



a COMPANY'S GUIDE to  
**OPEN SOURCE**  
and  
**SOCIAL IMPACT**

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**Teemu Turunen & Katri Kemppinen**

# **A COMPANY'S GUIDE TO OPEN SOURCE AND SOCIAL IMPACT**

**futurice**

# CONTENTS

- p. **7 — CHAPTER 1** where we observe the company
  - p. **8 — CHAPTER 2** where we contemplate open source and its importance
  - p. **9 — CHAPTER 3** where we briefly wonder why companies exist
  - p. **13 — CHAPTER 4** where we learn the story of the spice program
  - p. **23 — CHAPTER 5** where we consider the goals of our endeavour
  - p. **27 — CHAPTER 6** where we justify the sponsored activities
  - p. **34 — CHAPTER 7** where we dissect the lifecycle of a sponsored activity
  - p. **66 — CHAPTER 8** where we measure the created value
  - p. **88 — CHAPTER 9** where we look at the metrics
- 
- 99 — APPENDIX A** — Communication examples
  - 116 — APPENDIX B** — Early spice program feedback
  - 120 — APPENDIX C** — Employee engagement survey data
  - 126 — APPENDIX D** — The purpose of the company
  - 131 — REFERENCES**

# A Company's Guide to Open Source and Social Impact

We at Futurice have built a unique system to help our employees advance causes important to them. We have achieved this through research, trial and error, sheer stubbornness, and trusting people nearly to the point of naivety.

Our people can teach kids and teachers, advance open source projects, help NGOs with their digital challenges, or fight the good fight for inclusivity, equality or sustainability. They can do all this with a strong support from the company and their peers. The benefits to the company are remarkable.

This book attempts to give you a thorough understanding of how and why we have made open source and social impact activities a very significant part of our company culture. It describes our coordinated approach to support employee free time activities and measure the value created. Our approach is a program, which we call the Spice Program. This book should be particularly interesting for professionals interested in company culture, developer relations, and employee engagement.

At the time of writing our sustained supported activities are Open Source and Open Education. These activities encompass a large number of different initiatives carried out by roughly a third of our employees. This work describes our approach to achieving this rate of adoption of the program and what we have learned in the process.

We begin with some definitions and the story of our program and continue with a more analytical look at how and why to do these things. The third segment dives into the science of measuring things. At the end you'll find a number of appendices with all the relevant data we could think of.

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# CHAPTER 1

## where we observe the company

We are a digital agency!

### Builders Innovators Change Agents

Digital disruption needs builders, innovators and change agents working seamlessly together to show the world the way. That's us!

- Founded in 2000
- 300 employees from 22 countries
- 8<sup>th</sup> year in a row profitable growth
- YOY growth 30%



The company introduction in trochaic tetrameter\*:

*Futurice, the agile agency,  
Weavers of dimensions digital,  
From the land of the Finns,  
Helsinki housing the headquarters,  
Tampere indisciplined and innovative,  
Berlin coalescing with creativity,  
London leveraging laconic love,  
Stockholm suavely stepping it up,  
Munich making miracles to mammoths,*

*Together three-hundred strong,  
Counselling the leaders on winds,  
Concepts to cut out confusion,  
Drawing true the dazzling dreams,  
Architects avoiding awkwardness,  
Engineering the ever-efficient,  
Safely sailing the shoals of legacy,  
For the better digital services,  
For the better digital future.*

If you want information about us that is actually useful, check out  
<http://www.futurice.com>.

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\* Like Kalevala, the work of epic poetry on Finnish folklore. Our marketing did not provide a fresh company intro text fast enough. Yes, the blood is on your hands, marketing!

# CHAPTER 2

## where we contemplate Open Source and its importance

A knotty puzzle may hold a scientist up for a century, when it may be that a colleague has the solution already and is not even aware of the puzzle that it might solve.

— ISAAC ASIMOV, THE ROBOTS OF DAWN

To understand our approach, it is important to hear how we view open source. Open source refers to any work that can be modified and shared because its design is publicly accessible. The term also designates a set of values and approaches, such as open exchange, collaborative participation, rapid prototyping, transparency, and community development.

The term originates from computer software development, but has gained popularity in other contexts as well. This document you are reading is open source. The Creative Commons license we have chosen for it allows you to take these words, make changes, and redistribute the modified version. In fact, it would be great if you did!

Our company both advocates and benefits from making use of open source software when we build software solutions for our customers. It is the one ideology that the majority of our people subscribe to. It would be absurd not to make use of the available frameworks, libraries, databases, and other types of solutions available to us.

There is a lot of value in this. Open source builds on prior success and fuels greater innovation. Collaborative development can achieve amazing things that we alone couldn't. This is specifically true for software projects due to their notorious complexity.

We return to why we support free time open source activities later in this book.

# CHAPTER 3

## where we briefly wonder why companies exist

**Does morality play a role in running a company? What is the purpose of companies? Should a company be ethically and morally considered a single entity, or a collection of individuals?**

These questions are worthy of at least a shelf metre of books, and there are many good ones on the subject. Here we will only scratch the surface on the topic by contemplating our position as a company. This is quite relevant when you consider whether your company should have a social responsibility program, and even more importantly, what should the goals of that program be.

For our purposes let's establish that we have three types of companies (see also related criticism below).

The company can be an *amoral entity*, the sole purpose of which is to maximise shareholder returns within the parameters of the law. Considering ethics is only relevant as a tool; if shareholder wealth increases more through ethical business, then ethical business it is.

The business can also be guided by *enlightened self-interest*. The company recognises that the health of the society in which it operates is crucial for its continuity, and wants to be a good corporate citizen to ensure this. This type of company also avoids upsetting any stakeholders and interest groups, which may, in addition to your basic customers, subcontractors, and competitors, include parties such as the education system, nature preservation, etc.

Finally the company can be run based on an *ethical imperative*, making it a moral agent and a part of the surrounding society — even, at least to some degree, an entity that owes its existence to the society. There are companies with triple bottom line accounting, where in addition to financial profit and loss the company also considers social and environmental value as a measurable part of their core business.

Let's look back at the questions and answer them — this is the personal viewpoint of the Futurice Lead Social Responsibility Engineer, who also happens to be the author — hi there!

### **Does morality play a role in running a company?**

**Teemu:** Yes. A thousand times yes!



### **What is the purpose of companies?**

**Teemu:** Different companies have different purposes to exist. In my opinion our primary purpose is to give good people a chance to grow professionally and make this world a better place. For proper impact we should then convince other companies to do the same.

### **Should a company be considered an entity, or a collection of individuals?**

**Teemu:** Depends on the context, but if ethics are considered, then a collection of individuals.

Of course, if you asked someone else in Futurice, you would probably get different answers. In fact let's find out! We recently made a survey to our employees.

### **The purpose of the company survey**

#### **Which type of a company are we; what do you assume to be our current shared goal?**

- An amoral entity, our purpose is to maximise shareholder returns
- Enlightened self-interest, we recognise the health of the society as a key to our success
- Ethical imperative, we are a moral agent, our primary mission to make the world a better place
- Other...

**Which type of a company should we be in your opinion?**

- An amoral entity, our purpose is to maximise shareholder returns
- Enlightened self-interest, we recognise the health of the society as a key to our success
- Ethical imperative, we are a moral agent, our primary mission to make the world a better place
- Other...

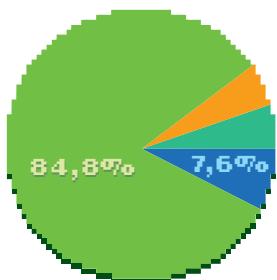
**Should our company, in the context of morality and ethics, be considered a single entity, or a collection of individuals?**

- A single entity
- A collection of individuals

**Any other thoughts on the subject?**

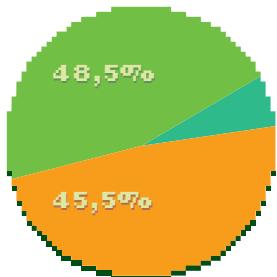
## We got the following results:

Which type of a company are we; what do you assume to be our current shared goal?



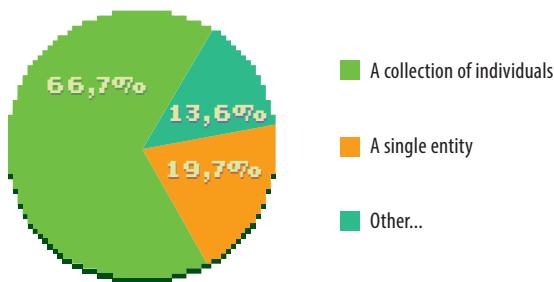
- █ An amoral entity, our purpose is to maximise shareholder returns
- █ Enlightened self-interest, we recognise the health of the society as a key to our success
- █ Ethical imperative, we are a moral agent, our primary mission to make the world a better place
- █ Other...

Which type of company should we be in your opinion?



- █ An amoral entity, our purpose is to maximise shareholder returns
- █ Enlightened self-interest, we recognise the health of the society as a key to our success
- █ Ethical imperative, we are a moral agent, our primary mission to make the world a better place
- █ Other...

**Should our company, in the context of morality and ethics, be considered a single entity, or a collection of individuals?**



See Appendix E for the free text responses to the last question!

## **Some criticism**

There was also criticism aimed at this simple survey. If you plan a similar survey, please consider the following points raised by our employees:

Ethical imperative answer seems to be a bit loaded/biased. After reading the definition of ethical imperative and looking at the answer:

**"we are a moral agent, our primary mission to make the world a better place"**

The definition and the answer, in my opinion, are a bit different - the answer feels interpreted: suddenly we're talking about our "primary mission" and "make the world a better place", which were not even mentioned in the definition. Do you think maybe you can remove the extra information from the answers?



I like the three categories here with a bit of salt. The first one is a bit loaded one. I think there are organisations that think it is morally ok to

think primarily about shareholders' interests. No one wants to be part of an amoral entity. Kinda loaded choice the #2 as well. "Self-interest" does not have the same shiny armor as being ethical. All in all, the three categories indicate the moral framework of the person asking the questions, rather than being three different points of view that people inside companies could have (feel or experience).

## What to make of the results

We haven't had the time to properly analyse the results of the survey, but several things stand out.

- The majority of people see us making our decisions based on enlightened self-interest.
- We are mainly in agreement that the company should be considered a collection of individuals.
- Surprisingly many would like us to follow an ethical imperative.

The quick analysis is that these key findings support us having this type of an active social impact program, and also running it the way we do — by giving the initiative to the individuals, and supporting them.

# CHAPTER 4

## where we learn the story of the Spice Program

It was a rainy and dark September evening in the year 2013. Matias Kirvelä ([@mkirvela](#)) and Teemu Turunen ([@hippielobster](#)), both working for the digital agency Futurice, sat in the Black Door pub in Helsinki. They were deep in discussion about combining the digital consultancy business with open source. The gist of the discussion, accompanied with a lot of waving of hands, was that it would be both Appropriate and Beneficial, if Futurice, as a company, found a way to really Pay Back to the Open Source Movement.

Appropriate, because in the business of designing and implementing digital services, having all these wonderful open source solutions available as our building blocks is truly a blessing.

Beneficial, because the majority of our employees, and of those we would like to hire, subscribe to the values of the open source movement. Many of them also contribute to open source projects, or lead projects of their own.



An actual note from the  
Black Door pub session  
©Matias Kirvelä, CC BY 4.0

From that round wooden table at the back of our favourite pub, now holding quite a respectable number of empty pints, we carried away two main ideas. First, start paying our employees for their free time open source contributions. Second, try to alter our customer contracts to better allow our employees to contribute to open source projects as part of their daily work.

We soon found a sympathetic executive sponsor, Mikko Viikari (@mviikari). Mikko is senior board level executive, and he has been responsible to the business for the success of this program. More

importantly, since Futurice has a rather low hierarchy, he has provided leadership on culture and values and kept our program aligned with the company strategy.

With his assistance we founded a program, as the vehicle to carry us towards implementing these ideas. We decided to call it the Spice Program. Matias coined us a slogan:

**It's payback time!**

—Matias Kirvelä



Satu Peltola designed the Spice Program website with a look and feel clearly distinct from Futurice. This was done to emphasise that what we have here is an independent program, not just a marketing campaign. She also helped us, two persons with tech backgrounds, to better understand the soul of the designer — specifically when it comes to openly sharing your work and helping others to do the same. This knowledge turned out to be very valuable for the future adoption of the program.

The original vision statement for the program hasn't changed since the beginning:

**Our work creates real value!**

Company sponsored social responsibility activities bring significant value to the employees, the company, and society. This value is measured to the extent that it supports business decisions.

*We share all that we learn!*

We openly share everything worth sharing, also our failures. Our approach is documented and marketed so well that others will fork, adapt, and improve our concept. So the Spice Program became our company sponsored open source and social responsibility program. Its primary goal: Making the world a better place.

Futurice has always attracted the idealist types, but the day-to-day realities of the software consulting realm may sometimes poorly reflect these softer ambitions. However, consulting is the place to be, if you want to aim for the big impact — our customers come from very diverse business domains and include numerous multi-nationals.

Wherever our people roam, they carry our company culture with them. We have a company culture based on trust and transparency. It is carried by agents that are both social and very good at what they do, which makes that culture highly contagious. Our success in spreading both agile and lean thinking has proven this. We can make use of this dynamic, we contemplated, to also spread the open source thinking!

Back to the storyline. In the year 2014, the first year of Spice Program, we accomplished three important things.

**1st:** We went through several dozen rounds of editing and review to create readable, understandable, non-threatening, and still legally solid (not an easy combination!) contract terms that allow our employees to do open source contributions in their customer project work. These were added into our standard contract templates. The revised contracts were accepted by the first customers. We also released these terms into the Public Domain, so that others can make use of them.

**2nd:** We started to walk the walk, by going forward with Olli Jarva's (@ojarva) idea of hiring a skilled summer employee to publish all our in house developed internal IT and support systems. Ville Tainio (@Wisher1) joined the Spice Program in the summer of 2014 and began his work to do just that. Half a year later we had a lot of company intellectual property published. Some of it even adopted into use by other companies. Ville stayed with us and has contributed a lot to the program.

**3rd:** We first planned and then started to pilot the employee free time open source compensation. We also established that we can extend this sponsorship to other activities, as long as they benefit the individual, the company, and society.

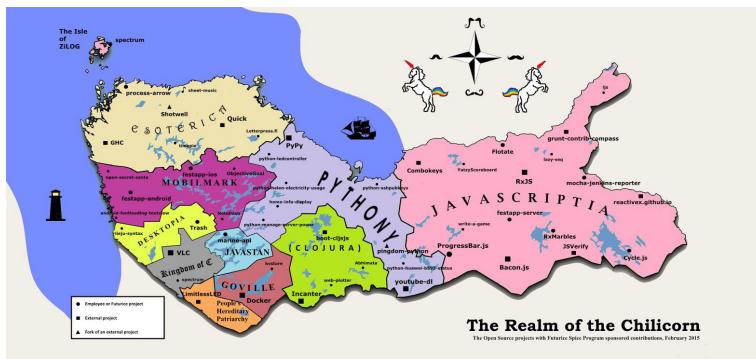


Ville Tainio

Open source drives innovation and forces companies to focus on transparency and quality. It has been inspiring to see how Spice Program has improved the technical skills of our employees and served as a channel to give something back to the community we owe so much.

2015 was to be the breaking year of open source at Futurice.

Many noteworthy projects sprang to life and people continued giving Spice (and Futurice) credit for their free time efforts. This was never asked for, but it has helped the program a lot, so thanks!



More importantly these people formed a community, showing interest towards each other's projects and encouraging each other — also, and especially, the people new to open source. This endorsement by others has proven to be much more important for motivation than the small amounts of extra money.

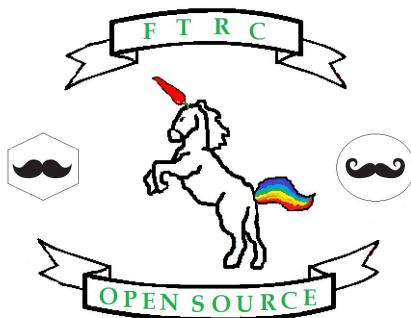


Cycle.js logo, © Pekka Pulli (@pekkapulli), The MIT License

André Medeiros (@andrestaltz) published the Cycle.js framework that would soon become very popular. Cycle.js was born out of the ideas he had while doing customer work at Futurice. He worked on these ideas on his free time, actualising and polishing them into a framework. André has given the company credit for the success of this project, at least partially because of our free time open source sponsorship. This has brought very welcome visibility and credibility for the program.

The external interest towards our open source activity started growing and Spice became a solid asset in recruitment. This was always one of our primary goals, as finding talent has been the limiting factor in our growth. Having some hackathons and other co-creation events helped new people to get into the open source game.

2015 was also the Year of the Chilicorn. We had been asking our designers to create a logo for the program. The designers were very busy. No logo. Finally it got to the point where swords were drawn. Teemu unleashed MS Paint and drew a logo as provocative as possible, to force the designers to take action.



The original Spice Program logo, © Teemu Turunen, CC BY-SA 4.0

So the Chilicorn was born, immediately thus christened by Tiina Romu (@TiinaRomu), its sole purpose to provoke our designers to take action and create a real logo. What happened next? Yep, our people fell in love with it. This unexpected turn of events made designing a new logo even more challenging.

Our senior designer Pekka Pulli (@pekkapulli) rose to the challenge and adapted Chilicorn into a wonderful pixelated version, the popularity of which has helped the program greatly. At the time of writing this we have handed out nearly ten thousand stickers with the graphic, not to mention t-shirts and other types of corporate swagfind.



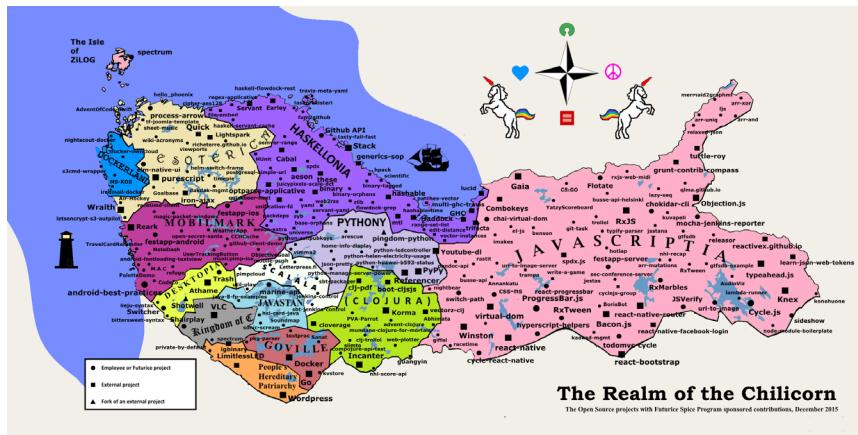
The official Chilicorn logo, © Futurice Oy, CC BY-SA 4.0



Pekka Pulli

The original logo idea was outstanding and got wildly popular instantly, so I saw no reason to steer away from the Chilicorn – even if there was a myriad of nice Dune references in the Spice name to be explored. I wanted to preserve the wonderful campiness and the proudly digital feel the original MS Paint drawing, while giving the Chilicorn a more polished look. It seemed to create a perfect mix destined for viral B2B success, and I feel humbled by the wide acceptance both inside and outside of Futurice.

At the end of 2015 the sponsored open source activity had exploded. At the beginning of the year we had perhaps a dozen people reporting contributions. At the end of the year, in a single month, up to as many as 40. People are contributing across the fields of technology, including many large-scale and well-known projects.



The Realm of the Chilicorn at the end of 2015, Spice Program sponsored projects visualised on a map, © Teemu Turunen, CC BY 4.0

Towards the end of the year we decided to extend our efforts wider towards social responsibility. We crowdsourced some ideas internally, went through the necessary brainstorming and discussion, did some planning, acquired the approvals, and started a pilot to support the open education movement with an arrangement very similar to open source. Tiina Romu was at the helm of these efforts.

Tiina did an excellent job figuring out how we can make the world a better place through education. Code schools for kids, programming exercises for elementary school, mentoring professional teachers on all matters digital -- these activities have turned out to specifically attract our designers. This is great, as the traditional open source world unfortunately isn't very inclusive or easily approachable to them.



Tiina Romu

I see teaching kids as a possibility  
to change the world.  
What would be a better way to pay back.

In 2016 Sebi Tauciuc (@stauciuc) joined the Spice Program team and started to take our open education and social inclusivity activities forward. We had earlier released a Finnish language course for the Arabic speaking (free and open source, to help asylum seekers), and Sebi has continued this work. He is also looking into helping our customers to adopt our practises, perhaps even offering them consultancy to achieve that.

Companies are just like people. They need income to survive but they need much more to thrive. People don't exist just to make money and nor do companies exist just for profit.



Sebi Tauciuc

Our people really like the language course initiative. It is also a very easy way to get new people involved, as we have recorded Finnish speaking audio from at least 40 employees. One big unforeseeable benefit of Spice has indeed been that having the program, the sponsorship models, and the community in place, allows our people to realise tangential projects with the support from the company and their peers'. Our people get help and support to, literally, make the world a better place.

In 2016 Katri Kemppinen (you can guess her Gmail address, if you want to get in touch), co-author of this work, also joined the Spice Program as an HR Consultant. She has been working on developing and testing the methods we use to measure the value that the program creates to the individual, the company, and society. There is still a lot of work and research to be done on that front, but week by week we are more convinced of what we intuitively have known from the start - that we are doing the right thing.



Katri Kemppinen

Katri is an HR Specialist with a focus on motivation and employee engagement.



Teemu Turunen

Teemu is the Lead Social Responsibility Engineer at Futurice and the founder of Spice Program.

## The authors would like to thank:

- ◆ Everyone at Futurice for being more or less awesome, usually more.
- ◆ Tekes – the Finnish Funding Agency, for Innovation for providing partial funding for this work.
- ◆ Specifically: Antti Ajanki, Arttu Tolonen, Oleg Grenrus, Mikko Viikari, Sebi Tauciuc, and Susanne Husebø for their review efforts.
- ◆ The CoPassion research project for interesting thoughts.

# CHAPTER 5

## where we consider the goals of our endeavour

Our program is a real investment and effort. It is not just a marketing campaign. That is why we have, from the beginning, been careful to set solid goals and do our best to measure our progress towards them. How we measure the realisation of the programme's goals is described in the chapters 8 and 9.

### Attracting talent

We can offer people a chance to make a difference, while working together with talented people in an open and respectful environment. Attracting talent should be easy — if we can find a way to credibly convey that message to the target audience. However, this audience is rightfully sceptical and wary of corporate marketing.

Our most efficient recruitment channel has been our employees' personal networks. Our people get their friends, ex-colleagues, school-mates, and other acquaintances to apply. The people joining via this route might not even know all that much about our company, but they do know who they will be working with. That is what really matters.

On the other hand, the people who do not share our core values might be less inclined to pursue employment with us. This is, of course, also a good thing.

Open Source is very much about collaborative participation. Your skills, values, and attitude are exposed.

How does the Spice Program attract new talent to our company? There are at least two clear dynamics at play.

It is difficult to get people interested in a consultancy company, but people are interested in other people. Our program helps our employees to gain visibility in the open source and emerging tech communities. This has resulted in many new recruits that would not otherwise have even considered talking to us.

The program is also a strong promise for people interested in social impact and open source. It differentiates us from our competition and helps with recruitment.

## Competence Development

We are good at hiring people who have the necessary drive and abilities to be fast learners. This is great in many ways: it makes the company growth easier, as we are not only looking for the established champions that everyone else is also wooing.

People need support to be able to learn fast. It matters what they get to do, and who they get to do it with. Giving people menial or impossible tasks will hardly result in anything good. Working together with an experienced professional motivated to share their knowledge, will result in professional growth that is frighteningly fast. It also provides some extra benefits.

People who are really good at what they do, usually tend to enjoy the actual work more when they get to teach others on the side. This has been proven time and time again in Futurice by looking at various team compositions and the measured resulting employee satisfaction.

We recently created the Futurice post-production business unit. We recruited some bright people with great attitude, then arranged them a chance to work closely together with people experienced in the relevant competence areas. This paid off really fast. Every recruitment we did turned out to be a good one, even though we took some risks. The team employee satisfaction was topping the charts on all the surveys.

The same teaching-learning dynamics are inherent to all healthy Open Source projects. The learning process can be wildly efficient. Soon enough the novices find themselves teaching others.

How does Spice Program help with competence development? People use open source projects to learn and master new technology. Meanwhile they often solve real problems, and with bigger projects, learn to efficiently collaborate through the use of pull requests, reviews, and elaborate version controlling tactics.

## **Employee engagement**

Engaged employees work with passion and feel engaged with their organization, so they are more likely to move the company forward by driving innovation. Employee engagement has been connected to business outcomes such as customer satisfaction, productivity, profitability and lower employee turnover. Just like Futurice states, "The passion and vision of our people drive this company".

To foster high employee engagement you need to drive the feeling of meaningfulness among employees. You want to empower the workers and enable their professional growth by offering them challenging and inspiring work, and options for competence and career development.

How does the Spice Program foster employee engagement? Being able to apply and develop one's professional skills at work, to advance goals that are personally important, is highly engaging for many of our employees.

## **Improving the World**

Any company, regardless of the line of business, has many opportunities to encourage and enable activities aiming for a positive social impact. As a consultancy company operating in a business that is notoriously prone to economic fluctuations, should we then invest in social impact activities?

Let's leave corporate altruism out of this. We are certainly still capable of that, being a mid-sized company with a strong founder ownership. However, Futurice being a growth company, this may not always be the case. It may not be the case for you, either, so let's rather view this as a commercial exercise.

We want to employ individuals that are very good at their work, talented and dedicated. People with such abilities can choose where they work, or whether they work for anyone but themselves. This dynamic is unlikely to change, when we consider the top talent.

Being able to grow our own stars will result in some extra employee loyalty, but to be able to steadily attract and retain the best people... they really have to be motivated to join us and to stay with us.

Many of our people want to do good. They want to make a difference. It is known, based on many employee questionnaires and experimental projects during the years. The majority of people want to do good, and there are clear benefits if they do.

This works out to a pleasantly (and, as always, deceptively) simple equation:

***If we invest in social responsibility activities, and as a result we get to hire more people and lose less people, should we do it?***

Yes.

***Okay. How much should we invest?***

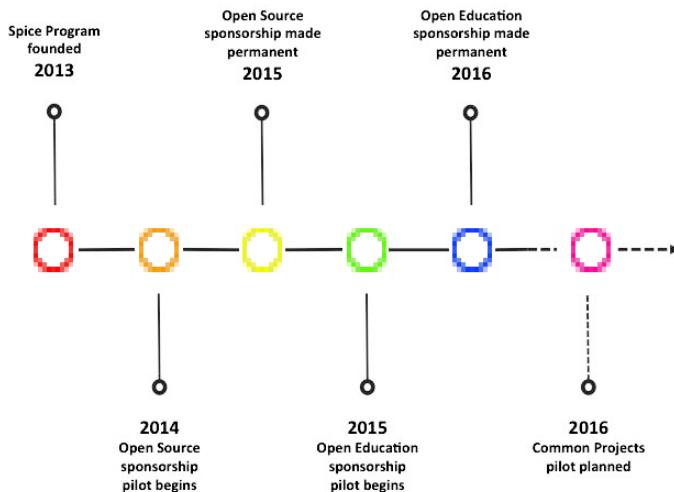
Now this is where things get interesting. There is a an entire chapter dedicated for that, but you will not get to play with absolute certainties, unless you simplify the scenarios to the point where they have, at best, a strenuous connection with reality.

However, applying smart measurements will give you confidence and nudge your intuition in the right direction. There is a lot of value in that.

# CHAPTER 6

## where we justify the sponsored activities

We first started backing Open Source related activities in 2014. In 2015 we extended our sponsorship to Open Education, and now in 2016 we are considering several more causes.



Spice Program Activity timeline, © Futurice Oy, CC BY 4.0

## The Case for Open Source

Open source adoption has become common to a point where it is the modern norm. Over 80% of companies world-wide run their business on open source software. When building bespoke software for our customers, we almost always take Open Source components in use, instead of reinventing wheels. These components either work as they are, or they may require minor modifications and improvements, which we are happy to do. Because they are open source, we also can.

So open source is important to our business. It is also important to many of our people, who have grown into the world where people again increasingly share what they have created for the benefit of others. Some are into open source for idealistic reasons, for some the personal benefit may weigh more. This doesn't matter.

By supporting open source, we can support our people - especially the technically oriented people - in becoming even better professionals. Meanwhile it helps us with recruitment, which is always a pain point.

Futurice, by default, publishes every internal solution. This has given us a lot of welcome visibility in very relevant developer circles, and made some supporting jobs, such as our internal IT development, more attractive to top talent.

Open Source - using, contributing, publishing, and overall supporting the movement - gives our company many excellent possibilities to show that we have a lot to offer to employees, customers, and society alike.

Many talented people consider open source analogous to doing good. Having your company actively support you in that is simply great.

## **Value for the individual**

- ✚ Very efficient competence development.
- ✚ Getting visibility for your interests and skills.
- ✚ Networking across the world.
- ✚ Building solutions specifically useful for you and getting contributions from others.

## **Value for the company**

- ✚ Very efficient competence development.
- ✚ Improved employee engagement, especially for the tech talent.

- Good benefit for recruitment.
- A test bench for emerging technologies.

## Value for society

- Open source provides people the right to use the work, to study and change it, and to redistribute copies with or without changes. These rights are very important for society, as they promote sharing and collaboration in this ever more digital world.
- The highest level of development in emerging software technology is primarily open source today.
- Open source is also a powerful enabler for new business, as companies can enter the business using tested and proven technology.

## The Case for Open Education

The world is becoming digital and companies like Futurice are driving that change. The digital world requires digital skills, and for people lacking those skills, it becomes increasingly difficult to cope. We can help them learn. Parts of the education process can also be digitised to make teaching and learning more efficient and fun.

For society it is important that all people can live with digitalisation. It is equally important that we grow new people who embrace it and thrive. There is a lack of skilled people worldwide and the need for them is growing for the foreseeable future. To meet this need it is important to ensure the growth of the global economy and the well-being of all people. Even better, education can ensure that we in the future get sufficient diversity into this digital talent pool. Right now this is not the case.

This new world can be a better place. Endless learning and work opportunities. Easy to connect with other people. Less loneliness. Less social exclusion.

This new world can be a worse place. Kids from poorer families are

left out. People fail to learn to use digital services, but nothing else is available. More loneliness. More social exclusion.

We are a company with a conscience because our employees care about good greater than just their personal benefit. They also expect this from their company. Combining open source and teaching gives us a powerful channel to use our expertise for good. We can use this channel to push for the world to become a better place.

## **Value for the individual**

- Learning by teaching.
- Clear communication is an essential skill in our business. The failure or success of our project may hinge on your ability to explain matters technical to an audience less so.
- You get to meet new, charming people.
- You get some money.
- Volunteering looks awesome on your CV.
- Most importantly, teaching and doing good makes you feel good.

## **Value for the company**

- The communication benefits described above also work directly in the company's favour.
- There are huge PR opportunities.
- Employee motivation, empowerment and loyalty are improved.

## **Value for society**

- Better quality of education concerning things digital.
- Happier people and a healthier economy.
- Less social exclusion.
- Improved digital skills foster economic growth.

## The case for Common Projects — the Chilicorn Fund

By common projects we mean actual service or solution creation charity projects that are designed and implemented by our employees, people from our partners, and student groups. Our work can be free of charge, heavily discounted, or perhaps sponsored by some other institutions or public funding.

During 2016 we have been working on several charity projects. One is for the Save the Children Fund, where we pilot a new approach for getting feedback from young children placed in foster case through a mobile app.



A screenshot of the Hemmo app for Save the Children for getting audio feedback from the kids.

The other one is for the annual Super-Ada event in Helsinki, organised by an NGO called Nice Tuesday. Its purpose is to encourage young women to consider information technology as a career.

We are building a program model where we do one or more of these world improvement projects annually, depending on the availability of suitable projects, and our resource availability. We call this model the Chilicorn Fund and it's due to be launched at the end of the year 2016.

Our planned program model has the following flow:

- 1.** There is a publicly advertised application period for charity projects
- 2.** We rate the project applications
- 3.** The project applications with the highest scores enter a compact feasibility study
- 4.** The feasibility study ends with a go / no-go decision
- 5.** Implementation of the project
- 6.** Maintenance or handover of the project

Our criteria for rating the projects will be public and open source. It is based on categories, such as:

- Social impact of the project
- Competence development and professional growth opportunities
- Open source significance
- PR opportunities for the company
- Student co-operation opportunities
- Partner sponsorship opportunities
- Project effort estimation
- Project risk estimation
- Employee endorsement of the project

We will assemble a temporary microteam for each applicable category, say 4-5 people to a team. They will then estimate it planning poker style. These micro-juries can also have external members, as they only meet once or twice, such as customer representatives, or even public figures.

Each included category will have a few key points for the micro team to consider, to make the evaluation efficient and consistent. An example:

Open source significance

Rate: 1 to 5 (5 = high potential)

Key points to consider:

- How valuable will it be for other humans if the final product is open source? Is anyone else likely to use it and build on it, or is it mostly

a chance for us to say “look we made an open source thing”?

- ➄ How much scope is there for building the project with fledgling open source libs, so that we may spend serious time fixing their bugs and implementing new features?
- ➄ How thoroughly will this project be “open source”; is everything going to be shared?

The points are there to help the estimating team get started, not to limit them from considering different angles.

# CHAPTER 7

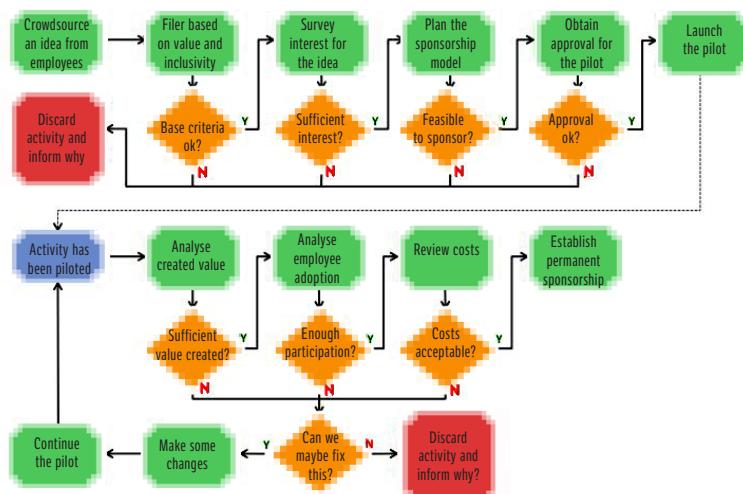
## where we dissect the lifecycle of a sponsored activity

Our approach to sponsored activities can be roughly divided in four main phases:

1. Choosing an activity to sponsor
2. Planning the activity
3. Piloting the activity
4. Maintaining the activity

We sponsor employee activities such as open source or open education, and we have established a lean process to help us decide what we should support, and how.

Each suggested activity goes through careful screening before being accepted into the pilot. The results of the pilot are then analysed and reviewed and a decision made to either continue or call it off. This frees resources to try something else.



Spice Program activity lifecycle flowchart, © Futurice Oy, CC BY 4.0

The process also puts a lot of emphasis in refining, invigorating, and further developing the sponsored activities. Also as with everything we do, we constantly strive to improve the process itself.

Next we go through these main phases in detail.

Choosing an activity to be supported

History recap! We started our program by supporting Open Source activities. Then we extended our support into Open Education, and now we are considering Social Inclusivity, Sustainability, Open Science, and other causes.

During this process, the basic flow we have discovered:

- 1.** Gather ideas from the company through internal crowdsourcing
- 2.** Confirm feasibility by filtering against the base criteria
- 3.** Survey the interest of the valid ideas
4. Choose one and communicate that it's going in the planning phase

Let's take a closer look at these steps, but first a few words about communication!

Internal communication

Our process begins with crowdsourcing, but you will want to make sure that people understand what they are submitting their ideas for. If you already have some sponsored activities going it may be obvious, but if the program is new it requires some explaining.

Internal communication can be challenging. No, internal communication is very challenging. There are so many things competing for people's attention. It's like marketing, but at least you probably know your audience. On the other hand you compete against your colleagues.

We have made use of the following internal communication methods.

Activity	Result
Sending many all-company mails	Around 20-40% read
Giving specific internal talks to people in certain roles	Can be efficient, but it's quite a lot of work
Delivering a few speeches/presentations in all-company events	Around 50% pay attention, brevity is usually a requirement though
Making a lot of noise on our company messaging platform	Good for discussion, bad for informing people
Writing a description and procedure information in company Confluence Wiki	Nobody reads, unless they are specifically told to read... Still serves a purpose as the master version of the procedure and rules
Create a detailed program web site	Seemed like a good idea, but it's really not worth the trouble. Takes a lot of effort to maintain and it's difficult to get people to visit it.

Between each communication attempt we have done some "corridor surveys" by asking random people whether they know about Spice Program and the sponsorship opportunities.

After all these communication attempts, you still find people who don't, but at least the majority now has an idea.

We also have a good onboarding process for new employees at Futurice and the Spice Program introduction is now a solid part of that. It however inevitably contains so much information that repetition is required.

See appendix A for some communication examples.

## **External communication**

External communication can be the most efficient method for internal communication. We'll take a closer look at our experience with it in the chapter dedicated to maintaining an activity. It suffices to state here that people usually pay attention when their company is mentioned in any official or traditional media, as opposed to the company blog, or social media.

### **Gather ideas from the company through internal crowdsourcing**

Gathering of ideas can be done simply through a web form and a mail, announcing that people now have a brief period of time (like two weeks) to submit ideas. To filter out unfeasible ideas, it is necessary to have a defined base criteria.

### **Base criteria**

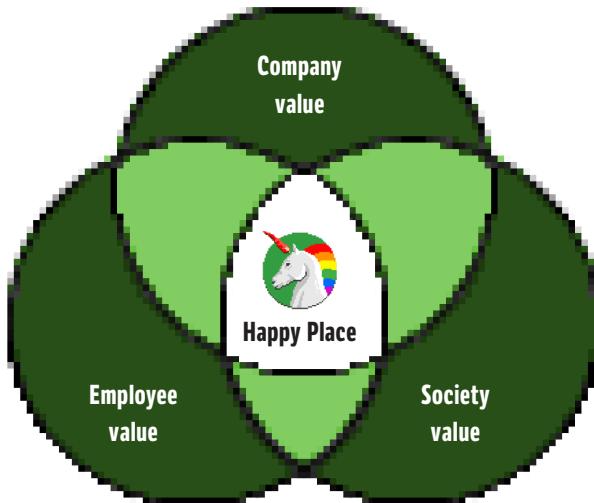
The base criteria for sponsored activities consists of two main considerations: value generation and inclusivity.

### **Value generation**

For the activity to be considered valid, it must generate value to all three:

- 1.** The people performing the activity
- 2.** The company sponsoring the activity
- 3.** Society

Repeat: *All three* should be checked, for the activity to be valid!



Don't stray outside the happy place; there may be small and admittedly somewhat harmless dragons.

Why all three? Let's look at the pairs.

#### *The Employee and Company benefit, but Society doesn't.*

This is a common situation in companies. Let's say the company supports employee education, by providing some business English courses partially on the company clock, partially on the employee's free time. This may seem harmless enough, but it isn't really social responsibility either, is it?

#### *The Company and Society benefit, but the Employee doesn't.*

This could happen when a charismatic leader rallies employees to clean some nearby ditches wearing the orange company jumpsuits, but the employees are not really compensated in any way. They don't learn anything new either. Cleaning ditches is fine, if it is an initiative by the employees, with no company machinations whatsoever. If you start to make use of this as an additional PR tool, you're on thin ice.

### *The Employee and Society benefit, but the Company doesn't.*

This is risky for the company. It may not be a sustainable model and employees get used to all kinds of benefits - also the ones that are unfairly good. It is not that scalable either. NOTE: Quite often the company is actually getting value out of these arrangements, but just not realising it. Please consider the measurements and types of values carefully, before deciding against arrangements that seem to fall here.

In addition it is important to estimate the participation possibilities. Supported activities must be highly inclusive.

## **Inclusivity**

By ensuring inclusivity you make sure that no members feel excluded on the grounds of gender, race, class, sexuality, disability, and so forth. In business it's likely you also have people with different skillsets and roles. We mostly have software developers and designers, but also many people with other roles such as business consultants, team leaders, account owners, HR specialists, QA professionals, and project managers. We have full-time employees and part-time employees. We have employees with a lot of free time, and many of those that do not have much (people with children, for instance). People who love to be on stage, and those with a very bad case of performance anxiety.

## **If we take a look at the activities we currently sponsor:**

*Open Source* could be very inclusive. There have, however, been concerns about gender bias, among other inclusivity issues. These concerns are very important. In the recent years it fortunately seems that the community and active companies have began to take them seriously. Nonetheless non-programmers may find it difficult to get started, even as open source is not limited to software; you don't need to know programming. If you can create something, and slap the appropriate license on it, and dare to let others know you did it, you can participate in our program.

Finding the courage to contribute seems to be the biggest limiting factor for participation. Our process has people reporting their contributions publicly by sending an email to an inbox that can be read by anyone in the company. Surprisingly many seem to think that what they do is not good enough, or important enough. Leading by example helps. The head of our program promised to write some My Little Pony fan-fiction and publish it as open source as a contribution to the program, to demonstrate the range of what makes a valid contribution. We are still waiting for that to happen, (turns out writing fan-fic is *hard*), but just expressing this intention served to encourage people to report their work.

If you dislike the idea of open source and want to have nothing to do with it, you probably won't be too excited about the sponsorship. This is a limitation we can live with.

Open Education is also very inclusive. You can work on the materials, if you don't like teaching people. You can teach individual teachers, if you don't like performing on stage. You can perform on stage, teaching as many people as you want, if that is your thing.

Language can be a challenge here. At least here in Finland our teachers seem to prefer being mentored in the same language, and the kids may not understand anything else well enough.

***No matter what the activity is***, it is important to arrange people easy opportunities to participate. You are likely to have some people who are really good at what they do, and have no qualms sharing their work. People less experienced tend to compare their own work to what these experts do and decide against participation. Many people need encouragement and support to get started. Arranging co-creation events is one good way to go about this.

To summarise; a good activity to sponsor is one that everyone can participate in and which brings creates value to the people who do it, the company, and the society.

## **Survey the interest**

To properly present the ideas collected from the employees, it is important to present them in a simple uniform format. For this we use a template which highlights what really matters:

- 1.** Good, brief description of the activity
- 2.** The value the activity produces  
(for the individual, the company and the society)
- 3.** Who all can participate (the inclusivity analysis).

That's it. This information can be presented to people in web, or through mail, and two simple gallup questions asked:

*Do you think we should, as a company, to sponsor this activity?  
Would you consider participating if we do?*

We did this questionnaire for Open Education and this is the information our employees received.

### **Supporting education of the digital age - Finnish elementary schools**

People are using digital services more than ever but they don't really understand how they are built. We as professionals could and often want to help with this transformation on more levels than our daily work allows us to.

Programming will become a part of the Finnish elementary school curriculum already in 2016. The support provided to the teachers is nearly non-existent. We can make use of code schools and other comparable sessions to develop methods and materials for their use. Direct mentoring can also be used; in some cases going all the way to the front line classrooms.

### **Overall value generation of the concept**

Each supported activity should provide tangible value to the individual, the company and the society.

<b>Value</b>	<b>Party</b>
Sense of accomplishment, doing things that matter	Individual
Improved communication, especially of technical concepts to less technical audience	Individual, Company
Kick-ass PR opportunities	Company
Less stressed out teachers	Society
Improved education (programming, perhaps also math and physics)	Society

### **Overall value generation of the concept**

Each supported activity should provide tangible value to the individual, the company and the society.

<b>Activity</b>	<b>Participation possibilities</b>
Improving the teaching resources	Everyone in company
Mentoring teachers to make use of the materials	Everyone in Finland
Co-teaching a class to test the materials	Everyone in Finland

Key assumptions to validate in pilot

1. There is sufficient interest on both sides (IT professionals/teachers) to do things
2. Tech savvy outsiders can provide valuable support to elementary school teachers
3. The materials can be made good enough to only require minimal 1-to-1 mentoring

This document was presented to everyone in the company, and the two questions asked. After a week we had 62% of the employees responding to our questionnaire.

Should we support this activity?	94% YES	6% NO
Would you consider taking part?	87% YES	13% NO

94% is an overwhelming support, so we decided to go ahead with the planning of the pilot.

## Planning an activity

The goal of the planning is to figure out the seven hows:

- How exactly can people take part in this activity?*
- How do they report what they have done?*
- How much are they compensated for this?*
- How long will the pilot be (at minimum)?*
- How much will the pilot cost the company (estimate)?*
- How will we measure the success of the pilot?*
- How will we manage the pilot?*

In addition, are there any constraints or exceptions; do we want to rule out anything?

When we plan an activity, we start with timeboxed forum approach:

Establish a temporary (a limited lifetime) discussion forum with your platform of choice. We use Flowdock, which is very handy for this. Having a proper backlog of the discussion available is quite important for capturing all the ideas and concerns.

Invite a half a dozen people you know are interested in the subject to discuss it. This is a good place to consider inclusivity! A diverse team

will end up with a much better result. Also, if you can find some, inviting people who are not excited about the activity is a good idea.

Tell each of them that they can invite maximum two people more, so it'll not be all about who you've picked.

Start discussing the sponsored activity, informing everyone that this discussion will end in maximum 14 days later. A week might be enough, the next time we might try that. Less than a week would probably not be enough, as people tend to be busy.

Steer the discussion towards the goals of planning. It's good to touch other topics as well, but the goals need to be discussed in the time period. If people are not proactive enough, ask direct questions to stoke more conversation.

When discussion finally dies off (or the timebox runs out), summarise the findings and halt the discussion. Do not close it yet, as it's likely it'll need to continue soon. Use the summary to generate a description of the sponsored activity pilot.

Ask for a pre-review of the pilot description by the executive sponsor of the program, to avoid misunderstandings when you take it forward.

Make any minor changes, if necessary, then present the pilot description to the decisionmakers. Presenting is always a lot better than just sending a document in mail.

If they have concerns that can be addressed by making minor changes, go ahead and do the changes, if it'll be sufficient for the approval. If major changes are required, return to the discussion to see what people think about the management concerns and the proposed changes.

Negotiate back and forth to find a compromise feasible for all parties. If a compromise cannot be found, the activity should be discarded and a new one picked for planning. If a compromise can be found, and it gets approved, move on to the pilot phase.

## **Spice Program Open Source sponsorship planning results**

Here are the planning results for our first sponsored activity, open source.

## **Spice Program Activity Planning - Open Source**

This document summarises the results of the planning of open source related company sponsored employee free time activities. The proposed sponsorship entails paying our employees a bonus for working on any open source projects on their free time.

### ***How exactly can people take part in this activity?***

People can participate by working on open source projects. Many already do. The projects can be anything, they can be owned by the people themselves, by other people, Futurice, or other companies. The project can be a software project, it can be a literary work, it can be whatever that fulfills the threshold of originality required for copyright to apply - so that it can be published as open source.

### ***How do they report what they have done?***

We will ask people to send a mail with a link to the project, free text description, and the hours they have worked on it. The mail will be sent to our Flowdock Open Source flow, where other employees can see the reports in the inbox.

### ***How much are they compensated for this?***

Proposed amount is €15 per hour, with 30 hours monthly maximum per person. The reason for the monthly limit is less the expenses to the company, but rather that we don't want to encourage people to spend all their free time on this.

### ***How long will the pilot be (at minimum)?***

If we get to start the pilot now in October 2014, it should run to the end of March, so five months.

### ***How much will the pilot cost the company (estimate)?***

It is difficult to estimate how popular this will be. We can set a maximum expense for the period. €45000 is probably way more than enough.

### ***How will we measure the success of the pilot?***

We are hoping to get at least 10% of the company (20 people) to contribute during the time. Towards the end of the pilot we will do a survey to get people's opinion. Measuring competence development (subjectively, at least) would probably be a good idea. It is unlikely that we get that much visibility for this at the early stages, but it may have a positive effect on recruitment.

### ***How will we manage the pilot?***

One person will act as the Clerk and collect all the reports at the end of the month, sending them to the payrolls. The head of the program can do this for now as part of his other duties. It will only take a day per month maximum.

## **Spice Program Open Education sponsorship planning results**

Here are the planning results for our first sponsored activity, open education

## **Spice Program Activity Planning —Open Education**

This document summarises the results of the planning of open education related company sponsored employee free time activities. The proposed sponsorship entails paying our employees a bonus for furthering our open education efforts on their free time.

### ***How exactly can people take part in this activity?***

People can:

- Work on the programming education materials (for kids or teachers)
- Mentor teachers on programming and digitalisation 1-to-1 or 1-to-many
- Join teachers in class to help them with the subject
- Organise programming/digitalisation education events for kids

The education materials should be published as open source, so they can also be handled through the open source sponsorship.

### ***How do they report what they have done?***

We will ask people to send a mail with a link to the project, free text description, and the hours they have worked on it. The mail will be sent to our Flowdock Open Education flow, where other employees can see the reports in the inbox.

### ***How much are they compensated for this?***

€15 per hour, with 30 hours monthly maximum per person, the same as for the already sponsored Open Source. The 30 hour maximum is shared quota between the activities —if you do 15 hours of Open Source, you only have 15 hours of Open Education left.

### ***How long will the pilot be (at minimum)?***

If we get to start the pilot now in October 2015, it should run to the end of March, so five months.

### ***How much will the pilot cost the company (estimate)?***

It is difficult to estimate how popular this will be, but since Open Education requires a lot more coordination, we assume it's going to be perhaps quarter of the volume of Open Source. Estimating €6000 for the first six months.

### ***How will we measure the success of the pilot?***

We are hoping to get at least 10% of the company (20 people) to contribute during the time. Towards the end of the pilot we will do a survey to get people's opinion. Measuring competence development (subjectively, at least) would probably be a good idea. It is unlikely that we get that much visibility for this at the early stages, but it may have a positive effect on recruitment.

### ***How will we manage the pilot?***

One person will act as the Clerk and collect all the reports at the end of the month, sending them to the payrolls. The head of the program can do this for now as part of his other duties. There is no significant extra effort to add this to the Open Source reporting.

## **Piloting an activity**

The goal of the pilot is to generate the relevant information for making the decision whether the specific activity sponsoring should continue.

The decision can be based on:

- Is there relevant competence development happening?
- Do the involved employees appear more engaged?
- Are there PR opportunities for the company?
- Do we have a positive social impact?
- Any other value creation?
- Is the rate of adoption sufficient?
- Does a community start forming around the activity?
- Have we succeeded in making the activity inclusive?
- Are the costs within the estimated/acceptable range?
- Does it create value for the customers of the company?

At Futurice we agreed a five month pilot for the Open Source sponsorship. During this time:

People were encouraged to make use of the sponsorship. Several influential employees were specifically asked to, to create an example, but of course it was all voluntary. This turned out to be a rather effective strategy.

The adaption rate was observed and the instructions were fine-tuned based on the received feedback.

We had a few co-creation events, such as hackathons, to get more people involved. This is very efficient.

Our existing somewhat fragmented Open Source community adopted the sponsorship and began to encourage other employees to participate, by positively commenting on each other's projects.

Towards the middle of the pilot we had a company survey gathering feedback for the sponsoring arrangement. The results were overwhelmingly positive.

“It really is awesome. And I know that ‘awesome’ as a word has been used too much in too many occasions but this time I think it really should be used. It makes most of our developers and designers really happy and makes the value their work place even more. And in the future hopefully our customers will be happier as well.”

“Lovely! I think it is great that we support contribution to open source as it is a great way for publicity and for our people to get even better!”

“I think it’s a great idea. I especially like the compensation possibility for employee own open source work. I think that sets us apart as a company. I am not sure how valuable the opensourcing of internal tools have actually been, but I’m sure it haven’t hurt.”

A full set of free text responses can be found in Appendix B.  
Based on our pilot we could then determine success:

*Is there relevant competence development happening?*

Maybe. It was not certain, but we strongly suspected so. This was later proved.

*Do the involved employees appear more engaged?*

Yes. People seemed excited and our survey supported this.

*Are there PR opportunities for the company?*

Yes. We got some media visibility announcing the sponsorship.

*Do we have a positive social impact?*

Maybe. We consider Open Source to be a positive social impact, but still a bit early to say.

*Any other value creation?*

Yes. Very efficient to mention the benefit in recruitment. Also people who don't usually work together now discuss their own projects actively together, improving cohesion and our work culture.

*Is the rate of adoption sufficient?*

No. People did not pick up on this quite as fast as we hoped. Partially because Open Source in general was not as familiar to people as we assumed. Also because people are very hesitant to expose their work to their peers. The adoption was growing though (see Appendix C).

*Does a community start forming around the activity?*

Yes. This happened surprisingly strongly.

*Have we succeeded in making the activity inclusive?*

No. Many people felt they don't have the necessary skills to contribute. It's been a lot of work to debunk this, and even now it's not ideal.

*Are the costs within the estimated/acceptable range?*

Yes, our 5 month pilot budget ended up lasting for the entire year.

## Sponsorship rules recap

This is what we have in our intranet at the moment, as instructions for our own employees, regarding the Open Source sponsorship.

Futurice strives to advance the Open Source cause by sponsoring Open Source contributions by the company employees on their own time. These contributions are entirely voluntary and are not related to any company projects, or the work in general. The purpose of the sponsorship program is to sponsor hobby contributions to a good cause.

This is not work, the compensation is not salary, the hours will not be entered into Planmill and thus there is no effect on vacation or saldos and such. The compensation is however taxable, like other bonuses.

- Futurice will sponsor open source contributions done outside work
- Any open source contribution is acceptable, as long as the license is OSI approved
- Also CCO, CC BY and CC BY-SA are ok —note that CCO is not possible in some jurisdictions
- Part-time employees are eligible for pro rata compensation. Please include your part time percentage when you report contributions.
- If you are based in Germany or Switzerland, please also sign the sponsorship information document before participating — Isabell can help you with that!
- Compensation is €15 per hour spent
- A maximum of 30 hours per calendar month is compensated to an individual (not cumulative)

- ◆ Contributions are reported by sending mail to [redacted]@[redacted].flowdock.com
  - ◆ The email needs to include the project, hours spent and a link to the relevant commit/PR/whatever
  - ◆ Contributors are encouraged to also join the Flow!
- 
- ◆ The Clerk will collect these from the Flow and send to the payroll monthly
  - ◆ The current Clerk: Teemu Turunen

The rules for the Open Education sponsorship are almost identical, but we added a lot of examples, hoping it would make it easier for people to start contributing.

## This sponsorship is in pilot phase starting Oct 2015.

Pre-defined Digital Education activities are sponsored under the Spice Program umbrella. Like Open Source work, the sponsorship of these activities concerns contributions by the company employees on their own time.

These contributions are entirely voluntary and are not related to any company projects, or the work in general. The purpose of the sponsorship program is to sponsor hobby contributions to a good cause.

This is not work, the compensation is not salary, the hours will not be entered into Planmill and thus there is no effect on vacation or saldos and such. The compensation is however taxable, like other bonuses.

- ◆ Futurice will sponsor digital education contributions done outside work
- ◆ See examples below to see what kind of contributions are acceptable, ask if in doubt (briefly: mentoring teachers and teaching kids is fine)
- ◆ The part-time employees are eligible for pro rata compensation. Please include your part time percentage when you report hours.

- If you are based in Germany or Switzerland, please also sign the sponsorship information document before participating — Isabell can help you with that!
  
- Compensation is €15 per hour spent
- A maximum of 30 hours per calendar month is compensated to an individual (not cumulative)
- This 30 hour quota is shared with the Open Source sponsorship!
  
- Contributions are reported by sending mail to [redacted]@[redacted].flowdock.com (see details below)
- The email needs to include the project, hours spent and a link to the relevant commit/PR/whatever
- Contributors are encouraged to also join the Flow!
- The Clerk will collect these from the Flow and send to the payroll monthly
- The current Clerk: Teemu Turunen

## **Activity A: Supporting comprehensive school teachers**

Creating (open source) study materials and exercises to assist teaching programming in Finnish comprehensive school, and mentoring the teachers to make good use of them.

### *Create open source study materials and exercises for elementary schools*

1. Get the template and a few examples for an exercise
2. Innovate your own exercise (doesn't matter, if it is not unique)
3. Fill in the template (doesn't matter, if it is not complete)
4. Submit the template to our GitHub repository
5. Report hours by sending the template to [redacted]@[redacted].flowdock.com as an e-mail attachment

### *Mentor the elementary school teachers*

1. Study the available exercises or if you have created one, suppose you know it
2. Inform Spice Program faculty that you'd like to mentor teachers

- 3.** Spice will arrange you the chance to do this, co-located or remotely, as agreed
- 4.** After the mentoring session, ask for teacher feedback, if you feel like it
- 5.** Report the mentoring by sending a mail to [redacted]@[redacted].flowdock.com

## **Activity B: Code schools for kids**

Creating (open source) exercise materials for code school, getting introduced with the existing materials, and co-teaching a code school.

### *Getting familiar with the existing code school materials*

- 1.** Choose whether you want to do this alone, with a colleague, or with someone else
- 2.** Go to <http://turtle-roy.herokuapp.com/> and meet Turtle Roy
- 3.** Read also <https://github.com/koodikoulu/koodikoulu> and <https://github.com/raimohanska/turtle-roy>
- 4.** Try things out with Turtle Roy and draw something cool
- 5.** Report hours by sending a mail to [redacted]@[redacted].flowdock.com

### *Create open source exercises for code school for kids*

- 1.** Get to know the existing material for code school
- 2.** Try Turtle Roy out and come up with your own cool idea on what to do with it
- 3.** Write the script on how to replicate and explain the cool thing you just did to kids
- 4.** Make a pull request to <https://github.com/koodikoulu/koodikoulu> or <https://github.com/raimohanska/turtle-roy>
- 5.** Report hours by sending a mail to [redacted]@[redacted].flowdock.com with a link to your PR

### *Co-teaching a code school for kids*

- 1.** Inform Spice Program faculty that you'd like to act as teacher in a code school
- 2.** Find a time, date and space for the code school together with Spice girls and boys
- 3.** Add event to the koodikoulu.fi site, or ask us to do it
- 4.** Hold the code school
- 5.** Report hours by sending a mail to [redacted]@[redacted].flowdock.com with a brief description of the event

## **Operations management**

Our basic operations management process for the sponsored activities is very simple.

There is a nominated person who collects the reported hours for the payroll. We call this person the clerk. In our case, the head of the whole Spice Program has this role, but it could be a rotating role just the same. It's beneficial though, if this person is actually interested in people's projects, and able to occasionally start discussion on them.

Each month the payroll informs the clerk when the hours are needed. It would be great if this date did not fluctuate from month to month, but in our case, due to our payroll process, this unfortunately is not the case. Of course we could set the date for these contributions reports to be in mid-month to achieve this. Perhaps we should!

Each month the clerk reminds the people a few times of the deadline. Each month several people miss it. When this happens, we usually accept more hours for the next month. Repeating the rules in public now and then alleviates the risk of someone accumulating hours for nine months, with the plan of reporting them all at once.

The clerk goes through the reported contributions accumulated since the last payroll report, asks any clarifications sums up the hours, and sends the report to the payrolls.

April 2016	hours	euros	country	Full-time
Aki L	15	225	FI	1
Antti A	10	150	FI	1
Antti P	19,5	292,5	DE	1
Axel E	8	120	FI	1
Daniel L	8,5	127,5	FI	1
David S	25	375	UK	1
Frank P	5	75	FI	1
Harri L	15	225	DE	1
Jarno R	30	450	FI	1
Jesse L	10	150	FI	1
Kimmo B	20	300	FI	1
Kimmo T	14	210	FI	1
Kristian N	22	330	FI	1
Marja K	3,5	52,5	FI	1
Martin R	11	165	DE	1
Max M	9	135	FI	1
Michael S	30	450	FI	1
Miko M	8	120	FI	1
Neil M	16,5	247,5	FI	1
Olli J	30	360	FI	0,8
Oskar E	10	150	FI	1
Ossi H	19	285	FI	1
Peter T	15	225	DE	1
Tomi H	4	60	FI	1
Tomi T	23,75	356,25	FI	1
Touko V	4	51,6	FI	0,86
Ville T	24	216	FI	0,6
	<b>409,75</b>	<b>5903,85</b>		

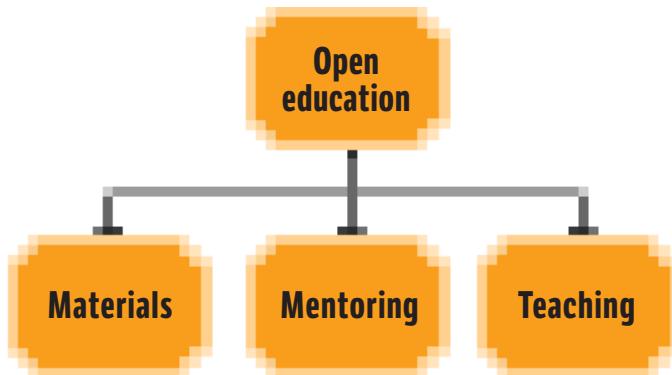
Report to payroll, real example

## Community Management

We have learned that the need for community management depends greatly on the particular activity that we sponsor. Strong communities are intrinsic to open source, and our in-house open source community is quite self-managing. People take interest in each other's work, they comment, offer advice, and help each others out. An active community manager would likely just discourage that, so the assumption is that it's better leave well enough mostly alone.

Even with open source it can be very beneficial to arrange co-creation events, or better yet, help and encourage community members to do so. The company can provide extra funding to these. This efficiently attracts new people to take part in the activity.

If the activity is more abstract, like our open education, community management is crucial to get people started and working together. We attempted to make it very easy to proactively do open education tasks by codifying the ways of participation.



There's also some consideration to people's personal preferences here. Not all people are comfortable teaching, for instance. A classroom of young students can be terrifying to some, even people who routinely present for adults in a professional context. On the other hand, creating exercises and testing them several times may not appeal to others. It's good to have possibilities for different types of people to contribute.

The initial feedback we got was that all seems clear and easy. We also provided the necessary infrastructure — a GitHub repository for the exercises, a web site where they are published, and so forth. However, this did not work. With a few exceptions people would not contribute.

Our error in this is perhaps quite obvious in hindsight. With open source, people tend to scratch their own itch. They have a motivation to build something, or contribute to something. With open education, the way we presented the activity, this intrinsic motivation is missing.

So we decided to get active with community management.

## General reporting

At Futurice we tend not to report overly much, but it's useful to keep track on the trends; how many hours do people report each month? Is it increasing or decreasing?

This is done not only to get budget projections, but more importantly to have an understanding of the popularity of the activity. Since we believe it to be beneficial to the employees (and the company, and the society), the ultimate goal is to get everyone on board.

Also people are generally interested in this type of easily visualisable data, so it makes for good Twitter-fodder.



## Communication and marketing

Please take this chapter with a grain of salt, especially if you are operating outside Finland. Marketing and communication are:

- a)** Something that our program has not really focused enough on
- b)** Prone to cultural differences

Early on in the program we decided to focus on internal marketing, that is, to direct our communication towards our own employees and not even seriously try to get the message out.

This was a mistake.

There's a constant oversupply of information. The most efficient way to do internal marketing is to do external marketing. People want to read and hear what others read and hear about their company. For instance, a post in the company blog attracts a lot of interest internally, if it evokes public reactions from some relevant external parties. What counts as relevant is personal.

Furthermore, if you are being serious about open source and social impact, no matter what your domain is, you will want to extend your program's impact outside your company. Therefore it makes sense to expose your activities to as wide an audience as possible.

Then again, many of our employees have commended our (somewhat unintentional) doing instead of talking approach. At least in Finland this seems to validate to many that we are indeed serious and not in it just for some quick PR wins. This, people feel, is a key differentiating factor from the so called traditional corporate social responsibility, where the company shovels a small portion of the marketing budget to appropriate charities, and cashes in the positive publicity through whatever media is available and interested.

So we want to let the world (and by proxy, our employees) know what we are doing. Meanwhile we'd rather understate our achievements than risk sounding smug, preaching, or the worst of all — false.

#### *Our revised marketing guideline for the program:*

- 1)** Make sure you have substance. If you get a great idea and someone wants to spin the story out before you have actually acted upon it, don't.
- 2)** You can let some cool stuff just let fly under the radar. Sure, not many will hear about it, but the ones who do will love it. And the

people who they share the story with. And the people who they share the story with.

**3)** Make sure that any parties we cooperate with, be they companies, other institutions, or people, get at minimum their due share of credit.

**4)** Be very careful about taking credit for employee personal achievements, even if they are sponsored by the company. The best way to go about this is probably to help them promote their projects.

In recruitment it has been valuable to be able to positively surprise the interested candidates when open source and social impact are being discussed in person.

*"You actually get paid for free time open source contributions?"*

*Sounds too good to be true."*

– A quote from a London job fair

## Arranging events

A good way to increase activity adoption among the employees is to arrange some co-creation events. We have had several different types of such events. Some have given birth to longer term projects, while others have been more of a one-time effort. Several examples of such events follow, with a brief analysis on the impact to our program.

## Project related events

Futurice and Ruisrock, Finland's biggest annual music festival, organised a hackathon with a goal of making a good open source festival app so that any festival can have one with minimal effort.

Festapp project aims to provide General Purpose Festival Apps, to be used as a basis for a companion app for any event.

The history of the apps, with thanks to Ruisrock producer Annakaisa Anttila (@TuottajaAnttila):



Annakaisa  
Anttila

**2011** Fonecta, as the sponsor of the festival, sponsored the making of a festival app for Ruisrock. Futurice was hired to implement.

**2012** Fonecta still was a sponsor of the festival and the app was partially updated.

**2013** Fonecta donated the code base to Ruisrock. Futurice people did a partial update partially as volunteer effort, partially company sponsored. Decision to open source was reached.

**2014** the aforementioned hackathon in Otaniemi Startup Sauna (@startupsauna) was organised. During the weekend people were focusing on extending the app to become a generic festapp, not just for Ruisrock. Later a smaller group who had participated in the hackathon adapted the new version so that it could be used by Ruisrock the next year.

**2015** a smaller group of Futurice employees updated the Ruisrock's version of the app, also the open source festapp code base was improved. This was a volunteer effort.

**2016** again a volunteer update on the app, including people who do not work for Futurice.

So let's take a look at the grand open sourcing hackathon of 2014. How did it go and what did we learn? After the hackathon the code base was not well organised and there were broken things.

*This is largely due to us having:*

- Quite a large number of participants (about 50)
- A rather scattered code base to begin with (server, Android, iOS, even Windows Phone)
- Not a very carefully considered task assignment prior to the hackathon
- A shortage of mentors
- A shortage of designers

Value was created. The effort to value ratio was not very high. This was suspected in advance and accepted; if we would have wanted to be

super efficient about the actual work, we would have just assigned a small team to do it. After the hackathon quite a bit of code was discarded. The rest of the codebase needed a lot of love.

If a hackathon is used to create something that will see actual use, the organiser needs to be prepared for this effort.

On the other hand, the hackathon very efficiently served as a positive inauguration to several people new to open source. The participants and organisers learned a lot. For the program this was definitely a success. For the project, there would have been more efficient alternatives to get the work done.

## Generic events

We have been organising code camps for several years now. The point of a camp is to gather together a group of software enthusiasts for a couple of days, with the intention of learning new methods or technologies. A theme is (loosely) agreed upon, and then people get to freestyle it for a weekend, in some suitably isolated location. Demos, laughs, and beers are had. People get to know each other and learn something new.

Open source sponsorship works very well with this. Our code camp of 2016, organised by Olli Rissanen at the quirky Villa Humerheim resort, resulted in quite a few open source contributions by multiple people. For several of these people it was the first sponsored contribution, and for a few the first open source contribution, ever.

*Some examples of the projects that were created and published:*

- A computer-narrated gif movie theater written in Elm
- Old-skool(ish) demo-effects written in Elm language
- A planetary music box written with Elm
- A chat bot connected to Microsoft Bot Framework, with a custom UI for speech IO and a Markov chain trained with Apollo 11 mission transcripts
- A Kotlin-based Android app that produces musical tones whenever any of a set of bouncing balls collide
- An F# program that uses Markov Chains and Spotify's API to deliver music reviews

From the program point of view this was an excellent opportunity to get people involved.

## **Themed events**

There are cases when having a sponsorship model in place has allowed our people to independently arrange something, like an event, without having to ask for actual work allocation for the time. Of course they could do this without any compensation, but that may not feel entirely fair.

One such example is a themed hackathon we had in 2013, the Retrohack. Our Juho Vähä-Herttua prefers everything in 8 bits and if possible, in Z80 assembly. He had an idea to get a bunch of people, with little to no experience in this old delicacy, to work on some retro demo effects for a weekend.

This required some preparation work. Juho worked on an open source ZX Spectrum programming tutorial with utilities and some examples to make the learning curve a bit less steep. He also wrote a blog post about setting up the environment, and published it with an applicable Creative Commons license. These hours could then be reported to our open source sponsorship.

The weekend we created the demo also resulted in quite a bit of open source work, as we published nearly all the resulting code. The event allowed several people to make their first open source contribution. From the program perspective this was very successful. For future retrohacks, perhaps some designer involvement could be good. The demo turned out awesome nonetheless!

## **Other related projects**

In the recent year we have had several employee co-creation projects that have been done either on company time, on sponsored free time, or the combination of both. This chapter briefly introduces some of these projects.

## Whappu App

In Finland, Walpurgis day (*Vappu*) is one of the biggest holidays. This is specifically so for the university students, who tend to take a full two weeks celebrating it. That means a lot of events, minor and major, scattered all around the university cities.

Futurice has strong ties to universities, and our Tampere site people had for several years considered helping out the Tampere University of Technology students, with the celebration by creating a better solution to keep track of what's where and who's there.

In 2016 they decided to act on this, and Whappu App (and server) were born. Creating it took the effort of half a dozen people. The work was done partially on free time as company sponsored open source (Spice Program), and partially on the company clock. The scope expanded a bit during the implementation and the final solution has some social media features, specifically a possibility to add photographs to a common feed. There is also a gamification aspect to this, as the students belong to guilds that like to compete with each others.

Some interesting challenges in curating the content rose after going live (all university students do not respect the rules regarding the nature of the content, who woulda thunk?) and were resolved by the team. The app was advertised in student events and media, and it gained wide adoption in the relevant group of people, making the project a success.

There are continuation projects in the works building on this codebase.

The technology selected was the bleeding edge React Native; an ambitious choice, considering that very few of the team had much experience with it. This made the learning curve somewhat steep, mostly because there wasn't all that much time to get the job done. The team received very valuable support from other experts in the company.

## Pepperoni Framework

Pepperoni is an app starter kit for React Native, Facebook's new mobile framework. It has been created by Futurice UK crew.

Our Jani Eväkallio (@jevakallio) describes its purpose:



"We aim to help developers new to React Native to get started building their first app the right way, and more experienced teams, such as our own, to kickstart new development projects at top speed."

"The developer community is very excited about React Native: in its one year of existence, it has gathered 32,679 stars on GitHub — almost as many as jQuery — and companies like Microsoft sponsoring its development."

"React Native is a revolutionary piece of technology, but actually building production-grade software with it can feel quite overwhelming for the uninitiated because of the novel concepts it expects you to understand. The development landscape is something of a wild west, too, and people struggling to set up their environments, unit and integration tests, continuous integration and delivery etc."

"Our team at Futurice, the consultancy where Pepperoni originates, has spent the last 10 months of building and shipping React Native apps to our customers, learning how to do it right. We want to share that knowledge with the community, and Pepperoni is our means to that end."

"Pepperoni is a tool for developers, but we built it to solve a problem for companies. In our work we help customers ranging from startups to enterprises to launch new products, and it simply takes way too much time and money to get a Minimum Viable Product out there to start

learning and iterating in the market. Pepperoni helps companies ship MVPs fast, but with a stable base that will enable them to scale their MVP to a full-fledged product.”

At the time of the writing, Pepperoni has been launched and has already drawn quite a bit of attention in the tech scene. We decided to use it in a pro bono project for a NGO. This has several benefits; Pepperoni gets a proper open source showcase implementation, internally more people in Futurice get involved with it, and the NGO project team finds some motivated mentors with the Pepperoni crew.

## CHAPTER 8

### where we measure the created value

At the first phase, we focused on measuring the impact in employee context: program's impact on attracting employees, competence development and engagement of employees. We also developed ideas of further measurement, such as societal impact and financial value of the program.

It's worth noting that program's long term impact and value can be properly evaluated over time, thus the very first results are just a starting point for assessing the value of the program. After measuring several times trends can be tracked. Especially impacts on society take usually a while to materialize. At the moment also the produced financial value is difficult to evaluate as there are not direct financial outcomes such as sold services directly related to the program, but this is expected to change as productization of the program is currently planned.

## **1. Attracting talent**

An item measuring importance of Spice activities (among other factors) while considering to apply for Futurice is included in recruitment feedback survey, which will be sent to all interviewed applicants after the recruitment process. This item ("How important were the following things while you were applying for Futurice") is assessed on a scale (1 not important, 2 slightly important, 3 important, 4 very important), also out of the scale option "not aware of this while applying" is offered. Importance of company sponsored open source contributions and other Spice activities (digital education, social inclusion and sustainability efforts) are measured separately.

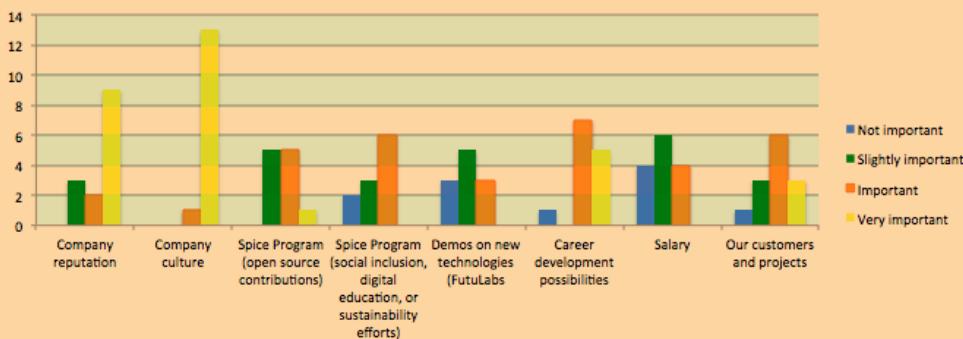
We can measure how important Spice activities are for recruited and not recruited applicants, different types of applicants (developers, designers, business consultants) and also measure if the ratio of those not aware of Spice activities will decrease as the program gets more publicity.

## **Results from the pilot phase**

Pilot feedback survey was sent to newly recruited Futuriceans at the end of February 2016, and 14 out 18 recipients answered to survey. The results show that open source contributions (mean 2,64) were considered more important than other Spice Program activities (mean 2,36) while applying.

One respondent considered open source contributions as a very important factor for applying, five thought it was important and five that it was slightly important. Digital education, social inclusion efforts and sustainability efforts were important for six respondents, three thought they had been slightly important and two respondents told that they were not important. Three respondents were not aware of open source contributions nor other Spice activities while applying.

### How important were the following things for you while applying for Futurice?



Both types of Spice activities were considered more important than demos on new technologies (FutuLabs) or salary (mean 2,0). The most important for candidates were understandably factors that were directly linked to attractiveness of company as a work place and to the work itself: the company culture (3,93), company reputation (3,43), career development possibilities (3,23) and customers and projects (2,85). Other things people brought up as an attraction factors were location and different sites, technical freedom (ability to choose technologies and languages they use) and learning opportunities.

As the total number of respondents was small in pilot phase, we can't draw comprehensive conclusions at this point, but more data will be collected continuously. However, it seems that especially company sponsored open source contributions have some importance when thinking of applying to Futurice. One respondent had also got information about open positions at Futurice through open source projects, so company sponsored open source projects might also promote the awareness of Futurice as an employer. In addition to survey data also qualitative data like recruiters' experiences at the job fairs could be used to assess the attractiveness of the program in the application phase.

## 2. Competence development

We have created a short survey on learning to program participants to gather information about program's impact on competence development, data will be collected twice a year. In the survey it is inquired whether or not participants have learned professionally relevant skills via Spice activities during the past 12 months, measured by item "My professional skills have improved by participating in those activities", and because the Spice program contributions are made on participants' free time, we are also interested if they have been able to apply those skills at work, measured by item "I've used skills learned by participating in those activities in my work". These items are assessed on a scale 1 (strongly disagree) to 5 (strongly agree). There are also questions about how frequently participants have made contributions and what kind of things they have learned.

### Results from the pilot phase

The pilot survey was sent to 54 Spice Program participants in January 2016, and 37 of them answered to it. According to responses, participating in Spice Program activities had really improved their professional skills. 22 participants (59 %) agreed strongly and 14 participants (39 %) agreed on improvement of skills, and the mean was 4,57. Respondents also described their learnings in detail.



Participants mostly agreed (21 people, 57 %) or strongly agreed (12 people, 32 %) that they had been able to use those learned skills at work (mean 4,14).



The frequency of contributions was assessed on weekly, monthly or less than monthly basis. This categorization is too vague and will be corrected to the next survey, since 24 participants had contributed less than monthly, and it doesn't describe properly how much people have really contributed. Because of this vague categorization, frequency didn't seem to be related to learning outcomes or applying skills at work, although the amount of contributions may not necessarily be connected to them either. One respondent described successfully applying learned skills "I haven't made many contributions — but those I have made I have been able to use directly in my project work at Futurice, as well as gain deeper knowledge of the open source tools we use daily".

Next time, application of skills needs to be asked more closely to get a more complete picture of how participants are using the acquired skills at work, and if they think they aren't able to use them at their work, why is that. It's probably mostly related to the type of the contribution and the kind of work and projects participant has. Professional skills gained via open source contributions might be more directly applicable in many work projects at Futurice than skills learned through code school teaching, for example.

To conclude, Spice participants are really learning skills valuable at work, but there's still more potential to apply those increased professional skills in their work projects.

### **3. Employee engagement**

Spice-related employee engagement data was collected as a part of wider personnel survey at the pilot phase, and it will be collected as a separate survey sent to Spice participants twice a year. Overall employee engagement data is collected every month with pulse survey to track the changes in faster way.

#### **What is employee engagement?**

Our measurement draws on definitions of employee engagement as "employee's cognitive, emotional, and behavioral state directed toward desired organizational outcomes" (Shuck & Wollard, 2010), "level of commitment and involvement an employee has towards their organisation and its values" (Anitha, 2014) and "positive attitude held by the employee towards the organisation and its values. An engaged employee is aware of business context, and works with colleagues to improve performance within the job for the benefit of the organisation" (Robinson et al., 2004). Engaged employees display their full selves within the roles they are performing (Saks & Gruman, 2014), are emotionally attached to their organization, and highly involved in their job with enthusiasm for the success of their employer, willing to go extra mile (Marcos & Sridevi, 2010).

This is more broadly defined than the concept of work engagement as "an active, positive work-related state that is characterized by vigor, dedication, and absorption" (Schaufeli & Bakker, 2004a) in which engagement is the opposite of burnout, and other definitions that primarily refer to the relationship of the employee with his

or her job. When choosing the definition and creating measures, it was assumed that Spice Program activities might be related to the engagement in organizational level rather than in one's work tasks, since those activities are done in free time but supported by company.

On cognitive level employee engagement is based on assessment of the workplace climate and tasks one has (Shuck & Reio, 2014), whether they are meaningful, psychologically safe, and if one has resources needed at work (Kahn, 1990). Employees experience meaningfulness when they feel worthwhile, valuable and not taken for granted (Saks & Gruman, 2014), and that they are "able to give to and receive from work and others in course of work" (Kahn, 1990). Organisations can facilitate meaningfulness by affecting factors that influence positively employees identity (Pratt & Ashworth, 2003). Things that feed meaningfulness are e.g. job characteristics, autonomy to do things, learning and career development opportunities, good social relations, leadership styles, compensation and intangible rewards like feedback and recognition (Anitha, 2014; Saks, 2006.) Meaningfulness can be further divided into meaningfulness in work and meaningfulness at work. Former derives from the work and tasks that one is doing, if they are intrinsically motivating, feel significant and valued. Meaningfulness at work comes from membership in an organization. It is about finding meaning in relationships at work, and in the goals, values and beliefs that the organisation supports. (Pratt & Ashworth, 2003). It is thus more related to engagement on organizational level.

Safety has to do with being able to express one's true self without fear of negative consequences and is enhanced by support from organization and co-workers, trusting relations and fair organizational policies (Anitha 2014; Saks 2006). Also personal resources like self-esteem and self-efficacy also affect engagement (Bakker, 2011). This cognitive level of engagement is followed by emotional and behavioral levels (Shuck & Reio, 2014).

From this broader perspective emotional engagement includes similar positive emotions e.g. pride and enthusiasm as dedication at work, but also towards the organization and its' membership, thus

being close to definition of affective organizational commitment, and behavioral level of being involved and motivated to contribute to organization's success. Examples of these could be willingness to go beyond the basic requirements of the job and desire to work to make things better (Robinson et al., 2004).

## **Content of the first survey**

Due to practical reasons number of items was limited in the first personnel survey. As a background information people were asked about their tribe, work years at Futurice, career path level, working in an account belonging to another tribe, and whether they were working at their customer's premises. Basic survey questions included e.g. items related to satisfaction of basic psychological needs of autonomy, competence and relatedness; company values of trust, caring, transparency and continuous improvement, as well getting feedback, sufficient rewards and having career development options. These are also factors that can be seen to support formation of engagement, as they create the experience of meaningfulness, psychological safety and having competences needed at work.

Emotional engagement at the organizational level was assessed by statements "I'm proud of being a Futuricean" and "I enjoy working at Futurice". Behavioral intentions that were assessed were recommendation "I would recommend Futurice as an employer if my friend would ask" and intention to quit measured by "I have recently searched for or I am planning to search for a new job in near future". The behavioral engagement was also asked by item related to individual level aim to continuous improvement "I have challenged myself (tried or learned new things, shared my knowledge etc.) recently". Another and more comprehensive item for measuring extra efforts will be added to next wider survey. Also intention to quit was replaced by intention to stay "I see no reason to look for another job at the moment". In addition to basic questions, wider survey included items related to work engagement related vigor, dedication and absorption.

Basic questions were assessed on a scale from 1 strongly disagree, to 4 strongly agree. Thus it didn't include actual neutral option in the middle, because less neutral opinions were originally called for, but instead there was fifth, out of the scale option "can't say" for those that don't know enough of the subject to provide an answer, or don't want to give an answer e.g. for intention to stay. These responses were left out from actual analysis.

In similar survey, also 5 point scale including neutral option in the middle could be used with the can't say or don't know option, allowing expression of milder attitudes but not lumping them together with those not knowing enough to answer, or unwilling to express views to sensitive questions. It can be argued that it would be better when counting means of statements, too. To be exact, one is not supposed to count means and use them as parameters for ordinal data like this, but sometimes they are calculated for attitudinal scales to give a general view on scores, just like here.

In addition, in a wider personnel survey people were asked what kind of activities they had participated, and which events, programs or initiatives make them enjoy working at Futurice, listing 14 options including Spice Program and possibility to provide one's own option. In the pilot survey time frame for participating in activities was missing, which impaired the relevancy of those responses. In the case of Spice Program this was not so crucial, as these activities have been going on for shorter period of time compared to many other activities, in similar survey this and latter question about important activities should be phrased more clearly.

In the future, separate and shorter survey about engagement will be sent to Spice participants, They will be asked more directly how they see Spice role in their engagement, if there is any.

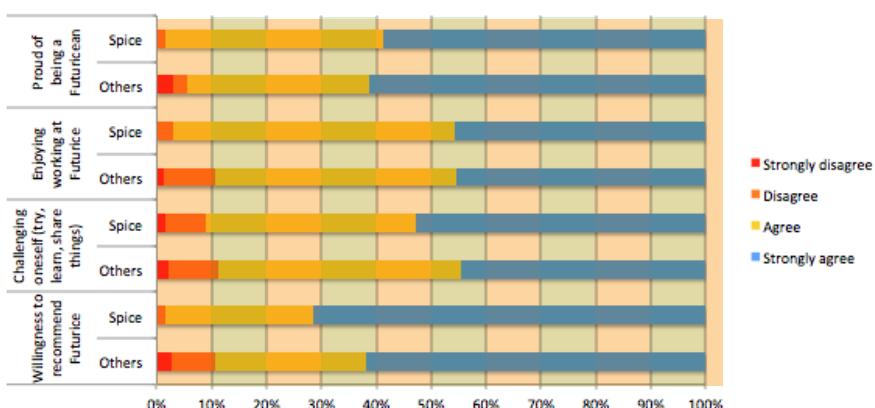
## **Results from the pilot phase**

68 people stated that they had participated in Spice Program activities, but as the level and time of involvement was not inquired, it's possible

that some of them have not taken actively part in program. Total number of respondents was 213, response rate being 85 percent of people working at Futurice (employees on family etc. leaves not counted).

In general, employee engagement was on a good level on whole company, and Spice participants got slightly higher scores from the basic questions related to organization level engagement and things that are considered drivers of employee engagement, except for getting enough feedback. For example 51 percent of Spice participants agreed and 46 percent strongly agreed on enjoying working at Futurice, and 59 percent of them strongly agreed and 40 percent agreed on being proud of being a Futuricean. 54 percent of participants strongly agreed on challenging themselves to try, learn and share things, compared to 44 percent of others. 72 percent of Spice participants agreed strongly and 27 percent agreed on willingness to recommend Futurice as a place to work while among others these percentages were 62 and 27.

Figure Organizational employee engagement related responses by groups (%)



However, the intention to quit was at the same level (mean 1,98) in both groups, about 30 % had or were planning to look for a new job in near future. Differences in relying on colleagues' abilities, getting support from supervisor and willingness to recommend Futurice as an employer had statistical significance (confidence level of 5 %,  $p < 0,05$ ).

(scale: 1 strongly disagree, 2 disagree, 3 agree, 4 strongly agree)	Spice participants			Others			All		
	n	M	SD	n	M	SD	N	M	SD
I can rely on my colleagues' skills and abilities	68	3,75	0,43	144	3,54	0,73	212	3,61	0,65
I feel I can honestly discuss my tasks, even negative feelings and frustration	68	3,49	0,70	144	3,39	0,76	212	3,42	0,74
I get support from my supervisor when I need it	68	3,47	0,63	140	3,19	0,83	208	3,28	0,78
I get support from my colleagues when I need it	68	3,63	0,51	143	3,41	0,72	211	3,48	0,67
I think there is enough visibility and information about what is going on in the company	68	3,03	0,69	143	2,93	0,76	211	2,96	0,74
I think that we share enough practices between projects and tribes	67	2,52	0,78	138	2,36	0,71	205	2,41	0,74
I have challenged myself (tried & learned new things, shared my knowledge etc.) recently	67	3,43	0,69	144	3,31	0,72	212	3,35	0,71
I feel that Futurice is improving as a great place to work	64	2,80	0,79	133	2,65	0,82	197	2,70	0,81
I feel that my workload is in balance	68	3,00	0,75	145	2,82	0,87	211	2,88	0,84
I think that my current project/work tasks are interesting	67	3,10	0,83	142	2,94	0,87	209	3,00	0,86

	Spice participants			Others			All		
I am proud of being a Futuricean	68	3,57	0,52	142	3,51	0,70	210	3,53	0,65
I am being fairly rewarded for my work	67	2,94	0,77	143	2,77	0,81	210	2,82	0,80
I get enough feedback about my work	68	2,56	0,67	143	2,62	0,77	211	2,60	0,74
I feel like I can influence things at work to improve things around me	67	3,16	0,70	141	3,06	0,75	208	3,09	0,74
I feel like I'm very good at my job	67	3,22	0,64	140	3,16	0,71	207	3,18	0,69
I feel that I have possibilities to improve my professional skills in my work	68	3,32	0,83	143	3,15	0,86	211	3,21	0,86
We have a strong sense of togetherness at Futurice	68	2,90	0,69	142	2,77	0,72	210	2,81	0,71
We have a strong sense of togetherness in my tribe	63	3,10	0,79	139	2,88	0,91	202	2,95	0,88
I see interesting career development possibilities ahead of me at Futurice	68	2,90	0,86	140	2,70	0,88	208	2,76	0,88
I enjoy working at Futurice	68	3,43	0,55	141	3,33	0,70	209	3,36	0,66
I would recommend Futurice as an employer if my friend would ask	67	3,70	0,49	142	3,49	0,76	209	3,56	0,69
I have recently searched for, or I am planning to search for a new job in near future*	66	1,98	0,93	135	1,98	1,00	201	1,98	0,98
Total mean	3,14			3,0			3,04		

The item measuring intention to quit was in reverse direction (high scores are negative from company perspective), and if its direction is changed to follow the logic of other questions, the total mean scores would be 3,18 for Spice participants, 3,05 for others and 3,09 for all employees.

Among Spice participants, emotional engagement at organizational level was quite strongly related to willingness to recommend Futurice as a place to work, and to things that are often considered as antecedents of employee engagement, although you can't assess causality by correlations. Here these were especially career development possibilities and ability to make an impact on things at work, having support from other employees and sense of cohesion. Also feeling that company is improving as a place to work was connected to organizational level engagement. The intention to quit was negatively related to career development possibilities and enjoying working at Futurice. Correlation matrices can be found in Appendix D.

Interestingly, although it seems that Spice participants had slightly more positive attitudes on their work and company, and showed efforts to continuous improvement by challenging themselves to learn new things and share their learning, they had slightly lower rates in feeling high energy levels at work (vigour) or being enthusiastic about their job (dedication). These and absorption are associated with work engagement defined as opposite of burnout.

	Spice (n= 68)		Others (n=145)		All (n=213)	
	M	SD	M	SD	M	SD
Vigour	3,73	0,99	3,89	1,05	3,84	1,04
Dedication	4,18	0,92	4,34	1,05	4,29	1,01
Absorption	4,66	0,86	4,66	0,97	4,66	0,93
Total	4,19		4,30		4,26	

Table 2. Scores on vigour, dedication and absorption by groups  
(scale 0 never, 1 almost never, 2 rarely, 3 sometimes 4 often, 5 very often, 6 always)

This is in line with findings of Erik Stenberg's master's thesis (2015), in which engagement was assessed by using UWES-9 scale (Schaufeli & Bakker, 2004b), and Spice participants ( $n=9$ ) had slightly lower scores than other respondents ( $n=66$ ) in vigour, dedication and absorption. On the other hand, this time feeling absorbed at work was at equal level among all respondents, and other differences had not statistical significance either. The total scores were lower than in Stenberg's study (in which they were 4,33 for Spice participants, 4,56 others and 4,53 total) but also number of respondents was much higher in this survey. Vigour, dedication and absorption were also assessed by only one question unlike in UWES-9 in which there are three items per each aspect of work engagement, because the main focus was on more broadly defined employee engagement than that measured by UWES, so results are not comparable as such. Engagement for work could also be measured with job engagement measures by Rich et al. (2010).

Although the survey scores cannot be derived from Spice participation, when asked about events, activities, programs or initiatives that make people enjoy working at Futurice, 90 people chose Spice Program, making it third most mentioned option after breakfasts (109 responses) and Friday beers (104 responses). Not surprisingly, of those choosing Spice activities 75 % were Spice participants, and for them it was the most mentioned option. Also 39 other than Spice participants chose Spice Program, making it 8th most popular option among them.

It needs to be noted that this question was unclearly phrased, and several respondents provided additional responses stating that it's really the people at Futurice that makes working enjoyable, also interesting work and Futurice's culture were mentioned. It's clear that these kind of things are essential for supporting great working environment and thus important for enjoying your work, more so than offering Friday beers, breakfasts or sponsoring free time Spice activities. They are not even comparable. In addition, enjoying working in your organization isn't exactly the same as being wholly engaged to it, although it is one component of emotional engagement. But still it can be concluded, that also Spice Program activities have role in supporting employee engagement by endorsing positive attachment to compa-

ny. This in turn is linked to things such as higher recommendability, as mentioned.

Program's connection to showing extra efforts at work for the benefit company or intention to quit is more difficult to track, if there is any, although Spice participants had higher scores for challenging themselves to learn. If extra efforts need to be assessed more closely, it might be useful to generate a behavioral measure (e.g. how much people are involving in activities and tasks outside the scope of their job or sharing their ideas on improvements, e.g. via Flowdock discussions) to describe the actual extra efforts instead of measuring attitudes towards it. In general these discussions also offer quite good overview on employee attitudes and actions, although not all are equally vocal there. In order to understand and follow employee's motivation and engagement, you need to listen them closely and respond fast to any concerns, not just survey their attitudes.

Turnover intentions seemed to be related especially to career development possibilities, and it seems quite unlikely that these intentions would have any direct relationships with activities done in free time. But as Spice Program activities contribute to enjoying working at Futurice, which was slightly related to intention to quit, it could have connection through that.

In addition to surveying subject, six brief participant interviews and general observations were made to get better understanding of what drives to participate in activities and how Spice Program activities might contribute to this organizational level emotional engagement.

## **Spice Program supports meaningfulness at work**

Participants were asked about what drives them to take part in these activities and how having such company sponsored program makes them think about Futurice. The motivational goals are very personal of course, but with those that these were discussed, they were related mainly to intrinsic motivation as expected, although participants could have also more external drivers for participation at the same time.

In open source contributions drive to participate comes from joy of learning, solving problems: *"you want to solve a particular problem, and there is no reason not to share it, because it might be useful others as well"*, and being able to create something new *"It's exciting to build new things that don't exist yet"*. There are also practical reasons, two participants told about wanting to improve tools they are using themselves. In digital education related contributions there was also personal interest in learning how to teach kids to code because of either own or relative's kids, and wanting to make an impact on the ways which coding will be taught to kids.

People also brought up doing good as a driver for contributing, wanting to give back to open source society which works for public good, and in digital education contributions *"It's nice to be able to contribute in something that gets kids excited and gives them nice experiences"*. There are also socially motivating factors, like getting to know new people, and getting feedback and recognition from others. Also personal brand building was mentioned as possible driver.

Open source contributors stated that they have been doing open source before the Spice Program and would do anyway, but the program is nice extra driver for making contributions. It has lowered the threshold to start again after a break, for example. But according those this was discussed with, participation in the program is not really about the money though, people told that compensation is just a nice bonus. One of the important benefits from doing contributions through Spice Program is related to those mentioned social factors and the sense of community it creates.

*"More important than money is that there is some kind of forum where you can get recognition, you post things there and someone notices that... If I worked in a company that doesn't support these kind of activities, I would do them anyway, but there would be this certain sense of community missing. It feels good that someone else is also interested in these things"*.

It was also stated that it affects Futurice's image, people outside Futurice think positively about program, and it makes you feel proud that we have it.

As these Spice Program activities promote social relations, developing, challenging and showing your skills in a way chosen by you, getting feedback for it, making an impact on things you value, and being able to give back to open source community, they seem to contribute to fulfilling the basic psychological needs of autonomy, competence and relatedness (see Deci & Ryan, 2000), and newest candidate for such, beneficence, the sense of being able to give (Martela & Ryan, 2015). When these are fulfilled, they probably enhance the wellbeing of employees (*ibid.*), but also experiencing psychological safety and meaningfulness at work, as there is stronger sense of community and company's values seem to align with yours. Having employer support such a program creates positive feelings towards the company and its values "it's nice and supportive having this", contributing to enjoying working at Futurice and being proud of it, although some people also mentioned that there would perhaps be more direct impact on their engagement if there were more customer projects that are open source.

From company's perspective the social aspect might be especially valuable in a situation where company is growing, and there might be less opportunities to get to know your colleagues and concerns that company culture is changing. There's a kind of own subculture around the program and although this culture with its Chilicorn jokes may be alienating for some, as in Stenberg's thesis (2015), based on these discussions and general observations it also creates enthusiasm and sense of togetherness, and benefits the overall company culture.

Sponsoring social responsibility activities will surely not magically turn employees engaged, in fact nothing will, as engaging is always a personal decision. To enable engagement, the basic things such as supportive work culture, required resources and meaningfulness of the work itself need to be in order. But experiencing meaningfulness at the work, feeling connected to community and alignment with its values, goals and beliefs, is also important for the organizational em-

ployee engagement, and this can be supported by social responsibility activities. Those employers that engage in practices that support both meaningfulness in and at work offer people the opportunity to self-development and feeling part of something greater (Pratt & Ashforth 2003), enabling stronger employee engagement.

## Summary

The measurable outcomes of the Spice Program:

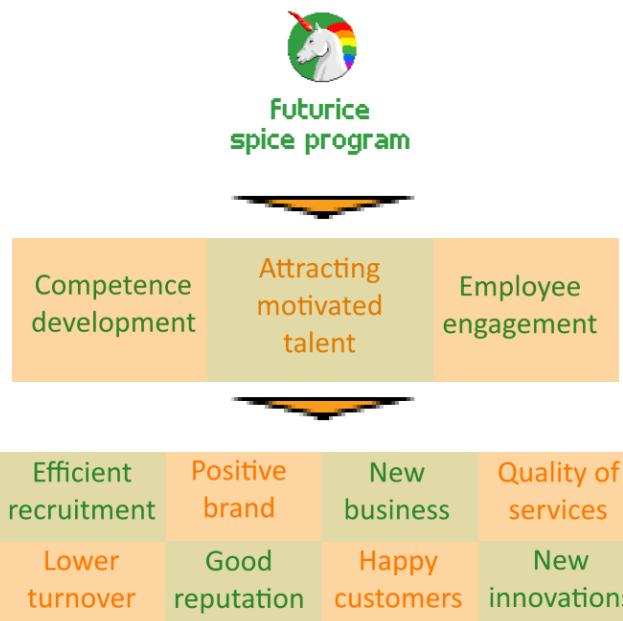
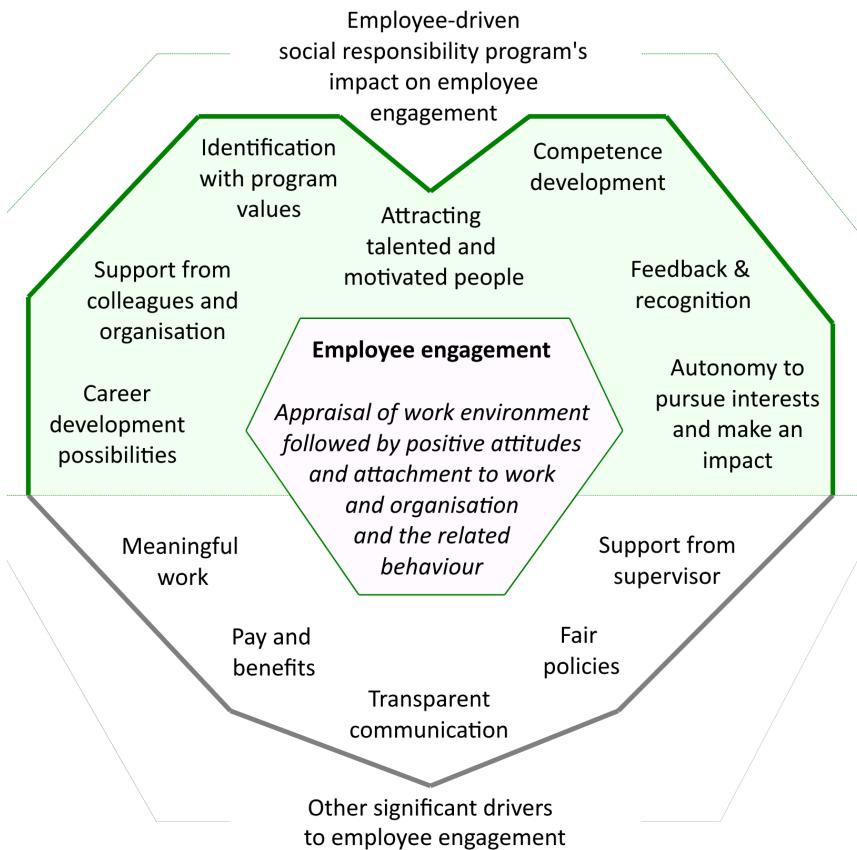


Diagram: the measurable outcomes for the Spice Program impact

Based on data we have gathered, Spice Program has an important impact in competence development, as 59 percent of participants agreed strongly and 39 percent agreed that their professional skills had improved by participant in program activities. These skills can also be

applied at work, 57 percent agreed and 32 percent strongly agreed that they had been able to use those learned skills at work. It also has impact for attracting talented and motivated people, but we need more data to see how strong the impact is.



Employee engagement is connected to experiencing meaning, safety and having necessary resources. There are several factors that affect engagement, of which perhaps job characteristics (interesting and meaningful tasks and autonomy to design the ways you work etc.),

career development possibilities and good social relations at the workplace are most important. But Spice Program activities have some impact for it, too, especially for emotional engagement on the organizational level, i.e. feeling positive attachment to company. 75 % of Spice participants brought up Spice activities among those that contribute to enjoying working at Futurice.

They also got slightly higher scores on questions related to organizational level engagement, although no direct connection can be made with program participation and these scores. In any case, those who had participated in Spice Program activities were for example more willing to recommend Futurice as an employer, 98,5 percent of them agreed or strongly agreed on that. This was connected to enjoying working at Futurice and being proud of being a Futuricean.

Spice Program most likely impacts engagement by endorsing the experience of meaningfulness at work, as company supports these activities and program's values, offering possibilities to develop professional skills, supporting autonomy to do intrinsically motivating, meaningful things and impact on things outside the scope of your work tasks and being able to do good. Meaningfulness at work and safety are also linked to possibilities for getting feedback and recognition, and strengthened social relations and sense of community within employees, at least in the subgroup of Spice participants. These create positive attitudes towards company. The social side of the program also supports the overall company culture, and might be especially useful in times when company is changing.

When Spice Program serves as an attraction factor in recruitment phase, for those employees it is more relevant in creating engagement due to their personal preferences. When the goal of recruitment is to attract most talented and motivated people, it is of course more likely that the recruited people possess personal characteristics and resources that might precede employee engagement, like self-efficacy and higher motivation levels.

Program has also potential to support career development via gaining recognition inside the company and offering possibilities to show off your skills. It could be best achieved through joint projects,

e.g. Tampere WhappuApp with React native. As career development possibilities are critical for retaining employees, Spice Program might have even higher impact on employee engagement in the future, if the program's career development potential will be promoted.

Although not measured at this phase, motivated, skilled and engaged employees are likely to produce more innovative and higher quality services. These will not only result in workforce efficiency, but added with the positive image created by doing good and benefiting the greater community, they will enhance the company's brand value and reputation. They will support company growth by attracting new customers and retaining old, happy customers, willing to buy new services. The revenues will increase and as it is likely that workforce efficiency reduces costs, this leads to high profits.

## Outcomes briefly

- ◆ Supporting recruitment by attracting talented people interested in open source contributions and other Spice Program activities.
- ◆ Increased professional skills through participating in activities, utilization of those skills at one's work.
- ◆ Supporting employee engagement by affecting engagement drivers, such as possibility to do good and make an impact, do interesting things, learn new things, feel part of community and get recognition on your skills, thus those supporting one's basic psychological needs. Having employer support these creates positive attachment towards the company.
- ◆ Increased brand differentiation, awareness and good reputation of Spice Program and Futurice

**Notes:** Survey-based data and self-report measures can be criticized for social desirability bias, people might be telling attitudes that are socially desirable, what they think you want to hear instead of their true opinions. In the case of impact measurement, people may want to emphasize their positive attitudes especially if they know that this will affect the evaluation of the program. Different respondents may

also understand or interpret understand questions or response scales in different way.

## Simplified impact mapping model

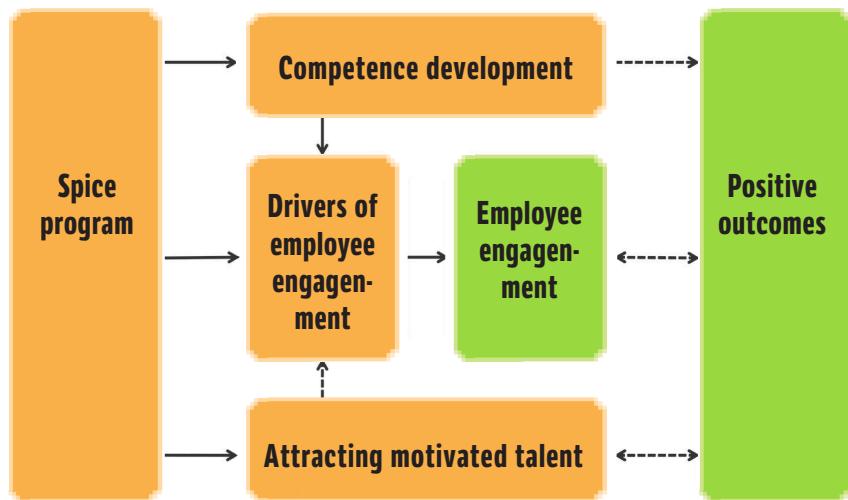


Diagram: The simplified impact mapping model for the Spice Program

Solid arrows represent topics analyzed at the pilot phase.

Dashed arrows represent links that were not analyzed, but are assumed based on experiences and existing research.

# CHAPTER 9

## where we look at potential metrics

The actual metrics are experimental, meaning that we are experimenting with them right now and our decision-making does not yet largely rely on numbers. This is a direction we want to explore.

### Attracting talented people

While assessing the value of the Spice Program for attracting talented people, we use the feedback survey based metrics to map the significance of the program for talented candidates. Monetary value can be then calculated by Chilicorn Talent Attraction Equation.

Non-financial metrics	What is measured	Way of measurement	Metrics
	How important attraction factor Spice Program is to talented people while making a decision to apply for Futurice	Recruitment feedback survey (collected continuously, sent to both recruited and non-recruited applicants)	- % of recruited people considering Spice Program activities important or very important while applying - Mean values of the importance of Spice activities in recruitment
	Level of applicants program attracts	Recruitment feedback survey	- % senior level recruited applicants

## Chilicorn Talent Attraction Equation

We can use an average figure for an employee annual value generation and simply multiply that by the number of people join us, and the impact of our program in their decision. The first two are easy, the last factor is difficult to measure. We achieve this with an automated survey, interviews, and an assessment by our recruitment department.

$$N = R_* \cdot n_v \cdot f_e$$

where

**N**      The financial value of talent attraction by the program annually

and

**R<sub>\*</sub>**      The average rate of new employees per year

**n<sub>v</sub>**      The annual value generation of a new employee

**f<sub>e</sub>**      The fraction of the program significance in recruitment success

## Competence development

We assess the impact Spice Program has on competence development by collecting participants' views whether or not their professional skills have improved, and also the type of skills they are learning. We can then present the value by using the Chilicorn Competence Development Equation.

Learning emerging technologies is a relevant indicator also while thinking about company's innovation capability.

Non-financial metrics	What is measured	Way of measurement	Metrics
	Have Spice activities improved participants professional skills	Competence development survey twice (3 times?) a year	- % agreeing or strongly agreeing on improvement of professional skills - Mean value
	Have participants been able to use skills learned via Spice participation at work	Competence development survey twice (3 times?) a year	- % agreeing or strongly agreeing on applying acquired skills at work - Mean value
	Skill type	Competence development survey twice (3 times?) a year Hour reports	- Number and % of participants learning emerging technologies - Number and % of participants learning other technologies - Number and % learning other skills

## Chilicorn Competence Development Equation

The open source free time sponsorship has people learning emerging technology. This brings value to the company. Since we need to keep up with the new tech, there is an alternative cost that can be estimated — if people were not learning the emerging tech on their free time, we would need to assign people to learn them in work. Also improving the skills in traditional technology is valuable.

$$N = (H_* \cdot f_t \cdot f_p \cdot n_c) + (H_* / n_l \cdot n_g)$$

where

- N** The financial value of competence development by the program annually

and

**H<sub>\*</sub>** The hours spent on free time programming annually

**f<sub>t</sub>** The fraction of the emerging tech hours

**f<sub>p</sub>** The fraction of the hours that are put in because of the program

**n<sub>r</sub>** The cost of the research on work time

**n<sub>l</sub>** The average hours exercising the art to go up one career level

**n<sub>g</sub>** The revenue gain (on average) for one increased career level

The equation consists of two main parts. First we add the expense we would have to invest to get the same level of emerging technology research in place, if we did not sponsor free time activities:

$$N = H_* \cdot f_t \cdot f_p \cdot n_c$$

where

- N** The alternative cost for the emerging tech hours put in due to the program

and

**H<sub>\*</sub>** The hours spent on free time programming annually

**f<sub>t</sub>** The fraction of the emerging tech hours

**f<sub>p</sub>** The fraction of the hours that are put in because of the program

**n<sub>r</sub>** The cost of the research on work time

Then we estimate how the increased pace of people advancing their skills affects our revenue. As a consultancy company that invoices customers mainly based on time and materials this is not so difficult:

$$N = H^* / n_l \cdot n_g$$

where

- Nc** The program's individual's competence development revenue gain

and

**H\*** The hours by the program annually

**n<sub>l</sub>** The average hours exercising the art to go up one career level

**n<sub>g</sub>** The revenue gain (on average) for one increased career level

Finally we sum up the calculated value from the two sources. Comparing it to the program cost is not feasible, because there are also other types of value generated through talent attraction and employee engagement.

## Employee engagement

Employees' attitudes and perceptions about employee engagement can be measured by different types of surveys and interviews, and we might even be able to assess the engaging behavior through chats. The financial value of employee engagement is here calculated by using the program's estimated impact on employee retention. Employee retention is of course only one of the value creating benefits connected to employee engagement, but important from company perspective.

## Chilicorn Employee Engagement Equation

Measuring employee engagement value is both simple and very challenging. For us the most important thing to is to keep our employees with us. Hence, by estimating how big an impact the program has in employee retention we can calculate financial value.

Non-financial metrics	What is measured	Way of measurement	Metrics
	How engaged Spice participants are	Personnel survey	- % of participants agreeing or strongly agreeing on engagement related items* - mean values of Spice participants vs others - total mean vs others
	Importance of Spice activities for enjoying working at Futurice	Personnel survey	- Rank of Spice Program among other activities - % of Spice participants considering it important
	Do Spice activities have positive connection to employee engagement	Survey for Spice participants (twice a year?) **	- % of participants agreeing and strongly agreeing in engagement items - Mean values

\*e.g. pride, enjoyment, recommendability, extra effort, intention to quit

\*\*Will replace the personnel survey in Spice related measurement

The challenge obviously lies in doing that estimation. Our primary solution is a combination of our quite detailed long-term employee engagement surveys, complemented with quarterly specific surveys, employee checkpoint interviews, employee exit interviews, and other traditional HR tools.

The advancement of machine learning and semantic analysis algorithms may soon allow us to measure the real-time mood of the organisation, based on our active instant messaging conversations. This may bring more valuable data to be used in employee engagement.

$$N = R_* \cdot n_v \cdot n_r$$

where

**N** The financial value of employee engagement by the program annually

and

**R\*** The average rate of employees leaving the company annually

**n<sub>v</sub>** The annual value generation of an old employee

**n<sub>r</sub>** The number of employees not leaving annually because of the program

## **Strengthening brand and reputation**

Employer brand depicts company's reputation as an employer and its attractiveness to its current and potential employees. Employer branding efforts are thus connected to talent attraction, employee engagement and retention. Social responsibility program can support these efforts, as we have discussed.

Social responsibility activities can also strengthen company brand among customers and potential customers. Visibility of the program builds brand awareness, and program might affect brand image positively. This impact can be measured by traditional surveys and interviews. Positive changes in brand awareness and image can strengthen the financial value of the brand.

## **Chilicorn Brand Recognition and Reputation Equation**

We measure the brand recognition and reputation value of the program by estimating how big a relative impact it has on our visibility and reputation, and applying that to our marketing budget. This is

Non-financial metrics	What is measured	Way of measurement	Metrics
	Has visibility of the brand changed	Analytics tool	Number of media hits
	Has visibility of the brand changed	Analytics tool	Social media visibility (volume of mentions and reach)
	Effects on brand image	Ad-hoc feedback, surveys etc	Number of positive feedback (customers, employees, potential customers, potential employees)
			Number of new clients

a huge oversimplification and, to be honest, not very useful. We are trying to develop better measurements.

$$N = n_m \cdot (n_m \cdot f_p)$$

where

**N**      The financial value of brand recognition by the program annually

and

**n<sub>m</sub>**      The annual marketing budget of the company

**f<sub>p</sub>**      The fraction of the brand recognition generated by the program

## **Other generated value**

There has been a lot of fuzz about how open source ecosystem works as a driver for innovation. We believe this to be true, but we do not yet have good measuring metrics for innovation. In our case the following will likely play a role:

- Emerging technologies learned through open source activity widening our offering
- Program-related new services
- Innovation through improved cohesion and communication between our sites and teams
- Innovation through improved multidisciplinary cohesion and communication

## **Impact on society**

Perhaps the biggest shortcoming of our current value measuring framework for the program is the lack of measures for the social impact. We have started to work on these, and will publish the information when we have something conclusive.

Measuring could be done on several levels. We have large initiatives, such as open source, open education, social inclusivity, and so forth. They could probably be put in an order of severity, and perhaps some appropriate instance, like the United Nations, has already done this work for us.

More interesting to us is to be able to estimate and measure the impact of our actions. By supporting open source, how much do we change the world to the better? What about open education?

Furthermore, as we are planning to do pro bono projects for NGOs in increasing numbers, it will be important to us to be able to assess the social impact of a project in advance, as it should weigh in in the selection process. Especially, if we invite applications.

## Digital education, preliminary thoughts on measuring the impact

Outcome measurement planning, *not implemented yet!*

Non-financial metrics	What is measured	Way of measurement	Metrics ideas
	Volume of digital education efforts	?	<ul style="list-style-type: none"><li>- Number of kids participated in code clubs</li><li>- Number of teachers that have received education</li></ul>
	Quality of education efforts	Feedback survey, direct feedback	<ul style="list-style-type: none"><li>- Amount of positive feedback (teachers, kids, parents etc.)</li><li>- % that think their skills in coding have increased</li></ul>

Short term outcomes of the program are quite easy to grasp, but as mentioned, long term societal impact is more difficult to measure and takes time until it can be seen. We assume that digital education efforts have several positive outcomes: they support the quality of coding teaching, and gives kids spark to coding and basis for learning more. Open source contributions help to create and develop high-quality software and services. Spice activities in general, and especially open source contributions develop participants' skills, providing highly competent digital specialist and leaders. Thus, we assume that the important societal impact of Spice Program is supporting the effective digitalization.

## Open source, preliminary thoughts on measuring the impact

Outcome measurement planning, *not implemented yet!*

Non-financial metrics	What is measured	Way of measurement	Metrics ideas
	Impact of open source contributions by Futurice employees	Volume and impact of the contributions	- We know the volume - How to measure the impact? - Forks, stars, ... users?
	Impact of open source overall	Other sources... like Gartner?	This may not make sense at all.

Short term outcomes of the program are quite easy to grasp, but as mentioned, long term societal impact is more difficult to measure and takes time until it can be seen. We assume that digital education efforts have several positive outcomes: they support the quality of coding teaching, and gives kids spark to coding and basis for learning more. Open source contributions help to create and develop high-quality software and services. Spice activities in general, and especially open source contributions develop participants' skills, providing highly competent digital specialist and leaders. Thus, we assume that the important societal impact of Spice Program is supporting the effective digitalization.

# APPENDIX A

## Communication Examples

Some selected examples from our internal and external communication.

### Open Source sponsorship announced internally through mail

By Teemu Turunen, 13th Nov 2014

Hello!

TL;DR-haiku

*Open source contribs  
On your time? You get money!  
Details: out of space:':*

---  
Futurice will start incenvi... intenciviz... sponsoring free time open source contributions by full-time employees (\*). Like the sports vouchers, but open source, and without the stupid vouchers.

#### *Why would the company do this?*

By being active in the open source scene, people improve their skills at an alarming pace.

Being a rare benefit, it should give us some recruitment edge.

It's the right thing to do, as Futurice benefits greatly from OSS.

#### *Why should you participate?*

Open source gives you a chance to improve your skills (at an alarming pace). While you get wicked good, you are marketing your skills at the same time. Now you can also make some extra cheddar by doing so. It's a sweet deal!

### *Is this only for programmers?*

No, open source needs more than code, design being obvious, but there's more!

Providing some pointers on how to get started is in the works; not limited to just coding.

The compensation is a flat €15 (or local currency equivalent) for an hour spent. A maximum of 30 hours per calendar month is compensated to an individual.

The trial period for this incentive is 20141101-20150331 (retroactive, yes). There's a budget cap for the trial period. That's €45000, which equals 3000 hours of total contributions. If it runs out we'll see what happens. This is a trial, which means the initiative might cease to exist after March, or the specifics may change.

Any open source contributions are acceptable, including both the existing and new projects. They don't need to be related to Futurice. This is not work, so Futurice has no IPR claim whatsoever.

To be eligible you'll simply report the contributions by sending an email to a dedicated Flow ([\[redacted\]@\[redacted\].flowdock.com](mailto:[redacted]@[redacted].flowdock.com)). Please also join the flow!

In the email you name the project, hours you have spent and a link to the relevant commit/PR/whatever.

Example:

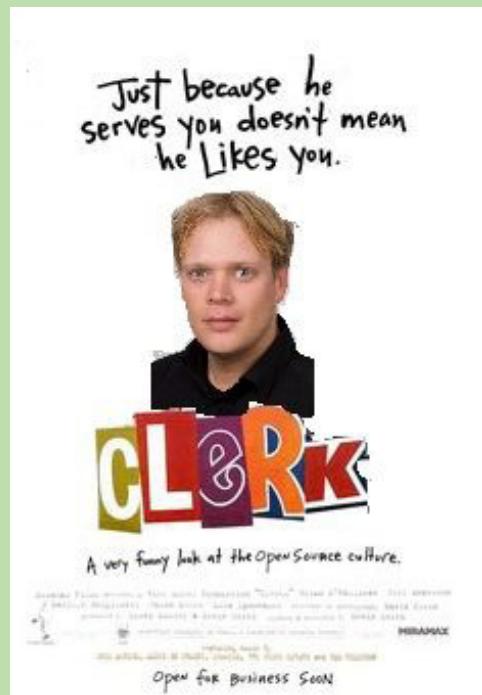
`mail [redacted]@[redacted].flowdock.com`

`viewports.scss, 4 hours, https://  
github.com/jareware/viewports/commit/  
e8319216bb2f261ad83aa112333a3a2c8bb530ca`

The Clerk will collect these from the Flow and send to the payroll monthly.

The Clerk will also report the usage/remaining budget to the flow.

For now, I am The Clerk.



We might want to list the “sponsored projects” on the company open source program site (<http://www.spiceprogram.org>), please let us know if that’s not cool. It’s not mandatory to include yours.

A quick recap, in solid monospace! Details also available in Confluence.

- open source contributions on your own time will be sponsored
- any project is fine
- 15 euros per hour
- max 30 hours a month

- only full-timers can get it  
(except in Germany and Switzerland)
- just send a mail to  
[redacted]@[redacted].flowdock.com
- include the project, hours and links  
to PR/commit
- no other hour reporting needed

(\*) Why full-time only? That sucks.

Yes, it kind of does. It would be awesome to find a model where this works for part-time employees as well. Being able to work a 4-day week is in itself a benefit, considering our business model. Combining That with This would currently make an unrealistic benefit. I'll be more than happy to discuss this.

Note that in Germany and Switzerland the regulations are such that the full-time limitation cannot apply. Hence, in those countries, the mostly imaginary part-time employees get this benefit pro rata.

Greetz: mkir & vtai (this is what we should do), ojar (this is how we should do it), lsnj & mvii (let's do this!), amed & ilau & jkro & jara & jyah & kpup & oaho & ogre & tpaa & ykar (yes, we should, but do consider these), mgmt & HR (ok, let's), epan & ipor (how to navigate the regulations) and shus (your haiku is broken and allow me to fix some grammar).

BR

Teemu

# How do social responsibility activities support employee engagement?

By Katri Kemppinen, Published in Futurice's blog on 27th May 2016

In the ICT industry, talented people have plenty of job choices. As a result employers need to concentrate on providing a competitive working environment as well as career options to both attract new talent and engage existing employees. To create and maintain engagement, you need to feed the employees' sense of purpose and passion. One of our [initial assumptions](#) was that our Spice Program activities might support this, so we decided to devise a way to measure its impact.

## What is employee engagement?

We have used the fuzzy concept of [employee engagement](#) to describe employees' positive emotional attachment to and elevated involvement in their work and organization. This wider perspective on employee engagement and its measurement differs from [engagement](#) concept analyzed in recent [master's thesis](#) written for Futurice by Erik Stenberg. Because Spice Program contributions are made during employee's free time, we assumed that they might be related to engagement on an organizational level rather than engaging in work tasks. One of the Futurice's slogans "The passion and vision of our people drive this company" captures why it's important. Engaged employees feel pride and enthusiasm. They move the company forward as they proactively try to find ways to improve things around them — not only to achieve their own goals, but promote employer's goals, too. They are more likely to recommend their employer and stay at their job. There

are obvious positive business outcomes, but benefits for the engaged employees, too: their wellbeing is demonstrably higher.

But employee's engagement doesn't come out of thin air. It is based on perceptions of work environment quality and the opportunities it offers. In short, it's mostly about being able to do interesting and meaningful things, in a meaningful way, in a supportive environment. This promotes positive feelings and active behavior. We found support that social responsibility activities can have a role in promoting employee engagement, too.

## **Spice activities support positive feelings about Futurice**

According to 213 responses in Futurice's employee engagement survey in March, engagement was quite high. On most questions related to employee engagement and its drivers, Spice participants (n=68) got slightly higher scores on most than others.

For example, they trusted their colleagues more, were proud of being a Futuricean, enjoyed working at Futurice, had challenged themselves to try, learn or share new things and were more willing to recommend Futurice as a place to work. On the other hand, though Spice participants answered positively to having interesting work tasks, they still had slightly lower scores for feeling energetic and enthusiastic about their job, but were equally absorbed by it.

Although no explicit connection exists between these scores and Spice participation, when asked about events, activities, programs or initiatives that make people enjoy working at Futurice, 90 people chose the Spice Program. This makes it the third most mentioned option after free breakfasts and Friday beers. Not surprisingly, 75 % of those who chose Spice program activities were Spice participants, and for them it was the most mentioned option. It seems that Spice activities endorse feeling positively about company.

It's worth noting that the question was phrased unclearly and several people provided additional responses saying that it's the great

people at Futurice, the interesting work itself and Futurice's culture that makes working enjoyable. It's clear that these kind of essential things supporting employees' motivation and a great working environment are core factors for enjoying your work — more so than offering Friday beers, breakfasts or sponsoring free time Spice activities. They aren't really comparable.

If you really only enjoy company sponsored beers and free time activities, you'd be far from engaged (and for the beer part, you might need help). In addition, enjoying working in your organization isn't exactly the same as being wholly engaged to it, but it is part of the emotional engagement.

## **Foster empowerment. And keep in mind the value of doing good!**

Although company supported activities are more like nice bonuses at work, they reflect the company's culture. They might make you feel like the employer cares about you and shares similar values. Many activities foster a feeling of being able to relate to your colleagues, which is one of the basic psychological needs — in addition to autonomy and competence. These, when filled, create enthusiasm, meaning and a drive for doing things.

Spice Program activities also promote the social side. You get to know new people and share your enthusiasm in a like-minded group. According to discussions with participants, these activities also support:

Developing, challenging and showing your skills in a way chosen by you

- Getting feedback
- Having an impact on what you value
- Giving back to open source community.

So in addition to fulfilling some other basic psychological needs, it has potential to foster the newest candidate for such: beneficence, the

sense of being able to give. All this makes you feel good, and it also inspires positive feelings about the employer that supports your good causes.

Sponsoring social responsibility activities will not magically make employees engaged. In fact, nothing will. It's always a personal decision.

To enable engagement, work culture and basic conditions, like having nice colleagues, fair reward system, and the meaningfulness of the work itself need to be in order. Social responsibility activities, like Spice Program, can add their own input to this engagement by enhancing meaningfulness that comes from the alignment of values and a sense of community they create. Great things can be built on a foundation like this.

We have already achieved relevant positive results with our Spice Program and we've just scratched the surface of what is possible.

# Want happy employees? Save the world or get a spa truck

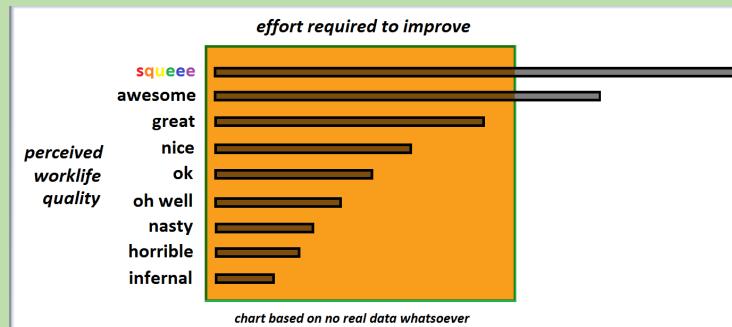
By Teemu Turunen , published in Futurice Blog April 13 2016

Being a great place to work is not easy, but the real challenge stems from the fact that people—especially the young and talented people—are not very well equipped to deal with the status quo. Which is to say, many people are only happy when things are improving.

Constant improvement being what any organisation should strive for, what's the problem?

Let me rephrase; people are only really happy when things are really improving. The higher you climb on the tree of happiness, the more difficult it becomes to find any significant improvements to work life.

Here's a chart that is not based on real data. I just drew it to prove my point, as this is how you do it in 2016:



The point I am flawlessly proving is that happiness decays. Keeping up with that decay easily becomes a Red Queen's race.

*“Well, in our country,” said Alice, still panting a little, “you’d generally get to somewhere else—if you run very fast for a long time, as we’ve been doing.”*

*“A slow sort of country!” said the Queen. “Now, here, you see, it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!”*

— LEWIS CARROLL

While your organisation climbs up this Great Employer ladder, it soon becomes insufficient just to come up with new perks and avoid upsetting anyone.



*Anecdote! When I was 11 years old all I wanted for Christmas was a BMX bike.*

*It was strongly implied by my campaign that the future lacking a BMX bike would not be a pleasant one to anyone. So I got one. The next day I took it out for a spin (yes, in the snow) and immediately encountered my neighbourhood nemesis riding a similar, but more expensive brand-new bike.*

*I was devastated. After 27 years I have still not entirely forgiven the universe this betrayal. I had received a great benefit, but my rival had it better, rendering mine absolutely worthless.*

Sensible adults, however, are capable of shrugging off such setbacks quickly. Yet a lot of effort is expended by companies to make sure

nobody gets upset about anything. This fear of disappointments often cripples efforts to gain significant improvements.

*We can't try this, as someone might not like it. You can't do that, as someone may consider it unfair.* It's a familiar song.

So it's easy to end up playing it safe, getting better coffee, handing out freebies to the employees. The ambition is misdirected and the company keeps investing an increasing amount of energy in trying to come up with new perks that do not offend anyone, and sound better than what the competitors have.

Here's an amusing quote from a recent article by Fortune:

*The company culture truly makes workers feel they're valued and respected as a human being, not as a cog in a machine. The perks are phenomenal. From three prepared organic meals a day to unlimited snacks, artisan coffee and tea to free personal-fitness classes, health clinics, on-site oil changes, haircuts, spa truck, bike-repair truck, nap pods, free on-site laundry rooms, and subsidized wash and fold. The list is endless.*

No mistake, quality coffee and free movie tickets are sweet, but they do not form a viable long-term tactic to manage the happiness decay of ambitious people. Nor do the haircuts, bike-repairs, or... what the hell is a spa truck? I bet it doesn't help either, though now I kind of want one for Futurice.

Having my employer shower me with services and gifts gives me a quaint satisfaction of being royalty, of being special. But it is a fleeting feeling. Nothing suffices, you get used to all the perks and start to take them for granted.

*Speculation and some hyperbole!*

*Are the real royalty or the super rich ever really satisfied with anything, I wonder? Muhammad Mahabat Khan, the Nawab of Junagadh, arranged a grand wedding celebration of his favourite pet dog Roshanara with a golden retriever Bobby. His people were starving. He invited 50000 guests. After the ceremonies, did he kick back and feel*

*complete? No, he acquired 500 more dogs and spent 11% of the entire state's income to cater for them.*

The traditional corporate social responsibility approach has the company deciding and declaring the cause and then just throw some money at it. That may help with PR, but it's not going to help with keeping the people happy and motivated.

How do you assess if the cause is good? We use a simple rule. The activities we sponsor must benefit the persons doing them, the company, and the society. Open source is an obvious example, and I wrote about the benefits earlier.

People get acclimated to whatever level of luxury they get, but you never get tired of having more purpose or meaning in your life. That is why employers should support their people in doing good. Every party benefits and our world is saved in the process. There are tools that claim to help you achieve tranquil inner peace. Self-help books on life acceptance. Endless articles in the web: "*3 ways to be happy*", "*7 ways to be happier*", "*The 25 habits of the punchably happy people*". Mindfulness is trending. Some people still advocate psychedelic drugs or religion. I don't know what Bob Ross's secret was, but it seemed to be working for him. Maybe he had a spa truck?

I haven't really tried any of these and I remain sceptical.

There is, however, something else that a company can do. We can help the employees to advance a good cause, such as open source, technology, science, education, social equality, or sustainability.

If the employee can have the time and company support to pursue something that brings out her passion, it will do a lot more than a crazy variety of perks.

The "help the employees"-part of the statement above is *very important*. People have causes they want to advance. The company can and should support them in that, if the cause is good.

# Code club mentoring experiences

By Antti Ajanki, published in Futurice Blog February 17 2016

Over the past few months I and a few of my colleagues have taught programming to upper comprehensive school students (aged 13-15) in a series of weekly code club sessions. We started from the very beginning assuming no previous programming knowledge and ended up flying drones!

## Mentoring experiences

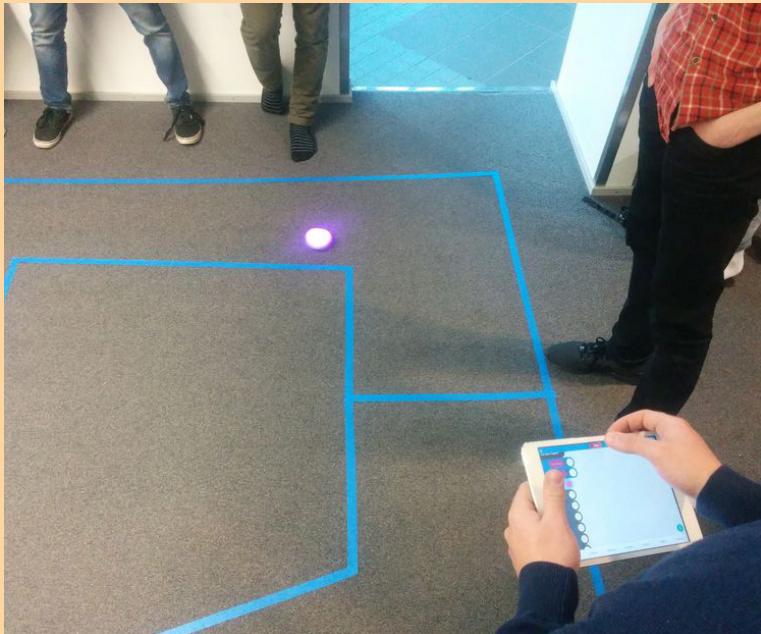
We held eight weekly code club sessions at the English School. Each session lasted one and a half hours and was scheduled after students' regular school day. There were usually two and sometimes more Futurice mentors present.

The first sessions introduced basic programming constructs such as variables, functions, loops and other control flows. In the later sessions, the students got to apply these building blocks in solving various tasks.

In the beginning of each session we briefly explained the concepts we wanted them to learn, but otherwise we let the students start coding straight away. The first exercise of each session was a recap from the previous week's topic. The students were free to advance at their own pace and they were not required to complete every exercise. The final exercises in each session were usually more open-ended so that those who managed to complete all other exercises in the allocated time could explore them in more depth. Throughout the sessions, the main role of the mentors was to help the students when they got stuck.

We also held other types of sessions that went beyond typing code on a computer. One time the students got to pilot a small toy robot and another time they got to fly a drone. Students were really excited when they got to program a robot to drive around a track.

Programming the drone to fly was actually less interesting, maybe because it had to be done on a different language than the rest of the exercises and the limited accuracy of the drone made it difficult to control it towards the target.



Will the robot stay inside the track? Photo credit: Yrjö Kari-Koskinen

We prepared exercises for each week's session in the week before. We brainstormed ideas for the exercises collaboratively and decided who will implement which exercise. A day or two before the code club session, when the exercises were ready, we tried them out and gave feedback for each other's exercises and made final amendments.

Both planning the exercises and seeing the kids carry them out was really fun. We often started preparing an exercise with only a vague theme in mind. The exercise emerged from lots of experimentation and playing. But this is exactly what we wanted to tell the students: programming is a creative endeavor. Seeing the students

get the hang of programming and apply their newly learned skills reminded me of how I felt when I was a kid and learnt programming: that unlimited possibilities had opened up.



The drone is ready to take off (as soon as the remaining bugs have been fixed).

Photo credit: Sebi Tauciu

## We are sharing the teaching material

Teachers, IT professionals and anyone else is welcome to use the material we have created to teach children programming. You can try out the exercises right now at the Chilicorn code club. Adopting the material is easy: open the page and start coding.

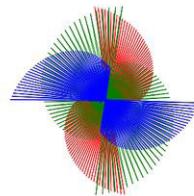
The code club web page contains a code editor and a window for displaying graphics. More exercises can be loaded from a menu. Exercises consist of some instructions and partial Python code which the student has to complete. The student is also free to start from a clean plate and build something on her own.

## Chilicorn Code Club

Save Load Exercises Material Run

```
49 t = turtle.Turtle()
50 t.left(90)
51 t.forward(100)
52 t.left(120)
53 t.forward(100)
54 t.left(120)
55 t.forward(100)
56 t.left(120)

57 # Now we have a flower with 3 petals.
58 # Let's add some more petals.
59 # We can do this by adding more loops.
60 # The for loop now repeats this
61 # drawing 100 times.
62
63 # Click 'Run' and see what
64 # happens.
65
66 # It's possible to change the
67 # color of drawing in the middle of
68 # code.
69 # Uncomment the following line
70 t.color("green")
71
72 # Then uncomment the following
73 # lines.
74 # Which does the same drawing as
75 # the first for loop.
76 # but this time with different
77 # color and turning to direction2.
78
79 for i in range (0, 100):
80     t.forward(petalWidth+i)
81     t.left(direction2)
82     t.forward(petalWidth + i)
83
84 # Click again 'Run' and see what
85 # kind of flower is going to appear.
86
87 # Then uncomment all the following
88 # lines and see what kind of flower
89 # there is.
90
91 t.color("blue")
92
93 for i in range (0, 100):
94     t.forward(petalWidth+i)
```



The Chilicorn code club web page.

In most exercises the goal is to draw something, because seeing the results visually gives instant feedback. Drawing is done with a turtle library similar to the Turtle Roy environment that is commonly used in code schools for smaller children.

Programming will be part of the elementary school curriculum in Finland starting Fall 2016. We at Futurice wanted to help teachers develop course material for grades 7-9. There is plenty of teaching material (mainly on graphical programming languages) available for younger children (for example at [koodikoulu.fi](http://koodikoulu.fi)). However, far less material is available that is suitable for upper comprehensive school level and for learning text-based programming.

The curriculum states that in grades 7-9 the students will be expected to learn a text-based programming language. Our exercises are using the Python language because it is easy to learn, is available on many different environments and extends readily to large programs. Many of the exercises involve mathematical concepts because programming will be part of the math education in Finland.

We encourage anyone who is interested to mentor code club sessions at their local school. While no previous programming experience

is assumed from students, a prospective mentor should have at least a basic level of expertise with Python. Necessary level of skills can be obtained by doing the exercises yourself, perhaps together with a friend who already knows programming.

The exercises could surely be improved further. They could be translated into Finnish and integrated more tightly with the elementary school curriculum. If you want to help improve the material, submit a pull request on project's GitHub page.

We are grateful to the English School for letting us hold the code clubs and to the Spice Program, the social impact program of Futurice, for sponsoring employees' spare time contributions to digital education.

# APPENDIX B

## Early Spice Program Feedback

What do you think about the Spice Program?  
(January 2015)

It rocks!
AWESOME
It is good way to "pay back" for the open source community — as we use quite many open source solutions.
Love it.
Good, really like the initiative regarding the open source clause for contracts and the stimulation of contributing to OS
Nothing really
Good initiative, but don't know how to contribute as a designer
I like.
It's cool. It's what we should do and it's good that we do it.
Lovely! I think it is great that we support contribution to open source as it is a great way for publicity and for our people to get even better!
Awesome for employees, great for the scene, important for the mankind, hopefully a good investment for Futurice.
It really is awesome. And I know that 'awesome' as a word has been used too much in too many occasions but this time I think it really should be used. It makes most of our developers and designers really happy and makes the value their work place even more. And in the future hopefully our customers will be happier as well.
Great way to give back to the OSS community and great for recruiting top talent.
Awesome!
Good thing to increase open source awareness.
Sure, why not.
nice to have
It is awesome. A really great way to sponsor open source.

It sounds great! I wish I had more time/power on free time to contribute to OS stuff, and I totally would.

I'm happy the company recognizes that hobby programming (not just contributing to a successful project) increases one's skills.

It motivates me to organize myself better and complete features or small projects (not leave it half-done).

It motivates me to experiment with technologies or projects I wouldn't otherwise dive into, if I can show off a nice & interesting result! I find this very useful to increase the breadth of my knowledge, while enjoying it and having full control of what I work on.

It's cool

It's cool! All software companies should do something in the open source world.

I think it's good for PR outside company.

Cool. Something that should not just fade away. I mean, really. Too many cool projects just fail miserably, as someone who decides about budget says "yeah, it already achieved <some arbitrary goals>", and then the project ends. Or single person leading/implementing/... moves on, and there is no hand-over.

i think it's awesome and should be continued. i marked some hours to the open source fest app, we now managed to design the page and implement it. this is really useful in my opinion.

Excellent initiative! Needs active pushing to make things happen, but so far so good. Looking forward for getting it more and more to customers' ears and them involved in it as well. Also interested in knowing whether that has any impact on recruitment. But anyway, just stick bigger gear in and keep it going.

I think it's a great idea. I especially like the compensation possibility for employee own open source work. I think that sets us apart as a company. I am not sure how valuable the opensourcing of internal tools have actually been, but I'm sure it haven't hurt.

It is great. We should definitely continue it. The program needs more internal and external visibility.

Awesome! Even though I have not participated — or even planning to participate it in the near future — I feel more proud about Futurice due to this initiative. I also want to share this more with my clients.

It's great!

It's a good idea!

Giving back to the community is great for us having benefited from OSS so much, and also for publicity.

Cool initiative, more communication about it would be nice.

It's great that we have the program. It has of course taken some time to find its shape, and but I think we have a great start currently with the OS-friendly contract clauses and compensation for open source contributions as the most promising long term components. The open sourced Futurice tools and the Ruisrock open source hackathon last spring were good results too.

Realy good idea!

It's great! Now if only I found the time to contribute to my favorite project...

Excellent

I think it's awesomel As they say in "Extreme Makeover — The House Edition", it is very important to give back to the community. This program is an important step to the right direction.

I think it's a cool initiative, but frankly I have no idea how it's tied to Futurice, if it's used in our business and if so, how.

Awesome, but weird name

Awesome!

Nice idea. No time to dig deeper even though I have done open source that would apply

I love it!

It is definitely the right thing to do, equally for publishing our own tools with a free license and making sure that our customer contracts allow contributing upstream whenever possible.

As for the sponsoring of free-time work, that is going above and beyond! I had fallen out of the habit of coding free software because of work and other business factors, and the sponsorship was just the nudge I needed to start doing it again.

Love it

Really positive initiative, unique :)

It's great, but I don't really have any incentive to contribute because I'm a part-timer.

Great program! Nice to see what people are working on and it has motivated me to push some contributions to be finished and merged.

Making it possible for part-timers too would be nice. I can imagine some hurdles but am not quite sure what the actual blockers are.

There are nice things coming out of the program in terms of sharing and encouraging to do open source contributions. What I would love to see is taking open source contributions more and more to customer projects and doing internal projects the open source way: Each project would have a couple of core people to keep it together and the whole company would contribute to projects in their liking whenever they have some spare time. Of course the projects would have to be of a significant value to people to keep them contributing.

It is a great initiative. I hope it would motivate people do more open source in all different levels of our company. Also I guess we need more people to take care of the spice practicalities: look after pull requests, maintain the websites, take care of the compensations and budgeting, motivate especially non-coders to take action etc.

Excellent initiative, possible competitive advantage in terms of visibility, recruitment, personnel satisfaction and learning. Somewhat underused in some aspects, occasionally feels slightly disjointed from the rest of the company and its initiatives (which it probably should, on the other hand). A potential channel for Futurepeople (and the company as a whole) to do good, which should be utilised more.

- great advertisement for Future
- the "get paid for open source contributions part" acknowledges that it is great training and that continuous training is what keeps us valuable
- gives us an opportunity to make the case to our customers that we (and thus they) are part of an ecosystem software creation

Awesome!

I think it's great, we should give back to community, since we do use lots of open source tools in our business. Doing open source stuff is also a great way to learn.

If I had more time on my hands I would participate.

I'm really interested and pro-spice. I think it's really good for individuals, Future and the whole community. Though still pending my own participation.

It is great.

I think it is an awesome motivator concerning the facts that we have gained a lot from the open source and that now we have a good chance to give something back.

Great stuff.

Really cool!

# APPENDIX C

## Employee engagement survey data

Number of participants by tribes

	Spice	Others	All
Avalon	16	21	37
Vesa	8	21	29
South Side	9	20	29
Tribe four	3	8	11
Internal	6	11	17
Tuomas & Teemu	2	8	10
Tammerforce	12	25	37
Stockholm		1	1
Berlin	6	17	23
Munich		2	2
London	6	11	17
Total	68	145	213

## Organizational employee engagement/tables

I am proud of being a Futuricean %			
	Spice n=68	Others n=142	All n= 210
Strongly disagree	0,0	2,8	1,9
Disagree	1,5	3,5	2,9
Agree	39,7	33,1	35,2
Strongly agree	58,8	60,6	60,0
Total	100,0	100,0	100,0

I enjoy working at Futurice %			
	Spice n=68	Others n=141	All n=209
Strongly disagree	0,0	1,4	1,0
Disagree	2,9	9,2	7,2
Agree	51,5	44,0	46,4
Strongly agree	45,6	45,4	45,5
Total	100,0	100,0	100,0

I would recommend Futurice as an employer if my friend would ask %

	Spice n=67	Others n=142	All n=209
Strongly disagree	0,0	2,8	1,9
Disagree	1,5	7,8	5,7
Agree	26,9	27,5	27,3
Strongly agree	71,6	62,0	65,1
Total	100,0	100,0	100,0

I have challenged myself (tried & learned new things, shared my knowledge etc.) recently %

	Spice n=67	Others n=144	All n=212
Strongly disagree	1,5	2,1	1,9
Disagree	7,5	9,0	8,5
Agree	38,8	44,4	42,5
Strongly agree	53,7	44,4	47,2
Total	100,0	100,0	100,0

I have recently searched for, or I am planning to search for a new job in near future %

	Spice n=66	Others n=135	All n=201
Strongly disagree	37,9	41,5	40,3
Disagree	31,8	28,9	29,9
Agree	24,2	20,0	21,4
Strongly agree	6,1	9,6	8,5
Total	100,0	100,0	100,0

## Example of correlation coefficients, all respondents

	1	2	3	4	5	6	7	8	9	10	11
<b>1.</b> Support from colleagues	1										
<b>2.</b> Challenging oneself (to learn, try and share things)	0,35	1,00									
<b>3.</b> Future improving as a place to work	0,32	0,34	1,00								

<b>4. Proud of being a Futuricean</b>	0,47	0,49	0,52	1,00						
<b>5. Ability to influence things at work</b>	0,33	0,38	0,47	0,55	1,00					
<b>6. Possibilities to improve professional skills</b>	0,36	0,40	0,52	0,55	0,54	1,00				
<b>7. Strong sense of togetherness at Futurice</b>	0,30	0,33	0,49	0,47	0,37	0,32	1,00			
<b>8. Career development possibilities</b>	0,25	0,24	0,54	0,39	0,43	0,53	0,42	1,00		
<b>9. Enjoy working at Futurice</b>	0,53	0,41	0,52	0,64	0,57	0,54	0,42	0,50	1,00	
<b>10. Willingness to recommend as an employer</b>	0,46	0,41	0,50	0,69	0,49	0,49	0,41	0,40	0,69	1,00
<b>11. Intention to quit</b>	-0,08	-0,04	-0,36	-0,28	-0,27	-0,33	-0,28	-0,50	-0,40	-0,35
										1,00

## Example of correlation coefficient, Spice participants

	1	2	3	4	5	6	7	8	9	10	11
<b>1.</b> Support from colleagues	1,00										
<b>2.</b> Challenging oneself (to learn, try and share things)	0,23	1,00									
<b>3.</b> Futurice improving as a place to work	0,40	0,34	1,00								
<b>4.</b> Proud of being a Futuricean	0,40	0,34	0,68	1,00							
<b>5.</b> Ability to influence things at work	0,33	0,34	0,50	0,43	1,00						
<b>6.</b> Possibilities to improve professional skills	0,49	0,30	0,61	0,49	0,51	1,00					
<b>7.</b> Strong sense of togetherness at Futurice	0,31	0,18	0,63	0,53	0,43	0,34	1,00				
<b>8.</b> Career development possibilities	0,42	0,27	0,62	0,52	0,43	0,54	0,55	1,00			
<b>9.</b> Enjoy working at Futurice	0,50	0,29	0,58	0,63	0,55	0,47	0,43	0,62	1,00		
<b>10.</b> Willingness to recommend as an employer	0,33	0,28	0,45	0,60	0,36	0,48	0,30	0,43	0,53	1,00	
<b>11.</b> Intention to quit	-0,11	0,01	-0,25	-0,35	-0,21	-0,36	-0,21	-0,47	-0,43	-0,31	1,00

# APPENDIX D

## The Purpose of the Company

Your title?	Any other thoughts on the subject?
Lead Social Responsibility Engineer	Our moral strength comes not from a shared mission, but the fact that we encourage good morals and let our people make many decisions based on their ethics.
Service Creator	With ethics as with any other subject, the ultimate decision is that of an autonomous individual. More so at Futurice than most other companies. But the collection of moral and immoral, ethical and unethical choices made by these individuals will establish an environment that respectively encourages ethical or unethical behavior.
Company Culture Engineer	Great survey. I like the three categories here with a bit of salt. The first one is a bit loaded one. I think there are organisations that think it is morally ok to think primarily about shareholders' interests. No one wants to be part of an amoral entity. Kinda loaded choice the #2 as well. "Self-interest" does not have the same shiny armor as being ethical. All in all, the three categories indicate the moral framework of the person asking the questions, rather than being three different points of view that people inside companies could have (feel or experience). My two cents.
Senior Software Developer	Companies can't succeed without the society surrounding them and on the other hand companies can't succeed by not focusing on the business too, which includes maximising the profit for the shareholders. So by being an enlightened self-interested company, it can make sure it succeeds in business and thus the company is also able to make the society better.
Lead recruiter	The view we have towards society should be reflected on the organisation on all levels. If we are community-driven, we should be more individuals who participate in activities around us (as we should imho). If we decide to be more self-driven, we should be building a strong internal community with less interaction with the outside world.

Senior UX Designer	We work and spend time with co-workers ~40 hours a week which is a lot. As individuals, we need to sustain ourselves. It is imperative that I work at a company where they are trying to give back to the community, humanity, so that it makes waking up worthwhile.
Software developer	In the narrow view of society only including other companies, Futurice has had an ethical imperative from the very early days and there are many examples for this. We work together with our customers to make the best services possible, and we shoulder more than our contractual responsibilities and don't point fingers when things go south. We actively teach our customers what they should expect from their vendors and that they don't have to agree with bad contracts. In the broader society we also have good examples, such as the spice program and koodikoulu, but we still typically have to justify internally why money is spent on the public good when it doesn't lead to revenue. When justifications have become short and obvious to everyone, that's when Futurice has achieved a true ethical imperative.
Software Engineer	Q: Which type of a company are we; what do you assume to be our current shared goal? A: I'd like Futurice to be "Enlightened self-interest", but it feels that "self-interest" (or even "Ethical imperative") is intrinsic to individuals, not the whole company. Maybe it might average to the middle, but I'm not sure. FWIW, it's hard to be "enlightened self-interest", if you short-term goal is to minimise shareholder losses. Q: Which type of a company should we be in your opinion? A: I chose "enlightened", but could pick "ethical" as well. If our business is going well, that we have opportunity to pick what projects we work on, then IMHO we should pick the ones making world better, not to maximising EBIT. I think it would be better to make world better through project work, and not try to make money on "shady projects", which then is used to make the world better elsewhere. Also we could do more of "ethical imperative" work which doesn't cost us much, e.g. participating in public discussions. The book is good thing for that, as it's a discussion opener. Even Futurice would be totally

	amoral entity, we rationalise self-interest in maintaining good relationship with customers. I don't see the rest of the society any different. The impact is harder to measure, but IMHO avoiding upsetting "society" doesn't cost money much. Q: Should our company, in the context of morality and ethics, be considered a single entity, or a collection of individuals? A: Definitely single entity. If there are some values, every Futuricean should stay behind them; otherwise it's not healthy for company culture. Though there is definitely a span in where the individuals are on the "amoral-ethical" scale, but our recruiting should try to hire people so we avoid too much confrontation.
Senior Consultant	I'm struggling with the first question. I feel that one of the key principles and main shared goals is to make the world a better place. However, we measure primarily economic success which I feel is a bigger guiding factor on decisions. Then again, 3x2 has ethical consideration built-in and is actually a bigger component than the economic one in the equation.
Software developer	The last question is not as simple. Of course we're a collection of individuals, but to the outside we are often seen as a single entity. E.g. if there's a fuckup in a company, it's the company that bears responsibility and seems to have screwed up tho it might be the actions of an individual
Business Director	Making the world better place is something all companies should thrive to. However, to make that primary mission, would mean two things: 1) It would have effect on our sales and numbers. So this is something everyone should agree, not just developers. 2) It will/could also mean projects which are technically not so fun. To cover our people costs we need to sell a lot and if we only do projects which improve the world, we would have to sell projects which will make world better place, but it would have negative effect to our people, because of projects in public administration, tighter budgets, etc.

Technology director	We could establish subsidiaries with an ethical imperative. I think a lot of Futurice employees would enjoy being associated with one, but it seems unlikely that de-prioritising profit on the group level would be high enough on current owners agenda to actually happen.
Vice Leprechaun	Maslow's hierarchy of needs ain't too far off with organizations. Acting on an ethical imperative is up there with self-actualization. Fortunately we have been solidly building the base to get there.
Developer	The company will always be about making profits. I believe that as a company we have understood that being moral and not using dirty tricks to gain advantage on the market should bring most profits in the long run. However, individual employees will most likely be driven by personal profit, which may not be reflected outside the company, but will nevertheless affect other members of the organisation. Because of this, the organisation should be observed in two different scopes: how the organisation functions internally, and how the company is - or want's to be perceived - by third parties.
Senior Consultant	We already are on a mission to do things better and more ethically in terms of software - do the right thing, help customer, recognize the change in society. We are also somewhat selective, not taking obviously shady cases (in terms of doomed software projects). Many of the employees, including me, have a need to also do something *more*. At some point, you start asking: Is writing beautiful code enough? Is helping client to succeed in their narrowly chosen discipline enough? Is it enough to make something beautiful and usable - if it really does not change the world? In small ways we certainly can bring the values of honesty, integrity and good work to the cases we work with, but it seems that it may not always be enough. Can you accept to fulfill those ideals only outside of a job?

IT specialist	We've had discussions in the past whether you could not work in some project if there was a mismatch with your personal ethics. I like that we can and do talk about ethical issues as well.
Team Lead	Probably lots if I started to think
Business Director	Is it desirable to take an existing "Enlightened self-interest"-organisation and turn it into an Ethical imperative? You might not be able to have all individuals agree on the same principles of ethics. It would feel more "honest" if this was clear from the birth of the organisation to allow like-minded people join based on their values and convictions.
Design Director	Our strategy says that we are builders of the future - I think we need to somehow determine what kind of future do we help building
Software Specialist	Companies are, ultimately, groups of people, and groups of people only have the values, morals and thoughts brought to the table by the constituent people. They are shaped by empathy and shared experience, but the point is, nobody just decides on company morals: it's how we individually think and act that matters.
Communications Specialist	Best results are probably on a fine line that barely separates enlightened self-interest and the ethical imperative.
Business Director	I think we are and should be more a collection of smart and empowered individuals with the same purpose and goal.

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