Future with Chemistry

Final Project Report 2013

Aalto University & Chemical Industry Federation of Finland

Preface

The original brief for this eight-month project was to find ways to create ideas on how the image of the chemical industry of Finland could be enhanced. The project team received this brief in the IDBM project kick-off in September 2012 and has been intensively working on it since.

The whole project started with mapping out the current actors in the industry in order to see what had already been done to get the younger generation interested in chemistry and the chemical industry. The team visited chemical industry companies and other parties in the educational field to see how the younger generation is reached. During this first phase the project team also conducted some academic research regarding various subjects such as branding, child development and generation research to find more about the project related subjects.

From the very beginning, the team started generating ideas on how the image of the industry could be enhanced. Further research was also conducted on a trip to Japan aiming to benchmark the Japanese chemical industry as well as various storytelling factors that could be used in the project. During the trip the team got a wide perspective of the current standing of the industry in Japan through interviews with a local chemist, branding manager and a researcher, just to name a few professions.

At this point it had become evident that the chemical industry lacked a common message or story what to tell to the consumers and possible employees. This shifted our project focus from creating ideas for attracting young people to the industry, to a more holistic view of branding. Thus the team started to direct itself more into building a story for the industry and to link the ideas to the story.

To research what the chemical industry story should contain, the project team participated the ChemBio 2013 event where various industry companies presented themselves and which was visited by many students and industry professionals. The aim of this participation was to gather material from the people in the industry themselves by asking the question what are the best things in their work and in the industry.

Based on this research and a workshop done with industry professionals, a core message was created for the industry. The message is meant to guide

the evaluation of ideas and activities that aim for enhancing the image of the industry. In the following pages the proposed core message will be introduced as well as concepts and slightly more specific ideas that have been fitted to this message. This will hopefully provide a basis for the industry to move forward in branding the industry further.

The entire project has been very interesting and rewarding for the team members, and we want to thank the Chemical Industry Federation of Finland for this opportunity.

The Project Team,

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Helsinki, May 2013



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"Give concepts to Chemical Industry Federation and member companies to enhance the positive image of Chemical Industry for the Young generation."

THE STORY

Starting with Why

In the various researches that the project team did during the project it became evident that especially for employees, but also for customers, it is important that the purpose of the company and its values resonate with the values of employees and customers. To emphasise the purpose and the values of the company, the team came across a man called Simon Sinek who had put this value and purpose communication of companies into an easily understandable model called the Golden Circle.

Simon Sinek¹ stresses that when wanting to inspire and create long term employee and customer relationships the company needs to be clear on its purpose. The communication should start from the purpose of the company, emphasising why does the company do what it does. Only after this core has been communicated it should become evident how does the company do what it does and then what exactly does the company do. Sinek argues, that starting the communication from why influences the receiver's emotions better and thus generates long lasting relationships.

This approach was found interesting WHAT by the group and thus started to search for a reason for why the chemical industry exists, why it is important and why should people care.

¹ Sinek, S (2009). START WITH WHY. London: Portfolio Penguin. p37-80.





The Core Message

In search of the core message for the industry, people from the industry were surveyed and interviewed. It became evident that the mission statement should contain the following key words: Everyday-life, Leader, Responsibility, Global, Well-being and Chemistry. After this, a workshop was facilitated for the steering group resulting in two stories for the industry. From these two statements the project team generated a combined message for the industry. The project group proposes that the core message of chemical industry is:

For the quality of everyday life, we take the lead in responsible development of global well-being.

World needs Chemistry.

What does the statement mean:

Everyday life – Chemical industry and its products constitute our everyday lives and the quality of life that we have in our society.

Leader in responsible development - Chemical industry is in the forefront of finding new solutions to problems in a responsible and sustainable way.

Global well-being - The Finnish chemical industry is not separating itself from the world, but takes an active role in solving the global issues and responding to global competition.

The Values

The values are signals of what the chemical industry stands for and how it goes about in achieving its purpose. To support and strengthen the core message of chemical industry, project group also proposes the following values:

Innovative -

Embracing the current and emerging challenges we constantly invest in research and development for finding innovative solutions for these challenges.

Inspiring -

We provide inspiration through our deep knowledge in chemistry providing solutions for younger generation to growing needs, to follow our footsteps reaching every in leading the change to create better future and lifestyle for society.

Responsible -

We are trustworthy not only with our customers but also with social wellbeing. We take initiatives to bridge growing concerns for environment and humanity.

Global -

We reach across cultures and borders individual.

Modified Values for each Target Group For transmitting values most effectively to different target groups, the groups

are divided by the developmental and educational phases. The exposition to the industry's message starts from a very young age, continuing during growth towards adulthood. Thus, there are six different target groups starting from play age children, going onwards to lower comprehensive school children, then upper comprehensive school children, continuing to upper secondary and vocational school students, the university students and finally to professionals already having a profession.

For every target group the core message that is communicated stays the same. The values themselves have been modified so that they are understandable to a specific target group. The core values as they are, are targeted to the adult target group. Therefore, for the younger target groups the values and the message must be modified to fit their cognitive capabilities. The message for the youngest target group differs from the core message the most, concentrating more on chemistry as a subject than the industry itself (Graph 1). Starting from the play age children, the closer in age the target group is to professionals, the more comes the chemical industry itself visible and thus the values and the message correspond more to the core message (Graph 2).





Graph1. Changing focus between chemistry & chemical industry.

Graph 2. Value simplification according to target group.

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Play Age Children

Lower Comprehensive School

Upper Comprehensive School

THE IDEA EVALUATION MODEL

The Idea Evaluation Model

The idea evaluation model is a tool for the chemical industry. The core of the model answers the question why the chemical industry exists. Based on the core of the model the values are simplified for different target groups.

The circle is divided into six sectors according to target groups. An idea, for empowering chemistry, can be created for one target group or for a combination of target groups. The target groups are placed in relation to consecutive age groups to let idea easily flow in the circle. An idea for the target group has to convey the target groups modified values.

To help to use framework, a questionnaire has been designed. The ideas should be evaluated and placed in the circle based on the score calculated from the questions below. This way the user can easily evaluate if the core values and mission statement are connected to the idea.





The Idea Evaluation Model Questionnaire Guidelines

Step 1: Target Group

This part of the questionnaire ensures that a target group has been decided. If it is known for whom the idea is for, then pick that target group. There is also an option of not choosing a target group. This is not a checkpoint to filter out an idea but to help to concretize the idea. More than one target group can be chosen.

Now according to the target groups that have been chosen, move to define what values of chemical industry does the idea convey. If a target group hasn't been chosen, all of the target groups and their values need to be evaluated. Move on to check the values of the target group.

Step 2: Value Check

To see how much the idea is parallel to the core message it is important to see how well the values are conveyed by the idea. This helps to rethink the idea whether it fits for chosen target group from the previous question.

If a target group has been chosen, start scoring the idea with the values of the group. Then check the neighbouring target groups to see if its applicable to the other target groups. If at this point another target group is chosen check that the idea can be modified according to the values of the target group. If there is no specific target group, then start from any of the target groups and check with all the possibilities.

For each of the values in a target group it should be defined how much the idea conveys the certain value from scale 0 to 3. When choosing 0 it means that the idea does not convey the value at all and choosing 3 means that the idea completely conveys the value. To get the final score for the idea, for each target group, add the ratings of the values together.

Use the following questions as rating guidelines:

- Does this idea make chemistry seem fun?
- Does this idea make chemical industry seem inventive?

Once the desired number of target groups have been checked, choose the one that has the highest score. That is the main target group for the idea. Then

choose the two target groups that have the second highest scores. These will be the secondary target groups.

Now you move down to the model where you can place your idea, for example with a post-it. Start from the outer rim of the circle. The score that the idea has represents the amount of steps that the idea should be moved towards the core of the circle. For example, if the idea got a score of five, the idea is placed inside the fifth rim from the outer rim.

The ideas that are the closest to the core of the model are the ideas that should be developed more. In general, ideas that score above 7 are ideas that should be considered further. Some of the ideas might need some modification before they fit the model and the values.

This model can also be used for other purposes than just evaluating ideas for the chemical industry. To use this model in another setting (for example company setting) one must insert own core message (for example mission or vision statement) to the core of the model. Additionally the division of the target groups might vary depending on the business of the company. The values supporting the core message should be modified to fit the target groups.



The Questionnaire

1. Define the target group

- [] Play Age Children
- [] Lower Comprehensive School
- [] Upper Comprehensive School
- [] Upper Secondary & Vocational School[] University & University of Applied Sciences
- [] Professionals
- [] Don't Know

2. Rate your idea based on the values it conveys (0=not at all, 3=completely)

[A] Play Age Children Fun - Conveys the idea is not serious and there is room to play	0 []	1 []	2 []	3 []
Safe - Is it safe and not scary Imaginative - Creates imagination and new thought processes Visible - Reachable as a physical object	[] []	[] []	[] []	[] [] []
[B] Lower Comprehensive School Engaging - It retains interest Caring - Concern of local well-being Creative - Different approaches in solving problems Present - Interaction with the near environment	[] [] []	[] [] [] []	[] [] []	[] [] []
[C] Upper Comprehensive School Popular - Provider of known everyday products in use Respect - Make the individual feel respected Cool - Enabler for new products or actions Local - Presence in daily life	[] [] [] []	[] [] [] []	[] [] [] []	[] [] [] []
[D] Upper Secondary & Vocational Scho Encouraging - Supports individual development In-charge - Active in leading sustainable development	loc [] []	[]	[]	[]

Inventive - Creating new and enhancing old products International - Providing opportunities abr

[E] University & University of A

Motivating - Spirit to spur each other Commitment - Commitment towards natu society and security of employment Visionary - Good team spirit creates a posi atmosphere to innovate Multinational - The community can act for of global society

[F] Professionals

Inspiring - Provide inspiration through dee knowledge in chemistry and work culture Responsible - The Industry takes responsil in providing job security for employees. Innovative - The industry brings ideas to re Global - The industry has a global access to research and resource



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	[]	[]	[]	[]
road	[]	[]	[]	[]
Applied	Scien	ces	C 1	
ure,	[]	[]	[]	[]
itive	[]	[]	[]	[]
r good	[]	[]	[]	[]
p	[]	[]	[]	[]
bility	[]	[]	[]	[]
eality	[] []	[] []	[]	[] []

Play Age Children

CONCEPT

Chemistry Through Play

VALUES

Fun, Safe Imaginative, Visible

IDEAS

Chemistry Kit for Kindergarten Children Chemical Company Themed Lego Chemistry Barbie Early Education Books About Chemistry Cartoons

Lower Comprehensive School

CONCEPT	IDEAS
Chemistry Through Leisure	Wall Painting Competition Chemistry Themed Hopscotch Chemical Industry - Monopoly
VALUES	Chemistry Kit
Engaging, Caring Creative, Present	Consumer Products Chemical Natural Drink Food With Chemical Motifs Products With Stories Annual Events to Make Children Have Fun and Create Ideas Workshops Where Kids and Parents Meet Professiona Chemistry Cartoons Get to Know Parents Workplace

Upper Comprehensive School

CONCEPT

Everyday Chemistry

VALUES

Popular, Respect, Cool, Local

VALUES

Chemical Card Game Chemistry App for Easy Learning Lab Coat Design Competition World Without Chemistry Videos Super Heroes in Chemistry **Company Showcase Professionals Visit Schools**

Upper Secondary School & Vocational School

CONCEPT

Mentoring Relationship

VALUES

Encouraging, In-Charge, Inventive International

Visiting Professionals Chemical Industry Ambassador Ask Students to Visit and Inspect Companies **Electronic Chemistry Laboratory** How Does It Feel to Start Work Life - Blogs People Behind Work **Educating Role Play Application**

University & University of Applied Sciences

CONCEPT

Chemistry Through Community

VALUES

Motivating, Visionary Commitment, Multinational

Chemistry Lounge

Professionals

CONCEPT

Human And Society

VALUES

Sponsoring Start-Ups TV Show Where Celebrities are Invited to Chemistry Laboratory Open Innovations Platform in Chemical Industry

Inspiring, Responsible Innovative, Global

IDEAS

IDEAS

Documentary for Latest Phenomena in Chemical Industry **Chemical Industry Game Show** Informal Get-Together Events Chemical Industry Ambassador Competition Chemical Industry Gift Package for **New Chemistry Students**

IDEAS

PLAY AGE CHILDREN

Chemistry through Play

The first target group in which children start to get exposed to chemistry and chemical industry is the play-aged children. These children (around 3-7 years old) are in the play-age, which means that they learn and perceive their world through play. Children in this age can be engaged through role-plays where they imitate their role models such as superheroes or princesses.

During the research trip in Japan it was discovered that small children have difficulties in understanding abstract concepts like "industry". This means that the core message cannot be used as it is and has to be strongly translated and modified for children. The core message is explained for the target group by linking chemistry to role-play.

As such, "Chemistry through play"-concept pushes chemistry into a child's everyday life and play, which are two elements familiar with kids under 7. The aim is to get the children familiarized and interested in the subject of chemistry by presenting it through different mediums of play. The goal of the ideas is to convey that chemistry is fun, safe, creative and everywhere, which fits the core values.

The core values in target group translate to:

FUN -

VISIBLE -



SAFE -

IMAGINATIVE -WORLD

The concept ideas for play age children focus on traditional children's medias such as physical toys and TV shows. Children take example from these medias, so although these ideas may not have a significant effect on teaching the exact meaning of chemistry they may gradually give an interesting impression on the image of chemistry. Through simulated experience where children play and act according to the idea the memories about chemistry retains long.

Physical Experiences

Toys and other physical items generate physical experiences and through the experiences young children increase their knowledge meanwhile playing. The ideas in this concept are based on this starting point.

Chemical Company Themed LEGO

The industry companies could collaborate with toy producers like Lego to produce chemistry related toys. These toys would provide small children a simulated experience¹ through play. Providing a set of Lego's with a laboratory or chemical factory environment, children would be taken to the world of chemistry. Through role-plays and building the chemistry environment itself they have a chance to see people in chemistry laboratories and factories as their role models. The toys would be produced by the toy manufacturers and designed together with consultancy of the Finnish chemical industry. As an example, the toys could be given as gifts by the chemical companies to the children of the employees and kindergartens.

Chemistry Barbie

Children play with Barbies to express what they want to be like in the future. In the Barbie line a chemist or chemical industry profession Barbie could be set as a popular career. Different Barbies could have different varying chemical industry related attires. Girls would have a role model what corresponds the core message of chemical industry by being innovative and responsible with the aim of saving the world. Chemical Industry could cooperate with the Barbie producer Mattel and many other toys or with another company that produces play dolls to create a new story and character for the chemical industry.

¹ Smulated experience = A hands on learning methodology where physical contact facilitates the

child's development.

Early Education Books about Chemistry

Books support simulated experience while being tangible objects that can transmit the core message through the plot of the book. The book will have a chemical industry related story and a variety of interesting tasks for little kids to work on. The book would contain stories such as how the world developed with chemistry during past thousands years or a fun story of a famous chemist. About the hands on work, they could be colouring book sequences, stickers and simple instructions how to perform basic chemical experiments with home







supplies.The activity would aim to convey children that chemistry is like magic. Chemical industry would cooperate with children's novelists and schoolteachers when doing the book.

Chemistry Kit for Kindergarten Children

The idea is to develop a toy line that introduces the world of chemistry for kindergarten aged children. With the help of that, little children begin to learn to recognize basic chemistry symbols and notice that they are everywhere.

Chemistry play kit is a toolbox, which contains chemistry related blocks and tools. Kids can use the equipment from the kit to demonstrate some experiments with water, colours and sands. It's a toy that inspires children and also provides the adults a method



Early Education books about Chemistry of teaching children to do simple chemical experiments.

The chemistry kit would be released with the help of a toy manufacturer, chemical experts and designers who would design the kit. The kit should have a design that gives the children a chance to find new ways of playing.

TV

TV is a passivizing media for the target group but it provides a great source of inspiration and role models for playing activities. The core message and values of chemical industry can be also easily implemented or concealed to the storyline of TV shows. As a medium it reaches a large amount of families and it has a great educational potential even if the format is entertaining.



Cartoons

Cartoons influence children by creating case, the story would teach children heroes and role models to which the what elements one object contains children can identify. It would benefit and what the characteristics of them. chemical industry that there were some cartoon stories broadcasted on to teach more accurate concepts TV containing knowledge of chemistry to children. The Chemical Industry and chemical industry that encourages Federation could find or partly fund a children to explore the world of chemistry.

For example, there could be a story about a boy who has the superpower to abstract chemical elements from objects nearby and create something new from these elements. In this



What's more, it is also a chance group producing cartoons. The story makers should work with chemists to make sure that correct knowledge is put in the series.

LOWER COMPREHENSIVE SCHOOL.

Chemistry through Leisure

Lower comprehensive school target group, or the second target group, consists of 7 – 13 year old school children that are in 1st to 6th grade in the Finnish school system. In lower comprehensive school age, children's interests tend to turn from play towards after-school leisure and individual hobbies. Furthermore, during the time out of the school environment the child continues develop themselves by pursuing their interests. These findings are based on research observations and expert interviews.

The core message of chemical industry: "For the quality of everyday life, we take the lead in responsible development of global well-being. World needs Chemistry" can be expressed to this target group through leisure time activities like hobbies. Hobbies, which are part of everyday life, are seen as responsible way to develop the well-being of lower comprehensive school children. The aim is not to make chemistry present only during the school time. Interests towards chemistry can be created through the hobbies and other leisure time activities.

The values to support the core message are: inspiring, responsible, innovative and global. However, these values might be too complex to understand within the target group as they are. They can be more easily understood when they are simplified into following keywords:

ENGAGING -POSSIBILITIES OF EXPERIMENTATION IN CHEMISTRY

CARING -CONCERN OF LOCAL WELL-BEING



PRESENT -INTERACTION WITH THE SURROUNDING ENVIRONMENT

CREATIVE -DIFFERENT APPROACHES IN SOLVING ISSUES

The concept ideas for the lower comprehensive school children focus on different medias that are linked to leisure time. Since school hours of target group are rather short due the age of target group the leisure time is more dominant in their lives. The target group also perceives leisure time in positive light in general and it enables easy-going methods for transmitting the chemical industry's core message to target group.

Games

Games are part of target group's leisure time, even during school hours games can be used for facilitating learning. Chemistry related games bring a fun way for the kids to learn about science. Games makes chemistry seem more concrete and not so scary or ambiguous.

Physical games as a medium support creativity and interest towards chemistry with learn by doing methodology. The hands-on games can be based on games that already exist, because the chemical theme itself makes them new. This also enables the games to transmit the core message of chemical industry.

Chemical Industry - Monopoly Chemistry Themed Hopscotch

Children can learn different stakeholders of chemical industry by playing a board game and it would also of hopscotch squares are replaced present the broadness of the industry. Game is quite similar with traditional monopoly but the environment and companies are changed to fit chemical industry with paint, oil and plastic companies as an example. Since Hasbro owns the game the license for Monopoly needs to be acquired from them by the Chemical Industry Federation of Finland.

The idea can be easily implemented to every school's backyard. In this version with chemical objects, which links chemistry to children's everyday life. The idea brings science to the school breaks and makes students aware of chemistry during their breaks. Chemical Industry Federation of Finland could distribute a ready-made template to various schools in order to help to paint the hopscotch.



Chemistry Kit

Children love playing hands on games and it also helps their intelligence grow. Chemistry play kit is a box, which is full with chemistry related blocks and tools. Kids can use the equipment in it to demonstrate some experiments very big, which can feel very fun from with basic home utilities and water. The core message, especially the part of responsible development, should dictate the content of the chemistry kit. Chemical experts should work with toy developers and designers to produce this nicely assembled kit. They should develop different actives what can be done with the kit and let children to have an opportunities to find new ways to play.





Wall Painting Competition

Wall painting supports child's creative skills. The idea is to let children paint a chemical themed painting such as molecules to a large canvas. The point is to make something small a children's point of view. Chemical Industry federation of Finland could even arrange a competition between schools about who creates the most creative painting.



Consumer Products

Chemical industry is not seen as provider of daily used consumer products. However, during leisure children have more time to spend with consumer products than within the school hours. Products as a media are very tangible and easy to approach. Co-operating with various manufacturers makes possible to produce almost any kind of material for promoting chemistry.

Chemical Natural Drink

This idea is about to create some really good and healthy drink named after chemistry. The purpose of the drink is to gain same amount of popularity that energy drinks currently have but in this idea with more healthy ingredients. The chemical compound inside should be engaging children to do sports or other healthy leisure time activities. The Chemical Industry Federation of Finland should cooperate with soft drink companies, which have good brand images to be able to produce drinks. Chemical experts should also be involved to develop a compound that boosts the health of children and takes care of their daily nutrition. Designers need as well to make an attractive package to make it special for the target group. The media can report the benefits of these drinks to make it well known for the perfect function. with chemical objects, which links chemistry to children's everyday life.

Food with Chemical Motifs

Because chemistry is part of everyday life it is easy to attach messages to food products. For instance, cereals, which look like atoms, could get children more curious about chemistry. Atom cereals are also very tangible way to help children to learn atom structures and other basic knowledge of chemistry meanwhile they eat. The idea could be pitched for various food manufacturers.

Products with Stories

Normally, the public is not well informed of how the chemical products are made and where they come from. The unknown fact will make them more suspicious towards companies and chemistry. Suspicions could be decreased from shampoo products, for example, if the packaging would include a storyline of the production process. The storyline could be revealed when consumer opens the product for the first time. The employed approaches could be done with the help of both text and illustration.

Workshop

Workshops as a medium is good way to bring people together and have them work, communicate and get to know each other. The workshop facilitator's can also transmit the chemical industry's core message as a part of his or her delivery and workshop theme. It is a great interaction where people learn by doing during their leisure time.

Annual Events to Make Children Have Fun and Create Ideas

The idea is to arrange a workshop for children where they generate ideas or solve problems related to chemistry. This idea supports child creativity and skills to use current knowledge in action. Best ideas/solutions could be rewarded. Tämä Toimii –competition arranged by technology industry is a good benchmark for this idea.

The Event could be arranged together with schools and Chemical Industry Federation of Finland. The content could be different for different age groups. Children between grades 1–3 could for example explore and ideate cases where they can find in chemistry from their everyday life and children between grades 3–6 could solve problems with knowledge related to chemistry.



Workshops where Kids and Parents Meet Professionals

Giving a chance to learn chemistry with professionals differ from normal school setup and provides a useful way to spend leisure time. The idea is to arrange workshops that are targeted for children where their parents are also welcome. Professionals facilitate fun workshops where the attendees can try the role of a chemistry professional and learn chemistry through guidance. The workshops take one day including the professionals' introduction of themselves as well as concrete hands on workshop where children and parents work together in learning and solving problems.

TV

TV is highly used media during the leisure time and can attract large amounts of viewers from the target group at the same time. TV programs are a way to educate children about chemistry in a dramatized way. In a point of view of values, TV is a channel, which can convey the core message and basic knowledge of the chemical industry in creative ways. Shows that raise interest towards chemistry could be created with the cooperation of production companies.

Chemistry Cartoons

Various cartoon series are based on different subjects and professions. Based on this, a whole TV series could be created to bring out the chemical industry and the life of a scientist. Since TV audience often perceive their characters as role models it is easy to promote chemical professions as appreciated choice for adulthood.

Events

Events as a medium is a good way to bring large amounts of people together and to get them familiarized with new knowledge. Since these events are large in scale happenings, they can have, beside the lower comprehensive target group, content for all other target groups. The events are arranged for a specific date and place and aim to raise the awareness of chemical industry. The happenings can vary from workshops to keynote speakers or even performances.

Get to Know Parents Workplace

The idea is to facilitate a day in the companies when children could get to know the work of their parents better. During the day the children could see, visit and observe different sections and positions of the companies. The aim is to get more knowledge of the companies and chemistry career as a general. The day could be carried out depending on the age of the children. If you have a young kid there would be a specific area in the company where you can hang out with your kid while you are working (A bit like working from home atmosphere). Here small activities like fun experiments and little chemistry toys to play with would keep the kids engaged. If you have an older child then you can reserve a day when you can take show them around in the factory and office facilities. Parents have a huge role in influencing a child's perspective in choosing career option for future. It would be a practical experience for kids to see how the chemical industry companies function. There is a lot that chemical companies offer, these positive

Internet

As a part modern culture, Internet has become increasingly important for keeping oneself in touch with personal social circles and interests. Furthermore, the target group explores information and entertainment from the Internet. It is also good to keep in mind the power of viral effect that can be created with Internet and that people want to share in social medias. This content that raises interest towards chemistry is easy to upload and distribute so that it is available to everyone. Since children have grown to use the Internet from a very young age on a daily basis, it is natural that target group spends a lot's of time on the web during their leisure time.

Virtual Chemistry World

Virtual chemistry world for children enables children role-play chemical professions in a virtual and safe environment. The chemistry world would contain elements from social media such as option for children to send questions to professionals or their teachers and follow the latest news of chemistry related topics. The content for newsfeed could be created with help of ejippo.fi¹ web magazine. Benchmarks for chemistry world are Yrityskylä² in content wise and



tangibles (like Neste Oil's zero waste policy) could be easily shown once the person is in the same environment. It would be wonderful for kids to know what their parents do and share things with them. And above all parents will have more time to spend with their kids.

Habbo hotel³ as a visual style and user interface. Introduction how to operate in chemical world would be given during the school hours but playing itself would take place in leisure time. To prevent misuse the chemistry world would be open only for lower comprehensive school children and educational staff. In Finland there are plenty of game developers with whom chemical industry could co-operate with and build the web platform.

¹ www.ejippo.fi

² www.yrityskyla.fi

³ www.habbo.fi

UPPER COMPREHENSIVE SCHOOL

Everyday Chemistry

The school group between 13-16 years belong to this third target group. In this target group students make their first career choices with the help of, for example, the two-week TET-period (työelämään tutustuminen), applying for first summer jobs. These first exposures to work life may help in shaping their decisions later. Another important point of this target group is that the students are technology savvy and spend an increasing amount of time on the Internet. For this target group there is also plenty of research data available, even very recently published reports such as "Kun koulu loppuu tutkimus 2013" produced by T-media.

The core message of chemical industry is modified to represent chemistry as a concrete everyday phenomenon. Since this target group learns chemistry as its own discipline, the students' interest need to be strengthened by means beyond lectures and books. Means that make chemistry a more understandable rather than vague topic could increase interest for students to take up chemistry for higher studies. The starting point for the ideas of this concept is, therefore, making chemistry visible through everyday activities.

The values, which reflect the everyday life aspect, can be understood as the bridge between the values of the target group and the values of the chemical industry. The modified values are:

POPULAR -PROVIDER OF KNOWN EVERYDAY PRODUCTS IN USE

COOL -ENABLER FOR NEW, PRODUCTS, MATERIALS

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RESPECT -**RESPECT TOWARDS** INDIVIDUALS

LOCAL -PRESENCE IN DAILY LIFE

Bridging the gap between science and everyday life is the goal of this concept. The everyday chemistry concept incorporates learning through daily activities. Various activities organised around this concept would help the chemical industry communicate its core message to the target group. In these activities teens can learn and play while receiving guidance. This would work as a support for teens that are going to make career choices. These activities would make chemical industry appear more popular, respected, cool and local for the Finnish students.

Learning Tools

Learning tools make chemistry more understandable. They can be performed through different medias and fade the border between chemistry and everyday life activities. Since chemistry studies are not considered as a hip subject chemical industry should try out new open-minded tools to reach the target group. Releasing these tools through applications and games, which are perceived popular within the target group, would enhance the image of the chemical industry.

Chemical Card Game

Card games as a learning tool make everyday learning more interactive and social. It also breaks the routines of normal chemistry lectures and gives teachers a new way to educate students. The chemistry card game would be based on the chemical formulas, reactions and basic laws of chemistry. As an example the game could be similar to solitaire but instead of collecting same suits (diamonds, hearts, spades, clubs) together the idea would be to gather chemical elements into a periodic table. The end product will be card game that is distributed across Finnish schools by the Chemical Industry Federation of Finland.

Chemistry App for Easy Learning

With growing interest in mobile applications amongst the target audience generation it is necessary that chemistry will reach its audience through this medium by offering a concrete means to help learn chemistry. This could be accomplished by creating e-book styled apps. As an example the app could be light version of chemistry book with various quizzes and games related to books' chapters. A part of the homework could also be done doing exercises that are programmed to the app. Educational book publishers could co-operate with mobile app developers together with chemical industry as a part of bigger educational ecosystem and strategy.

Competitions

The goal of competitions facilitated by Chemical Industry Federation of Finland is to attract people from the target group who are not interested of chemistry or natural sciences in general. Students who are more interested in creative work could attend competitions where they have to imagine the everyday life of chemical industry employees. Without noticing the competition participants needs to focus on chemical industry daily actions and it helps them to realize the broadness and importance of chemical industry. The core message and values can be transmitted to participants through the competition material.

Lab Coat Design Competition

The idea is to arrange competition where upper comprehensive school level students would design a new lab coat for a chemist. This idea would encourage target group to research lab would be sponsored by specific practises and help students familiarize chemical industry company, which themselves with chemists' work. The aim is to motivate to research and

Internet

As a part of everyday life, the target group spends a lot of time on Internet following popular websites. For example, Youtube ranks teens as the highest user group in terms of age. Many new global hot topics spread fast in the Internet and are shared by the target group amongst each other. Internet as a platform provides more visibility to Chemical industry with low investments by creating effective social media buzz.

World Without Chemistry Videos

The idea is to produce short and good way to promote how broadly humoristic videos that show the chemistry affects the everyday life. impact of world without chemistry. Either individually viewed or screened An example storyline of the video during a chemistry lecture these could be that all the physical items are videos would be effective in inspiring falling into pieces when the chemical the target group. These videos could be interventions disappear. Videos are broadcast through a Youtube channel



find information of the challenges that the chemists face daily and design a lab coat that would best help the daily work of the chemists. The competition would then take on the winning design into use.

by Chemical Industry Federation of Finland.

Super Heroes in Chemistry

Improved digital special effects have made superhero films massively popular and visually impressive. The idea is to make chemical industry professions parallel to superhero characters. As a concrete example, Clark Kent, the Superman, is a normal journalist by day but a fighter of super villains by night. Idea's character, Jane Smith, is an ordinary student by leisure time but a world rescuer by work. Instead of superpowers, her special skill is ultimate knowledge of chemistry to solve various global problems. Also the chemical industry's core message "For the quality of everyday life, we take the lead of responsible development and global well-being. World needs chemistry" could appear more hip by expressing it from a superhero angle. The idea could be developed further with the cooperation of a comic book studio and as a final goal to sell the idea to a large film studio.

Visits

Personal visits allow the Chemical industry to have a direct connection to the target group. Experiences of the visits stay a long time in the mind of the audience and they have a chance to affect future career decisions of the target group while providing a personal view to industry itself.



Company Showcase

Company showcase is a transportable tool for promoting companies innovations. The idea is to bring the tour to the target group to enhance their general knowledge of chemistry. One way to execute this is with a custom crafted bus in which the showroom is built in. The bus would visit schools and other popular and local environments among the target group to reach the youth as a part of their everyday life. Chemical companies could cooperate with marketing and promoting agencies to make the company's inventions suit the showcase and appear cool for the target group.





Professionals Visit Schools

Professionals from the local chemical companies could visit schools to talk about their work-life. The idea could be organized with the help of schoolteachers and school coach. Professionals can tell about their stories how they ended up working in chemical companies while including failure and success stories within their speech. This will bring out the human side of professionals and make it easier for target group to relate and connect.

UPPER SECONDARY SCHOOL & VOCATIONAL SCHOOL

Mentoring Relationship

The fourth target group, the upper secondary and vocational school students are in their late teens from 16 to 20 years old. The upper secondary school studies usually precede higher educational studies in university or university of applied sciences. These students haven't necessarily yet chosen the field they want to study further and there is still a window of possibility to influence these students.

In Vocational school the students already have chosen a career path which to take and study to get a profession. For these students it is important to get the support they need in their studies and provide information about job opportunities and companies where they could work after they graduate.

Students that are currently in upper secondary and vocational school are part of the generation Y. This generation children and young adults look for guidance and instant feedback in working life as well as studies^{1,2}. At this stage effort is needed to build mentoring relationship between teenagers, teachers and professionals. The aim is to build a relationship with students who already study in the field as well as inspire potential students that could study the field in the future. By stating "The world needs chemistry" the feeling can be created that the target group is important for the industry. Through the mentoring communication, the core values of chemical industry need to be emphasized in the following manner.

In the mentoring relationship concept, majority of ideas concentrate on relationship building and communication and interaction on a personal level with

ENCOURAGING -SUPPORTS INDIVIDUAL DEVELOPMENT

INVENTIVE -CREATING NEW AND ENHANCING OLD PRODUCTS

¹ Atkinson, P. (2008). MILLENIALS: Researching the application of demographics to build customer relationships and HR strategy. Management Services. 52 (1), p. 6-11.

²Hansford, D. (2002). Insights Into Managing an Age-Diverse Work Force. Workspan. 45 (6), p48-54.



IN CHARGE -ACTIVE IN LEADING SUSTAINABLE DEVELOPMENT

INTERNATIONAL-EMBRACING OPPORTUNITIES ABROAD the target group. It concentrates on showing what the work and studying is at a higher level of studies or career. Through these means of letting the students talk to inspiring people from the industry they can get exposed to the core message of chemical industry.

Company workshops

Through enhancing the visibility of the companies and by letting the students know about the work life in the industry they can form stronger opinions and then choose amongst various possibilities in the future. Although the teenagers may have internal needs of finding their possible future, they may not know where to get the information they need. Holding workshops could be an intuitive way to reach the target group and to introduce mentor figures to them. Visiting and getting to know companies, provide more qualitative personal information about the industry.

Visiting Professionals

Teenagers trust the professionals and their professionalism that derive from their occupation and status. They value getting feedback directly from experts in their specific field. It would be good that professionals could visit upper secondary schools to answer the questions from students and teacher related with their career life. They could even try to give a lesson about how the chemical formulas are implemented in the companies and factory production as well as how they see their occupation related to their self development. These kinds of visits not only focus on getting new chemistry students, but also enhancing the image of chemical industry in the youths' mind. The Human Resources departments could take the charge of these visits in each company organizing them together with the chemistry teachers.

Chemical Industry Ambassador

The idea is to create a chemical industry ambassador for chemical industry, who is employed by Chemical Industry Federation of Finland. Companies from the industry could sponsor the ambassador program in collaboration with universities. The ambassador works as a PR person for chemical industry and the profession is ideal for university student in field of chemistry. The main purpose to have the chemical industry ambassador from the university level is to provide more realistic and fresh overview for the target group as well as guidance why to carry on the studies in field of chemistry. The ambassador's working area consists of various schools and universities all around Finland. The main task for the ambassador is to promote chemistry in schools and to gather observations, data and report the outcomes to the chemical

industry. The ambassador will also talk about the positive aspects and the core message of chemical industry.

Ask Students to Visit and Inspect companies

The aim of the visits is to provide a realistic picture of the chemical industry and fix wrong mind-sets within the youth. The idea is to take a group of students to visit a chemical industry company and then present company's actions on how they

Internet

Surfing on the Internet occupies a lot of teenagers' time. They are familiar with many kinds of new emerging internet trends and also interested in exploring more. They can easily reach the internet by mobile phones and computer in almost everywhere. This media is absolutely necessary for chemical industry to control well for maintaining the agile mentoring relationship between the target group.

Electronic Chemistry Laboratory

The new trend is towards open innovation where industries are becoming more willing to share and co-create with public. In this emerging culture, younger generations begin to search for platforms to display their thinking and look for others' opinions. The electronic laboratory would be a very convenient and safe way for teenagers to demonstrate chemistry. On the website, students can drag the material and laboratory apparatus together to do an experiment or even invent new fictional experiments. In this idea, mentoring aspect is taken into account through this virtual



deal with pollution issues. The visit includes a factory tour and a workshop where students and company representatives could bridge the gap between the unfavourable image and reality. The image of unsafe handling of poisonous and dangerous chemicals in factories is easier to change when the target group sees factories concretely and experience the true atmosphere by themselves. The PR departments of companies could co-operate with local schools to arrange such visits.

platform by live chats and forums in which the target group could get help from their friends or professionals who are online.

This idea definitely needs a large amount of resources to support it. The key issues would be the user experience design and program development. Once this online platform is done, the upper secondary school and vocational school students can enjoy much more experiments than they could before and also share their learning with each other. This concept would fit well with



LUMA Centre and the chemistry class Gadolin³ which already provides facilities of schools to come and visit and use their laboratory. To expand its work Gadolin could also move in to the internet and create and internet based laboratory that would be available to everyone regardless of time and place.

How Does It Feel to Start Work Life - Blogs

Bloggers are an important media channel today and chemical industry could use this for their advantage. One way to do this would be blog posts from trainees who work in the chemical industry, for instance as a summer trainee. During the trainee period, the trainee bloggers would tell their own experiences about their new work. This is the way to encourage the target group by sharing personal experiences and thoughts. The blogging would be done through

3 www.kemianluokka.fi

written updates, pictures and videos. The blogs are updated on a regular basis and there is several different bloggers for maintaining viewer engagement. Links to the blogs could be distributed to study counsellors and websites like Kunkoululoppuu.fi² that provide information about study and work opportunities.

People Behind Work

People behind work would be a series of videos that would concentrate on the people who work in the chemical industry and can be seen through the videos as mentor figures. The videos themselves would concentrate on showing what these employees do in their work. They concentrate on the things that the employees themselves find the best in their work and how they see their job. Additionally to this the videos should also show what the workers do during their free time, to show various ways of having work life balance.

The videos would be shot at the workplaces of the employees or during the free time activities. Distribution of these videos would be mainly via a YouTube channel. This channel would be promoted to study counsellors in schools and also linked to pages like kunkoululoppuu⁴. fi that would provide information on career and study opportunities. Watching the videos, young people could see and understand the reality and enthusiasm of the employees in the chemical industry. This helps to understand what it is like to work in the chemical industry and show various ways of achieving work life balance.

Educating Role Play Application

Smart phones have become increasingly popular among teenagers.



4 www.kunkoululoppuu.fi

5 Tilastokeskus. (2011). Internetin käyttö kodin ja työpaikan ulkopuolella yleistyy. Available: http://www.stat.fi/til/sutivi/2011/sutivi_2011_2011-11-02_tie_001_fi.html. Last accessed 24th April 2013



According to Tilastokeskus more than half of the teenagers own smartphones in Finland⁵. Smart phones as a medium are a very potential way to deliver the message to teenagers. As an example, a roleplaying application could help the target group to pick their professions in the field of chemical industry. The setting of the app would in a high tech chemical industry environment, where the player solves tasks related to chemistry to advance in the story. The tasks and problems are related to the level studies the target group faces in their studies. The game would provide professions from the broad scale of chemical industry, from process engineer of oil factory to cosmetic developer in a makeup company. The first step to do that could be corporation with app developers and after then on publish the app for different mobile platforms. The interaction design of the application needs to be well thought of with game developers and designers.



UNIVERSITY & UNIVERSITY OF APPLIED SCIENCES

Chemistry through Community

University target group, or the fifth target group, consists of 19 - 25 + year old students which are studying either in University or University of Applied Science. This target group is preparing itself for the working life and adulthood and therefore they start to get more concerned about in what kind of community they want to live in and be part of. These findings are based on research observations and expert interviews.

The core message of chemical industry: "For the quality of everyday life, we take the lead in responsible development of global well-being. World Needs Chemistry", can be expressed to this target group through emphasizing communal issues. The aim is to make the target group recall the importance of chemistry in everyday life and make them aware of the massive importance that chemical industry has for maintaining society as a whole. As a group they have the possibility to enhance future well-being in global scale with the help of chemistry.

The values to support the core message are: inspiring, responsible, innovative and global. The ideas of for this target group aim to promote:

MULTINATIONAL -THE COMMUNITY CAN ACT FOR GOOD OF GLOBAL SOCIETY

VISIONARY -GOOD TEAM SPIRIT CREATES A POSITIVE ATMOSPHERE TO INNOVATE



COMMITMENT -COMMITTED TOGETHER TO ACT RESPONSIBLY TOWARDS ENVIRONMENT AND SOCIETY

MOTIVATING -SPIRIT TO SPUR EACH OTHER Community is a good platform to develop social skills. A skill of being a good team player is important during the studies, but it's even more important in working life later on. This concept, named "Community", is targeted for university students. The core element of this concept is community and it emphasizes how community develops a positive atmosphere and team spirit within it.

ΤV

TV is a medium that raises discussion inside communities. With TV programs it is easy to bring new viewpoints to the target group and the general public. The focus of the shows is to communicate power of strong communities. To create these kind of shows there would need to be co-operation between the chemical industry and Finnish TV production companies. The core message would work as bedrock for the shows' storyline.

Documentary for Latest Phenomena in Chemical Industry

The huge amount of new innovations inside the chemical industry is a great source of content for the show. The idea is to create documentary TV show that presents the latest phenomena in chemical industry.

The show would mirror the interests of the target group by the style of the production. Documentary presents the background and research leading to the innovation as well as its future usage.

Chemical Industry Game Show

The game show is about student teams which compete against each other for winning a prize. Amount of participating teams is around 20 and in each round one of the teams will be eliminated and rest will continue towards the final. Being part in a community, or in this case a team, is about either failing or succeeding together and provides opportunities to enhance the team spirit. The game show challenges include questions and problems from the field of nature sciences. The show can be created and supported by various stakeholders generating larger ecosystem around the show. For example chemical industry could work as a sponsor and mentor for chemical student teams and other industries act in the same way for students in their discipline.

Events

A common interest in a group can make great events happen since these are happenings where communities gather around. Common interest is also a driving force to make communities to arrange and visit events. Chemical industry's touch points to events are theme, sponsorship or facilitation. Content of the events can vary from workshops to keynote speakers or even performances.

Informal Get-Together Events

There is a risk of information gap between students and reality of working life. The idea is to arrange informal events where the target group has the chance to interview professionals in field of chemical industry in an easy going atmosphere. Events could be sauna evenings, social evenings or something similar that are not too official. University students have a chance to hear the reality of working within chemical industry. Pros and cons are discussed, giving the students a more realistic image of the career possibilities. The professionals follow that the core message "The world needs chemistry" really applies in reality. The companies in field of chemical industry cooperate with student unions and students to arrange and facilitate the events.

> Chemical industry Ambassador Competition



Chemical Industry Ambassador Competition

This is a supporting idea for choosing the chemical industry ambassador among the university students for upper secondary and vocational school. The competition also offers possibility to work as a PR person for the chemical industry. Competition is held annually and includes short listing the candidates based on work and academic performance. From this list of pre-elected people the students will vote for the next chemistry ambassador. In the election, the candidates will have to answer questions forming around the core values of chemical industry as and the present their plans on how the post of



the chemistry ambassador should be developed.

The aim of the ambassador is to have a broad view inside the industry with a realistic touch. For the target group is arranged events where ambassador can share his/ hers experiences and students can

interview the latest happening within the industry. Ambassador makes also a good communication channel for the Industry to reach out to the students and transmit the core message. Ambassador could be financed through Chemical Industry Federation of Finland and be an employee to represent the industry.

Facilities

Communities need physical places to collaborate. While providing facilities it is easy to enhance the team spirit of the target group. Chemical industry sponsors these locations while they can make themselves visible there. The facilities are used by the target group for workshops, group work and studies.

Chemistry Lounge

University students need to have a place where they can encounter like-minded people. The idea about chemistry lounge means a space with easy-going cafeteria for hanging out with other members of the community. There would be also spaces to arrange workshops and project work as well as a testing

laboratory for needs of chemical experiments. The space is near a university area and it could be designed with the help of students. The equipment's of the lounge would reflect the core message by supplying tools that make it possible to be a sustainable and inspiring developer. The chemistry lounge is financed by the university and the Chemical Industry Federation of Finland.

Consumer products

By using particular products you can state that you are part of a certain community. When community members buy products there are reasons behind the purchase. The reasons behind the purchase are partly the values that the products represent. The value of product is created through branding and marketing means and affecting to this area chemical industry can bring up their desired values.

Chemical Industry Gift Package for New Chemistry Students

Practical consumer products that one gets for free work as a gesture of goodwill. Giving gifts strengths the bond between a new chemistry student and the industry. The content of the gift package can be designed to fit the values (inspiring, responsible, innovative and global) of the chemical



industry. The gift package should include an exclusive product that cannot be bought anywhere else. For example, the gift package could include products produced by the chemical industry companies. Chemical industry distributes these gifts to new students with a cover letter to promote its core message.

Chemical industry Gift Package for New Chemistry Students



Professionals

Human and Society

The final target group, the professionals, consist of people that have moved to the work life. This group of people are finished with their studies and have moved toward various available career paths. This target group also has the possibility to greatly influence other target groups through parenthood, professionalism and mentoring.

The core message of chemical industry: "For the quality of everyday life, we take the lead in responsible development of global well-being. World needs Chemistry" can be expressed to this target group through emphasizing societal issues and responsibility towards the society and humans. The chemical industry is often seen as very old fashioned and monolithic industry, and thus this message aims to create a more sustainable, innovative and responsible picture of the industry.

The values to support the core message are:

INSPIRING -WE PROVIDE INSPIRATION THROUGH OUR DEEP KNOWLEDGE IN CHEMISTRY FOR YOUNGER GENERATION TO FOLLOW OUR FOOTSTEPS IN LEADING THE CHANGE TO CREATE BETTER FUTURE AND LIFESTYLE FOR SOCIETY.



RESPONSIBLE -WE ARE TRUSTWORTHY NOT ONLY WITH OUR CUSTOMERS BUT ALSO WITH SOCIAL WELL-BEING. WE TAKE INITIATIVES TO BRIDGE GROWING CONCERNS FOR ENVIRONMENT AND HUMANITY.

INNOVATIVE -

EMBRACING THE CURRENT AND EMERGING CHALLENGES WE CONSTANTLY INVEST IN RESEARCH AND DEVELOPMENT FOR FINDING INNOVATIVE SOLUTIONS FOR THESE CHALLENGES.

GLOBAL -

WE REACH ACROSS CULTURES AND BORDERS PROVIDING SOLUTIONS TO GROWING NEEDS, REACHING EVERY INDIVIDUAL.

This concept concentrates on communicating the societal importance of chemical industry in Finland as well as the humane contributions that is performed by the industry. The updated industry image will be touching the humans by supporting well-being with the help of job security, environment friendliness and by being the largest industry of Finland to name a few topics.

Sponsoring

Sponsoring as a medium is an act of goodwill and responsible gesture for supporting innovative people who inspire others. As a sponsor, the chemical industry can gain visibility as a single entity. By sponsoring individuals with similar values as the chemical industry, chemical industry can also communicate their values to the rest of the society.

Sponsoring Start-Ups

Even small amounts of sponsorship can help growing chemistry related start-ups immensely to go further. This support can create new social and capital wealth for the chemical industry as well as whole Finland. The sponsoring could include providing funds, information, physical material and mentoring. The activities should also be known to the public, so the responsible and innovative image could stand out. In order to built this industry culture, chemical industry should work as large community and keep looking for the start-ups which are valuable. By supporting startups Chemical Industry Federation of Finland can gain positive visibility also on a global scale.

ΤV

TV as a medium is a great way to promote chemistry because it enables attachment of the storytelling methods for showcasing chemistry-related subjects. TV directs the attention of humans and reflects what people are talking about in the society. TV is a media with a national reach of audience.

TV show - Celebrities Invited to Chemistry Laboratory

The idea is to produce a TV show where celebrities come and perform some funny and crazy experiments in chemical industry which combines chemistry facts and entertainment. The purpose of the show is to give more human touch to chemistry.

Internet

Nowadays internet is the main platform for society's communication and channel for information distribution. People can also make themselves heard through internet. It is also a great source of inspiration and platform for new innovations. Another rising trend is global scale cooperation that is done through internet. Chemical industry's core message "For the quality of everyday life, we take the lead in responsible development" can be achieved with the help of others and tools provided by the Internet.

Open Innovations Platform in Chemical Industry

Open innovation is a new trend of how societies develop themselves. The word open means that capital holders make use of public's intelligence through advanced technology to achieve their goals. Chemical Industry Federation of Finland can improve its image by launching an open



Combining celebrities and learning basic knowledge of chemistry can make chemistry a popular phenomenon for the whole society. Setup of the show could be similar with many TV cooking shows but the kitchen environment will be changed to a laboratory.

innovation platform on the internet where anyone can take part in developing new solutions for chemical industry. The platform is a website where different open source projects are presented. Potential projects will be funded for implementation and chemical industry becomes a partner for commercial use of the project. There will be a reward-system for the active and helpful contributors.

CAMPAIGNS

Campaings

Campaigns are smart way of maintaining presence and reaching out to the general public. Campaigns are created around a central theme in a same media or various mediums. Neither for Chemistry or the Chemical Industry has been given such an exposure before to build a brand image.

New Forms of Advertising

Interactive Advertising

"Volkswagen fun theory" Changing behavior and perception towards certain subject can be done easily by making it fun and simple. A good example is "Volkswagen: fun theory" campaign in Stockholm launched in 2009 based around the theme "to take responsibility" This simple behavior change campaign like taking a staircase or putting rubbish in the dustbin ultimately culminated with being more responsible towards environment when buying environmentally friendly cars.

"World needs Chemistry"

World needs Chemistry is the main slogan for a creative campaign for Chemical Industry. This will feature as a two part campaign showing the "what will happen without chemistry" and "what chemistry does for you". These campaigns will be



Contextual Advertising

There is a growing online trend towards contextual advertising. Contextual advertising is a form of targeted advertising in which the content of an ad directly correlates to the content of the web page the user is viewing. This helps establishing the real target audience. Google AdSense is an algorithmically functioning program and major player in contextual advertising.

print and web based campaigns. The advertisements will be featured in JC Decaux screens with HSL Featuring common and important things that we need in daily life. These ads will also be screened in websites targeting online users. The first campaign will

feature common missing things from everyday life and funny situations without them. Effects of missing things like purified water, fuel, plastic products would be featured in the advertisement. All these advertisements will carry written copy with a final statement "World needs Chemistry". Second advertisement set will follow in not longer than 4 weeks. This advertisement set will focus on positive aspects of what chemistry does for the society. This advertisement will feature what challenging things chemistry supports for well-being and social advancement for example special plastic life supports for patients in hospitals.

These advertisements will push for more positive image of chemistry related products, which come through chemical industry and will support bringing a better image for chemical industry.

Responsibility and Care

Chemical companies are known for creating more pollution rather than providing products that support society. Key products from chemical companies like plastics exist until either burned for producing energy or for recycling.

Almost all chemical companies use plastics either as product or as packaging material. There will be a special collection campaign organized around the used plastics.

Responsibility and Care

This campaign will run as a surprise event. Special collection point in collaboration with recycle points with glass collection, metal collection or reusable clothes collection point like UFF collection point will be organized. This will create the message of community recycling. Here the recyclable plastics will be checked and weighed and the person will receive discount coupon or money in exchange for plastics. With this discount coupon people will get percentage discount in consumer products from chemical companies during a specific period of time.

Weeks before collection dates television and online ads will make citizens aware and excite them about the event. This will also give them time to start storing plastics. Actual collection dates, time and places will be announced in the later advertisements a week before collection date. At the collection point a salesperson will check and collect the plastics and return money or coupon depending on what person wants. After the collection the plastics will



be used either to recycle or in energy production.

"Do You Have a Secure Job? Join Chemical Industry."

European Union is recovering from economic crisis and in the wake of it either many people have lost their jobs or they are worried that they might not have secure jobs. Chemical industries main offering a stable job and job security should be made a key selling point when attracting new employees while boosting the confidence of already working professional at chemical industry.

The campaign will begin with print and online advertisements on newspapers, job search websites and outdoor screens with one simple message "Do you have a job?" A supporting image of financial troubles will be added in the background. These advertisements will run for 2 weeks which will be followed by a second advertisement at a key location in the city where the visibility will be maximum. This advertisement will be on one billboard with the final message " Do you have a secure job? Join Chemical Industries" with logos all the companies in chemical industry. Potentially this advertisement will be screened for international potential employees in international job search site with an edited message: " Do you have a secure job? Join the Finnish chemical industries".

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New Ways of Recruiting Young People

Right before summer vacation special hired buses with clear visual look would go around upper comprehensive schools and upper secondary schools for students to record their video and submit their CV. Two specialists will be in the bus, one a video guide and 2nd a CV expert who knows what chemical companies need. Their work is to help students communicate about themselves. Video format of CV will give one more medium for teenagers to tell what they are good at and how they perform in schools. The experts will give advice on how to prepare a CV and present themselves in a video. The video format will be no longer than 1 minute. The format would be also made interactive with experts interviewing the participant. Special note should be taken that the teenagers are not yet professionals and this is their first job, Most of the summer jobs for the teenagers will not be highly technical so a difficult process of recruitment would harm industries image. Through this way chemical industry will become more accepting towards younger teenagers. At the same time it will give a great opportunity for chemical industry to build its presence among younger crowd. Familiarity of work life is one of the important aspects for professionals and recruiting teenagers will help increase applications later in the chemical industry.

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The Questionnaire

1. Define the target group

[] Play Age Children

[] Lower Comprehensive School

[] Upper Comprehensive School

[] Upper Secondary & Vocational School[] University & University of Applied Sciences

[] Professionals

[] Don't Know

2. Rate your idea based on the values it conveys (0=not at all, 3=completely)

[A] Play Age Children Fun - Conveys the idea is not serious and there is room to play	0 []	1 []	2 []	3 []
Safe - Is it safe and not scary Imaginative - Creates imagination and new thought processes Visible - Reachable as a physical object	[] []	[] []	[] []	[] []
[B] Lower Comprehensive School Engaging - It retains interest Caring - Concern of local well-being Creative - Different approaches in solving problems Present - Interaction with the near environment	[] [] [] []	[] [] [] []	[] [] [] []	[] [] []
[C] Upper Comprehensive School Popular - Provider of known everyday products in use Respect - Make the individual feel respected Cool - Enabler for new products or actions Local - Presence in daily life	[] [] []	[] [] [] []	[] [] [] []	[] [] []

[D] Upper Secondary & Vocatio

Encouraging - Supports individual development In-charge - Active in leading sustainable development Inventive - Creating new and enhancing old products International - Providing opportunities abro

[E] University & University of A

Motivating - Spirit to spur each other Commitment - Commitment towards natu society and security of employment Visionary - Good team spirit creates a posit atmosphere to innovate Multinational - The community can act for of global society

[F] Professionals

Inspiring – Provide inspiration through deep knowledge in chemistry and work culture Responsible – The Industry takes responsib in providing job security for employees. Innovative – The industry brings ideas to re Global – The industry has a global access to research and resource

nal Sch	ool			
ment	[]	[]	[]	[]
	[] []	[] []	[] []	[]
road	[]	[]	[]	[]
Applied 9	Scien	ces		
ure,	[] []	[] []	[] []	[]
itive	[]	[]	[]	[]
r good	[]	[]	[]	[]
p	[]	[]	[]	[]
bility	[]	[]	[]	[]
eality	[]	[]	[] []	[]

Professionals Play Age Children For the quality of everyday life, University & University we take the lead in of Applied Sciences School responsible development of global well-being. World needs chemistry. Upper Comprehensive School Upper Secondary & Vocational School





