 2 of the YOURI project was to be an intensive working day for the young people. They held interviews with experts and came up with the first suggestions for solutions. The students contacted an iron and steel company based in Austria that could possibly make use of the materials in its production processes. They then carried out experiments to find out what the material properties were and whether they were suitable for further processing.

The third day was dedicated to developing real solutions to the problem of recycling GRP waste. In teams the students discussed possible solutions, contacted the promising lead again in the iron and steel-making company, and found out about other activities in the industry. Two teachers at TGM came from Vienna to give their students more help with their ideas and forge closer ties with HOBAS themselves. Following final discussions, they produced concrete ideas for recycling the waste, which they ranked according to actual feasibility.

On the fourth day the students' task was to put their ideas into a presentable form and in the right order for the presentation. They produced a draft, which they then proceeded to edit. By the end of the fourth day they put the finishing touches to the final version. A presentation in front of the head of quality control rounded off the afternoon and the YOURI students were ready to present their results to the HOBAS Management.

The successful project week ended with the presentation of the results in front of the management, including in-depth discussion and a press conference. Given the innovative solutions suggested and their excellent presentation, the young plastics engineers went back to Vienna feeling pleased with their work and HOBAS started evaluating their ideas with a view to using them in house.

3.3. Becoming an energy self-sufficient non-profit-organisation (Diakonie Kärnten)

In Klagenfurt a large non-profit-organisation is situated which operates hospitals, homes for older people, and schools for handicapped and others. The organisation used the innovative power of YUORI to find out as many opportunities as possible to save energy with the aim to become an energy self-sufficient organisation one day.

Fourteen students worked out a long catalogue of measures. The ideas were very diversified and included thermal insulation, possibilities to reduce the consumption, awareness raising among the employees, construction of an own hydro-electric power station on the areal of the organisation, solar energy plants, exploitation of a water source on the areal ...

3.4. Developing a prototype for an “electricity eye” (Feistritzwerke)

Another interesting project was realised for the Feistritzwerke, a local electricity supplier, which is a leading company for renewable energy in Styria, during November 2009.

Eleven students of the HTL Weiz (a well-known technical school in Styria) were asked to design, plan, and build a prototype for an “electricity eye” - a new monitoring system to reduce the power consumption in households. The electricity eye will help the customer to control the consumption of electricity and will inform in a simple way about the amount of daily/yearly consumption and the expected costs.

Red light signals a higher consumption and green light shows a reduction in comparison to the previous year. After five days work the students presented three different prototypes which are to be developed further on in cooperation with the technical school in Weiz.

4. Conclusions

This contribution at IRDO's Conference in 2010 gives insight in various YOURI-projects that confronted young talents with different nature-caring missions and leads to a continuative discussion about present-day youth and their – mostly unseen – importance to create social innovation.