



Always explore!
Always create!
Always enjoy!

VINN Excellence Centre
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Mobil@JIT



Contents

Always explore!			
Always create!			
Always enjoy!	4		
Introduction	6		
Centre Partners	8		
Research organisations	8		
Industry partners	8		
Public sector representatives	10		
Innovation system partner	10		
Research	12		
The Future of Money	14		
LiveNature	16		
mFashion	18		
Re-mobiling	20		
Material Explorations	22		
Internet of Sports	24		
The Other Big Data	26		
Homes & Cities	28		
Arts & Crafts	30		
Publications	32		
Book	32		
Book Chapter	32		
Journal publications	32		
Peer-reviewed conference papers	32		
Other papers	33		
Doctoral thesis	33		
Licentiate theses	33		
Master's theses	33		
Activities	34		
Visits at the centre	34		
Talks, presentations and demos	37		
Seminars	40		
Doctoral thesis	41		
Media	42		
Press and media appearances	42		
The Organisation	44		
The Centre Board	44		
The Academic Advisory Board	44		
Research Advisor	44		
People at the Centre	45		
Funding	46		



Always explore! Always create! Always enjoy!

Having completed the eight' year of the centre's planned ten-year lifetime we are starting to think about the future. What lies ahead after year ten, and what will the centre transform into? As Alex Taylor at Microsoft Research put it: "It is in the centre's last two years that we look forward to seeing this carefully fostered intellectual life extended and cemented. This legacy is what we believe to be the real impact from Mobile Life."

A major event during this last year was the evaluation conducted by our funder, VINNOVA. The centre was deeply involved in the preparations for the evaluation and put a lot of effort into writing a substantive report of our work since 2012. The evaluation team, comprising four internationally renowned experts, once again endorsed the centre in many ways. In the words of the evaluators the centre: "has world-leading research and development capabilities that span everything from hardware and software developments through interaction design and user research, to media, art, enterprise, and innovation". They also praised the centre for its standing in the international field of HCI where it is known for its focus on user enjoyment and human-centred design. They saw us as having "strong leadership and management and governance structures supporting a highly competent team of researchers, most of which have or are developing strong international profiles." They also remarked on our close collaborations with industry and our shift into new markets through our collaborations with

IKEA and ABB. Given our strengths, it seems important to find a new life for Mobile Life after year ten as our role has not diminished but rather increased during the years.

During the past year, we have vigorously discussed what major disruptive changes, due to the ongoing technological and business-model shifts, we can see on the horizon and should engage with creatively using our unique strengths and focus. What do we mean by creative disruption? We have seen how new, digitally enabled services like Uber, Airbnb and Spotify have radically changed the conditions and requirements of entire markets, such as transportation, lodging and music. When this happens, whole sectors are irrevocably altered, totally redrawing the map that actors in the old markets used to follow. We can only speculate on what will happen when Apple changes the health market with their health app and watch, when Husqvarna begins connecting all their gardening products in a local network, or when Amazon and eBay automate

delivery services to the point where any physical product can be delivered within a matter of hours. Much like how mobile network providers lost their hold on services through Google's and Apple's disruptive phone platforms, existing industry actors in other sectors now risk ending up as hardware providers in the low-end of profitable markets. To avoid this they have to latch on to the development of new digitally enabled services and integrate their own and others' products into new value networks. We also note how the sharing economy is changing our views on ownership and the relation between digital and physical possessions.

What will this mean to our everyday lives? How will we engage with these technologies and with the new forms of mediated interaction with our bodies, homes, cities, gardens, as well as with nature? Expecting and receiving interactivity everywhere is both poses a challenge to interaction design, but also a challenge and challenges those who will have to live with the demands this interactivity places on our

attention. Again, designing for playfulness, aesthetically evocative interactions, somaesthetics, social and bodily engagement, fashion, arts and crafts and all the other key insights from the Mobile Life legacy will be key in creating design for the good life as our interactivity increases everywhere. We need to continue to *engage, create and enjoy!*

*Kristina Höök, Centre Director
& Maria Holm, Co-director*





Our
Project wall

Introduction

Mobile Life's research is based on design-led exploration of novel technology. We envision an enjoyment society, where happiness, pleasure and playfulness are key factors. The technology trend that supports this is an emerging consumer-oriented Internet of Things (IoT). To map out and understand this future development, the centre performs strategic innovation by collaboratively creating and evaluating enjoyment services that will make the vision of an enjoyment society a reality.

The Mobile Life VINN Excellence Centre was formed in 2007, and has established itself as an internationally recognized research locus in the area of mobile services. The centre is a joint venture between three research partners and eight industrial partners, with funding from the Swedish governmental funding agency, VINNOVA.

At present there are approximately 36 people working permanently in the centre (including those financed by related grants). This is complemented with an ever-changing stream of guests from industry and academia. Having the critical mass of a centre of excellence has been crucial in retaining and keeping core competence, as well as diversifying the capabilities of the researchers in a way that would not have been possible in a smaller research group. Through our scale we can act as a centre of gravity that attracts and keeps crucial competence in diverse areas. The fact that we have been able to combine diverse skills

including engineering, design, sociology and art in a single location is a direct result of this, and has been crucial in generating the adventurous and high quality research that the centre is known for.

The centre's academic production has continued to be exceptionally high. During the period, one book, one book chapter, 4 journal papers, 15 full peer-reviewed conference papers, and 11 publications such as short papers, workshops, posters and other contributions have been published. Over half of the conference papers were in top-tier venues, and a honourable mention and a best paper nomination was received.

Together, these results paint the picture of a centre that is highly successful both in serving its partners with exploitable research results, and in generating scientific research that is of high value to the academic community.



Centre Partners

The Mobile Life Centre is a joint venture with several partners including research organisations, IT- and telecom industry partners, consumer-oriented product partners, and public sector representatives. Read more about our partners in the presentations below.

RESEARCH ORGANISATIONS

Stockholm University – Mobile Life is organised as a unit under the Department of Computer and Systems Sciences (DSV) in Kista. The centre is physically located on the Kista campus in the Electrum building. Through Stockholm University, the research in the centre is well connected with undergraduate and graduate programmes and the general social science faculty. Students employed at the centre will be enrolled in the master's and doctoral programmes at the university. Senior researchers will be actively involved in the creation of such programmes, primarily in this department but also in other university departments at Stockholm University.

SICS Swedish ICT – The mission of SICS is to contribute to the competitiveness of Swedish industry by conducting advanced research in strategic areas of computer science, and to actively promoting the use of new research ideas and results in industry and in society at large. SICS is situated in Kista in close proximity to the Mobile Life Centre. Many of the researchers in Mobile Life are employed at SICS. The role of SICS at the Mobile Life Centre will be that of a joint research partner together with Stockholm University.

The Royal Institute of Technology (KTH) – The Mobile Life Centre cooperates with KTH's School of Computer Science and Communication (CSC). CSC is engaged in education and research within the traditional core areas

of computer science – numerical analysis and datalogy – from theory construction and analysis of mathematical models via algorithm development to computerised implementation and simulation. Other core areas of growing importance include technology and methods for sustaining human communication and computer-supported cooperation between users separated in time and space. The role of KTH in the Mobile Life Centre will be that of a joint research partner together with Stockholm University.

INDUSTRY PARTNERS

Ericsson – Ericsson is a leading provider of telecommunications equipment and related services to mobile and fixed network operators globally. Ericsson has extensive knowledge about present and future telecommunications systems, including content and communication oriented services for mobile devices and the connected home.

Ericsson is advancing its vision of the “networked society” through innovation, technology, and sustainable business solutions. In this Ericsson is very well aligned with the focus of Mobile Life VINN Excellence Centre.

TeliaSonera – TeliaSonera provides network access and telecommunication services that help people and companies communicate in easy, efficient and

environmentally friendly ways. International strength combined with local excellence is what makes TeliaSonera truly unique and enables it to provide a world-class customer experience, from the Nordic countries all the way to Nepal. This combination has brought groundbreaking 4G, a world-class fibre network, and the introduction of 3G at Mount Everest. TeliaSonera has been a partner since the centre began in 2007.

The centre's forward-looking research into mobile users, applications, and ecosystems fits well with the company's objectives and provides input for future strategies. This was made evident through the foresight report co-published in the Ecosystems project and more recent in the Future of Money project.

Microsoft Research – Microsoft Research is dedicated to conducting both basic and applied research in computer science and software engineering. Microsoft Research has identified three key domains in which support from Microsoft will enable university researchers to achieve the greatest progress: the emerging computing environment, the transformation of science through computing, and advancement of the computer science curriculum. The Centre continues to identify compelling areas of research that strongly resonate with trends in popular culture and, as a consequence, that appeal to the industrial research sector. Its explicit focus on materialising new forms of (digital) mobility along with an emphasis on the playful and ludic qualities of everyday life ensure the Centre's work remains meaningful to consumer orientated technology businesses such as Microsoft. Furthermore, its efforts to be innovative in its theoretical research as well as its technological visions mean it has a close affinity to what compels at Microsoft Research. The Centre's goal to concentrate its efforts across this spectrum of innovations and scholarly work successfully compliments the research at Microsoft and, at the same time, it succeeds in extending what we are able to do by working in areas we do not have the scope or resources to investigate. The researchers at the centre have a well-established collaboration with Microsoft Research Ltd in Cambridge, resulting in a profound understanding of information technology use in everyday life.

Nokia Corporation – Nokia is a leader in the fields of network infrastructure, location-based technologies and advanced technologies. Headquartered in Espoo, Finland, and with operations around the world, Nokia invests in the technologies of the future.

Nokia has three strong businesses: Nokia Networks, our network infrastructure business; HERE, Nokia's location intelligence business; and Nokia Technologies, which is focused on technology development and intellectual property rights activities. Through these businesses, Nokia has a global presence, employing around 57,000 people. Nokia is also a major investor in R&D, with investment through the three businesses amounting to more than EUR 2.5 billion in 2013.

Until recently, Nokia was a key participant in the mobile devices market through its Devices & Services business. In September 2013, Nokia announced an agreement with Microsoft whereby it would sell substantially all of its Devices & Services business to Microsoft. The transaction was completed on April 25, 2014.

The centre collaborates with Nokia in the areas of user experience, novel applications of mobile multimedia, and future interaction models and metaphors for wearable technology.

IKEA – IKEA is a home furnishings company with a fully integrated supply chain, including its own industrial groups – Swedwood and Swedspan. For IKEA, creating its home furnishings catalogue is about understanding the needs and dreams of many people. By matching these to the needs and opportunities within IKEA's supply network, the company can create a range of well-designed, functional products at extremely affordable prices. IKEA of Sweden AB leads business development at IKEA through the Home Furnishing Businesses. IKEA is especially interested in the centre's focus on the “good life” – that which makes people feel good and have fun.

ABB – ABB joined the Mobile Life Excellence Centre as a partner in 2012 and contributes to the centre by sharing its knowledge about user experience and situational awareness in the context of industrial systems. In addition, ABB will collaborate on a wide range of research projects that aim to



provide operational efficiency in industrial environments. One main project where ABB will be an active player is “Introducing playfulness in the automation domain”. At the Mobile Life Centre, ABB will collaborate with leading researchers and key players in the mobile industry and gain knowledge about designing experiences, especially for mobile use.

Movinto Fun – Movinto Fun creates innovative interactive entertainment products that make people move and have fun. The company was founded in 2007 as a spin off from scientific interdisciplinary research at Interactive Institute and KTH – research merging dance education and interaction design. Movinto Fun is very interested in Mobile Life, especially the areas of interaction design, bodily interaction and games. As a partner, Movinto Fun contributes expertise and knowledge about movement-based interaction and movement-based mobile devices, commercial perspectives on game and product development, and experiences of commercialising research results. Movinto Fun can also provide test platforms (hardware and software) for movement-based interaction concepts that might be used in the projects.

Rebel & Bird – Rebel and Bird is a leading agency for growth hacking. Rebel and Bird joined the Centre in April 2014. They work with product development and communication to fuel business growth for some of the most recognised brands in the world. Sectors they work in include digital technology, insurance, media, health and culture. Rebel and Bird create a positive impact by using technology, and work with clients and partners across the globe providing both B2B and B2C services. They innovate, structure and adopt a strategic approach to product development. Rebel and Bird believe that innovation for digital products, new or existing – requires more than just programming.

PUBLIC SECTOR REPRESENTATIVES

City of Stockholm – Within Sweden as a whole, the Stockholm region and Kista in particular are playing a crucial role in the establishment of a consumer-oriented service industry. This role has been recognised by the City of Stockholm, which has chosen to establish and participate

in several initiatives focusing on this sector, such as the Kista Mobile Showcase, in addition to participating in the Mobile Life Centre. The City of Stockholm plays a natural central role in the Mobile Life Centre, providing multiple channels for local collaboration, dissemination, and take-up with both small and large companies.

The City of Stockholm contributes to the centre by being prepared to serve as a test-user representing the public sector in several project domains. Furthermore the city strives to promote coordination and cooperation regarding the various mobile initiatives in the city.

Kista Science City – Kista is a science city – a creative melting pot where companies, researchers and students collaborate in order to develop and grow. The foremost sector in Kista is ICT. Figures show that few places on the planet can demonstrate the same high concentration of expertise, innovation and business opportunities within ICT. Kista Science City brings to the competence centre its project “Kista Mobile & Multimedia Network”, an active business-oriented network for people and companies within mobile services and multi-media industry. The network serves as a meeting point for researchers, entrepreneurs and industrial management in a cosmopolitan milieu with a strong focus on business. It is an important component of an ecosystem where government, academia and industry work together to promote growth.

INNOVATION SYSTEM PARTNER

STING –STING, Stockholm Innovation & Growth, founded in 2002, is a world class ecosystem for innovative start-ups based in Stockholm. The ecosystem encompasses comprehensive business development support, own financing sources and access to STING’s broad network – all interacting with each other to more rapidly build Sweden’s new international growth companies. STING works primarily with innovative start-ups within ICT, Internet/media, medtech and cleantech – supporting entrepreneurs and innovators from academia, research institutes and the business sector. STING is headquartered in Kista Science City – in the middle of one of the world’s premier ICT clusters. STING is a supportive partner of the centre and contributes its competence as an incubator. STING has been a partner since the founding of the centre in 2007.



The Future of Money

LiveNature

mFashion

Re-mobiling

Material Explorations

Internet of Sports

The Other Big Data

Arts & Crafts

Homes & Cities

Research

During the year, nine research projects have been running in the centre. Researchers at the centre and our partners jointly develop ideas for the projects as well as ideate new projects. This takes place in various kinds of creative workshops in which the whole centre, including the partners, meet and discuss, new technology, design processes and future challenges. The companies take an active part in the projects, and the close collaboration creates a flow of knowledge from the research projects into the companies.

The centre's research involves the design, implementation and study of novel, futuristic enjoyment services in real-world use. The main field of the centre is Human-Computer Interaction (HCI), with the academic flagship publication venue being the ACM SIGCHI Conference on Human Factors in Computing Systems (CHI) alongside the journal Transactions on Computer-Human Interaction (ToCHI). Other major HCI journals include the International Journal of Human-Computer Studies, Interacting with Computers and the International Journal of Human-Computer Interaction. Additionally, the centre's work is also relevant for communities concerned with computer-supported collaborative work (CSCW), mobile human-computer interaction (Mobile HCI), game studies (DIGRA), ubiquitous and pervasive computing (UBICOMP, Personal and Ubiquitous Computing), design of interactive systems (DIS), tangible, embodied and embedded interaction (TEI), and interaction design (International Journal of Design, DRS).

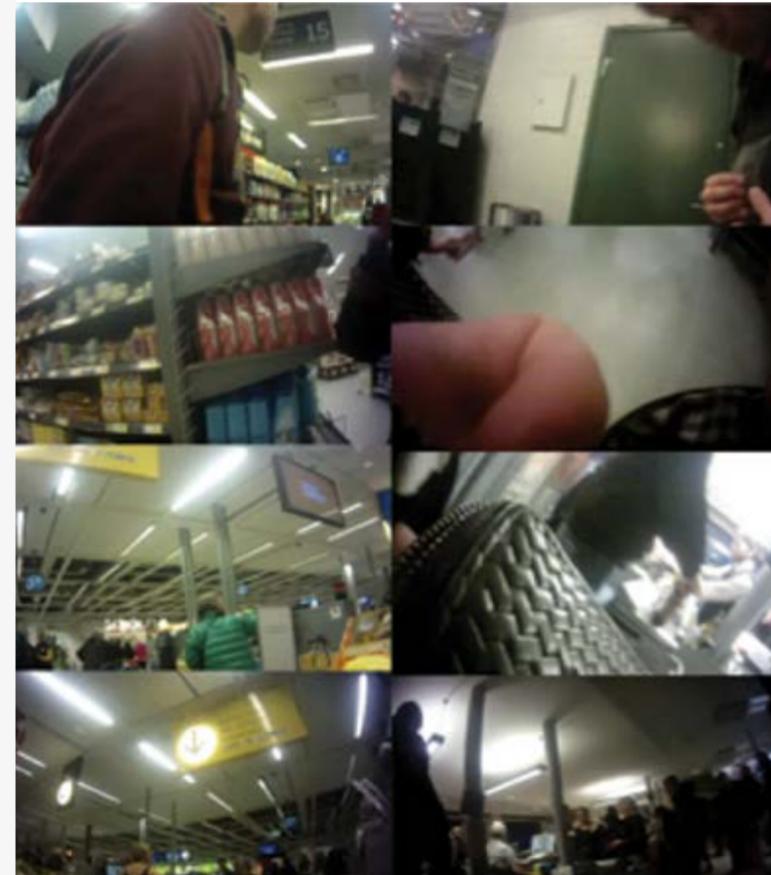
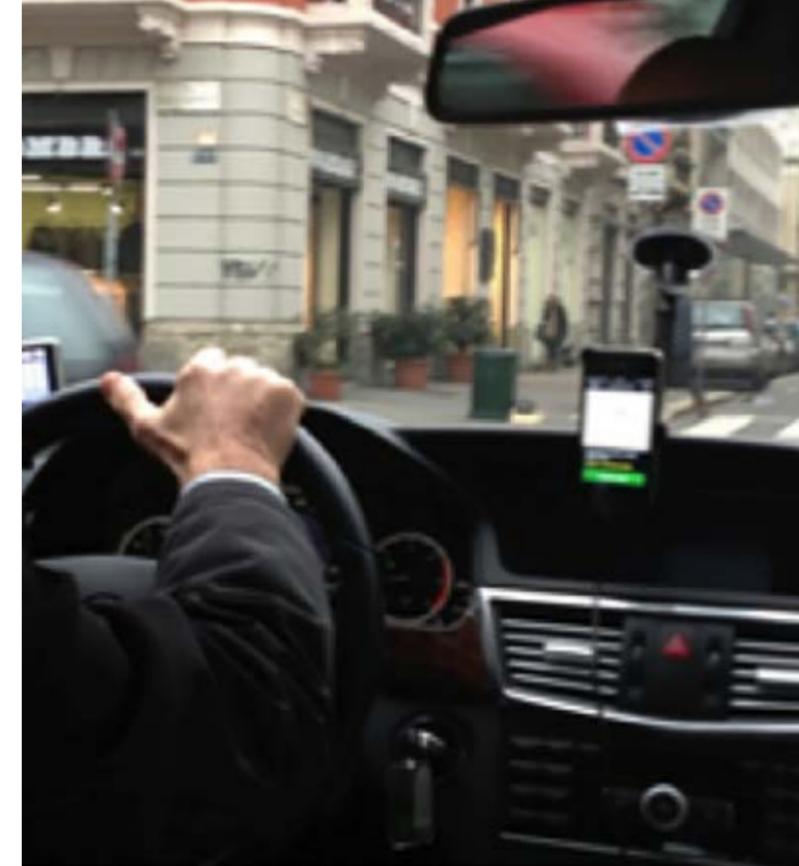
The centre's work is based on design-led exploration of novel technology. At the core lies design thinking, a human-focused, prototype- and design-driven process for innovation that is fundamentally multi-disciplinary. It draws on a number of competencies to arrive at not only better products, but also better processes, services, strategies and business models. It typically entails opening up new design spaces through the creation of many different example designs, at the same time the problem space itself is continuously explored and refined. This can be contrasted with more traditional engineering research that starts from a problem and then, seeks to solve it. Our unique take on design thinking relies heavily on sociological points of view.

Competence areas that are represented in the centre are among other; Interaction design (IxD), User studies – both traditional HCI studies and ethnographically oriented methods, Product design, Hardware engineering, Software engineering, Critical analysis, Critical design, and Media art. The projects are presented on the following pages.

The Future of Money

The theme of this project is “the future of money” – which means understanding how payment systems are changing and the impact this will have on mobile devices and server systems. In the second year of the project we have increasingly come to focus increasingly on the sharing economy and the role of technology, payment and employment in systems such as Uber and Airbnb. The project has also been kickstarting considerable academic work in the area – with a #CHIMONEY workshop at the ACM CHI Conference on Human Factors in Computing Systems, a panel at the conference Computer-supported cooperative work (CSCW) on the sharing economy, and keynotes at the Royal Society in the UK. Airi Lampinen has presented her work on Airbnb use at the CSCW conference, reviewing the tensions between hospitality and financial gain that are involved in Airbnb use. Moira McGregor and Barry Brown have also conducted an extensive study of Uber use in San Francisco and London, the results of which have been published in the *Journal of Peer Production*, and further publications from which are in preparation. Lampinen is taking this work further by organising a workshop in June on the sharing economy with notable speakers from the US and Finland. The project has come to an end and as a closing event Barry Brown was invited to present a keynote at the Royal Society. Research from this project is being further developed in multiple Mobile Life Phase 4 projects – in particular the Data Politics project.

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*Picture top: Study of Uber drivers in London and San Francisco
Picture bottom: Point of Sales*

LiveNature

Although we often use notions such as nature and culture in a common-sense way, there is no obvious dividing line between them. The natural normal distinction between them in everyday language is usually not a problem, but it can be if, for example it restricts how we engineer and make use of new technology.

In this project we invent and investigate this bewildering landscape, given that new mobile media seem to be able to enrich their relation even further. This idea is not new, and we have seen how architects create new designs by making windows larger and selecting locations to provide scenic views of the cherished surroundings. Emerging mobile media, sensors, Internet, etc. can be used to make nature and culture even more transparent. We could extend on the architectural techniques to provide windows on remote locations in the wild. During the last year, we took one of our design instantiations and implemented it as a system to be deployed in collaboration with IKEA in their “Living Lab”, where a number of families came to live and interact with the new technology in their daily life for two weeks. In terms of technical challenges, it was our most ambitious user study yet, and we learned a great deal about people’s

appreciation of ambient video experiences as part of home décor, as well as about the high technical quality of current mobile technologies.

We have also taken steps toward considering the nature-culture divide as a cherished place, not only for humans, but also for other species. We have engaged in close-studies of urban walks in Milan with dogs on a leash, how the dogs experience the city and how this differs from people’s experience of a city. We are forced to reconsider the most important notion in our research, that of “interaction”, when we see how wild boars and hunters orient themselves toward a landscape where proximity-sensing mobile cameras are part of the scenery. Moving beyond the notion of Human Computer Interaction to Animal Computer Interaction, we are doing field studies in the park, Kungsträdgården in the city centre of Stockholm during the cherry blossom season, asking how we should now orient ourselves towards plants, flowers and trees.

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mFashion

Digital devices come in use closer and closer to the clothes we wear. It began with the success of mobile phones, is continuing with the emergence of smart watches and smart eyewear, and is leading to a future of smart textiles and organic user interfaces. These devices provide public visual surfaces with the possibility for endless variations of expression. The question then arises of how, specifically, the devices should vary in their expression. We suggest that fashion design has much to offer in this regard, and that we now need to develop fashion-oriented software, services, and applications. This year we developed the “Watch for Figuracy” app, which makes the face of a smart watch interact with the wearer’s outfit, in a way that utilises colour and contrast theory. It attempts to provide a conceptual instantiation, to complement our dense academic texts.

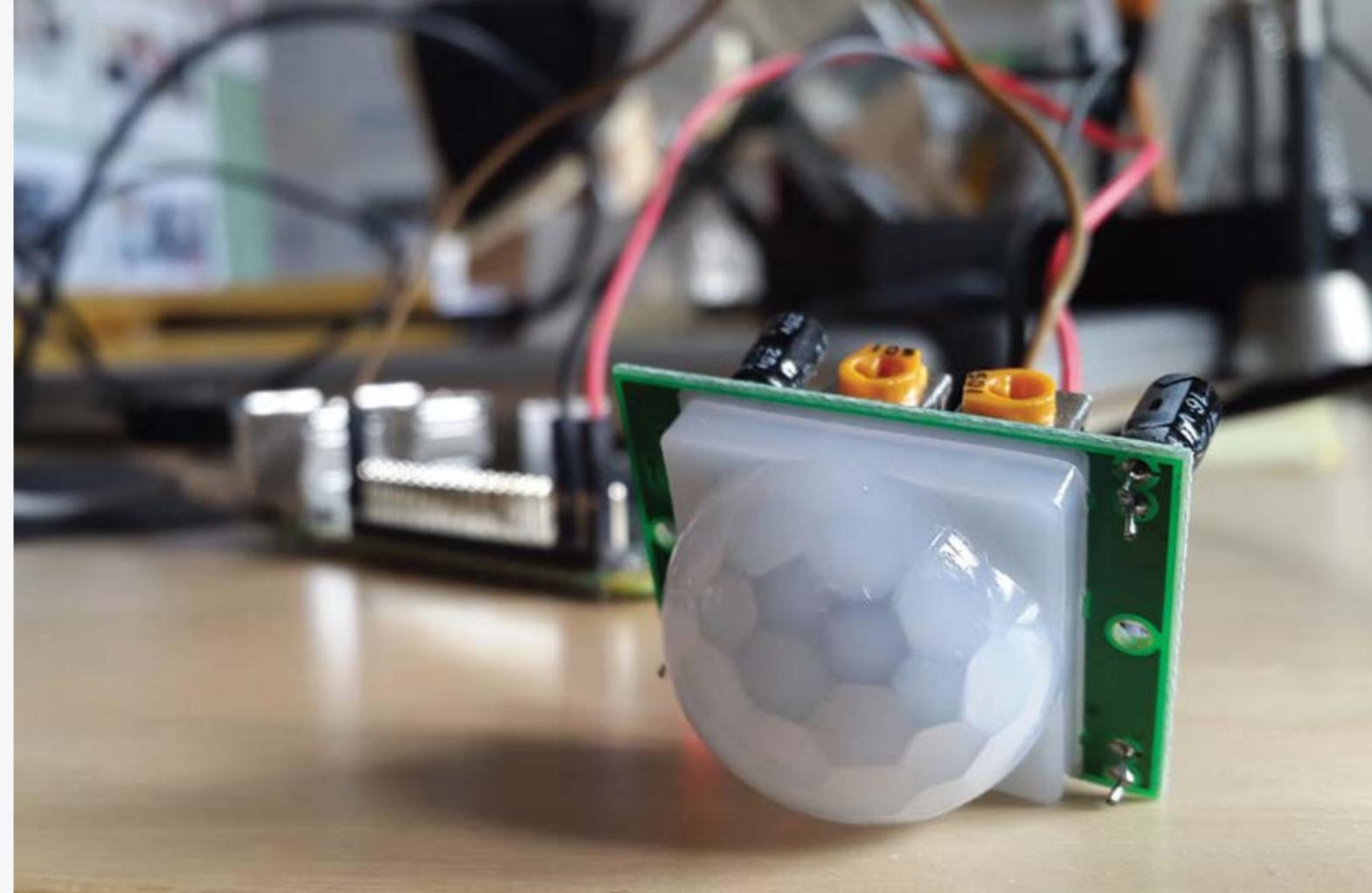
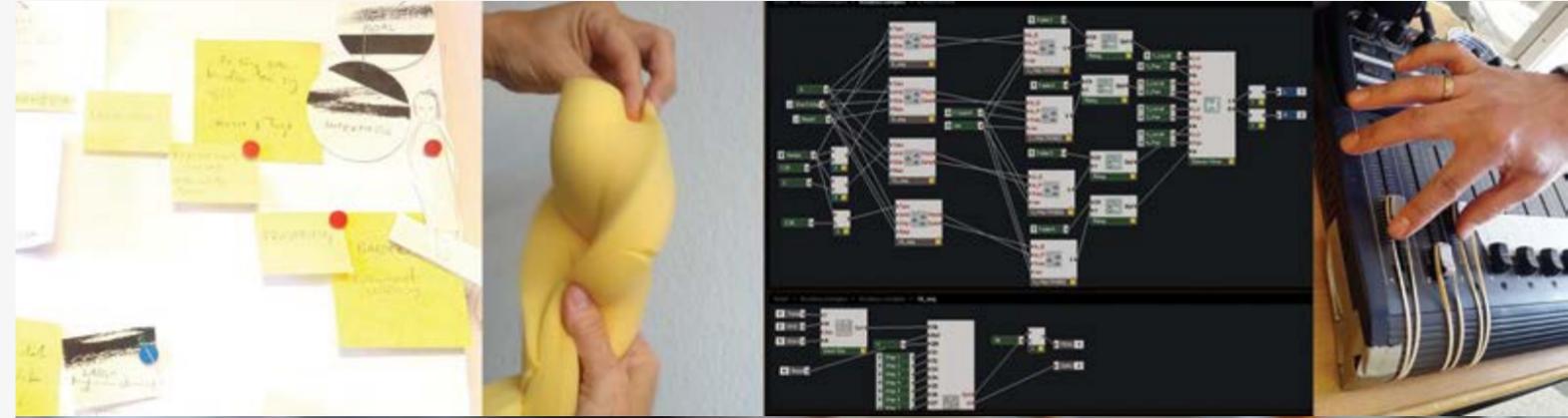
Although the app accounts for fashion concepts, such as outfits and public visibility, it is only an initial step in developing fashion-oriented wearables. The fashion phenomenon is fleeting and hard to grasp. It is a general term we use for the items we wear as well as a concept denoting social practices related to our experiences of clothes. Scholars argue that fashion is a form of visual

art with the visible self as its medium. Changes in fashion have to do with an evolution of aesthetic style that reflects discords in society. Aesthetic styles are in themselves ambiguous and are partly rooted in the continual change of expressions, with a style drawing on the one before it, in a sense creating a pattern in which each step reflects the previous step. But fashion aesthetics is also molecular and disconnected. It is also said that fashion comprises the social and cultural institutions that make particular items or textiles desired. These institutions are important drivers of taste and that mould our conception of what is considered beautiful. If that is true, we cannot expect fashion experiences to emerge solely out of a system design à la human-computer-interaction. New design needs to be complemented with fashion institutions such as advertising, to which we recently have turned our attention. Perhaps we should design desirable fashion wearables through fashion adverts rather than system design and testing?

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Picture: The app, “Watch for Figuracy”



Re-mobiling

The Re-mobiling project began with the goal of taking apart the mobile phone – in terms of both its form and in terms of its services – in order to create alternative ways of interacting with its basic functionalities. Throughout our research, we have sought inspiration by revisiting and reformulating our understanding of time and bodily behaviours.

To question the basic form and functionality of the mobile we turned to ethnographic methods and applied aesthetics. We performed a range of workshops to experiment with and develop our questions. We also studied the social, cultural and bodily practises in Vanuatu and we studied people’s pace in life, which is forced to follow the landscape of charging (mobile phone batteries).

To illustrate and articulate our thinking, we developed various interactive sketches and applications. For example we designed a time indicator where the unit of time has become the rhythm of breathing instead of seconds,

minutes or hours and we designed a mobile application that transforms text messages into Haiku poetry. We have designed a prototype that notates people’s rhythms in words and we have built an application enabling us to track users’ movements and charging habits relative to position. In addition to these activities, we have produced a range of articles, master’s theses and exhibitions.

Through our excursions, we have developed an aesthetic sensitivity to what pliable, restful, rhythmic and blended temporalities might be like in interaction design, and we have made tools for how to design for them. We have uncovered prioritising behaviours in the charging of mobile batteries in everyday life. We have also learned that saving old text messages and call logs is not a solely positive feature.

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*Picture top: Squeezing interface
All: Body, time and technology workshop*

Material Explorations

Designing of digital devices and services can feel like building something from LEGO blocks – like fitting together prefabricated pieces in predefined ways. What if we instead treat such digital materials the same way that we treat materials such as wood or metal, and learn how they can be moulded and shaped to create better and sometimes unexpected designs? The aim of the Material Explorations project was to investigate how this can be done and through a designerly and crafts-oriented approach foster a deeper material understanding of digital materials.

In the project we worked hands-on with digital materials to uncover their salient properties and how they can be used in designs. A core part of this work was to develop tools that allowed for experimentation with digital materials. This resulted in the Ins-bits portal tool, a connectivity agnostic tool for experimenting with Internet of Things (IoT) material composites. Another important aspect was to package our findings on methods for structuring design work and communicating material properties in understandable and inspiring ways through the creation

of the Ins-bits portal. There, easy-to-digest information on the Inspirational Bits method and examples of actual inspirational bits were collected. We believe that having such methods is crucial for creating a common understanding of digital materials, which is especially important in design teams whose members come from multiple disciplines come together to work on a design.

We also continued our work with ABB to apply some of what we have learned about digital materials and how to work with them, to control room environments. In a workshop that included participants from Mobile Life as well as major Swedish companies we attempted to envision how control room work would be affected by general trends such as increased automation, blurring of boundaries between leisure and work, and an aging workforce, as well as technological trends such as IoT.

*Project leader: Jarmo Laaksohlahti,
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Picture top: Imagining future control rooms

Internet of Sports

In the Internet of sports project we have explored how various aspects of Internet of Things (IoT) infrastructures can augment individual and social experiences of sports and physical activity through interaction around aspects such as movement and bio-data, sociality, and sharing of bodily and performance-related data.

The research has been conducted in the form of prototype building and in user oriented explorations of how technology is experienced. We have also spent efforts in expanding the HCI community around interaction design for sports by organising several work shops and Special interest groups, as well as editing a special section in interactions that was published in February/march of 2015.

The key findings of the project were formulated in the paper presented at CHI 2015. Based on interviews with ten elite and recreational athletes around their experiences and engagement with endurance sport and personal and wearable sports technology we found how they emphasized the experiential aspects of doing sports and the felt experiences of their activities was repeatedly emphasised. While technology was described as having an instrumental role in measuring performance and feeding bio-data back

to them, the experiential role described as supporting and enhancing the sport experience. Based on this research, we suggest that further interaction design research in sports and sports performances need to be understood from looking at experiences, firstly through the notion of a measured sense of performance, and secondly as a lived-sense of performance.

Based in this thinking we have also implemented the prototype system Runright that provides open-ended real-time feedback on the bio-mechanics of cross-country running. This is a second iteration of a system that mirrors the runner's body posture and stride pattern in the form of visualisation that is presented on the a mobile phone. The system also allows the users to revisit the feedback they got during a run through a log for post-workout analysis. This system was used by some of the participants at the 2015 SIG, Understanding sports-HCI by going Jogging at CHI.

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Picture: Understanding sports by going jogging

The Other Big Data

The Other Big Data project has focused on the intersection of big data and people. We have explored the new possibilities for interactive technologies by imagining new roles for users interacting with data. Currently, most big data efforts see people either as passive consumers or passive producers of data. In the past year, we have been imagining more active roles for users.

One line of research we have been pursuing explores different ways of approaching the mappings between data rhythms and people's rhythms. We have worked with infrastructural rhythms of the phone such as battery life; movement/geolocation; patterns of calls associated with places, times and movements; data usage; peaks and valleys in use of Internet and cell tower usage; applications; and times, durations, and frequencies of usage of particular applications. Based on these investigations we have designed a set of three related phone apps. The apps help users examine, reflect on and adjust the rhythms of their digital connectivity. The apps were demoed at the Mobile Expo organised by the magazine, Mobilbusiness.

One of the three apps we named ScreenBlur. ScreenBlur is an Android app that helps its users find rhythms of phone usage that suit them better. In this day and age, most of us have a love-hate relationship with mobile technologies: we love being connected and able to access information anytime and anywhere, but at the same time we hate the constant interruptions, distractions, and time wasting that come with it. To help alleviate this problem, we have designed ScreenBlur, an app that allows users to specify how they want to use their time on the phone. The app adjusts the brightness of the screen according to user specifications. For the apps the user wants to use less, the screen gets dimmer as time goes by until the phone becomes unusable; for the apps he or she wants to use more, the brightness increases with time. If the user does not use the phone for a while, the brightness returns to the default setting.

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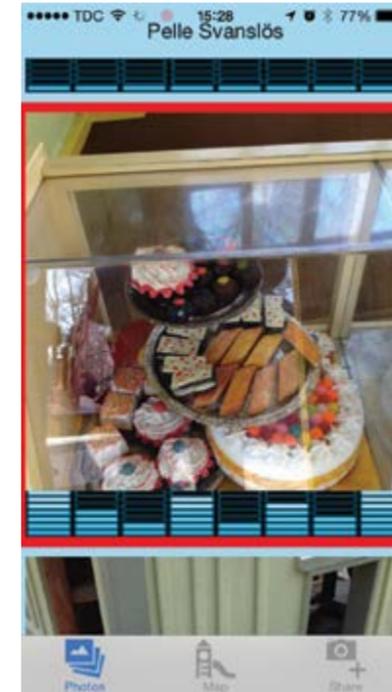
Homes & Cities

The Homes & Cities project has focused on contemporary city life through explorations of everyday urban activity and the current role technology plays in it. We have approached this broad agenda through two lines of work. One considered the shared home/city spaces and experiments with designs for supporting their use in novel and enjoyable ways. The other engaged with city institutions and the variety of stakeholders with whom they strive toward “smartness”.

One part of the project looked into liminal spaces between the home and the city, that is, spaces at the boundaries of the domestic, the communal, and the public. During the past year, we have explored playgrounds, recycling areas, and communal areas in apartment buildings, to better understand everyday life and the role technology can play in urban neighbourhoods. We have undertaken a set of design experiments to explore how we might push the limits of what technology can do to support enjoyment, cooperation in shared spaces, while remaining sensitive to the co-present need for both distance from and connection with others nearby.

The second part of the project approached city systems by interviewing developers and city workers in four European cities (Stockholm, Glasgow, Edinburgh, and Helsinki) as they develop apps and data sources to help their cities run better. We set out to learn from the diverse stakeholders through interviews with municipal authorities, third party developers, and agencies, who have developed technology and services, especially apps that utilize city data and envision citizens as the end users. Our exploration of how and with whom cities make, share, and use data and apps allows us to provide a richer narrative of “smartness” in cities and thus encourage more nuanced and fitting design explorations.

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barry@mobilelifecentre.org*



Picture: Screenshots from our playgrounds photo app

Arts & Crafts

Artistic and creative practice is an important driver for cultural and commercial innovation, and this project aims to specifically investigate such practices in relation to novel interactive materials. The project scope spans from popular culture and folk art to the forms that crafted interactivity takes in public exhibitions and on the contemporary art scene. Special emphasis will be on aesthetic craftsmanship with new interactive technology and traditional materials like leather, silver, wood and textiles. The project covers two major areas of investigation:

Explorative work combining traditional crafts and new interactive technology. Examples include leather, silver, wood, and textiles. In this strand of work we collaborate with experienced craftspeople in these domains to further explore future potential interactions and design challenges.

Interactivity in contemporary art. This theme comprises in-depth studies of selected contemporary artworks produced within and outside of academic research.

This has been the exciting first year of this project, with many activities: workshops, internal and external seminars, exhibitions and conference presentations. The topic

seems to interest many people, and there has been much interaction within the group as well as with researchers and practitioners outside of the centre. Apart from the internal Mobile Life funding, the project has also been supported by a grant from Innovativ Kultur endorsing a sub-project named *Precious Materials of Interaction* that made possible a collaboration with a professional silver smith, resulting in several exhibits displaying interactive objects crafted from traditional jewellery materials combined with electronics. The project has also had a fruitful collaboration with the educational sector, where the project was used as a theme in a course on Physical Interaction Design and Realisation at KTH, with student projects resulting in several demos at Mobile Life as well as presentations at several international conferences.

Project leaders: Ylva Fernaeus,
fernaeus@kth.se
and Martin Jonsson,
martin.jonsson@sh.se



Picture top: Exhibition – *Precious Materials of Interaction*
Picture bottom: *Shell inspired speaker in leather wrapping*

BOOK
1BOOK CHAPTER
1JOURNAL
PUBLICATIONS
4PEER-REVIEWED
CONFERENCE PAPERS
15OTHER PAPERS
11PATENTS
1DOCTORAL
THESIS
1LICENTIATE
THESIS
1MASTER'S
THESES
3

Publications

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1. Brown, B. and Juhlin, O. (2015). *Enjoying Machines*, The MIT Press, Cambridge, Massachusetts.

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1. Tamminen, S., Lampinen, A. and Lehtinen, V. (2014) *Digitaalinen vuorovaikutus, muutos ja luottamus* [Digital Interaction, Change, and Trust] In Myyry, L., Ahola, S., Ahokas, M., and Sakki, I. (eds.) *Arkiäjäntelu, tieto ja oikeudenmukaisuus* [Everyday Thinking, Knowledge, and Justice], University of Helsinki.

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2. McGregor, M., Brown, B., and Glöss M. (2015). Disrupting the cab: Uber, Ridesharing and the Taxi industry. *Journal of Peer Production*, Issue 5.
3. Nylander, S., Tholander, J., Mueller, F., Marshall, J. (2015) *HCI and Sports - introduction to special topic section ACM Interactions March/April 2015*.
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2. Brown, B., McGregor, M., McMillan, D. (2014) 100 Days of iPhone Use: Understanding the Details of Mobile Device Use. In *Proceedings of MobileHCI 2014*, Toronto, Canada.
3. Fernaeus, Y. and Vallgård, A. (2014) Ajna: negotiating forms in the making of a musical cabinet. In *Proceedings on Designing Interactive Systems, DIS 2014*, Vancouver, BC, Canada.

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5. Medhi-Thies, I., Ferreira, P., Gupta, N., O'Neill, J. and Cutrell, E. (2015) KrishiPustak: A Social Networking System for Low-Literate Farmers. In *Proceedings of CSCW 2015*, Vancouver, Canada. **Honourable mention.**
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7. Sundström, P., Baumgartner, A., et. al. (2014) Gaming to Sit Safe: The Restricted Body as an Integral Part of Gameplay In *Proceedings of the 2014 companion publication on Designing Interactive Systems, DIS 2014*, Vancouver, BC, Canada.
8. Tholander, J., Laaksolahti, J., and Nylander, S. (2014) Experiencing art through kinesthetic dialogue. In Proceedings of the 2014 companion publication on Designing Interactive Systems, DIS 2014, Vancouver, BC, Canada.
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9. Sanches, P. (2015) Beyond Personal Stress Management: A Reflection. In workshop "Beyond Personal Informatics". In *Proceedings of CHI 2015*, Seoul, South Korea.
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11. Wang J., Durrant A. and Kirk D. (2015). Designing Future Technology for the Aesthetic Experiences of Traveling. In *Proceedings of CHI 2015*, Seoul, South Korea.

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1. Juhlin, O., Mughal Ahmad, M., and Engström, A. (May 2015). EPO Patent (European Patent Office) Synchronization and delay-EP IPQ4033.

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1. Ståhl, A. (2014). *Designing for Interactional Empowerment*. Doctoral thesis in Human-Computer Interaction at Department of Media Technology and Interaction Design, KTH, Royal Institute of Technology.

LICENTIATE THESIS

1. Solsona Belenguier, J. (2014) *Topics in engineering methods for IT: Moving towards an interdisciplinary design space*. Licentiate Thesis in Communication Systems at KTH, Royal Institute of Technology.

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1. Albert, C. (2014). *Real-time feedback in high performance sports scenarios: A case study for orienteering*. Master's thesis at the Department of Computer and Systems Science, Stockholm University.
2. Motiejunaite, I. (2014). *Deletion and digital memory: user study of mobile application "Delete by Haiku"*. Master's thesis at the Department of Journalism, Media and Communication (JMK) at Stockholm University.
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Activities

In addition to working on research projects together with our partners in the joint venture Mobile Life Centre is involved in many activities outside of the centre. These can include invitations to speak at conferences or corporate events. The centre is also organising an open seminar series, which is listed below. The research at the centre also attracts media attention both nationally and internationally.

VISITS AT THE CENTRE

April 10th – WWTF – the Vienna Science and Technology Fund Board of Directors, including the Mayor of Vienna and the Director of University of Vienna, visited the centre. Kristina Höök presented Mobile Life and talked about the work conducted here, which was followed by a tour with short presentations on current research. The WWTF derives its promotion strategy from the context of the Austrian science and research scene, as well as Vienna's special position as the capital of Austrian research.

May 7th – A group of 33 Interaction Design Students from KTH, the Royal Institute of Technology visited Mobile Life. They were introduced to the centre on different levels through a tour, demos but as well through actively participating in workshops. The students additionally presented their own final group projects.

May 12th – “Lilla Digitaliseringskommissionen”, a commission appointed by the Swedish government with the purpose to generate ideas for the digital agenda for Sweden's future in IT visited the centre for an entire day. The six children and teenagers (6–18 years of age) from all over Sweden were accompanied by their parents or guardians, as well as commission representatives.

May 14th – Agneta Wallin Levinovitz, Editor-in-Chief and Karin Svanholm, Project Manager, Digital Media Senior Editor, both from Nobel media visited the centre to be inspired by the research in Mobile Life.

May 15th – The Director of Digital Media at SR (Swedish radio, public service), visited the centre for inspiration and input from the research.

May 27th – Camille Mousette, Apple, visited the centre. Camille has a Ph.D. from Umeå Institute of Design and is an old acquaintance of Mobile Life.

June 23rd – Girish Agarwal, Enterprise Architect at Husqvarna AB, global leader in outdoor products based in Jönköping, Sweden, visited the centre.

July 1st – Ivan Bretan, Global Product Manager Mobile Consumer Apps at TeliaSonera visited the centre.

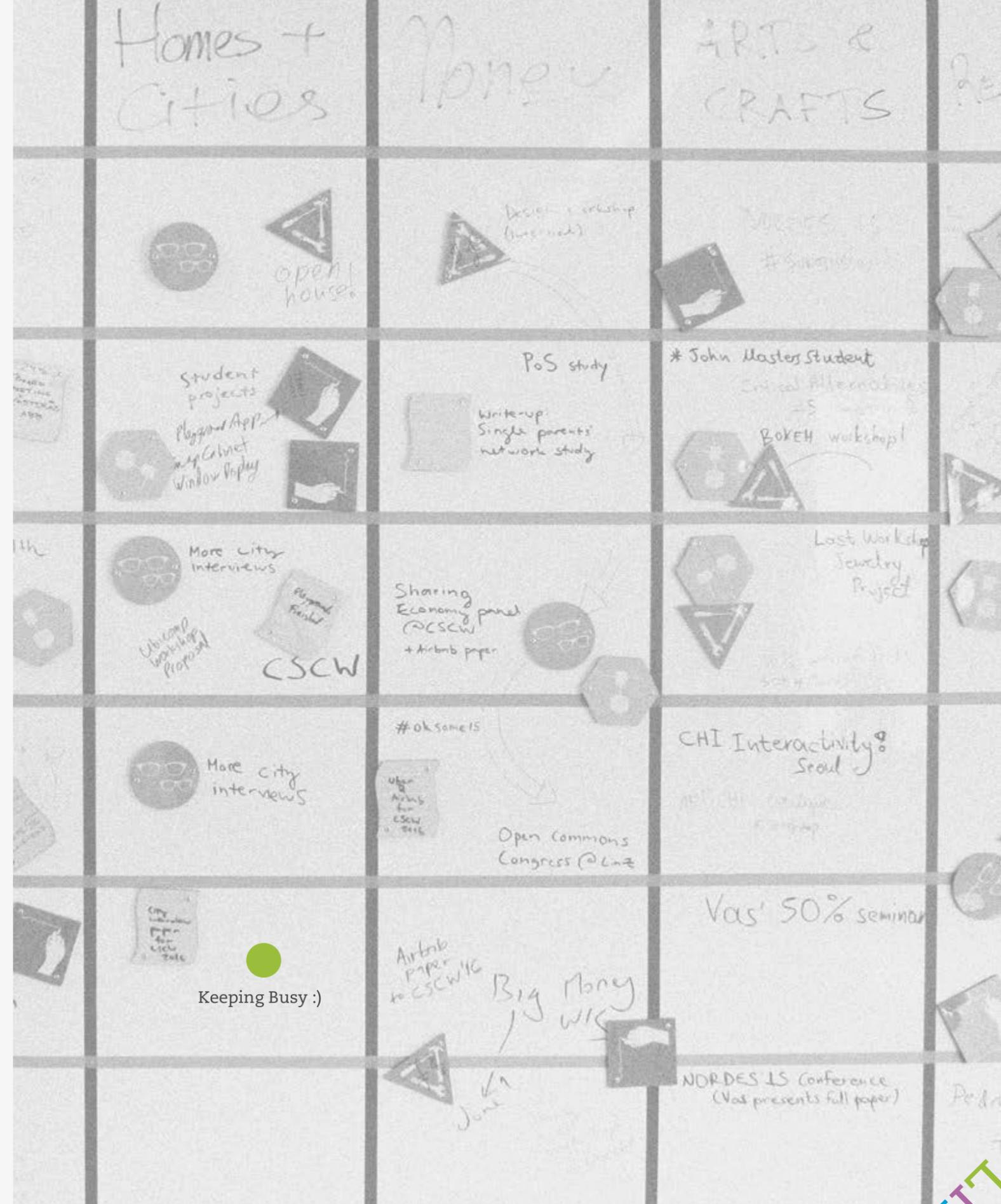
September 9th – Kang Dongsek, Samsung, VP UX Design Team visited the Centre on his tour in Kista. The meeting was organised by Stockholm Business Region.

September 29th – The design bureau PeoplePeople visited the centre with a group consisting of the two founders, Martin Willers and Per Brickstad. accompanied by their co-workers Johan Frössén and Anna Palleschitz.

October 9th – Roger Bengtsson, TeliaSonera visited with colleagues, Freenasp Mobedjina: Manager Global Strategy and Business Development at Corporate Development, Henrik Sund, Group Technology, Priya Sawney, Customer Experience and Innovation, and Mats Mägiste, Commercial Innovation, Group Commercial.

January 12th – Nackademin visited with a group of 30 people lead by Eva Stattin. The curriculum for the course is digital strategy.

February 2nd – Masa Inakage and his students visited the centre in conjunction with their meeting with the UX group at Ericsson research.





Book Release!

TALKS, PRESENTATIONS AND DEMOS

April – Mobile Life helped organise the 2014 SIDeR conference. The 10th Student Interaction Design Research Conference was held at KTH, the Royal Institute of Technology in Stockholm. Highlights were the industry panel with representatives from Google, Ziggy Creative Colony, Screen Interaction, Ocean Observations and SVT and inspiring demo sessions both from our research institutes and the interaction design students.

June – Mattias Jacobsson held a presentation at Mobile Life for a class of teenage students employed as summer interns by the Eskilstuna Municipality. The task of the students was to support SME's in Mälardalen with fresh and novel ideas for their ongoing development. Mattias presented many of the projects from Mobile Life as a source of inspiration for the students to bring back.

June – Stina Nylander presented parts of Mobile Life's sports research at MOCO – the International workshop on Movement and Computing in Paris, France.

June – Jinyi Wang demoed LiveNature System at the Experiencing Night Event of the ACM conference on Designing Interactive Systems: Crafting Design (DIS2014), Vancouver, Canada, Jun 2014.

July – Kristina Höök was invited to participate in three different panels during the Almedalen week - a political gathering every summer in Visby, on the island Gotland. The first panel concerned introducing "Dataslöjd" (Maker-culture) into primary schools, and was organised by AcadeMedia. The second panel concerned IT-politics, asking leaders from the different Swedish political youth parties to debate their positions, and was organised by Almega. The third panel focused on how to make sure Sweden has the competence we need in 2018, and again was organised by Almega.

August – Mattias Jacobsson visited the inauguration of Expectrum (Upptäckarrum) in Västerås, a project in which he contributed to by taking part in design/planning workshops as an external expert fall 2013. The connection to the Material Explorations project lies in exploring methods and knowledge for setting up environments such as hacker and maker spaces, to supports the exploration of physical-digital materials.

August – Kristina Höök gave an invited talk at the Digital Health days in Älvsjö, <http://www.digitalhealthdays.se/>

September – Airi Lampinen was studio guest on the Finnish DocVentures TV series.: <http://yle.fi/aihe/artikkeli/2014/09/23/viikon-teema-totuus>. For more on Airi Lampinen's blogpost about key points from the discussion: <http://www.demoshelsinki.fi/2014/09/26/miten-totuus-rakentuu-digitalisoituneessa-maailmassa/>

September – Kristina Höök gave an invited talk on Mobile Life research at Sony Mobile in Lund.

October – Jarmo Laaksolahti gave an invited talk at the Nordic Science Centre Förbunds Annual conference in Borås.

October – Kristina Höök gave a talk at TeliaSonera's Sales Business meeting. The meeting is an annual gathering of all of TeliaSonera's sales-persons in the broadband area.

October – Airi Lampinen served as a mentor at the Internet Research 15 conference's Doctoral Colloquium 21.10.2014 in Daegu, South Korea. For more information about the colloquium see: <http://aoir.org/ir15-doctoral-colloquium-call-for-submissions/>

October – Airi Lampinen co-organized & chaired a session at the Internet Research 15 conference, titled "Old Against New, or A Coming Of Age? Rethinking Broadcasting" on 22.10.2014 in Daegu, South Korea. The session was organised in collaboration with R. Stuart Geiger (UC Berkeley), Stacy Blasiola (University of Illinois at Chicago), Zizi Papacharissi (University of Illinois at Chicago), and Nancy Baym (Microsoft Research New England) (For more information about the event see: https://www.conftool.com/aoir-ir15/index.php?page=browseSessions&form_session=7)

October – Kristina Höök gave a talk on IoT at the Stockholm Business Region Breakfast seminar (with more than 500 participants).

October – Airi Lampinen presented a conference paper titled "Access to Participation in the Sharing Economy: The Case of Local Online Exchange in a Single Parents' Network" at the Internet Research 15 conference in Daegu, South Korea. The paper was co-authored with Kai Huotari



(Helsinki Institute for Information Technology HIIT) and Coyo Cheshire (UC Berkeley).

October – Mobile Life was active in organising the NordiCHI 2015 conference, held in Helsinki, Finland. Oskar Juhlin acted as program chair, Airi Lampinen acted as student Volunteer Co-Chair 2014 in collaboration with Eve Hoggan, Helsinki Institute for Information Technology HIIT. Sophie Kurth-Landwehr acted as student volunteer, and Jinyi Wang acted as a member of program committee.

October – Jarmo Laaksolahti was invited to an Indo-Danish workshop in Copenhagen where he presented Mobile Life.

October – Jinyi Wang visited Culture Lab at Newcastle University, UK, as a visiting researcher from Oct 2014 to Jan 2015. Whilst staying in the UK, She also gave talks about LiveNature project at Microsoft Research, Cambridge, Mixed Reality Lab, Notting University and FIT Lab, Swansea University.

October – Jarmo Laaksolahti chaired the “Gestures and Body” session at NordiCHI 2014.

November – Kristina Höök was an invited speaker at the IoT-conference held in conjunction with Öredev Developer Conference in Malmö, <http://www.iiotconf.se/schedule-2/>

November – Mobile Life was present during the exhibition at the conference Mobilize your business. The conference is an annual event arranged in conjunction with Mobilgalan an award event. Present at the exhibition were the Mobile Life Centre, the Other Big Data project and the centre’s two spin-offs, Biosync Technology and LiveLing.

November – Airi Lampinen was a guest lecturer for the KTH course The Future of the Digital Commons speaking on the topic “Social Interaction in the Sharing Economy” and served as an external jury member for student presentations.

November – Stina Nylander, together with Jin Moen, presented the Mobile Life sports research at Riksidrottsförbundet’s IT day.

November – Airi Lampinen co-organized two workshops at the Annual Social Psychology Days (Sosiaalipsykologian päivät) in Helsinki, Finland. The workshops were on the social psychology of everyday information technology and the social psychology of social networking services. Both were organised in collaboration with Suvi Uski (Univ. Helsinki), Vilma Lehtinen (Univ. Helsinki) and Mikael Wahlström (VTT Technical Research Centre of Finland).

November – Airi Lampinen gave a talk in the “The social psychology of social networking services” workshop at the Annual Social Psychology Days (Sosiaalipsykologian päivät) on the topic of “Monetizing Network Hospitality”. The talk was based on research that was conducted together with Tapio Ikkala, Univ. Helsinki.

November – Stina Nylander presented the Internet of Sports project at the InfinIT Week of Wearables in Copenhagen.

December – Jarmo Laaksolahti attended an envisioning workshop for RATS Theater at the Location eXperience Lab at DSV.

December – Jakob Tholander presented the joint project “App-jakten” at Forskarhjälpn at Livrustkammaren. The project is a collaboration with Nobel museum and will engage 1 500 young schoolchildren that will work and do research for Mobile Life and SICS.

December – Kristina Höök gave a keynote presentation at India HCI 2015.

January – Oskar Juhlin participated in a panel discussion addressing wearable technology at Stockholm Fashion week.

February – Jarmo Laaksolahti gave an invited talk at a round table on IoT organized by Onbird and Quale. The event was attended by representatives from a number of Swedish companies.

March – Mobile Life projects were represented during the annual SICS open house. The event attracted more than 400 people.



March – Jarmo Laaksolahti has visited 8th graders in two schools in the Stockholm region to talk about Mobile Life's research as well as engaging them in Forskarhjälp, led by the Nobel Museum.

March – Oskar Juhlin gave a keynote presentation on "Video interaction" at the conference "Webbstrategidagarna för offentlig sektor".

March – Stina Nylander presented the Mobile Life sports research at Internet of Sports Day in Åre.

April – Barry Brown gave a keynote at The Royal Society in London entitled "The future of money: from Apply Pay payless payment".

SEMINARS

April 9th, 2014 – Professor Gilbert Cockton, Northumbria University, School of Design, gave a seminar entitled: Stronger Concepts: Just Add More Concepts. In his talk, he presented and illustrated Abstract Design Situations, and applied them to the continuum of design phenomena from practical resources, via Strong Concepts, to disciplinary cultures.

May 13th, 2014 – Lara Houston from the Department of Sociology and Centre for Science Studies, Lancaster University, UK, gave a seminar on "Original" and "Chinese" mobile phones: Categorisation work and "postcolonial computing" in the repair workshops of Kampala, Uganda.

August 28th – Harry Sanderson gave a talk that focused on the relation of technology and capitalism, exploring the implications of appropriating nascent and weaponised technologies of surveillance and display.

September 3rd – Seminar with Cristian Norlin Master Researcher UX group at Ericsson Research. The

presentation discussed the next generation of mobile infrastructure – commonly referred to as 5G – and how 5G will be about more than just about speed and technical performance. How and why it be different and how might the ways we experience the network through our mobiles and other connected things may change?

September 3rd – Lars Erik Holmquist, one of the founders of Mobile Life, visited the centre and shared his experiences of two years in Silicon Valley.

November 12th – Seminar with Duncan Brumby, senior lecturer at University College London. The seminar was entitled: Improving everyday interactions with your phone.

January 21st, 2015 – Günter Alce, Industrial doctoral candidate with Sony Mobile and Lund University gave a seminar entitled: Interaction with Augmented Reality Systems. Günter presented two prototyping methods that aim to support the design and evaluation of wearable devices.

February 4th, 2015 – Stephen Brewster, Professor at the Department of Computing at the University of Glasgow. Stephen talked about new ways to design haptic interactions.

February 25th, 2015 – Crystal Abidin, PhD candidate, University of Western Australia, Perth gave a seminar entitled: Public Coupling: Imageries of Domestic Intimacy among Social Media Micro Celebrities.

March 4th, 2015 – Denzil Ferreira, Research scientist at Oulu University in Finland gave a seminar entitled: AWARE: Human & Social Context For Wellbeing.



Doctoral Thesis

Anna Ståhl successfully defended her thesis, *Designing for Interactional Empowerment*, at the department of Media Technology and Interaction Design, KTH, the Royal Institute of Technology.

Anna Ståhl's thesis further defines how to achieve Interactional Empowerment through design for users. Interactional Empowerment is an interaction design program within the general area of affective interaction, focusing on the users' ability to reflect, express themselves and engage in profound meaning-making.

This has been explored through the design of three systems eMoto, Affective Diary and Affective Health, all of which mirror users' emotions or bodily reactions in interaction in some way. From these design processes and users' encounters with the system Ståhl has extracted one experiential quality, Evocative Balance, and several embryos of experiential qualities. Evocative Balance refers to interaction experiences in which familiarity and resonance with lived experience are balanced with suggestiveness and openness to interpretation. The development of the concept of evocative balance is reported over the course of the three significant design projects, each exploring aspects of Interactional Empowerment in terms of representing bodily

experiences in reflective and communicative settings. By providing accounts of evocative balance in play in the three projects, analysing a number of other relevant interaction design experiments, and discussing evocative balance in relation to existing concepts within affective interaction, the project offers a multi-grounded construct that can be appropriated by other interaction design researchers and designers.

The thesis aims to reflect a designerly way of working, which can be recognized by its multi-groundedness, focus on the knowledge that resides in the design process, a slightly different approach to the view of knowledge, extension and rigour. It provides a background to the state-of-the-art in the design community and exemplifies these theoretical standpoints in the design processes of the three design cases. This practical example of how to extend a designer's knowledge can serve as an example for design researchers working in a similar way.



Media

PRESS AND MEDIA APPEARANCES

April – Airi Lampinen was invited to take part in the Finnish DocVentures TV talk show as a studio guest. Link to the program & episode: <http://yle.fi/aihe/artikkeli/2014/09/23/viikon-teema-totuus>

May – The Internet of Sports prototype, “Applikationen hjälper dig hålla rätt kurs”, developed for the study with Orienteringsförbundet was featured in the magazin Skogssport. <http://www.orientering.se/Skogssport/Tidigarenummer/Skogssportnummer52013/>

May – Mobile Life in VINNOVA Nytt. The purpose of the VINN Excellence Centers is to build internationally leading research organisations with academic excellence and that do research that is relevant to the industry. The collaboration should spur knowledge transfer to the public and the industry. In this article Mobile Life is presented as an example of such a successful VINN Excellence Centre. Mikael Anneroth at Ericsson Research says in the interview that: “It is very important to have these kinds of world leading research environments in Sweden”.

October – Vetenskapens värld, SVT broadcasted program Mobile Life Centre in conjunction with their program on Big Data. Kristina Höök was interviewed in the studio and the Other Big Data project’s prototype IllBook was presented as part of the program.

November – Oskar Juhlin was interviewed by the

Technology Review, German edition, about the 1st Animal – Computer interaction conference in Madeira.

January – Computer Sweden, Modern teknik flyttar in i IKEAS möbler. <https://computersweden.idg.se/2.2683/1.604869/modern-teknik-flyttar-in-i-ikeas-mobler>

February – Press release by KTH on Future IT gadgets; presenting Mobile Life’s projects. http://www.mynewsdesk.com/se/kth/pressreleases/haer-aer-framtidens-it-prylar-1117963?utm_campaign=send_list&utm_medium=email&utm_source=sendgrid

March – Computer Sweden TV produced a program from Mobile Life presenting the many on-going projects in the centre. <http://computersweden.idg.se/2.2683/1.616491/har-hjalper-framtidsforskarna-ikea-och-abb?queryText=mobile%20life>

March – As a follow up on the 2014 CHI workshop on Sports and HCI, Stina Nylander, Jakob Tholander, Floyd Muller and Joe Marshall wrote an article for the special topic section in ACM Interactions.

March – Stina Nylander is talking about the Internet of Sports project in the report from Centre for research on Sports: <http://centrumforidrottsforskning.se/wp-content/uploads/2015/05/Recept-for-rorelse.pdf>





Mobile Life in Lissabon!

The Organisation

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Anna Ståhl, PhD, SICS
 Antoine Loriette, research assistant, Stockholm University
 Andreas Axtelius, master's student, KTH
 Airi Lampinen, postdoctoral researcher, Stockholm University
 Arvid Engström, PhD, Interactive Institute / Stockholm University
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 Naveen Ramani, research assistant, SICS
 Oskar Juhlin, professor, founder, Stockholm University
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 Simon Asplund, master's student, KTH
 Sophie Kürth-Landwehr, management assistant, SICS
 Stina Nylander, PhD, researcher, SICS
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 Vincent Lewandowski, PhD student, KTH
 Vygandas Simbelis, PhD student, KTH
 Xin Guo, master's student, EIT ICT Master's school
 Yanqing Zhang, PhD student, Stockholm University
 Ylva Fernaeus, associate professor, KTH
 Zarah Faraj, master's student, KTH

Funding

VINNOVA – the Swedish Governmental Agency for Innovation Systems – is Sweden’s innovation agency. Its mission is to promote sustainable growth by improving the conditions for innovation, as well as funding needs-driven research.

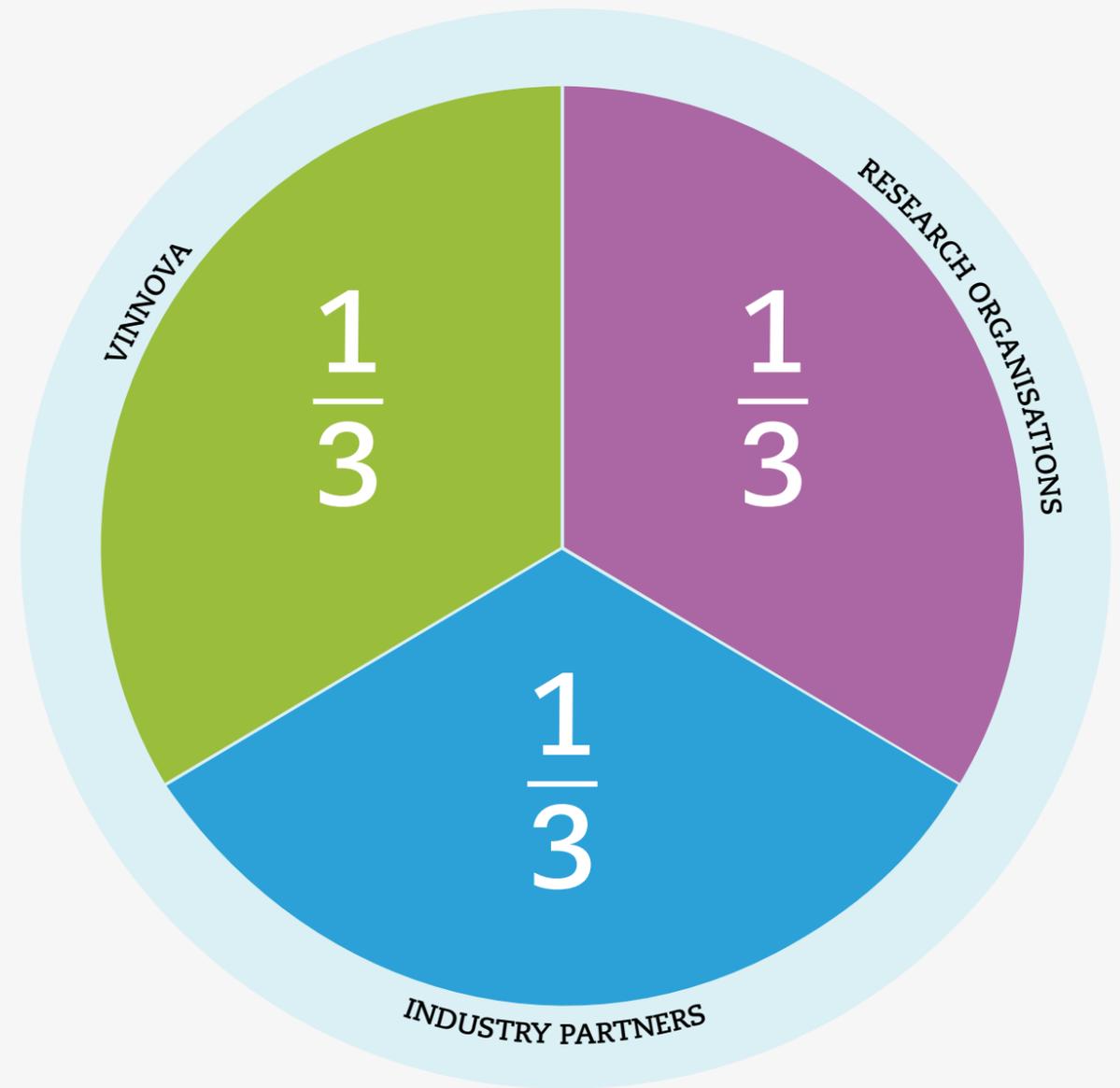
VINNOVA is currently funding 17 different VINN Excellence Centres for a period of 10 years. These provide a forum for collaboration between the private and public sectors, universities and colleges, research institutes and other organisations that conduct research.

The centres deal with both basic and applied research and work to ensure that new knowledge and technological developments lead to new products, processes and services. The funding model for the VINN Excellence Centres is that

a third comes from VINNOVA; a third from a Swedish University; and a third from industry partners.

The Mobile Centre’s funding follows this model and a third of the funding comes from VINNOVA, a third from Stockholm University, together with the research collaborators SICS Swedish ICT and KTH, and a third from the industry and public sector partners; Ericsson, Microsoft Research, Nokia, IKEA, ABB, TeliaSonera, Rebel & Bird, Moveinto Fun, Stockholm City, Kista Science City and STING.

In total the annual turnover of the centre is 21 MSEK. The VINN Excellence funding will continue until March 2017.



Mobile Life VINN Excellence Centre
at Stockholm University

Partners:

SICS and KTH, Ericsson, Microsoft Research,
Nokia, TeliaSonera, IKEA, ABB, Movinto Fun,
Rebel and Bird, City of Stockholm,
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