

ensto today

ENSTO'S STAKEHOLDER MAGAZINE 2013

Design's

DIFFICULT

QUESTION: 'WHY?'

ABB and Ensto:

**ANATOMY OF
A PARTNERSHIP**

Leena Mörttinen's

Bottom-Up
Revolution

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Anne Stenros: A Memorable Space



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In the War Room: Soldiers in the War Against Losses



Brian Tracy Unlocks Human Potential

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From the Editor

First to the Future

The Nordic countries "have reached the future first," wrote Adrian Wooldridge in *The Economist* on February 2, 2013. We could not be more flattered.

But despite heaping praise, the magazine also highlighted what it called "one of the region's biggest weaknesses," a failure to bring together our two core strengths of design and engineering.

Ensto is working hard to continue to be an exception to Wooldridge's statement. In Finland, as well as the 19 other markets we call home, we're committed to the successful marriage of engineering and design with the ultimate goal of saving your energy.

This issue of *Ensto Today* is, in part, a celebration of the union of engineering and design – not only at Ensto, but at other great companies like EDF, KONE, and Artek. We hope you'll take inspiration from some of the many examples in this issue!

Pia Hänninen
Director
Brand and Communications



Saves Your Energy



Timo and his Gordon Setter Pinot Noir

Electricity is Not the Problem – It's the Solution

When you take a thorough look at electricity as a form of energy, you quite clearly see that it is an enabler of sustainability, and a source of many positive things in our lives. Without electricity there is no modern civilization.

Electricity is also the only form of energy that does not produce local emissions in its transport or use. However, electricity is such a part of our lives that we take it for granted: few people think about it at all, except when paying their electricity bills, or when taking an emotional or non-rational position against it. Let us consider some facts about electricity.

Think about a house without electricity some one hundred years ago. Lighting with candles or oil lamps was inefficient, costly, and polluted the air. Heating in fireplaces or stoves with wood or coal caused severe health problems and airborne pollution, especially in urban areas. Wood and coal had to be transported, loaded and unloaded, and stored, which led to the inefficient use of space, and would hardly anymore be possible in modern cities.

For an average worker the cost of a reading light was rather high, as candles and lamp oil were expensive. The storage of food and the heating of water for laundry were challenging and time consuming. In farmhouses, cows had to be milked manually with, at best, limited lighting and under poor hygienic conditions. It is easy to see that those who have benefited most from electricity are those responsible for food, laundry, heating, and tending to animals. Hence, electricity has been a source of equality since it made a revolutionary change in the lives of normal housewives.

If you consider modern society and imagine what can be done with electricity in order to enhance energy efficiency, reduce local emissions, and facilitate more comfortable lives, you wind up with a very long list. Beginning with IT solutions that reduce the need for mobility, and ending with electrical vehicles – several times more efficient than internal combustion engines in urban traffic – electricity can be used to reduce particle- and CO₂ emissions. Both inside and outside, LED luminaires deliver not only high efficiency, but also longevity, comfort, quick reactivity and reduced maintenance.

Modern buildings built to passive norms or high LEED certification need so little energy that electricity is the most economical solution. These electric systems can easily be combined with distributed production of electricity with solar panels, nano coating in windows, or paint-generating electricity. The houses and their inhabitants will play a role as both consumers and producers of electricity. In fact, electricity will be the future building technology solution for houses with a low energy need and will replace many of today's technologies, such as geothermal or district heating, which are at their best in houses with high energy consumption. Houses of the future will also learn, react and adjust automatically to the lives of their inhabitants, and will even monitor their well-being and, if needed, call for help.

Electricity is nothing negative. It is rather the only solution possible to conserve our planet's resources and maintain a better standard of living.

TIMO LUUKKAINEN
CEO and President, Ensto Group



The world economy is undergoing a structural change, says economist Leena Mörttinen, Director, Competitiveness and Growth, at the Confederation of Finnish Industries. The challenge: to create strong, sustainable growth - growth that does not destroy the environment at the same time.

'A World of Zeros and On

You've said growth is critical for Finland. Are you referring to the general capitalist growth imperative, or something more specific?

If I'm speaking as a Finn then the welfare system that we've established necessitates growth. It's the welfare imperative.

Finland is in a tough situation at the moment with an aging population and shrinking labor force, so the question is in the sustainability of the model we have. The crisis is global, so over-indebtedness and sustainability is not a Finnish issue only. If there is no growth, I see no future for the euro.

The euro is anchored in the idea that we have a common convergence toward a stable growth path in Europe. If that is taken away, the justification for a common currency evaporates, and indebtedness starts to be what's driving us, resulting in continued austerity, political instability, and beggar-thy-neighbor policies. And the case for the EU and a single currency loses ground.

The challenge is how to generate positive growth that does not destroy the environment and climate at the same time. That's a big challenge since it requires fundamental structural change in production and consumption.

By structural change are you talking about a shift away from carbon-

based technologies toward cleantech?

And more generally being able to produce more efficiently from scarce resources. We need increased productivity to reduce the destructive effects of wasting resources.

But binding regulations apply to roughly 15 percent of the world's carbon emissions; the overall carbon footprint grows each year; and Europe deindustrializes, exporting the carbon footprint to Asia. So is a conscience-easing exercise or is there true improvement?

The problem is that so far the environmental policy in Europe has not generated growth. Some may feel better about themselves owing to an aggressive first-mover approach, but the environment and climate are not cleaned by it. Continue to consume and someone will continue to produce. If the products are not produced by us with cleantech technologies then they will be produced elsewhere with less-clean technologies. Climate rules cannot be European-specific.

Europe's first-mover approach, where we implement unilaterally and even fragmentally, is not going to result in a better world.

Environmental policy must be done on a global scale. Europe must be stronger

in negotiating for global rules, and contributing to how the rules are structured. The problem is that in Europe authorities are not satisfied by having a roof set for emissions, they are also setting multiple targets and creating conflicting incentives which fragment industry's ability to find the best technologies themselves. Environmental policy is actually resulting in deindustrialization but not cleaning the environment.

You say Europe must put itself in a better negotiating position, but does the US or China, say, share similar goals or priorities when it comes to climate?

Europe has a different sort of agenda than the US has. Consider the US and its new technologies concerning shale gas and oil. They have abundant resources and they're also worried about growth. Now energy prices are falling there and industry is considering moving back. With all these benefits, they're not going to give up their newfound, albeit old-fashioned, energy resources.

Perhaps the technology they develop will be carbon-based, but they may use carbon capture to counteract the negative effects, for example. If the US continues towards exporting energy, they may actually correct their current account deficit quicker than we think.

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“We talk about Swedes being too consensus-oriented. Finland is more of a country where you 'just do it.' – In my view we could discuss a bit more, a bottom-up revolution where the whole team contributes.”

'A World of **Zeros and Ones'**



If the US gets its political act together, while Europe is killing its future through unilateral implementation, European industry will also move to the US or Asia.

This bigger picture has to be better anchored in the European discussion. At the moment, the benefits of integrated Europe are not there. Environmental policy requires cooperation. We in Europe have to take the political externalities better into account.

What is the result for Finland?

If Europe is tying our hands, then Finland loses. We are like an island. The logistical costs are much higher in Finland than in other parts of Europe, and they're a much bigger share of a company's cost structure than in, say, Central Europe. In Finland we've been compensated by lower energy costs and reasonably-priced financing, the banking sector providing loans with low margins.

Now the regulations are hitting our financing very heavily because we're bank-dependent. The margins will creep upwards because of the regulatory shock and high bank dependence in Europe. Also, energy prices are increasing because of environmental regulations put in place. Companies will have to make up their minds where they want to produce. Deindustrialization may very well be the path of Finland unless European policies change.

What about the doomsayers who say that soon Europe will be the world's fifth economy?

Well, it may be if the policy does not change. This really is up to us. Europe either will go down or it will be something much better than it's been before. We no longer have continuously nicely behaving

“If the products are not produced by us with cleantech technologies then they will be produced elsewhere with less-clean technologies. Climate rules cannot be European-specific.”

paths to choose from. We have zeros and ones. Crisis has always been the way to change the world. In Finland when we had the crisis in the beginning of the '90s we changed some fundamental things, like we got out of this inflation-devaluation cycle we had and actually anchored monetary policy very firmly. We couldn't have done it without the crisis.

The question is whether Europe uses this crisis to make a better Europe and create a growth agenda that is sustainable. I think disintegration will be at the end of the path if Europe is not able to choose more wisely than it has so far.

So are you an optimist?

I'm an optimist. I'm an economist, after all. The macro economist always says that politicians eventually always make the right decisions, and people in the end find the light at the end of the tunnel more attractive than this self-defeating, staring-at-your-own-belly-button way we're now doing things.

That is some of the debate among Finnish companies. Support for the view is growing that the EU is not beneficial, and we should play with those outside Europe, as if these are mutually exclusive. This distracts people from their own opportunities and causes them to talk about savings or pay cuts rather than thinking about productivity and working to improve cooperation and creating something new.

But we can create something new if we believe we can do it together with Europe and the rest of the world. This should be about the single global market again. This is not about federalism, this is about economic integration that hasn't been fully established or implemented in Europe yet.

What about Finnish manufacturers of Ensto's size? What should they be doing?

They need to stay alert about what is happening elsewhere and be extremely dynamic. They should not rely on one economist's forecasts, since forecasting is impossible in a world of zeros and ones. Create scenarios, test those scenarios, and see whether you can survive even crisis scenarios. Remain strategically agile. Being a pessimist or not daring to do anything is not the right approach. Through the stress tests, you know your ability to survive shocks and negative outcomes that may surprise you. If you have a good handle on your risk-taking ability, you can consider growth strategies.

Has the view of the world changed compared to the pre-crisis time?

Yes. We used to be in an easy, Goldilocks world. We thought that pretty much all the countries were market economies, we had the WTO approach of multilateral trade agreements, and "globalization" was the word of the day. When the BRIC countries started emerging we treated them as if they were from that world. But of course they are much more difficult to read. They are still planned economies to a certain extent, they do not have open financial markets, they do not have strong domestic consumption, they have capital controls, etcetera. These big players came to the scene and we pretended these were market economies.

The question is if the consumption growth is not coming from Europe, you have to be able to access the markets where the catch-up phase is still on, developing countries as well as the


BRICS countries. But these do not behave like market economies because they're still developing. Companies have to be extremely well informed on the specificities of these countries, the political role, how to avoid corruption. Information is not cheap in these countries.

But if we believe what we read in the newspapers, Finland has a great problem-solving ability, a commitment to cleantech, and possibly the best educational system in the world. So where's the problem?

We are engineers. We've really gone very far with the division-of-labor thinking and concentrating on engineering skills we have. What we have not been so good at so far is figuring out how to integrate horizontally, across industries and professions. We, just like everybody else in the world, need engineers that are humanists and economists at the same time.

We talk about "regional policies" with 5.5 million people, and we have fragmentation – the forest cluster, ICT cluster, etcetera. The next phase is not going further in these silos, but it's horizontal, open architecture, opening the borderlines between industries. It is products meeting services, the lines getting blurred.

It has not been necessarily our strength to cooperate much. We talk about Sweden being too consensus-oriented. Finland is more of a country where you "just do it." In my view we could discuss a bit more, a bottom-up revolution where the whole team contributes. This is the way forward. ■

A close-up portrait of Gilles Rougon, a middle-aged man with a shaved head and a goatee, looking slightly to the right. He is wearing a dark grey button-down shirt under a dark jacket. The background is blurred, showing green foliage and a white structure.

Design and
the
Bottom
Line

EDF's Gilles Rougon emphasizes that design is much more than trendy shapes. When properly understood, design can increase the value of a company.

“The best design we may deliver is the one you don’t think is designed.”

Design is often thought of as trendy shapes, or packaging designed to give seductive form to a function behind it.

But Gilles Rougon and Electricité de France demand more from design. To Rougon, design means adding value for the end user at every stage of a business. At EDF, there is no “design department” where ideas are produced, rather design bridges innovation and stands at the crossroads of the needs of end-users, EDF itself, and every potential stakeholder.

EDF is the world’s largest producer of electricity and employs 160,000 workers in 27 countries. Unusual for large power companies, however, 2,000 of these employees are researchers who work hand in hand with the design team on a variety of topics.

Rougon names four ways which design is used in companies.

First is **industrial design**. “This discipline enables an organization to boost user-centered innovation in delivering new products,” says Rougon. “The goal is to design seductive but fair and cost-effective solutions to differentiate your offer.”

The second is **image and brand building** through design. “This is what companies mainly see at the beginning when they think about design,” he says, “simply because you can more easily measure the return on investment through the press coverage generated.”

The third, however, deals with facilitating **new processes for collective innovation** within a company. “It’s not a question of which product or image you bring,” says Rougon, “it refers to how you work.” He says designers generally like to

work in short periods of time on a single subject. How quickly? “Ideally two to five days to make a team project deliver an innovation which you can patent,” he says, emphasizing that the work process brings innovation quickly in terms of product, image, organization and potential partnerships.

The fourth way Rougon terms “**strategic design**,” and he says it is not seen yet in most companies but will be in the future. “Strategic design focuses on imagining new valuable roadmaps. It means identifying potentially valuable business models for the future, even if it’s not your core business yet.”

As an example, Rougon takes a page from his own business. “Even if you combine all the companies in the world that supply energy for transportation, industry and buildings, international energy experts underline that we won’t be able to build enough capacity to supply the world’s needs in year 2050. So our next business models have to be more than about only delivering more energy.”

Design comes into play as a way to “sketch out various scenarios” – scenarios illustrated and shared with a lot of people in and outside the company. “How can you deliver new services to the end user?” asks Rougon. “Because in the future no single player will have the whole answer.”

Design as History

Design is part of the history of EDF, beginning in the 1970s when it worked with architects like Claude Parent in order to integrate its centralized plants within the remote landscape.

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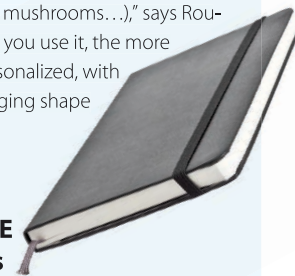
Gilles Rougon’s Best-designed Products

“The best designs for me are those I like to use everyday all year long. Something sustainable, something I appreciate and am proud to use,” says Gilles Rougon. Here are his three favorite well-designed products:



The OPINEL Knife
Designed in 1890

Opinel is a simple, beechwood-handled pocket knife with a carbon blade. It’s been manufactured since 1890 in Saint-Jean-de-Maurienne, France. “It’s not overdesigned and helps you in a wide range of situations (eating, cutting material like wood or textiles, picking mushrooms...),” says Rougon. “The more you use it, the more it becomes personalized, with the wood changing shape over time.”



MOLESKINE NoteBooks
Designed in 1997

“As a designer I use drawing books. Moleskine may be the first notebook where the design really considers the details. Notice the corners.”

The BIC four-color pen
Designed in 1962

“I carry this pen everywhere.”



Photos: Pasi Viitanen

“Design is not an adjective, **it’s a discipline.**”

GILLES ROUGON, ELECTRICITÉ DE FRANCE



How to Brief a Designer

Want to get the most from your designers? Gilles Rougon shares what’s worked for him:

- **Define your practical need or needs to the designer,** focusing on the final result you desire.
- **Give as much data as possible for the designer,** which forces him to pay attention to details. Technical data, financial, market information – you may be surprised what a designer will find useful.
- **Make sure the designer understands your company values.** Make it clear what the end-users and stakeholders need to feel as a result of the work.
- **Keep the brief open!** Let people be free to question the brief and propose alternatives. If you don’t do that you may miss a wonderful path to innovation. Of course, the freedom to deliver an unexpected vision must be balanced by the practical, and so make sure to share clear criteria for a go/no-go decision about ideas.
- **And don’t forget to brief the client who is buying the design!** If he is not prepared, if he does not understand how the process works, then you may be defeated before you begin. Prepare your client to receive the added value!

EDF, despite its vast economic resources and a head start due to architecture, tried twice to integrate designers into its R&D and failed. It was simply too soon to mix quite different cultures.

Today, Rougon’s team is active in helping the company’s solutions keep the end user in mind. Take EDF’s “Watt time” clock, for example, a most elegant solution for energy monitoring in buildings.

“The first idea came up six years ago,” says Rougon. The challenge before bringing the concept to life, he says, is to design “a fair balance between a back office becoming more and more sophisticated and the will to understand what’s happening at a glance. You’ve got lots of data to monitor in every direction, but you are looking for simple interactions. It takes time to deliver simple solutions.”

‘Weniger, aber besser’ (Less, but better)

What may come as a surprise to most, however, is that Rougon’s design team is only five individuals. Yes, five. And it may come as more of a surprise that despite its successes Rougon stays reluctant to create any large centralized design team.

“When you create a design- or innovation- department or division or direction, you unconsciously send the message to employees that ‘this is where innovation starts.’ Based upon our experience, you have to put the designers as near as possible to the operational teams, researchers, and engineers to develop networks and not only centralized in-house design teams.”

Rougon says the trick is to multiply the effect of the design resources you have. “When you create an in-house design team and introduce designers in some parts of your company, you immediately foster and develop external contracts with design agencies. Even if ours is a tiny team, we’re working a lot with external designers in order to multiply the impact of our way of working. But definitely we’re not working separately and just bringing back ideas after a brief.”

Rougon is quick to invoke the name of Dieter Rams who famously declared design should be “weniger, aber besser,” less but better. Rams, the lead designer for Braun, brought hundreds of innovative designs into our homes – ideas so evident that they quickly became the new standard.

“The best design we may deliver is the one you don’t think is designed,” says Rougon. “If it looks very trendy, then be careful. It won’t last long. If something is so well designed you forget it and just experience it, then that’s good design.” ■

Design and the Bottom Line

The Franco-Ensto Partnership

France is Ensto's biggest market outside its home market of Finland. Ambassador of France to Finland, Éric Lebédél, spoke with Ensto Today about the France-Ensto partnership.

France-Finnish Trade

France and Finland have long had a close relationship. The Republic of France was one of the first to recognize Finland's independence on January 4, 1918.

Economically speaking, France continues to play an important role in Finland's economy, receiving 2.9 billion euros – five percent of total – worth of Finnish exports in 2011.

"It's never enough," says Ambassador Éric Lebédél of the amount of trade between Finland and France. "France is between the fifth and sixth trading of Finland, but it should increase."

Of higher profile business the two countries do, Ambassador Lebédél notes that Finnair is among the first who will fly with the new Airbus A350 XWB which

employs composite carbon fiber technology. Finnair has ordered 18 of the new aircraft, the first to be delivered in 2015.

Lebédél adds that in "for the year to come we [France] will work more on the energetic mix, which means we are going to diminish significantly our fossil and carbon consuming energies, that we'll have more sober and efficient energy. We'll develop solar, biomass, wind in addition to nuclear which will remain significant in France."

The ambassador says that France has pledged to lower its dependence on nuclear energy to 50 percent of total by the year 2025, and will continue to assist other nations who have made the decision to stay with some nuclear power. The ambassador notes the French company Areva is bidding to construct two new nuclear reactors in Finland.

"France also has projects in wind and wave energy. Look for more cooperation between Finland and France in wind and wave energy," says the ambassador. "In wind it has been solidified in Lappeenranta with Alstom."

Ensto in France

France represents the second largest market for Ensto. "Of our top five customers, four are French owned," says Ensto's Timo Luukkainen. "Not only do we have three production sites in France, but it's a big home market for us. Revenue wise, it accounts for a bit over 20 percent of our total turnover."

Luukkainen says that Ensto has "invested on both sides" in order to gain products the company did not have

before, providing know-how to the French operations and building businesses in France and Finland which complement each other. "One of the reasons we bought NOVEXIA is to gain unique knowledge we didn't have before."

While Ensto gains smart grid knowledge from NOVEXIA in France, its made-in-Finland heat recovery is exported to France, which now has progressive heat recovery requirements for new buildings. "France will be a big market and going to take a huge step in the direction of energy efficiency," says Luukkainen.

Ambassador Lebédél, in Porvoo on October 9th to tour the Ensto plant, was pleased to recognize that France would constitute Ensto's largest market in 2012 for electric vehicle charging stations.

"We are happy to see companies like Ensto investing in France, developing manufacturing operations in France," said the ambassador. "I was glad to see today what is done from Finland in Ensto for other countries. To understand better how work is shared between Finland and other countries including France."

Personal Victories

One of Ensto's most publicized investments in France has been the plant in Néphiac, which produces a multiservice kiosk combining a parking meter, electric vehicle charging and internet-based city services. The product has been employed in Nice, and was most recently featured at the Cannes Film Festival.

Luukkainen says that since he's had the pleasure of living 15 years in France and he also considered it "a personal victory that Ensto is so prominently present in France."

As Luukkainen made himself at home in France by learning the language, Lebédél has done likewise in Finland: the ambassador has learned to speak Finnish thanks to six months training at the Finnish Institute in Paris.

And there are other parts of the Finnish culture the ambassador has embraced: his two "secret passions" of cross-country skiing and forests. But as a career diplomat, Ambassador Lebédél knows the odds of being stationed in a place where the environment matches your personal interests.

"When the foreign service first hinted to me that I could be sent to Finland, I did not reply how lucky I was," says the ambassador. "Because in a diplomatic career it could mean you would be sent to Africa!"

KONE

A Memorable
SPACE

How do you instill a design culture in a 100-year-old, NASDAQ-traded engineering company with five billion euros in revenue and over 35,000 employees throughout the globe? KONE's Design Director Anne Stenros is doing just that.

Prior to 2005, KONE, the world's leader in escalator production and second largest maker of elevators, used external consultants for its elevator design.

"That's how things used to be," says Anne Stenros, a PhD-toting architect and former Hong Kong Design Centre chief, who was hired shortly after Matti Alahuhta took over as KONE's CEO in 2005. Stenros' task: Take charge of the entire design process and bring it in house – at a world-class level.

Traditionally, KONE offered elevators in two ways. The standard offering enabled a client to combine a few materials and components. Custom projects – where even 50 elevators could be present in a single project – entailed architects giving specs for the elevator which would be fulfilled by KONE product engineers and factory technicians.

A Consumer Now King

Seven years after Stenros' arrival, the traditional mix-and-match option is still available. But KONE has evolved to offer over 300 standard elevator interiors which a client can choose from a catalog or piece together with an online tool.

"When an old building is modernized," says Stenros, "the apartment board generally will not have a design background. For them it's easiest to just choose a model from the catalog." Each of KONE's 300 designs are overseen by professional designers with particular attention paid to the combinations of materials and lighting and how they interact.

For huge "branding" projects, such as Olympic buildings constructed as international showcases, Stenros says the formal language of architecture is similar. "But when you're talking about residential buildings, the preferences differ vastly from country to country, so we change the skin."

But changing the skin is only part of Stenros' task. Her team is required to wear multiple hats. They serve the end-user, the architect, and the engineer.

"My background is as an architect, and I see the elevator as part of sequence of spaces in building, rather than a gadget or engine. It should be a memorable space that makes sense in terms of the overall architecture. It's part of the journey to your destination."

And given that an elevator's modernization time is 13 years – its lifespan, so to speak – before major renovation will be required, the designers' challenge is to work closely with engineers to minimize

required repairs. "We look out for the life cycle of the elevator," says Stenros. "We want to repair and not replace."

Since technology will develop significantly over the 13 years, creating modules mean that some parts can be changed without changing the whole elevator.

An example of that thinking may be seen in KONE's separation of the appearance of the signalization system from the technology behind it. "We started from the idea of a touch screen," says Stenros, removing and switching on her smartphone.

"Today's consumer is used to this kind of detailing," she says, displaying her phone's home screen. "Years ago they would not have been, hence you had the old stainless steel plate in elevators."

To create a new control operating panel (COP), KONE commissioned a freelance cellphone designer. Slightly ironic, perhaps, given the company's move to bring design in house, but also likely the most natural solution. "He created a huge cellphone for us," Stenros says. "And that was a very transforming idea in this old traditional engineering business."

But selling transforming ideas is not always easy. "It isn't just convincing your own people," Stenros says. "We had old systems, old subcontractors, and for a project manager it's always easier to use old systems. But when it was all done we won several design awards."

'I am the snowplow'

Stenros is adamant that designers – especially design directors – have to be far more than just aesthetically- and technologically savvy. They must be hard-headed and persistent.

"A major launch takes two-and-a-half years. Someone has to have a vision, and this is not something tangible. Gradually, and in an interactive way, the vision is manifested, your idea becoming more concrete over time. Finally, you show a mockup. Then everybody has an opinion! Everyone is an expert! If you can't support your idea with research and study then there'll be endless discussion of whether it should be green or white or black."

So KONE's 300 current offerings are heavily backed by trend maps and other market research in which Stenros' team personally takes part in KONE's key markets. If her team says "black," then there's good reason for it.

"You have compiled an idea and backed it up. If you leave it to voting then the big picture will be destroyed. So I have a very good design manager who handles resources, processes and timelines, and I am the snowplow that makes room for my team to work properly. Design directors push the idea through, and the job of diplomats follows. If you don't do it this way, your product will not have a soul."

"We started from the idea of a touch screen"

ANNE STENROS

The Ultimate design Brief

(How to talk to a Designer)

"The most beautiful design brief I have ever seen is for the Citroën 2CV," says Anne Stenros. The "deux chevaux," as the French call it, is an economy car produced between 1948 and 1990.

"It was made just after the war, and it was meant for farmers to get their goods to the market on bad roads. The brief was to 'design a car where a basket of fresh eggs on back seat would be unbroken when you get to market.'" In addition to an iconic design, the brief also resulted in an extremely soft long travel suspension system.

"In general, engineers don't even consider Citroën a car," says Stenros who

drives a Citroën C5. "But we architects love it. It is like sitting in an armchair instead in a car, and it all started from the eggs."

The enduring 2CV illustrates Stenros' point that one should not define what to design. "Don't tell me what you want. Tell me your problem. Whenever someone tells me what he wants I question his brief. I want to know what the essence of the problem is. Then you hit on something new and novel, otherwise you're wrapping the old problem in a new way."

"The Chinese always say, 'We have a good problem here!' In the west we too often say 'We have a disaster here.' We should learn to have good problems." ▀



Chago Basks in Cannes limelight, Wins RedDot Award!

Ensto Chago electric vehicle charging points are enjoying Hollywood-style fame, as electric vehicles gain popularity throughout the world.

At the Cannes Film Festival, Renault promoted its range of electric vehicles with Ensto providing the charging units for the 25 showcased vehicles. Stars and guests were

able to test drive the automobiles and try out charging points during the event. Chago was also recognized by the design community, winning the 2012 prestigious red dot award for product design in the household category. Chago was selected by the jury from over 4,500 design entries in its category.

Each year, the red dot awards are presented at a gala held at the Aalto Theatre in Essen, Germany. The theatre was designed by the Finnish architect Alvar Aalto, the unanimous winner in a competition in 1959, but the building was begun only in 1983, seven years after his death. It was Ensto's great pleasure to receive the award in the theatre named for and designed by Mr. Aalto. ■



reddot design award winner 2012



Photo: Jean-Michel Toral



ENSTO SPIRIT

20 countries.
1,600 employees.
One Ensto spirit.





Design **for All**

*Design is mysterious to many, which means it is often misunderstood.
Scope's Jarmo Lehtonen makes some sense of it.*

“Design strikes a good balance with the environment and user.”

JARMO LEHTONEN, MA, SCOPE CVO

A design so bad that the designer killed himself? Jarmo Lehtonen, Chief Visionary Officer of the business design consultancy Scope Associates, is fond of recounting a story of a man who designed a package to hold two cubes of sugar. Consumers, however, refused to open the package in the way the designer anticipated, and sugar wound up on the floor, instead of in the coffee. Frustrated, the designer committed suicide.

Apocryphal? Perhaps. But it's a great example of how seriously design is taken by people like Lehtonen, whose life work is not only design, but dispelling the myths around it.

Meaningful Design

“Often people don't understand design,” says Lehtonen. “They think a good design makes the price higher. That's not true – it can be the opposite! Materials can be adjusted to make a product cheaper or more expensive, either one.”

And design is more than just a product, Lehtonen is careful to point out. His company, Scope, markets itself as a business development company with design at its core. Scope advocates a holistic approach to design, seeing it as a key contributor to the bigger picture.

“Design means recognizable visual quality,” he says. “Design strikes a good balance with the environment and user. Design is functionality, creates ease of use, is sustainable, affordable, reliable, durable and safe. When design is done right, people may not even notice it!”

Scope and Ensto

Scope offers design management and business development services to Ensto's Building Technology division. Lehtonen, along with Scope partners Pia Jäminki-Hovi and Matti Mikkola, and their co-partner network, help Ensto to achieve design targets.

“My role is as an external design director at Ensto,” says Lehtonen. “Together with the client, we form guidelines concerning the

total concept - form, functions, color and material to get the best result from the manufacturing process. Our ultimate goal is to support Ensto strategy and make both their product solutions and business values recognizable on the market.”

In-house or out?

Ensto has used external design partners in several product development projects throughout its history. The more technical a product, the more critical that a manufacturer-designer partnership be solid.

“It's very trendy in the business to use an external name designer,” says Lehtonen, referring to star-designers who lend their names to a multitude of products. “But if that designer isn't committed to learning the company's technical side, then he's just making trendy cover for a product. The rest of the product - materials, technology, sustainability - may not be in the best condition. That's why most name designers make lower-tech products like chairs, glass, or textiles.”

“At Nokia, for example, they can't take a name designer and have him design a phone, because they don't know the requirements, risk, the manufacturing details and timelines.” Lehtonen should know. He designed e.g. the best-selling Nokia 5120, the phone with the colorful, rubberized exterior that created the active sports phone category, and then he worked closely with engineers to manufacture and bring it to market in record time.

'Design for all'

How to grow as a designer? For Lehtonen, he finds it in diversity design. “I also design for disabled people. I do bathroom furniture designs and also high-tech product development for senior citizens. It strengthens my skills and understanding, because it requires taking steps to deepen customer understanding. Diversity design strengthens my scent, skills and understanding, which I apply to the rest of the design field.” ■

Photo: Scope



Great Design, Tragic Design

Ask Jarmo Lehtonen about tragic design, he'll cite the example of Honda. In Finland, at least, the “Honda Man” is not taken seriously. Lehtonen is also continually baffled by food packaging that opens the wrong way, or packaging for dishwasher soap tablets which seem to cause a powder explosion when you attempt to open the package. “I am struggling every day with packages,” he says. “Exert force in the wrong place, and you get the stuff all over you.”

But Lehtonen is quick to praise Apple products, German cars (he loves and drives a BMW), STX cruise ships, Bang & Olufsen audio components, Fiskars tools, and generally well-designed items such as wine glasses and sushi.

And sometimes great design solutions appear in the most unexpected places. “Like this modern fiberglass orthopedic cast which runs from my toes to my waist to heal my broken leg!” Or the Clas Ohlson laptop holder which enables air circulation beneath it and allows Lehtonen to work in a reclined position for long periods at a time. Great design is everywhere. And when it's done right, we hardly notice it.

What's a **Passive house?**

For a home to meet the original definition of “passive,” established by the German Passive House Institute, the home’s annual heating and cooling requirements must not exceed 15 kWh/m² per year each, or it must be designed with a peak heat load of 10W/m². The structure’s total primary energy consumption (energy for heating, hot water and electricity) may not exceed 120 kWh/m² per year, and the building must not leak more air than 0.6 times the house volume per hour.

Carbon's Worthy Adversary

Passive homes themselves aren't news, but the way they're built should be. Choices during design and construction significantly influence a home's carbon footprint.

Matti Kuittinen photographed at the Kamppi Chapel. With its facade constructed of sawn-to-order spruce planks, it's a tribute to the power of wood. It's also one of the quietest spaces in a busy Helsinki city center. Design by K2S Architects.



"I'm still on a controlled level of obsession with lowering CO₂," laughs Matti Kuittinen, a Finnish architect who has devoted his career to the study and construction of low energy buildings.

There are 29 normative indicators for the ecological sustainability of buildings, says Kuittinen. "As an architect you have to choose in which ones you want to excel. It's similar to sports. You're good at the marathon perhaps, or fencing, but you're not good at 'sports.'"

So Kuittinen has specialized: he is one of the world's foremost experts on wood construction and its impact on the environment. "I got into architecture and found that my ideological and naïve wishes have a scientific basis. Hence, my belief in wood as a sustainable construction material."

At last summer's Tampere housing fair, with a project devoted to the reduction of the CO₂ footprint, Kuittinen set out to demonstrate the superiority of wood construction for passive houses.

Tervakukka

The result was a house named Tervakukka. Tervakukka is Finnish for tar flower, and although the tar in Tervakukka was made from pine and not the flower itself, a triple coating of tar was used to protect Tervakukka's claddings. In the Nordic region, tar has been used to protect wooden buildings from at least the Viking era, a tar-coated wooden church in Borgsgund, Norway, having resisted harsh weather for 850 years.

To create a home that is "passive," requirements are generally met by using tightly sealed concrete covered with insulation. Kuittinen, however, opted for wood instead of concrete.

"You can use any material to build a passive house – wood, steel, concrete – but the emissions in the production and construction phases are different," he says.

Steel-framed homes leave a carbon footprint due to the heavy requirements of primary energy needed to extract and melt the material. Recycled steel, however, is eco-friendly, since it must be only melted down again, with no energy expenditure for mining the ore.

Concrete construction suffers the problem of the energy intensity required to produce it, with concrete responsible for 5 to 7 percent of total carbon emissions on the planet.

continued ▶



But wood, as Kuittinen explains, is the best among the options. “The carbon from the atmosphere is already present in the wood.”

More Benefits

And wood is preferable not only for exterior and frame construction. According to research carried out by Kuittinen (a lecturer, researcher, and PhD candidate at Aalto University), gypsum, or dry wall, is a major CO₂ contributor in typical wall structures. Even though dry wall is made using recycled materials, the pressure required to compress it is a heavy carbon producer.

But foregoing drywall – since there is not yet a cost-effective alternative for a wallpaper base – is anathema to many homeowners. Few are willing to go that far in the name of eco. “I consider it my job to explain to my clients the tradeoffs they’re making,” says Kuittinen, who says some walls in Tervakukka have drywall, the homeowner unable to resist beautiful retro wallpaper.

Wood also benefits from what Kuittinen terms “ecofunctionality,” a concept developed together with Dr. Heli Mäntylä from the TTS Work Efficiency Institute. Ecofunctionality answers the question of how much ecological value is gained by improving the functional qualities of a building. For example, the use of eco materials are of limited benefit if the structure is continually remodeled, each time adding to the carbon footprint. Functionality can remedy that.

Kuittinen designed Tervakukka with handicapped access, even though no one in a wheelchair may ever live in the house. “Someone could have a skiing accident at age 42,” says Kuittinen, laying out just one of many scenarios. “And as we age we

When concrete is Better

After the 2010 hurricane, Matti Kuittinen traveled to Haiti as part of a humanitarian project team. What he found: “Wood was not a sustainable material in Haiti. They have a huge problem with deforestation, nearly all trees have been cleared away.”

Wood could not be imported due to the expense and problems with corruption, so Kuittinen designed schools to be built from recycled concrete rubble. To date, approximately 50 schools have been constructed.

Kuittinen also did what may be a first in humanitarian construction: he calculated the carbon footprint for his schools. “Usually,” he explains, “you’re in such a hurry on humanitarian projects that the footprint isn’t calculated. But we need to turn every stone in order to mitigate climate change. The construction projects built in the public sector are the largest impact we will leave in this life.”



Photos: Zara Järvinen, Finn Church Aid and Matti Kuittinen

want to live in our homes for longer. Also, what’s good for the handicapped is also good for pregnant women and for small children.”

Tervakukka’s second floor was designed with an adaptable floor plan. “When the kids leave,” says Kuittinen, “you can move things around and have a home gym.”

Idealism?

Kuittinen is the first to recognize that the binding regulations we have on CO₂ apply to only 15 percent of the world’s carbon emissions. And he is quick to point out that the consequences are not evenly distributed.

“We expect the sea to rise one meter in equatorial regions, and average temperature to increase 4 to 6 degrees Celsius within this century. The developing world bears more than its fair burden. So southern Europe’s debt crisis is a small

issue compared to climate.”

Kuittinen’s message is that the more we mitigate climate change, the less we need to adapt, and the less we need to suffer. “Right now, we’re more focused on adapting.”

To carry forward his message, Kuittinen serves as a coordinator with the €CO₂ research consortium – 20 organizations in five countries with an agenda to build wood houses as carbon efficiently as possible. “We build houses, compare, give data to industry leaders, something for them to digest when tightening the regulations in the next stages. My challenge is to prove what I believe and then to explain it to decision makers.”

Kuittinen sees CO₂ as the great equalizer in the context of the construction industry. “There is the western context and the developing country context – and CO₂ will bring them together.” ■

Tervakukka

- 198 m², 6-room single family home
- Construction price: 434,800 EUR.
- Approximately 10,000 kg of wood and wood derivatives used in construction.
- Constructor: GreenBuild, a company dedicated in building wooden passive houses
- Wall insulation, which functions like a breathable sawdust, is cellulose made from recycled paper manufactured by Termex.
- Tervakukka is a Ensto Hybrid House with energy efficient and accurately adjusted electric heating, ventilation with heat recovery, as well as energy monitor Ensto eGuard, which measures the energy consumption - in real time. Energy efficiency is completed with Ensto eLED lighting and Ensto Chago Point for electric vehicle charging.
- Architectural design by Kombi Architects, Matti Kuittinen



Design's Difficult Question:
'WHY?'



Photo: Artek

How the international expansion of one of Finland's premier design companies hinges around one simple question.

There are overwhelmingly too many products in the world," says Artek's CEO Mirrku Kullberg. "We don't need any more."

More than 70 years after the company's founding by Alvar and Aino Aalto, Maire Gullichsen and Nils-Gustav Hahl, a large part of Artek's furniture and lighting products are still the enduring designs of Alvar Aalto.

Kullberg's challenge: to create broader concepts for Artek's collections and become an international sales company for Nordic design by expanding via new channels of distribution. Alvar Aalto left big shoes to fill, and Kullberg recognizes it can only be accomplished when new products answer the rather difficult question: "Why?"

'Newness is nothing...'

The "why?" Kullberg is concerned with is a product's *raison d'être*. She has been with Artek seven years now, and four years ago she set up the Artek Studio. Her brief to the designers: "Newness is nothing to us; the product must have something more behind it."

Historically, Alvar Aalto discovered his answer to "why?" in the context of his projects. "Aalto's basic design process was an architectural process," explains Kullberg. "He always designed products in parallel to the architectural projects. It was never a chair or table for its own sake, rather it was in relation to the bigger picture. It was very holistic."

Kullberg is a CEO with a background of turnarounds of small- and medium-sized companies in the fashion industry – and she embraces Aalto's philosophy of working. "We are following that same recipe. We don't think the product should exist without answering 'why?' Is this product relevant? Will it live to the next generation?"

Kullberg says forty percent of Artek's business is contract work – design jobs for private clients – which functions as "the leading part for the design process." From Artek's contract solutions, those which elegantly answer "why?" are chosen for the company's consumer catalog.

Case in Point: Libraries

One issue at the heart of the "why?" ques-

tion is that of public libraries. "With so much stuff digitized, why go to a library?" asks Kullberg. And she believes Artek has at least part of the answer.

"Libraries are sacred places in Nordic countries. They are a retreat. A book gives security. It's a tactile instrument that engages several senses. The architecture of a library also gives you confidence and security concerning the future. Books have weight. People will need to touch the book again in the future. I believe it's coming back."

And since beyond books, libraries are mostly filled with tables, chairs, and lighting, they are a natural venue to employ the strengths of Artek. "Chairs are important," says Kullberg. "In what position do you want to sit when you read? And what's proper lighting for a given space within the library?"

Artek furniture will be found at the Brooklyn Public Library. Architect Toshiko Mori has been working with Artek furniture for the library's Leon Levy Information Commons, a high-tech research center. "It's one interesting initiative," says Kullberg.

In Berlin, Artek is collaborating with the library and bookstore called "do you read me?"; a venue for lectures, exhibitions, and discussions, which serves as a testing ground for Artek products. "Chairs are not the main role," says Kullberg, "but they play a key role in getting people to stay. Do you read me? is much like what the original Artek shops were as conceived by Alvar Aalto."

Aalto's Legacy

Kullberg's task at Artek has been to revive the Aalto legacy. "Once the four differently talented people in the original company died, it became more of an institution. It had an amazing collection that didn't communicate with anybody anymore."

"Aalto had bridges to international designers, artists, businesspeople — an amazing cosmopolitan community. Those bridges disappeared with the owners.

"I believe that if a company has been around 75 years then there is a very good reason for it. You have to dig for the lost relevance. I am the bridge builder; I bridge the company to the next generation."



Design: Catalyzing Manufacturing

Alvar Aalto's way of working was marked by a keen understanding of the materials he used and close cooperation with carpenters.

For the manufacture of furniture, Artek has long held minority interest in a furniture factory. "We need to own production capabilities so that we can see and understand the production process," says Artek CEO Mirrku Kullberg. "Furniture manufacturing is old and stagnated, and so if we're not part of the development process, the capabilities will disappear and we'll be in a sunset business."

And so Artek looks to catalyze the manufacturing business, to challenge it and push it forward. "Design is not an enemy. It must be part of the manufacturing process," says Kullberg. "Design is a partner."

While Artek may own a furniture factory, it does not own a lighting factory. "For lighting companies we need partners," says Kullberg. "Engineers are involved immediately – different knowledge and competence is needed! For us it's learning by doing. For them it's an understanding of our perspectives."

Artek and Ensto are investigating together different possibilities for future cooperation in energy efficient lighting.

This Ensto-Artek project has so far thrived. "You can't have it all in one company," says Kullberg of technical knowledge. "Engineering is a dialogue with the designer that has to work."

In rebuilding those bridges, Kullberg has recruited architects like Shigeru Ban and Peter Zumthor. "They want to be part of this amazing company," she says. "And we want a connection to industry like UPM or Ensto. We find them interesting, because in highly-engineered production we can find a twist, we can find how to bring it to the consumer level or the contract interior business."

Kullberg does not hide her idealism, her belief that design can change the world. "We are not a super-rational company at all. We want burning ideas. We are on that path." ■

A Cathedral's Immaculate Roofline

Keeping a cathedral's roof ice-free

The weather at 60.1708° N, 24.9375° E is often described as “extreme,” even though Helsinki residents are used to it. Each year, the city enjoys 688 mm of precipitation and a full 137 days of measurable frost.

Just a few centimeters of snow add literally tons to the load a roof must carry. Ice dams can form when heat escapes a building and water re-freezes in guttering, resulting in moisture leaking back into a structure. Or worse: falling icicles. For the Helsinki Cathedral a clean roofline is of

almighty importance.

To ensure its roofline is ice free, the Helsinki Cathedral, symbol of Finland's capital and the most well known building in Finland, recently installed over 840 meters of Ensto OptiHeat cable on its roof and in its gutters are free of ice buildup year round.

Although the cathedral had undergone a complete restoration in 1996, which included a frost protection system, that system unfortunately failed to function properly. In 2012, the cathedral hired

Finnish contractor Ten-Watt to overhaul its rooftop.

“Our main reason for selecting Ensto's OptiHeat products was the ease of installation, which was critical concerning the special circumstances involved”, says Tero Aaltonen, CEO of Ten-Watt.

The special circumstances include the complexities of installation on such a large three-story structure, one beholden to rigorous requirements set by the National Heritage Board.

“In addition,” says Aaltonen, “Ensto

“To ensure its roofline is ice free, the Helsinki Cathedral recently installed over 840 meters of Ensto OptiHeat cable.”



Photo: Jori Gustafsson

Tero Aaltonen, Ten-Watt CEO, and Hannu Kukkonen, Ensto Area Sales Manager, discuss the project.

The Helsinki Cathedral

Designed by Carl Ludvig Engel and Ernst Lohrmann, was constructed over the 1830–1852 period as the center of Helsinki’s Senate Square. It is visited annually by approximately 500,000 people, including many tourists.

The Neoclassical stone church is the Finnish Evangelical Lutheran cathedral of the Diocese of Helsinki. The annual ecumenical opening and closing ceremonies of the Finnish Parliament are held here, as well as the Independence Day service.

The cathedral seats 1,300 and is one of the largest churches in Finland in regular use for services of worship and special events such as weddings. Also a popular concert venue, it is in use every day of the year.

was able to offer all the installation accessories needed, which made the process significantly easier.”

Self-regulating OptiHeat cables are installed overlapping and in contact with one another, their temperature kept constant by automatically regulated voltage according to the changes in the surrounding temperature. “This solution effectively eliminates the dangers of miscalculations in measuring the cables and voltages, and it minimizes the risk of unwanted power surges,” says Aaltonen.

“Absent or inadequate frost protection can cause severe damage to roof structures: roofing sheets may bend, rainwater pipes may crack open, and gutters may freeze and crack causing sizeable financial losses”, cautions Ensto Area Sales Manager Hannu Kukkonen.

Aaltonen agrees: “In listed buildings such as Helsinki Cathedral reliability is especially important, because water- and roof damage causes irreversible harm for a priceless building. Ensto’s high-quality solution was the only choice for us.” ■



Riddle Wrapped in a Mystery

Market intelligence in Russia: How Ensto uses customer service to both boost sales and gather market information.

A riddle wrapped in a mystery inside an enigma,” was Churchill’s famous outsider’s description of Russia. But even to insiders, what takes place in its business landscape isn’t always easy to understand.

The Riddle

“During the peak of financial crisis in 2009, the under-35kV distribution networks suffered a year of stagnation in investments, but this was followed by such heavy growth in 2010 that we worried we couldn’t meet market demand for Ensto

products,” says Ensto Russia’s Managing Director, Erkki Anttila.

In 2012, Anttila noticed that some users were using Chinese copies of the products of some of Ensto’s French competitors. Had customers turned to cheap knockoffs because Ensto quality had not been available to them a couple of years earlier? Or was the reason something else entirely?

A problem defined is a problem half solved, but in developing markets like Russia, market intelligence is not easy to get, even for someone like Anttila who has lived and worked in the market for almost 25 years.

The Mystery

What Anttila needed was to test theories and get an objective understanding of what was happening in the market.

Ensto’s database generated KPIs like delivery accuracy, but they had no way of objectively measuring whether enquiries – requests from distributors regarding availability and price – were being effectively converted to sales. So Anttila, together with Customer Service Manager Svetlana Maystrishena, decided to find out.

“The first step was that we started to systematically register requests of our



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Ensto in Russia. Meet key members of Ensto Russia's team. From left to right: Anastasiia Dolgoplova, CS Team Leader; Ekaterina Petrova, CS Senior Specialist; Svetlana Maystrishena, CS Manager; Ivanova Luybov, CS Specialist; Susol Polina, CS Specialist.

distributors in our ERP system,” says Maystrishena. “It was effectively a survey of what was happening in the market and accessible right away for us.” Customer service specialists began entering enquiries into the system so that this new data could be compared alongside actual sales data.

“It was new to input enquiry data into the ERP,” says Anttila, “and it’s probably not done in other markets. But for us it was a great way to gather business intelligence.” After entering data for November and December 2012, the team had data worth reviewing.

The Enigma

But the result was not at all what the team expected. “It turned out that we had an instant availability rate of 70 percent,” says Anttila. “In other words, the product was available. Delivery would have been the next day had the orders been placed, but somehow a significant amount of enquiries had not turned into orders.”

Although their minds may have been put at ease about their ability to

meet orders in a burgeoning marketplace, the analysis more illustrated the amount of information they still didn’t have. “Our conclusion,” says a core user of this information, Ensto Utility Networks Sales Director, Vitaly Golubtsov, “was that given Ensto’s huge size on the Russian market, we still needed better market information!”

Anttila, Maystrishena and Golubtsov had planted the seeds for a business intelligence unit of sorts. “We don’t look for answers immediately,” says Anttila, “but rather we look for the right questions.”

Anttila envisions a future where a small team – a business intelligence unit – inside Ensto actively and regularly gathers market information. “We need to have indices to see what’s happening in the market. For example, the amount of cables produced and sold in regions in the market per annum.” But where to get the information?

“There’s an association of cable producers, and you can buy information from them, or you can get it through a social network. The business is big, but the number of people in the business is

small. Everybody knows everyone. You give something, you get something. But this has to be organized. Today we have plenty of ‘quiet information’ in our own people – people know a lot, but since nobody’s systematically asking, information is not shared or analyzed. Data must be gathered, organized and connections must be drawn.”

The Certainty

Although the team’s main conclusion was that more information was needed, the simple act of gathering information was based on good trust, cooperation, and communication between sales and customer service.

“Given the peculiarities of the Russian market, Russian customer service is much closer to sales than in any other Ensto country,” says Svetlana Maystrishena. The peculiarities Maystrishena refers to is the fact that not all Russian clients have sophisticated cash management systems. There is also the strict practice in Russia, that a new order is not shipped if a past invoice is overdue. The result can be a client who is a victim of his own success – sales which have gotten a bit ahead of his cash management system.

So over recent years Ensto has structured its customer service department to help them out, making a phone call or sending an email to help clients plan their cash flow so delivery of orders is not disrupted. During this phone call, customer service also asks the client about any new requests. What products will be needed? Could Ensto fill that order? This information is then shared with sales.

Under this structure, customer service specialists, with their daily client contact, become great Ensto ambassadors and de facto sales personnel. “It truly drives sales,” says Vitaly Golubtsov.

More Questions

No one from Ensto’s team will yet claim they have all the answers. The fact is, however, that they’re getting closer to the right questions. And discovering the right questions has already delivered results for the business.

Russia may indeed be a riddle wrapped in a mystery inside an enigma. But the mere attempt to understand it certainly has its benefits. ■



'A bit of a Car Freak'

Electric vehicles and CEOs

"It's not your traditional auto for a CEO," Ensto's chief executive Timo Luukkainen admits, noting that at a recent gathering of Finnish CEOs he counted over ten Mercedes S-class and Audi A8 sedans in the parking lot. Luukkainen was the only one to arrive in an electric vehicle, the Opel Ampera that is his company car.

Luukkainen also admits he has a bit of a lead foot. "In good conscience I can accelerate as fast as I want from March through October," he says, naming the

months when he is able to power the car solely by solar panels and, not coincidentally, the times of the year when Finnish roads are ice free. "I can overtake, enjoy the feeling of acceleration without a heavy conscience. It does not add one gram to my carbon footprint."

Luukkainen typically charges his Ampera at Ensto's Porvoo office using a 20-square-meter solar panel. A full charge on a sunny day takes slightly over three hours, and so he is able to cover 10,000 of his yearly 18,000 kilometers of driving

using solar energy. He plans to better that ratio by installing a solar charging unit at his home.

"It's an ethical choice," he says, emphasizing that the choice has not forced him to sacrifice much, even given the obligations of running a modern company.

"I live 20 kilometers from the office, 60 kilometers from the airport, and 60 kilometers from southern Helsinki where many of my meetings take place." The Ampera's range is 90 kilometers in summer and a maximum of 50 kilometers in winter.



“I can overtake, enjoy the feeling of acceleration without a heavy conscience. It does not add one gram to my carbon footprint.”

Incenting Green Driving

Ensto’s Innovative Company Car Policy in Finland.

- Ensto’s auto policy offers incentive for employees to commute with the least carbon footprint.
- The lower emissions the less the employee must contribute to the cost of the company car. An electric vehicle means an employee pays 20% of the leasing price. The employee contributes 50% if emissions are under 110 g/km. Autos emitting over 150 g/km are strictly forbidden.
- A bit of context: In the UK, the average CO₂ emissions rating is 158 g/km, the lowest being 0 g/km and the highest 368 g/km – the Aston Martin DB9 V12 Volante Touchtronic.
- While this particular plan is custom-built for Finland, Ensto attempts to create similar policies in other markets which correspond to local legislation.



Forced to name compromises, he concedes “you have to drive a smaller car, unless you get the Fisker Karma, which does not fit into the company car policy!” The Ampera is a true four-seater, and the boot is not especially large.

Something else that takes getting used to is the silence. “The car is so quiet you have to be extra careful around pedestrians,” he says. The Ampera is equipped with an additional, pedestrian-friendly horn to warn of the car’s approach. But that is a minor drawback. The silence also means that the car’s Bose stereo system

(which comes standard) can be enjoyed to its fullest.

More advance planning is another compromise the car requires, since Finland’s electric vehicle charging possibilities are still rather limited – there is no charging station at Vantaa Airport, for example. Luukkainen gets around this by booking several meetings in a row so that he can charge the car at one of the city’s charging points.

But the Ampera will not die without charging – it simply isn’t as green as it would be otherwise. After 40 to 80

kilometers, the range extender kicks in to charge the battery, enabling over 600 kilometers without stopping.

“Accept that you must find a charging point, walk a bit further, and plug in the car for charging. A kilometer of extra walking is not a bad thing,” says Luukkainen. These minor inconveniences are offset by never having to visit a petrol station again, and, well, a hell of a lot of torque.

“The Ampera does zero to 100 in nine seconds,” Luukkainen smiles. “I admit I’m a bit of a car freak.”

Bruce Oreck, US Ambassador to Finland, has long been an advocate of LEDs.

More Light, More \$avings

LEDs and the US Embassy

When the US Embassy in Helsinki replaced its fluorescent kitchen lighting with twenty Ensto AVR320 LED luminaires, it not only saved significantly on its electric bill, but it created a brighter work space, as well. LED light is directional and the source is placed where it should be – on the surface.

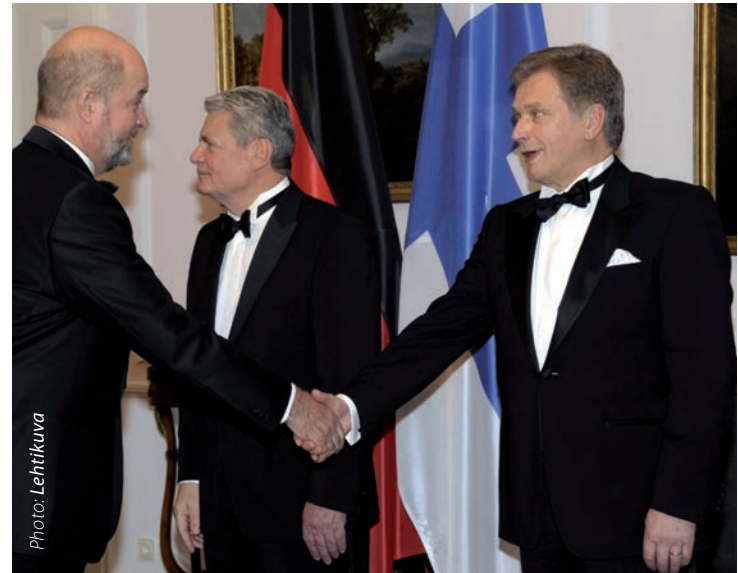
While a kitchen staff may be indifferent to the fact that LEDs consume 58 percent less power than fluorescents, they will surely take notice of the 33 percent more light they have to work by.

Beyond the savings, the annoying flicker is gone, and no longer will one trip in the dark after entering the kitchen faster than fluorescents can light it.

LEDs' light dispersion means superior light output, and thanks to a remarkably better color rendering index, there are no more yellow lighting situations where one must guess whether food is fresh – colors appear as they should!

The AVR320 LEDs save over 2,000 kWh annually, reducing the embassy's electric bill by 300 euros. And it's also worth noting that LEDs are maintenance free: fluorescent bulbs may be cheap, but calling in a technician with a ladder to replace them certainly is not. ■

Ensto CEO Timo Luukkainen, Joachim Gauck, the President of Germany and Finland's President Sauli Niinistö.



What the Germans Know

A Finnish delegation led by Finland's President Sauli Niinistö visited Germany to witness the critical importance of industrial manufacturing, concluding the service economy is not a silver bullet.

What's the secret of German success? Germany's economy thrives while the rest of Europe either wallows in recession or teeters on its precipice. Employment rate forecasts are higher than ever. Industrial manufacturing represents 26 percent of total production. The nation exports more than it imports.

"At some point it was thought that industrial production is old-fashioned," Finland's President Sauli Niinistö noted during his delegations visit to Germany in November 2012 "It is worth to back up from that idea and think about whether we can boost Finland's industrial production. Life seems to be such that people consume concrete things, so industrial production seems to directly correlate with the success of the overall economy."

During the last decade Germany has enacted major labor market policy reforms. It shortened the length of earnings-related unemployment benefits to one year. It raised the retirement age to 67. It maintained its tradition of apprenticeship training, one strongly connected to education and employment systems.

Ensto's CEO Timo Luukkainen praised the system to Finnish media, noting that "Germans understand better the importance of industrial manufacturing. The service industry can't fix Finland alone. They have invested in the manufacturing industry in Germany and kept the whole value chain domestic."

"Germany assured us that its [post-reform] labor market organization is still able to agree on all important things," added President Niinistö. ■

Finally, Plentiful EV Charging Points?



Photo: Dreamstime

Thanks to the EU's quest to tackle social challenges like climate change, energy and resource scarcity, the electric vehicle charging business may find wind under its wings.

The long-awaited EU draft directive for clean transport infrastructure was released in January 2013. It proposes the construction of more than eight million electric vehicle (EV) charging points, including 800,000 public charging points.

For large markets like Germany, the directive would mean over 1.5 million charging points constructed, 150,000 of them public. Estonia, with its relatively small population, would boast 12,000 charging

points, 1,000 of those public. Finland is slated to get 71,000 points, 7,000 of them public.

Should the directive come to fruition, not only would there finally be a choice of places to charge your EV, but it could potentially translate to significant economic benefit for both Ensto, as well as other Finnish companies which manufacture EV-related products.

"As much as an optimist as I am, I must

admit that not all of those eight million charging points will be manufactured by Ensto," says Ensto CEO Timo Luukkainen. "But in situations where quality and design matter, Ensto has proven its EV charging products offer a clear advantage."

The directive's eight million charging points are part of an effort to break the oil dependence of transport and reach the target of a 60 percent reduction greenhouse gas emissions from transport by 2050. ■

One Thousand Trips More

(with the same amount of energy)

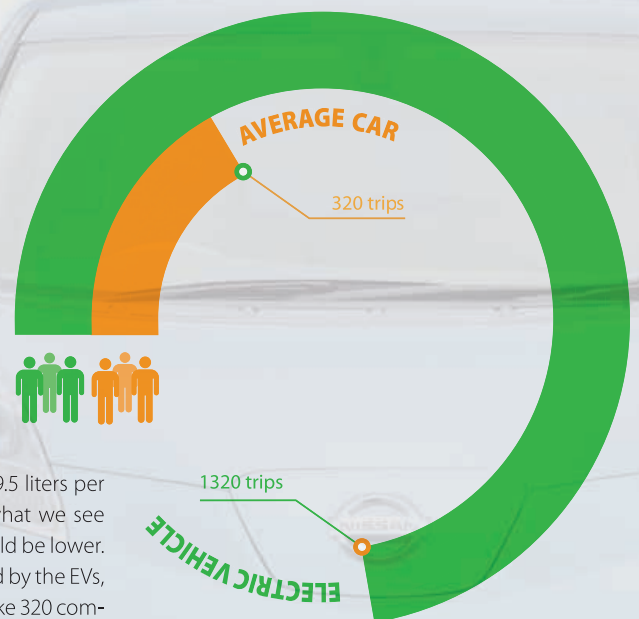
In the Greater Helsinki area, electric vehicles are estimated* to have consumed some 10.6MWh of charged electric energy during the last 14 months. This equates roughly to 52,000 kilometers of driving, or approximately 1,320 commutes of a 40-kilometer round trip distance.

However, data from Finland's VTT Technical Research Centre's annual LIPASTO survey makes things far more interesting.

VTT's system for calculating traffic exhaust emissions and energy consumption in Finland shows that average fuel

consumption in urban traffic is 9.5 liters per 100 kilometers. This supports what we see and smell in cities: emissions could be lower. With the same energy consumed by the EVs, average petrol cars may only make 320 commutes.

Replace an average car with an EV, and the same number of people are moved an extra 1,000 trips over the same distance. What's more, crude oil dependency is reduced by 1.8 liters for every charged kWh, letting us all breathe easier. ■



* Estimate based on Helsinki Energy's statistics on six publicly accessible charging stations and extrapolated to include home charging and other public charging points during that period.

Revenge of the **Electric Vehicle**

The EV is no longer the ugly stepchild of automobiles powered by internal combustion engines. Fisker Karma proves an EV can indeed be sexy.





“I’m not saving the world, but I’m making an effort.”

AARNO TÖRMÄLÄ, CEO, HUB Logistics

Starting from the cars themselves, they cannot be ugly, little, and gray,” Michael Speh, Infiniti Europe’s Regional Director for Central Europe, told *Ensto Today* in March 2011. “Electric vehicles in the future must somehow be sexy.”

The future has arrived. And the Fisker Karma extended range electric vehicle may indeed be the answer to the problem posed by Speh.

The Karma is an EV sportscar designed by Denmark’s Henrik Fisker – previous credits: the BMW Z8 and Aston Martin DB9 – and it has what *Car and Driver* called “an interior trim that bows to Mother Nature.” In a word: sexy.

It’s driven by a pair of 120 kW (161 hp) electric motors that take power from a 20 kWh lithium ion battery. Karma’s torque enables it to hit a limited top speed of 200 kilometers per hour virtually effortlessly and silently, with a special noise rerouting system mounted on each corner of the car.

Add a front-mounted 260 horsepower, 2.0-liter Ecotec four-cylinder direct-injected and turbocharged gasoline engine which powers a generator to recharge a low battery, and what you get is a major cure for range anxiety – 480 kilometers. The total package delivers a total of 403 horsepower, the car powered solely by electricity before switching to gasoline after 80 kilometers.

It’s a package that is turning the heads of car enthusiasts like Aarno Törmälä. He’s a car guy who is also into sustainability. While on weekends he may race a Porsche 944 in six-hour endurance races, for his everyday life he prefers green: “I drove a Lexus hybrid the last three years, but I was looking for an EV with larger range that encompassed real function as well as sustainability.”

Törmälä also found the car offered advantages for his business. He is the owner of HUB Logistics, an international

service provider which offers customized logistics and warehousing solutions to Finland’s top companies.

“The vision in my company is one of eco-friendliness, environmental efficiency, and innovation,” says Törmälä. “HUB reduces its electricity consumption by five percent each year, among other sustainable initiatives. The car promotes that ethos to people who don’t know us. That’s why you see the logo and HUB license plate.”

Törmälä is used to getting a thumbs-up from people he doesn’t know when he drives the Karma. This is no small thing in Finland, a nation so egalitarian that a schoolchild would be embarrassed if his wealthy father dropped him off at school in a Ferrari. But the Karma gets a positive reaction.

But do people know it’s an EV? Or are they just reacting to the fact that it’s cool. “Both,” says Törmälä. “People are positively curious. One elderly lady stopped me at the supermarket and told me, ‘I don’t like cars at all, but this is the most beautiful one I’ve ever seen.’”

Finns may also be reacting positively because the car is unique. Despite the fact that the Fisker Karma factory is 200 kilometers from Helsinki in Uusikaupunki, there are only two of the cars on the road in Finland.

Törmälä knows the other Karma owner, though their meeting was pure coincidence. “We drove past each other in the vacation town of Hanko, one hundred kilometers southwest of Helsinki. We pulled over on the side of the road, introduced ourselves, and talked about cars.”

In the past, car enthusiasts have not made ideal poster children for sustainable lifestyles. But Aarno Törmälä, HUB Logistics, and Fisker Karma may have taken a positive step toward that direction. “I’m not saving the world,” says Törmälä, “but I’m making an effort.” ■

16...1600 Amperes

- Front operated safety switches
- DC and EMC safety switches
- Enclosed switch-disconnectors
- Enclosed change-over switches
- Enclosed switch fuses

Typically used with electrical motors or other loads in industrial, commercial and residential applications. Safety switches provide safe maintenance conditions when padlocked in the OFF position.



Anatomy of a Partnership

*For ABB and Ensto, a metal box is far more than just a metal box.
There's a partnership inside it.*



“Expert partners like Ensto are essential to remaining competitive.”

REIJO MYLLYMÄKI, ABB

There are three things important to become a supplier to ABB Oy Breakers and Switches,” says ABB’s Reijo Myllymäki. “First, potential suppliers must understand that cost is critical. Second, they must be able to fill orders that vary from a few pieces to a few thousand pieces. Third, they must have technical knowledge about what’s behind the product.”

That’s what it takes to be a supplier. It takes even more to be considered a partner.

Each year, ABB’s final assembly and testing plant in Vaasa, some 400 kilometers north of Helsinki on Finland’s western border, generates 100 million euros in turnover assembling switches for panel manufacturers and enclosed switches for building and process industry contractors and end users all over the world.

The Vaasa plant is part of the Switzerland-headquartered multinational ABB Group, whose operations in robotics and power and automation technologies produce annual turnovers exceeding 40 billion US dollars.

Though ABB sells boxes with switches inside, “We’re really selling safety,” says Myllymäki, Product Manager for enclosed

switches.

Myllymäki’s enclosed switches ensure the safety of service workers all over the world. In countries where safety is a priority, almost anywhere you find a rotating machine that might do a human harm, nearby is a safety switch, one possibly manufactured by ABB.

Myllymäki, an electrical engineer, has been with ABB for 35 years, serving in various capacities, including stints in the UK and South America.

For the past seven years, Ensto has supplied the ABB Vaasa plant with enclosing solutions, mainly customized metal boxes (painted steel, stainless and acid-resistant).

In that period of time, Ensto has become a true partner. When does a supplier become a partner? “When we do something new together,” says Myllymäki. “A partner understands our requirements, but they also create something suitable for their manufacturing processes, which allows us both to be competitive.”

Myllymäki says Ensto understands the nature of a good partnership. “When ABB is competing for a big contract, Ensto adapts to the circumstances and helps us be competitive. Ensto makes sure its products are available and delivers on the date they promise.”

“Ensto knows what we’re looking for,” he says. “It understands ‘protection class,’ and it understands the technical requirements behind the product well enough that they are very often telling us how to do it. Ensto is in the business.”

The final, and often critical test of a partner, is speed in tackling problems. Complaints must be handled quickly. “The Ensto representative in Vaasa can be in our factory in ten minutes,” says Myllymäki. “If needed, an engineer will come from their Mikkeli plant.”

Myllymäki says the situation no manufacturer likes is an angry customer combined with a long supply chain, which makes it extremely difficult to determine who’s responsible. In those situations, true partners work together to resolve the problem as soon as possible.

In the modern manufacturing environment, as inventories shrink and lean practices are adopted, relationships between those in the supply chain become ever more important.

“We have an efficient and slim organization here,” says Myllymäki of his ABB plant. “Expert partners like Ensto are essential to remaining competitive.” ■

“*Ship owners need to save more and more energy on lighting, and we solve this problem.*”

GUGLIELMO RUTIGLIANO



All Aboard Ensto

Ensto LEDs light the world's cruise ships



Photo: Carnival Cruise Lines

“Since the 1990s, Ensto has provided lights for cabins, corridors and public areas, but now we offer a full line of technical luminaires for marine lighting,” says Guglielmo Rutigliano, Sales Director of Ensto Italia. “Ship owners need to save more and more energy on lighting, and we solve this problem.”

Twenty-thousand Ensto luminaires may be found aboard the *Costa neoRomantica*,

known for her public rooms decorated with rare woods, Carrara marble, and millions of euros of original art.

Carnival Cruise Lines is another of Ensto’s marine customers. Carnival installed 6,000 Ensto LED luminaires on their newest luxury liner, the *Carnival Breeze*.

Most recently, Fincantieri, the largest shipbuilder in the Mediterranean, signed Ensto to provide public area house lighting for all its new vessels through 2016. Each

new vessel will be complete with 19,000 Ensto luminaires and over 20 kilometers of strip LED lighting.

“Quality was the main reason for the Ensto partnership,” says Fincantieri. “We wanted to add direct control to the supply of the luminaires to ensure we only use high quality products in our ships, so we made the selection ourselves, not through our partners like in the past.”



*“ We truly want to save energy -
and the time and money of the customer”*

MARIA VICKHOLM

Maria Vickholm pictured with Harri Otila, Ensto Utility Networks Regional Sales Director, who is involved in coordinating Ensto Pro trainings for project customers.



Working toward **'WOW'**



How Ensto Pro brings Ensto closer to its customers

We want to spread the word of wow," says Maria Vickholm, Ensto Pro Specialist. "We want each training session to be unique for our customers."

Ensto's tool for spreading the word of wow is Ensto Pro, a training academy with a mission to ensure two-way communication between Ensto and its customers. Conducted in over a dozen languages, Ensto Pro is a local, customized training effort to get to know the customer and ensure products are installed in the right way.

"Each manufacturer's products are installed differently," says Vickholm, "We want to train our customers to minimize or erase human mistakes and at the same time, we want to get real-time feedback."

Training is not something new for Ensto, of course. "We've trained for decades," says Vickholm. "However, our trainings have been gradually systemized to ensure quality and a uniform approach in all markets for all our clients."

Ensto Pro Training Academy contains training sessions from practical installations to lectures on line design and standard requirements. "We see to it that our own people are professionals in their area. Still, in order to serve our clients properly, we need to listen to them – to hear what they need, what challenges they face, and what comments they have for us. This way we both learn."

Case Study: Poland

A program for network designers done in February 2013, in Baranowo, Poland, is an example of how Ensto reaches out to get to know its customer.

Energobud's Paweł Linkowski, Product Manager responsible for connecting new facilities to low-voltage lines, was one participant. His employer, Energobud, is wholly owned by ENEA, a leading energy supplier in Poland. Linkowski says Energobud delivers a variety of services to ENEA: "If something's broken, they call us. If they need something built or designed, they call us. We operate their systems."

What Linkowski most valued in the Ensto Pro training was Ensto Designer Suite software, a product he uses to create specifications for overhead lines. "We use mainly overhead lines in Poland, the PAS, EXCEL, and AXCES systems. Ensto updated and improved the program last year. Now slack calculations are much easier, and we can represent it in graphic form."

Customer Ideas

But in addition to the technical exchange, Linkowski says of equal value was the opportunity to talk with other designers, as well as suggest product impro-

vements to Ensto. "In Poland right now it's popular to install multiple lines. If Ensto would develop a program for this it would be nice."

Ensto's Maria Vickholm says all product suggestions are taken seriously. "We get lots of ideas for product development. A recent example is a client and product manager discussing rural area distribution cabinet and how it should be done. It took a month and we had a new prototype for them. And then at the International Exhibition of Electricity, Telecommunications, Light and Audio Visual in Jyväskylä, Finland, we had a client order 200 of them. The idea was a customer idea!"

Saving Your Energy

In Ensto Pro trainings, common aims are shared and challenges solved through open discussion and cooperation. This results in mutual success and is the basis of a true partnership. "We truly want to save energy - and the time and money of the customer," says Vickholm. "No double work, no double time." ■

TEGEVUS

VASTUTAJ

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KAO PÕHJUS

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In the WAR ROOM

Soldiers in the war against losses

Some say it all started with Winston Churchill, in whose war rooms beneath Whitehall the routes of British convoys were plotted and monitored to keep supply lines open with America and Russia. During the war, the rooms were used 24 hours a day, and lights in the Map Room burned for six years straight.

Although the safety of the free world no longer hangs in the balance, the use of war rooms continues today in industry's war against losses. You'll find them at every Ensto plant throughout the world.

In Keila, Estonia, Ensto assembles products including utility network accessories, terminals, switches, light fittings, and heating cables. And in the middle of the factory floor is the war room, where Ensto's front line officers meet to wage the

war on losses, a war that intensifies as Lean practices – creating value by eliminating waste – are implemented.

“As Ensto works to reduce inventory to release capital from stocks, this forces close cooperation with suppliers,” explains Sami Soiramo, Keila Plant Manager. If you shrink inventory, then there is less tolerance for defects in the inventory you have.

“An assembly plant is dependent on availability and quality of components. A majority of cases are related to one or both of those,” says Keila quality engineer Hardi Rajur. “We used to send defective parts back, but now we work together with the supplier to see that it doesn't happen again.”

And the war room is the key tool to help in identifying problem areas.

One case in point is a troublesome

aluminum lug, produced by one of Ensto's suppliers in southern Europe. The lug is a core product which is placed on the end of underground cables.

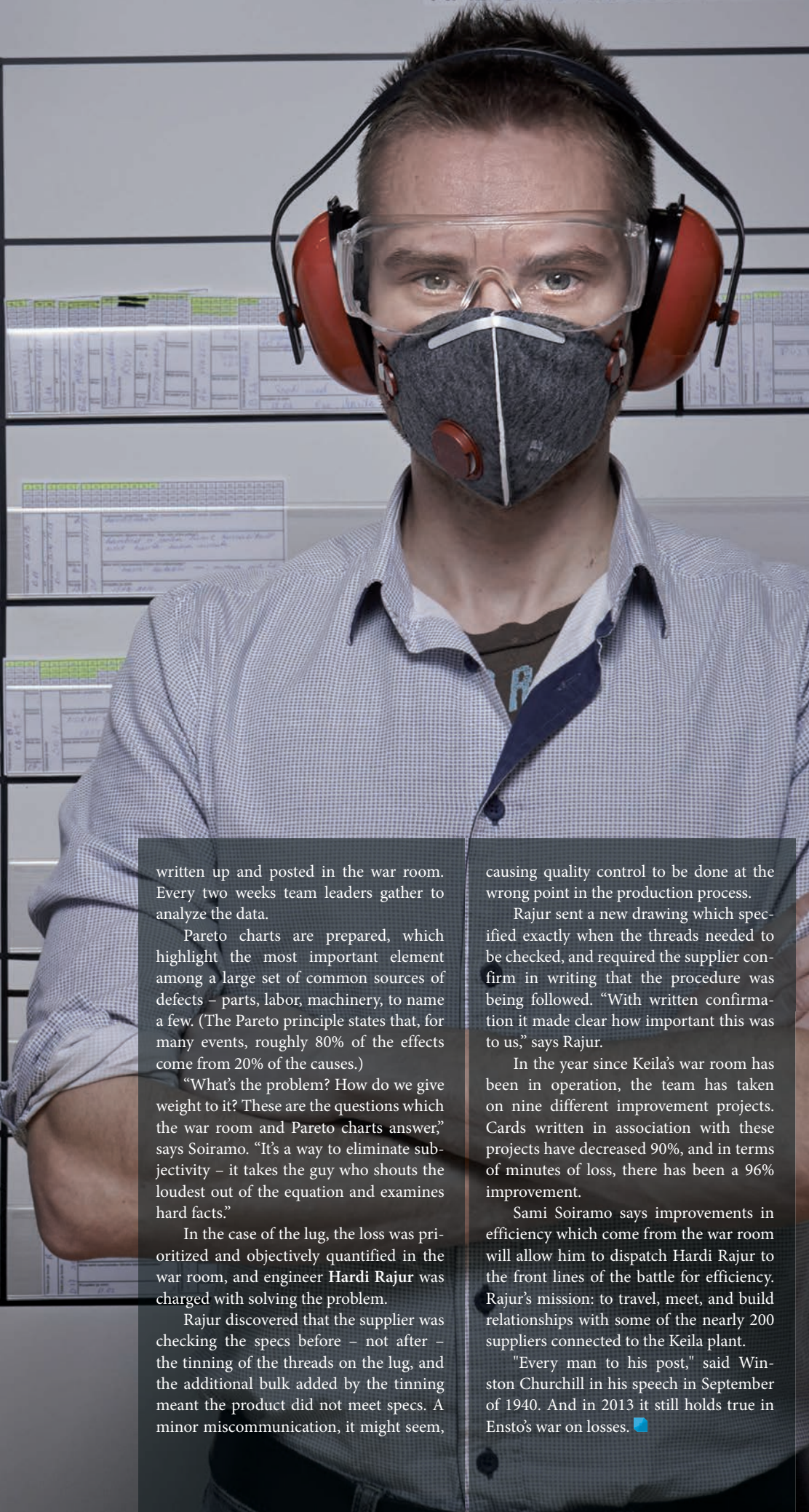
The lugs are shipped to Keila where they meet shear-head screws arriving from Finland's Porvoo factory. The lug plus two screws are assembled in Keila and shipped on to the end user as finished product.

The lug had caused trouble for the Keila plant, as too often workers discovered that the screws didn't properly fit the lugs. Workers were then required to expend additional time to manually widen the gap between the threads. Thanks to Keila's war room, that waste was able to be quantified: 2,760 minutes – or 47 hours – in one single month.

Under the war room system, any loss of greater than five minutes is “carded,” or

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KADUDE KOONDTABEL



written up and posted in the war room. Every two weeks team leaders gather to analyze the data.

Pareto charts are prepared, which highlight the most important element among a large set of common sources of defects – parts, labor, machinery, to name a few. (The Pareto principle states that, for many events, roughly 80% of the effects come from 20% of the causes.)

“What’s the problem? How do we give weight to it? These are the questions which the war room and Pareto charts answer,” says Soiramo. “It’s a way to eliminate subjectivity – it takes the guy who shouts the loudest out of the equation and examines hard facts.”

In the case of the lug, the loss was prioritized and objectively quantified in the war room, and engineer **Hardi Rajur** was charged with solving the problem.

Rajur discovered that the supplier was checking the specs before – not after – the tinning of the threads on the lug, and the additional bulk added by the tinning meant the product did not meet specs. A minor miscommunication, it might seem,

causing quality control to be done at the wrong point in the production process.

Rajur sent a new drawing which specified exactly when the threads needed to be checked, and required the supplier confirm in writing that the procedure was being followed. “With written confirmation it made clear how important this was to us,” says Rajur.

In the year since Keila’s war room has been in operation, the team has taken on nine different improvement projects. Cards written in association with these projects have decreased 90%, and in terms of minutes of loss, there has been a 96% improvement.

Sami Soiramo says improvements in efficiency which come from the war room will allow him to dispatch **Hardi Rajur** to the front lines of the battle for efficiency. Rajur’s mission: to travel, meet, and build relationships with some of the nearly 200 suppliers connected to the Keila plant.

“Every man to his post,” said Winston Churchill in his speech in September of 1940. And in 2013 it still holds true in Ensto’s war on losses. ■

Lean Lingo

How to talk quality

Lean is a philosophy for manufacturing derived largely from the Toyota Production System whose goal is creation of “value” – defined anything a customer is willing to pay for – through the elimination of waste.

While often attributed to W. Edwards Deming’s pioneering work and expressed through the three Japanese types of waste (Mura, Muda, Muri - unevenness, non-value-adding work, and overburden), champions of Lean often go even further back in history to reference Ben Franklin, who was fond of saying that avoiding unnecessary costs could be more profitable than increasing sales. “Save and have,” said Franklin.

For Ensto, Lean is the first phase of its EOX program, Ensto Operational Excellence. Lean means the implementation of practices such as 5S (all things in their proper place), SMED (making setup operations as efficient as a Formula 1 pit stop), 8D (root cause analysis and elimination of defects), ASSY (reorganization of assembly cells), and War Room (a factory floor process to track and follow up on deviations, the “war against losses”).



Hardi Rajur and Sami Soiramo.

Brian Tracy is an internationally renowned speaker and consultant in the field of human potential. He addressed attendees at Ensto's Sales Championships on February 14 in Finland. Tracy spoke about techniques to improve both sales and productivity. Excerpts from his talk are on these pages.

Unlocking
**Human
Potential**

“Do the thing you fear until the fear goes away.”

“‘Overprepared.’ The word does not exist. It is not in the dictionary and not in the mind of the professional.”

“Social networking is social notworking. If you want to build relationships, phone someone and go see them.”

“Everyone in the top 20% started in the bottom 80%. You simply decide to be in the top 20%. Then the only question is how.”

“Thoughts are things. Change your thinking. Change your life.”

“When confronted with the choice of earning a lot or earning a little, I recommend you choose a lot. The time is going to pass anyway.”

“Success is on the far side of failure.”

“Each ‘no’ means you’re one step closer to a ‘yes.’”

“Don’t check email first thing in the morning. If you start with productive work, you’ll be more productive all day long.”

“If you want to achieve something you’ve never achieved before, you must do something you’ve never done before.”

“Ensto products are free. They pay for themselves. We just take a deposit up front.”

“For 6,000 years, since ancient Sumeria, customers have only bought one thing: improvement.”

“Trust is the lubricant of business.”

Brian Tracy’s tie clip, with the acronym YCDBSOYA.

(This is Ensto CEO Timo Luukkainen’s gift to the sales force, and it stands for “You Can’t Do Business Sitting On Your Ass.”)



Ensio Miettinen *and* **TRUST**

The Ensio Miettinen memorial seminar, held last August at the Porvoo Art Factory, was a gathering of friends and business partners of Ensto's late founder to discuss the meaning of trust, a value highly esteemed by Ensio. Distinguished speakers included noted politicians, professors, and a philosopher.



Timo Miettinen, Chairman of the Board of Directors of Ensto opening the seminar.

Trust: the Ultimate Capital

*On the occasion of the Enso Miettinen Memorial Seminar, **Timo Miettinen, Chairman of the Board of Directors of Ensto**, reflected on the nature of the modern organizations and their relationship with human beings.*

Shareholder value vs. stakeholder value

"It is dangerous to emphasize shareholder value alone. It is challenging for an entrepreneur and employer if the employees, and especially the management, are interested solely in issues related to money."

On the dangers of public companies

"In family companies, it is more rare for the management to be paid exorbitant fees that could be seen as unjust by society. Indeed, that has been more of a problem lately in state-owned companies or public enterprises. On the other hand, if profits are made, it is just to reward the personnel, especially those responsible for the good result."

Corporate acquisitions and trust

"These days, corporate acquisitions are truly an occult science with their many and various clauses. This has resulted in consultants receiving fancy compensation, while the buyer and seller can still end up suffering. Money goes up in smoke, and the focus of the company's management is shifted to completely inappropriate areas for a long time. In these cases, the meaning of trust seems to have crumbled away: there isn't any. We try to fix things by filling the void with a complicated set of articles and clauses."

The European Union

"In my opinion, the European Union can be seen as an enormous enterprise that has drifted into great trust-related crisis. The basic problem in this enterprise is the differing sets of values, and the lack of trust between the North and the South. Transfer of money and collateral from the North to the South does not provide any help now. They are mere pick-me-up drinks the next morning. We would need to build a European society of trust, which, given the current composition of the European Union, is next to impossible."



Kaj Bärlund, Mikaela Nylander and Klaus Hellberg, Finnish politicians.



Päivi Lipponen (MP) with Ensto's friend and business partner Risto Forssell.



Timo Miettinen and Marjo Miettinen, CEO of EM Group and Ensto Board member, greeting NCC's Vesa Peltola.



Risto Harisalo, Professor of Public Administration, Tampere University



Ensto's close friend Paavo Lipponen, former Prime Minister of Finland



Jyri Häkämies, CEO, Confederation of Finnish Industries



Klaus Hellberg, Markku Välimäki and Risto Anttonen, Porvoo influencers.



Esa Saarinen, Professor of Philosophy, Aalto University

“What I can do is give you the basic principles of looking at the world!”

TOSHIO YAMAGISHI

In Others We Trust

Photos: Jori Gustafsson

Professor Toshio Yamagishi's work demonstrates that those who have a strong tendency to trust others are not gullible or naïve – they are more sensitive to information that reveals the trustworthiness of others.

Professor of Social Psychology in the Brain Science Institute at Tamagawa University, Japan, Toshio Yamagishi is a specialist in trust as a form of social intelligence. He spoke to *Ensto Today* about trust in society and in corporate environments.

You've very carefully defined what general trust is not. Trust does not equal an assurance of safety. Trust does not mean gullibility or assurance. So what might be the best way to characterize "trust"?

By that I mean trust in other people in general, without much information about a particular person. The difference between trust and distrust is in the default assumption about human beings. Generally distrustful people assume that people are bad in a sense until it's proven that a person is nice. Trustful people start with the assumption that people are generally nice but look for signs of untrustworthiness. You assume others are trustworthy unless you get information otherwise.

So more successful people are those who extend the benefit of the doubt? Can something be said about the general level of people willing to extend the benefit of doubt in the world? Or is it cultural specific?

The general trust in China, ranked by an answer to one question is extremely high, right next to Sweden. But Chinese trust is at the bottom according to another question. If you ask the Chinese do you trust others in general, they say yes. But if you ask Chinese if you trust the person you meet for the first time, they say no. It's a collectivist culture; they deal with an exclusive

set of people, meaning people they know. It's important to establish strong relations because you distrust others.

You point out in your book that lack of trust means enormous social waste, and you have a great example: "Inefficiency is forced upon government by countless rules and regulations." It's a lack of trust. Perhaps I've been unfair to government all these years?

It's kind of a Catch 22; in Japan we say chicken and egg, which comes first? Another way of describing that kind of situation is equilibrium in game theory. Once you reach that stage, there is no way to get out. If you change your behavior you lose unless your partner also changes strategy at the same time. With people and government, government can give freedom to its employees which might improve efficiency, but there is always someone who cheats, and the media finds out, then there will be strong criticism asking "Why didn't you control?" For bureaucrats it's best to enforce rules so that they have an excuse when something goes wrong.

Do we see it in corporate world? Shareholders strangling management with rules?

Some major corporations become bureaucratized and lose their efficiency. Leadership is very important in those situations. The leader is to provide a guarantee, protection for employees who take initiative. Sometimes people need to go beyond the rules to create efficiency or do something really important. Sometimes you need to take a risk. If you lose, if that means the end, then you cannot take a risk. Strong leadership, protecting risk taking, provides the basis for general trust.

Japan is the least risk-taking society according to one survey, and the reason is that Japan – this is my take – there is too much risk in Japan. It's counterintuitive, right? It's a safe society with permanent employment, but that increases the risk. Permanent employment means once you get fired that's the end. There is no second chance. Every major company maintains a permanent employment system. Once you are out, you cannot come back. The best strategy is to avoid risk.

Will this change?

Shifting from one equilibrium to another is difficult. Change occurs very slowly when it reaches a point where many other people are changing. When it reaches a critical mass it will change. It's approa-

ching that. Many understand it must change, but they believe that others don't believe it.

But those outside of Japan virtually worship the systems and efficiencies that Japan has created in manufacturing. Aren't the Japanese the world leaders in this?

There are always two sides to things. Japan's employment system and quality control comes from an environment where people care about reputation within their own group. They understand that their behavior is always being watched informally. They need to fit in, to be accepted by group members. That is the mentality: you need to fit in so you won't get expelled.

So how can one be innovative in a collectivist society?

Japan up to a certain point has been successful by reducing transaction costs within organizations. Many of techniques to improve transaction costs have been introduced, like the rotating system of jobs within an organization. Competition is group-based or section-based. If you invent something, you don't get a huge benefit. But individuals get respect by being praised by people around them. It gives them strong motivation to cooperate and work hard. Collectivists endeavor to improve efficiency like quality control, but that system is not as efficient as before. Basically the opportunity cost is getting more important. Most Japanese institutions and companies adopted the so-called Japanese management system that reduced opportunity costs for employees. Once you are out of the system there aren't too many opportunities. Employees knew they had to stay. And a seniority-based promotion system makes you hostage.

If you could have full power to change things in Japan, what would you do?

This is a tough question. The system and mentality have to change simultaneously. If the system remains, the mentality assumes the presence of the system and people do not change. If people's mentality stays it's hard to change system. As president or prime minister I might be able to change the system, but I could not change people's mentality immediately. There must be a time lag between system and mentality. If you give me ten years, freeing me of any criticism, then I might succeed.

So can we as individuals within society learn to trust? Or is the change more generational and beyond our individual control?

The question is very critical in Japan. My generation has invested in developing relation-specific knowledge – you know how the relationships are within your own company. It improves efficiencies of organizations. But because people spend so much energy and time to develop these skills they have not invested enough in the development of universal skills and knowledge. They are stuck. My generation, baby boomers, cannot change. They cannot speak English as it was not important for them. All of a sudden internationalization of the global economy forces them to speak English, but they cannot. It's a skill. You need to invest years. General trust is a skill like that. The shift will come between generations.

And in the corporate environment? Is change also so slow?

Some corporate leaders are trying now. Rakuten, a Japanese based retail website, wants to expand beyond national boundaries. The leader, Hiroshi Mikitani, decided the language of his company would be English. People cannot choose Japanese. That kind of strong leadership can make a difference.

Mandating English sounds rather draconian?

If his company succeeds it is an incentive for other leaders to adapt a similar strategy. But many others don't believe in the approach. It's too much for them.

When you speak in these non-academic settings you must often be asked for practical advice by businessmen about how to implement the ideas you discuss. What do you usually tell them?

My answer is I'm the wrong person to ask. I'm basically a scholar. It's up to you. What I can do is give you the basic principles of looking at the world! ■

For more information, Ensto Today recommends Professor Yamagishi's book, Trust: The Evolutionary Game of Mind and Society. Springer press, 2011.

Ensto in Poland: Happy 20th!

Happy birthday to Ensto in Poland, formed as Ensto Pol Sp. z o.o. in 1993!

For 20 years now the company has strived to be Poland's leader in the development, manufacturing and marketing of electrical systems and solutions for power distribution as well as electrical applications.

Headquartered in Straszyn, near Gdansk, Ensto also has two technical offices in Łódź and Kraków, plus a network of technical sales representatives throughout the country.

Ensto's growth in Poland has been recognized by winning several Gazelles,

Poland's prize for the fastest-growing small and medium-sized enterprises. Ensto has also won four Forbes Diamond awards (in a row!) beginning in 2009 – the Diamond is recognition for companies which have increased their value and retained high revenues throughout a prior three-year period. The company is also proud of having been certified ISO 9001 in 2008.

"We'd like to take this opportunity to thank all our customers and business partners for their trust and cooperation," says Jacek Wagner, the CEO for Ensto in Poland. "We also look forward to the next 20 years of fruitful cooperation." ■



SLO Names Ensto 'BlueWay Supplier 2012'

SLO Oy, Finland's leading wholesaler of electrical, telecom and automation products, named Ensto its "BlueWay Supplier 2012" for Ensto's victory in SLO's Energy Saving Week competition in June.

SLO is part of the international, Paris-based Sonepar Group, whose BlueWay program and Energy Saving Week promote sustainable development. BlueWay is a mark of energy efficiency.

"Ensto was the best at rising to our challenge," said Sami Kokkomäki, SLO's product marketing manager. Kokkomäki praised Ensto's themed approach to the competition built around its AVR320 LED lighting, ideal to replace old luminaires during renovation of large apartment complexes.

Ensto is SLO's seventh largest BlueWay supplier ranked by product sales. ■



This year, Ensto and its 420 employees in Estonia celebrate 20 years in the market.

Ensto began in 1993 with a sales office in Estonia's capital of Tallinn, and the first factory was opened in 1993 in Keila for product surface finishing.

In 2004, a new factory was opened to assemble electrical products, and in 2006 metal enclosure production was added. In 2010, Ensto greatly expanded capacity in Tallinn, doubling the company's production volume of thermoplastic enclosures.

All said and done, Ensto's factories in Estonia make approximately 6,000 different Ensto products. That's a lot of flexibility, though perhaps not surprising for a 20-year-old! Happy birthday, Ensto Estonia. ■

GENERIC SUPERHEROES SAVE LIVES. ENSTOMAN SAVES YOUR ENERGY.

ENSTOMAN



FACES

ENERGY IGNORANCE

TODAY'S EXCITING ADVENTURE:

THE SMART GRID IS COMING SOON AND WILL HELP US UNDERSTAND THE ECONOMIC IMPLICATIONS OF OUR ENERGY DECISIONS. BUT UNTIL IT ARRIVES ENSTOMAN IS HERE TO ASSIST.

06:25



Power showers may feel good, but did you know they consume loads of energy?



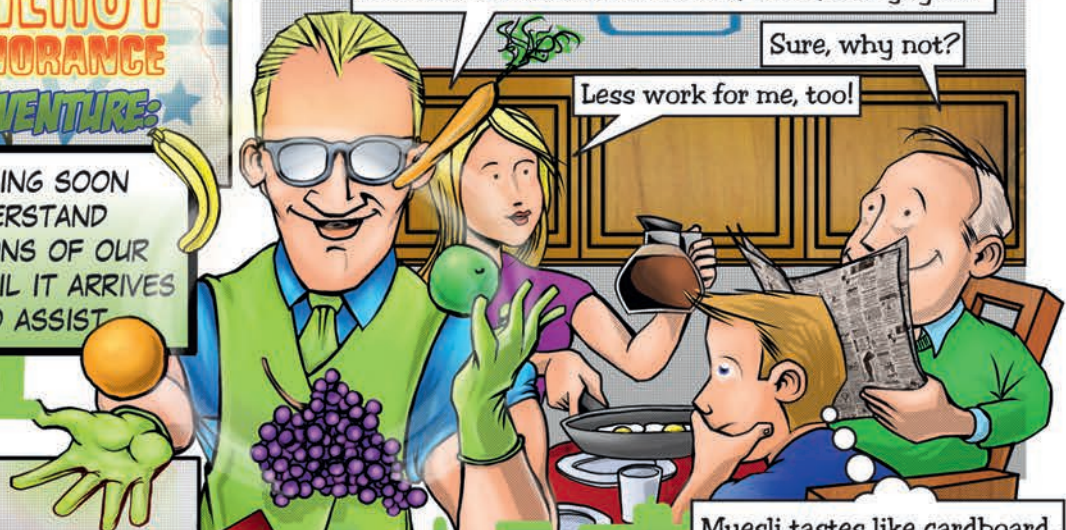
Get out of my shower, EnstoMan! It's my choice and I'm making it.

A FAMILY OF FOUR USING A WATER-EFFICIENT SHOWERHEAD CAN SAVE AROUND 85€ OFF THEIR GAS BILL AND 85€ OFF THEIR WATER BILL EACH YEAR. SHOWER AT NIGHT AND SAVE EVEN MORE.

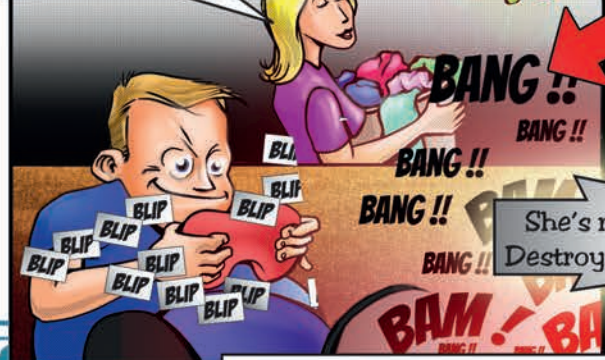
Instead of frying, boiling, and baking, why not an alternative breakfast of muesli, fruits, and yogurt?

Sure, why not?

Less work for me, too!



Hey, Destroyer300, why don't you turn off your video game and go play outside?

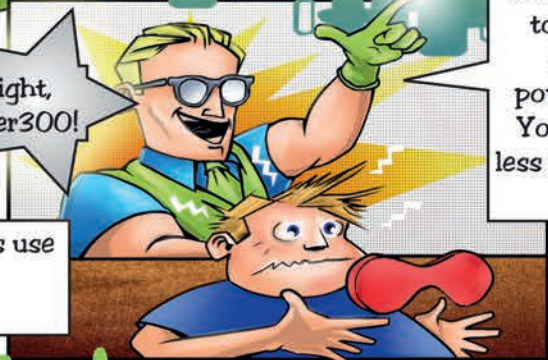


Muesli tastes like cardboard.

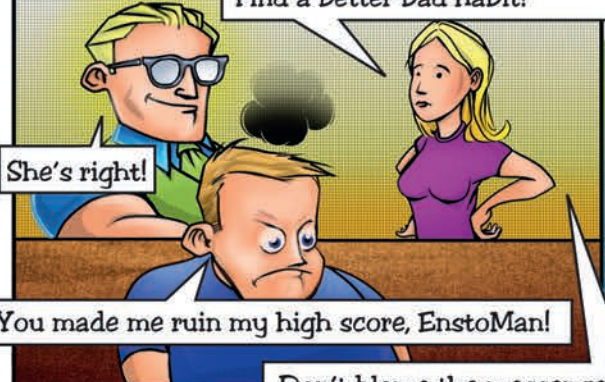
A HEALTHY, COLD BREAKFAST EVERY OTHER DAY ADDS VARIETY, SAVES ENERGY, AND CAN IMPROVE HEALTH.

That game consumes close to 400 kilowatt hours, costing as much as powering the refrigerator. You could use that much less energy and get in shape playing football.

She's right, Destroyer300!



Those mind-rotting war games use that much energy? Find a better bad habit!



She's right!

You made me ruin my high score, EnstoMan!

Don't blame the messenger, dear.

WORLDWIDE, VIDEO GAMES CONSUME ENOUGH ENERGY TO POWER A MAJOR CITY FOR A YEAR. EVEN IN IDLE MODE, THEY CONSUME SO MUCH POWER THAT JUST TURNING THEM OFF COULD SAVE GAMERS 75 € PER YEAR.

The smart grid sounds great, but can it save my wayward generation?



THE SMART GRID. COMING SOON TO EVEN YOUR HOME.

IN OUR NEXT ADVENTURE... ENSTOMAN TAKES ON HIS ARCH-NEMESIS, DR. FOSSIL!



First to the **Future**

The Nordic countries 'have reached the future first,' wrote The Economist in February, 2013. Ensto could not be more excited.

For Ensto, the future means sustainable products, services, and practices. Though our region may lead the world in the development of renewable energy resources, we will never be content. In Finland, as well as the 19 other markets we call home, we're committed to the ultimate goal of saving your energy.

www.ensto.com



Saves Your Energy