A leader in service research

CTF, Service Research Center at Karlstad University, Sweden, is one of the world’s leading research centers focusing on service management and value creation through service. In 2013, Karlstad University appointed two Excellent Research Groups, and CTF is one of them.

Vision & Mission
CTF’s vision and mission is to contribute to scientific knowledge and development of private and public organizations and the wider society through research on value-creation through service.

Aims & Research
By research and education, CTF contributes to smarter and more sustainable private and public organizations. CTF aims to be recognized in its role as strengthening value creation between organizations and their beneficiaries (i.e. customers, patients, citizens or users). The aim is to ensure that CTF is at the leading edge of international research. We develop and conduct research projects in close collaboration with private and public organizations. CTF contributes to education through master, doctoral and online courses at Karlstad University.

Organisation

CTF is a multidisciplinary research center at Karlstad University. Established in 1986, CTF now has about 70 researchers and PhD students variously involved in disciplines such as business administration, psychology, information systems, environmental and energy systems, and working life science.

Management team
CTF’s daily operations are led by: Director, Per Kristensson, and Vice director, Per Skålén. They are supported by a strategic council, that consist of professors and associate professors at CTF, and an administration team: Administrators Britt-Marie Shandrew and Ingrid Hansson, Accountant Roberta Starosky Jonsson, and Communications Linda Fridberg.

Advisory board
The Advisory Board provide CTF with valuable insights, vital knowledge and experience.

- Malin Thorsén, Bright Planet AB (Chair)
- Peter Rovér, Effect Management
- Hans Karlsson, Landstinget i Värmland
- Christina Öberg, Örebro University
- Jonas Matthing, RISE Research Institutes of Sweden
- Anders Tufvesson, Motification
- Sofi W. Elfving, Telia Company
- Vilhelm Jensen, Nordea
- Kathrine Löfberg, Löfbergs
- Mikael af Kleen, Differ Strategy
- Per Kristensson, CTF
- Per Skålén, CTF
- Jenny Karlsson, CTF
# Annual report 2018

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director’s report</td>
<td>4</td>
</tr>
<tr>
<td>Key numbers</td>
<td>5</td>
</tr>
<tr>
<td>Chair’s view</td>
<td>6</td>
</tr>
<tr>
<td>Research</td>
<td>7</td>
</tr>
<tr>
<td>Projects</td>
<td>8</td>
</tr>
<tr>
<td>Research profile</td>
<td>10</td>
</tr>
<tr>
<td>Publications</td>
<td>11</td>
</tr>
<tr>
<td>Highlights</td>
<td>12</td>
</tr>
<tr>
<td>CTF people</td>
<td>15</td>
</tr>
<tr>
<td>External relations &amp; impact</td>
<td>16</td>
</tr>
<tr>
<td>Funders and partners</td>
<td>17</td>
</tr>
<tr>
<td>International cooperation</td>
<td>17</td>
</tr>
<tr>
<td>Communication &amp; dissemination activities</td>
<td>21</td>
</tr>
<tr>
<td>Education</td>
<td>23</td>
</tr>
<tr>
<td>Attachments</td>
<td>26</td>
</tr>
</tbody>
</table>
We have an increasing awareness regarding our environment. According to the United Nations panel for assessing the science related to climate change (IPCC), global warming needs to be reduced by 1.5 degrees, which requires substantial changes of organizational and individual behavior. Currently, 1.3 billion tons of food – the equivalent of 30 percent of the world’s agricultural production – is thrown away. A very important initiative that targets these issues is Agenda 2030 for Sustainable Development Goals. How, then, is CTF assisting in meeting the 17 Sustainable Development Goals (SDGs) for a better world?

Our research has a positive impact on several of the SDGs, here are some examples. Transformative research with countries at the base of the pyramid, and research on how new technology can promote health contributes to 3 Good health and wellbeing. The development of a new Graduate Professional Development Program to strengthen competitiveness in Swedish industries contributes to 4 Quality education. Research on #metoo gender issues and customer orientation in service organizations are contributing to 5 Gender equality. Service innovation, and servitization are two of our largest research areas that have a positive impact on 9 Industry, Innovation and Infrastructure. Research on mobility, sustainable transportation and sustainable cities, and on how to reduce food waste contributes to 11 Sustainable Cities and Communities, and 12 Responsible Consumption and Production.

To sum up, we have carried out several research initiatives during 2018 that have implications for the 17 goals for a better world by 2030. We have also conducted research that help public organizations, governmental agencies, and county councils to better meet the needs and co-create value with their citizens and patients. In addition, several research projects in collaboration with businesses have a similar aim when it comes to better understanding customers’ needs, and how businesses more proficiently can support their customers in value co-creation. When I look at 2019, I see several research projects that are about to peak, for example, our research on how organizations take on their digitalization challenges, and how various business sectors can play a more important role and manage their service ecosystems. I can also see how CTF will involve additional academic disciplines in the years to come. I would like to take the opportunity to stress that CTF’s research is important as our mission is to contribute to a positive development of individuals, organizations and society. We do so by conducting research that has significance on value-creation through service. CTF is associated with private and public organizations’ value-creating processes.

Per Kristensson
Director of CTF
Key numbers

139 publications in total

56 journal articles

34 international co-authored articles

27,6 new external funding in MSEK

45 ongoing research projects

74 CTF people

32 CTF seminars

5 PhD defenses
Chair’s view

In a world with a desperate need for a change in consumption patterns in the western world, the importance of value creation is growing by the minute. The solution for a sustainable future partly lies with consumers and organizations paying for different kinds of value instead of products. Not only because it lowers our demand, and use of new raw materials, but also because it drives a refreshing shift in our demands and view on status markers.

Digitalization as well as Artificial Intelligence and machine learning, demands insight in human behavior along with discussions and reflection on how we want the technology to be used, and how it should serve us. Also, we need to dig deeper into how services and behavioral changes needed to convert into a sustainable society are perceived.

Here the excellence and expertise of the researchers at CTF have a vital part to play. Their interdisciplinary approach is a success factor in finding how the new technology should be used to serve the development for humanity, society and the planet.

CTF is known as one of the world’s most prominent research centers in the field of service innovation and value creation, combining expertise in the fields that explores the human, as well as organizational motivators, for change with understanding of the impact and possibilities of new technology. We are determined to further establish this important role in the research and results to come, acting as a strong partner and source of knowledge and insight for companies and organizations who wants to lead the change.

With all these facts the board has initiated a discussion, together with the community of researchers, about the future role of CTF, Service Research Center. The discussion has been based on the strategy that was developed during 2017, and will be continued during 2019.

Malin Thorsén
Chair of CTF Advisory Board & CEO Bright Planet
We conduct research on value creation through service based on the needs of individuals and society. We want our research to make a difference and help develop people, organizations and the world around us. Through scientific research on services we develop new knowledge about value creating processes. With value creating processes, we refer to the effects that arise between an organization and a user in the form of a customer, citizen or patient. Central research areas are: service innovation, service management, service experience, service transformation and service logic. CTF is always open to new research areas when societal transformation makes such areas relevant. CTF’s research is at the forefront of the international research and is conducted in collaboration with private and public organizations as well as academia. We develop and conduct research projects in close collaboration with leading business and public organizations.
Projects

During 2018, CTF had 45 ongoing research projects, applied for funding for 30 new research projects where 15 of them received funding. Selected research projects:

A Virtual Innovation Group Method for Designing Patient Centered Healthcare Services: CTF will develop and test a digital method that will enable patients and employees to co-develop innovative ideas related to healthcare through a digital platform. The researchers will investigate the effects of using a digital platform instead of physical meetings when conducting innovative group work, and compare how innovation groups in the physical and the digital space differ. The project is funded by Vinnova during 2018-2020, and will be conducted in cooperation with the County Council of Värmland and CGI.

“Previous research shows that the best innovations usually come from the users. It is important to involve and focus on the users, in this case patients and healthcare employees, in developing new health services to ensure that the results support their specific needs. A digital format is not only cost-effective, but also facilitates patients and healthcare employees who, for various reasons, have difficulties to attend the physical meeting”, says project leader Jessica Westman.

Potential for Energy Efficient Travel in an Aging Population: CTF researchers will develop new knowledge about elderly’s travel habits. The purpose is to map factors that may be important for changed behavior and more sustainable travel habits among the elderly. The project is funded by the Swedish Energy Agency during 2018-2021 and is carried out in collaboration with the European Network of Benchmarking in European Service of Public Transport (BEST) in cooperation with actors in Bergen, Copenhagen, Geneva, Helsinki, Rotterdam - The Hague, Oslo and Stockholm.

“Knowledge of the elderly’s habits is important in order to develop attractive and sustainable mobility services tailored to their needs. The goal is to increase the quality of life and participation of the elderly in society in a sustainable way. We are pleased that the project has received funding over three years as it contributes to long-term competence building in the research area, both nationally and internationally”, says project leader Lars E. Olsson.
Customers with benefits: #MeToo, power and gender in customer-centric service work: This project seeks to generate more knowledge about the work environment in service organizations by focusing on sexual harassment from customers, which is both more extensive and frequent in the service context compared to other industries. The project will investigate how customer orientation ideals interact with power and gender structures with a particular focus on implications for the work environment: how can it legitimise and support customers sexual harassment but also limit employees’ abilities to act. The project is funded by Forte, the Swedish Research Council for Health, Work and Welfare, during 2019-2020, and in run by Anna Fyrberg Yngfalk and Markus Fellesson.

"Customer orientation is a central management idea to organise and market service activities based on the concept “the customer is always right” in which the employee is subordinated to the customer’s needs. Previous research shows that there is a connection between customers general negative behavior towards service employees, and the typically strong customer orientation that characterizes these service organizations, and hence the interaction between the customer and employee. A similar relationship may exist with regard to an increase in customers sexual harassment of employees in service-oriented industries”, says the researchers.

Selected project collaborations where CTF researchers are participating:

MECO: The project Music Ecosystems Inner Scandinavia (MECO) aims to strengthen the music industry in inner Scandinavia through increased knowledge and innovation. In the project several actors from Karlstad University: Ingesund School of Music, CTF and Geomedia, collaborate with study associations and industry. The goal is to create long-term positive effects that provide a more inclusive music-, and cultural life as well as increased growth in the region. The project receives Interreg funds and funds from Region Värmland, Arvika municipality, and Hedmark County in Norway. Karlstad University and the Inland Norway University share the project ownership along with Studiefråmjandet.

Digitalwell Research: DigitalWell provides industry and public sectors with research on the developments of digital social security services focusing on the needs of its users. DigitalWell Research is a sister project of DigitalWell, run by the Compare Karlstad foundation. The common goal is to create an innovative environment, where research, industry and public sectors may interact to develop new digital social security services. Services in education and healthcare are prioritised. At Karlstad University, Computer science, CTF, Mathematics, and Nursing are involved in the project which is co-financed by Region Värmeland.

CoSIE: CoSIE- Co-creation in Public Service aims to look at the public sector and how they involve citizens when developing new governmental services. The project will first of all focus on groups that otherwise can be marginalized in that work, for example the newly arrived immigrants. The results of the project will be used to improve the public sector’s ability to incorporate the citizen’s input, at local, regional and national levels, an thereby develop service innovations that are better prepared for future needs. 11 universities and 9 public organizations are participating in the project at local and regional level around Europe. Karlstad University is the only Swedish university that participates. CoSIE is funded by the EU within the framework of Horizon 2020 with the sum of approximately 40 million SEK over three years.
The research profile Service Innovation for Sustainable Business (SISB) is coming to an end, and has since the beginning been an important part of research on service innovation at CTF. Over the years, the researchers in the profile have published 94 journal publications, presented 119 conference papers, and produced books and book chapters both for managers and education. During 2018, the research profile contributed to 23 journal publications with several manuscripts published in level 4 and 4* journals such as Journal of Marketing Research, Journal of Service Research and International Journal of Operations and Production Management. I believe that 2018 can be seen as a great start of a magnificent end of our focus on service innovation.

For 2019, we have initiated a number of exciting initiatives together with our partners that we believe will create a sustaining imprint on the future of CTF. The first initiative is the launch a new edited book on service innovation that summarizes and pinpoints what service innovation is, and how businesses can work through initiation, development and value capture to create service innovations for sustainable business. We believe that the book captures what we stand for at CTF, and that it is a good dissemination of our theories and managerial relevant knowledge on service innovation.

We have also initiated a co-operation with Cambridge Service Alliance, where researchers and partners in our research profile will meet and interact to create a common idea on the role of service innovation for creating sustainable business. In particular, we will focus on the changes brought by technology and customers and how firms can be proactive to create new business opportunities.

Lastly, one core principle of our research is that service innovation is a change in the value co-creation process from a customer perspective. But most measures of innovation focus on R&D expenditures and patents. We argue that innovation has to be seen from a customer perspective - and have together with Norwegian researchers developed the Swedish Innovation Index. This index takes a customer perspective on innovation. We believe that this will be a lasting contribution form the research profile that will be essential in the long run for how we understand where in the Economy innovation happens.

The research profile extends over 2011-2019, and is funded by the Knowledge Foundation, Karlstad University, and a number of Swedish companies: IKEA, Ericsson, Volvo, Löfbergs, Ica Maxi, Valmet and Stamford.

Lars Witell
Research Director of SISB
In 2018, 56 journal articles, 62 conference papers, 5 dissertations, 2 books, 11 book chapters, and 3 reports were published. CTF researchers have published in leading and high impact factor journals, for example in Journal of Marketing Research, which is considered to be a 4-star publication.

During the year, we have been developing strategies to further increase our publications, and foremost to publish in high impact journals. Some initiatives were our PLS seminars with Professor Christian Ringle, and several workshops with CTF Professors Per Skålén and Anders Gustafsson.

CTF is not only publishing many articles. A quick overview of the last 15 years, using Google Scholar Citations, show that many CTF publications have made an impact on our research field:

Prestigious Lovelock award

Anders Gustafsson, Professor in Business Administration, was awarded the “Christopher Lovelock Career Contributions to the Services Discipline Award”. Since 1994, the “Christopher Lovelock Career Contributions to the Services Discipline Award” is presented annually by SERVSIG to the individual whose teaching, research and service have had the greatest long-term impact on the development of the services discipline. Only five times earlier has the award been presented to a researcher outside the US. This is the second time a researcher from CTF receives the award, in 2004 Professor Bo Edvardsson was recipient of the award.

Visit at CSI in Bergen

In November, a research team from CTF visited CSI, Center for Service Innovation at NHH in Bergen, Norway, to work on the Swedish Innovation Index (SII). In 2016, CSI launched the Norwegian Innovation Index (NII), the first ranking of important industries and companies’ innovative ability where the customers are the jury. The US version was launched in 2018, and in 2019 CTF will launch the Swedish version.

Sustainability day

On December 3, Karlstad Business School at Karlstad University, organised the annual Sustainability Day. CTF researchers Per Kristensson and Margareta Friman talked about their research in connection with the Global Goals and the 2030 Agenda for Sustainable Development.

The program of the Sustainability Day “Orchestrating Transformation to Meet Global Challenges – in the light of Agenda 2030 also included: Victoria Svanberg, Nya Wemlands Tidningen, and Malin Pellborn, SBAB, and moderator Samuel Petros Sebhatu, CTF.


Wallander & IMIT Scholarships

Kaisa Koskela-Huotari was one of the recipients of the Wallander Scholarship for outstanding doctoral dissertations during 2018. The scholarship is funded by Jan Wallander and Tom Hedelius Foundation, and the Tore Browaldh’s Foundation.

Johan Netz received the 2018 IMIT-scholarship for his dissertation “First things first - think before you decide: The how, what and who of idea screening”. The scholarship is funded by the IMIT Foundation.

CTF planning days

CTF’s annual planning days were held in the end of August in Stockholm. This years’ theme were research impact and trends in academic journals.

New Books

Quality of Life and Daily Travel: This book describes the relationships between life satisfaction, well-being and daily travel. The authors discuss travel and quality of life to the built environment, travel mode choice, travel satisfaction and emotions, and presents case studies highlighting different aspects in daily travel and well-being. Editors: Margareta Friman and Lars, E Ölsson, CTF, and Dick Ettema, Utrecht University, The Netherlands.

Service logic: In this book, key concepts related to service logic are explained, such as value co-creation and resource integration. It also brings up how service innovation is carried out from the perspective of service logic and how actors co-create value in service ecosystems. The book also presents a large number of examples involving: online companies such as Spotify, traditional service firms such as Ikea, industrial companies such as Volvo, and public organizations such as the Swedish Tax Authority. Author: Per Skålén, CTF.
PhD Defenses

Katrin Lättman: “Perceived Accessibility: Living a satisfactory life with help of the transport system” (December 18). In the thesis, a new method that captures accessibility as experienced and perceived by users has been developed. How users’ perceive accessibility is important in the development and evaluation of attractive and sustainable transport services, but is generally left out in traditional accessibility evaluations.

Johan Kaluza: “The workload of citizens on sick leave: Working citizens encounter a customer-oriented bureaucracy” (October 5). Health insurance is one of the foundations of Swedish welfare, and a security for citizens that are unable to work due to sick leave. The thesis is based on a study of Sweden’s Social Insurance Agency, and shows that citizens on sick leave have to work and be active in their contact with the Agency, in what is named bureaucratic co-creation, to get their case processed and to receive health insurance benefits.

Vassilis Charitsis: “Selftracking, datafication and the biopolitical prosumption of life” (March 23). The thesis examines selftracking, which allows and enables consumers to track, quantify and datify diverse facets of their lives. The thesis engages with the notion of biopolitical marketing to analyse the extraction and appropriation of value from consumers’ lives.

Kaisa Koskela-Huotari: “The evolution of markets - A service ecosystems perspective” (March 16). Markets related to music, travel and accommodation have lately been under dramatic changes. The dissertation investigates how market transformations occur through institutional dynamics between markets and innovations.

Jenny Karlsson: “Frontline employees’ role in service innovation and value creation” (February 16). The dissertation shows that employees with continuous customer contact play a key role in service innovation, and how they contribute to developing attractive and realizable services.
CTF people

During 2018, Johan Quist was appointed Associate Professor of Business Administration, and Helén Williams was appointed Associate Professor of Environmental and Energy Systems.

Andrey Abadzhiev, joined CTF in June as a PhD Student in Business Administration. He is part of the Vinnväxt Paper Province project, where he is studying servitization and business models development with a focus on small and medium-sized companies. Andrey is originally from Bulgaria and has a Master’s degree in Economy from Gothenburg University. Prior to his PhD studies, Andrey worked with business development at leading software companies.

Margareta Friman, was appointed new Pro-Vice-Chancellor at Karlstad University. In her new assignment, she is leading, coordinating and developing education, research and collaboration primarily within, but also outside the university.

Johan Quist and Martin Fransson was appointed a part-time assignment at The Delegation for Trust-Based Public Management at the Government Offices. In their new assignment they will conduct experiments on design methodology, system theory and professionalism in the government agencies in collaboration with Katarina Wetter-Edman, Research Director at Research and Development, County Council of Sörmland, and former researcher at CTF.
"CTF is a truly unique place where a service researcher feels at home. CTF people conduct top research and play a central role in the international research community but always find time to gather together for Friday "fika" in a cozy atmosphere. Their secret might be a collaborative culture and a joint passion that connect people across disciplines."

Elina Jaakola, Professor of Marketing
Turku School of Economics, University of Turku
Funders and partners

Since the start in 1986, CTF works in partnership with businesses, public organizations and academia all over the world. Our funders and partners are important factors of our success. In addition to support from Karlstad University, we are grateful for the support from the following funders and partners during 2018: The Knowledge Foundation, Vinnova, The Swedish Foundation for Humanities and Social Sciences, Horizon 2020, Region Värmland, Handelsbankens Research Foundation, Anne-Marie and Gustaf Anders Foundation, The Swedish Research Council, Ericsson, Volvo, Valmet, Ikea, Löfbergs, Ica Maxi, Tobii Technology, The Swedish Transport Administration, Försäkringskassan, BillerudKorsnäs, Rolls-Royce, Voith Hydro, Cellcomb, Karlstad Municipality, The Swedish Retail and Wholesale Council, Forte, Formas, Mistra, The Swedish Energy Agency, and others.

Examples of academic partners: Forskarskolan Management och IT, Chalmers University of Technology, University of Gothenburg, Stockholm University, Linköping University, Uppsala University, Lund University, BI Norwegian Business School, Hanken School of Economics, NHH Norwegian School of Economics, University of Agder, KEDGE Business School, Aalto University, EAWAG, Freie Universität Berlin, Manchester Business School, Universita Bocconi, Arizona State University, Edificio EGADE-ITESM, University of Hawaii at Manoa, Florida State University, Politecnico di Milano, University of Wisconsin-Madison, Kyoto University, Griffith University, and others.

International cooperation

Example of external academic assignments
Margareta Friman is a member of the Academic Network Steering Board for the UITP (Union Internationale des Transports Publics) which is the International Association of Public Transport and a passionate champion of sustainable urban mobility. Carolina Camén is a member of the steering committee for the research platform SQMA, Swedish Quality Management Academy. Katrin Lättman is a member of the board of the “Network for equality in Transportation”.

Packaging Save Food Research Group
To strengthen the research and society awareness, a group of researchers, with the common interest of the role packaging has on minimizing food waste, established the Packaging Saves Food Research Group in 2016. The group comprise a unique and global team of experts, hailing from the Nordic countries, the United States, and Australia, and is bringing together a wide range of academic disciplines, including material science, packaging technology, food quality, supply chain management, design, consumer psychology, and environmental science.

External academic appointments
Per Skålén and Bo Edvardsson are visiting professors at INN, Högskolen i Innlandet. Mikael Johnson is a Research Fellow at INN. Per Kristensson is a Visiting Professor at NHH, Norges Handelshøgskola. Anders Gustafsson is a Professor at BI, Norwegian Business School, and Per Pettersson is a Visiting Professor at Uppsala University.

Ander Visiting Professors 2018-2020
• Joann Peck, University of Wisconsin
• Johanna Gummerus, Hanken School of Economics
• Martin Schreier, University of Vienna
• Satoshi Fujii, Kyoto University
• Stephen L. Vargo, University of Hawai’i at Manoa

The Ander Visiting Professorship is funded by Anne-Marie and Gustaf Anders Foundation for Media Research. The Ander Visiting Professors contribute with an international perspective, and with valuable knowledge of methods and theoretical frameworks. Learn more about two of our Ander Visiting Professors on the next page.
Ander Visiting Professors: Satoshi Fujii & Johanna Gummerus

Satoshi Fujii is a Professor of Transportation Planning and Behavioral-psychological analysis of Transportation in the Department of Urban Management at Kyoto University, Japan. He conducts research on attitude and behavior of transportation and has worked on soft measures to change attitude and behavior of travel from car use into sustainable transportation modes. His research also includes travel demand modeling, cognitive decision making, social dilemmas, and macro-economic forecasting models that accounts for decision making processes. Satoshi Fujii is currently a Chair of Corporation of Japanese Conference on Mobility Management. Between 2012 - 2018, he was a special advisor to the Japanese Cabinet where he gave advice on policies for building national resilience and macro-economic policy.

"CTF is the one of the best research institutes for transportation policies while considering behavior sciences. The collaboration with colleagues at CTF is really productive, and we can develop new behavioral models explaining mobility behavior. Our collaboration include an on-going research on relations between subjective accessibility to leisure activities in urban areas and well-being in Japan based on the theories proposed at CTF."

Satoshi Fujii
Kyoto University

Johanna Gummerus is an Associate Professor and Head of Discipline in Marketing at Hanken School of Economics, Helsinki, Finland. Her research interests are in the impact of technology on consumers, service innovation and value creation. She has published versatile research in international academic journals and is Associate Editor at the Journal of Services Marketing. Her current research focuses on service innovation based on customer activities, on consumers’ negative psychological reactions in retailing and health care services, and on customer journeys in digital environments.

"CTF is really an inspiring and interesting research environment, and have always felt like a sibling unit to our department CERS, Center for Relationship Marketing and Service Management at Hanken in Finland. I look forward to good and rewarding cooperation over the next three years, and to discuss and exchange thoughts about the future of service research."

Johanna Gummerus
Hanken School of Economics
Ten years ago, CTF initiated a collaboration with Tobii Technology to create an innovative lab environment for consumer research. This was the launch of CTF Consumer Lab, and the beginning of a research journey with the quest to test the applications of Eye tracking, and to explore customer behavior and decision-making.

Since then, we have conducted a wide range of studies and experiments to develop fundamental knowledge on consumer behavior, and on how to collect, extract and analyse research data. Also, at the same time, we have been evaluating different eye tracking tools and developed knowledge on how to apply the technique to answer a multitude of research questions. With eye tracking we can identify which items capture consumers’ interest and attention, understand how consumers perceive the environment in a store, and discern what drives the consumer to buy or take action.

In numerous experiments, first mainly in the CTF Consumer Lab, but also later out in the field, we have been studying how the characteristics and placement of packages affects decision making in a purchase situation. We have studied consumers’ search process before a purchase decision is made, and the steps consumers undergo to make simple decisions in the grocery store. We are asking ourselves if there are specific strategies used, and how these strategies are affected by factors in the environment.

One of the most important aspects of CTF’s success conducting research in this research field has been our collaboration with Tobii Technology. They have given us the ability to influence development in the hardware and software depending on the limitations and possibilities that what we found in the different applications.

"Over the years, we have been working closely with CTF for evaluating our eye tracking system in retailing context. The collaboration has resulted in several new insights on how to use and improve our products, and recommendations for the use of existing products and development projects for the next generation of eye tracking systems. It has also generated knowledge of the measuring instrument’s application and methodology, which lays the foundation for the knowledge we distribute to our customers. Knowledge that can fundamentally change the commercial use of hardware in retailing and open up new opportunities for us as a world-leading supplier of eye tracking systems. Together with CTF we have created knowledge that places us globally as a leading provider of eye tracking in retailing."

Ricardo J. Matos,
Head of Knowledge programs at Tobii Pro
In the spring of 2015, Karlstad University was granted funding from the EU research program Horizon 2020. One of the approved projects was Service Design for Innovation (SDIN), and the aim of the project was to develop relationships between service design and innovation researchers at leading European Universities. SDIN started in January 2015 and ended in December 2018, and was a collaboration between CTF, University of Porto, Maastricht University, Linköping University, Cologne University of Applied Sciences, EDP Comercial, and Experio Lab at the County Council of Värmland.

SDIN included nine PhD Students in Europe, two of them Sebastian Dehling and Josina Vink were placed at CTF. Josina is also placed at Experio Lab. Sebastian Dehling’s research is focused on exploring and assessing the usefulness of different stakeholder engagement in different practices. Josina Vinks’s research focus on what she refers to as “designing the invisible”. More specifically it is about how we can reshape the institutions or norms, rules, roles, and beliefs that guide our actions in the context of health and health care.

All nine research projects within SDIN were designed around three themes, addressing core issues in Service Design for Innovation. Sebastian and Josina’s Projects are part of the theme “Design for increased stakeholder participation”. The other two themes are “Service design for innovation frameworks and methods” and “Design of complex service systems and value networks”.

One important aim with SDIN was to integrate competences of key European universities and non-academic organisations. Therefore, during these four years the PhD students have not only been at their own university, but also spent time at the industrial partners and in other universities to build a ground for service design for innovation. We believe this has been a prerequisite in order to spread the knowledge of service design and how it can be used in various contexts to facilitate for various actors.

We are very happy that we were granted funding from the EU and also very satisfied with the results so far. The first PhD students will defend their dissertations in 2019, and we hope to continue working within the network that has been established.

Maria Åkesson
Project Leader of SDIN

This project has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement Nº 642116
Communication & dissemination activities

CTF actively use the webpage (ctf.kau.se), social media and other digital solutions to post press releases, news, blog post, activities etc. Research communication is an important part of CTF’s activities. During 2018, the following blog posts were published: ”Kan man leva det liv man vill utan bil?”, ”Från goda idéer till realiserade innovationer”, ”The Sage Handbook of Service-Dominant Logic”, ”From idea to innovation in Swedish Public Healthcare service”, ”Designing the systemic self”, ”Is it time for mind-shift? Values-driven service innovation for transformational change”, ”Isn’t that obvious?”, and ”Ten years of eye-tracking in consumer research”.

Newsletter
CTF News is our bimonthly, electronic newsletter (available both in Swedish and English) with national and international subscribers.

Social media
CTF’s Facebook account (CTFServiceResearchCenter) was launched in 2011. In 2010, CTF joined Twitter (@CTFse) and in 2011, Youtube (CTFse). In 2017, Karlstad University launched @kauresearch on Instagram. The account is used for exploring the researchers’ daily life at Karlstad University, which also includes the reseachers at CTF.

Mynewsdesk & AlphaGalileo
Since 2014, CTF use the digital PR solution Mynewsdesk.com together with Karlstad University for national external communication. In 2018, we published 13 press releases, 16 news articles, and 6 newsletters. Since May 2017, we use AlphaGalileo, an independent business to business service for the research and media communities, for international external communication. 6 articles have been published during 2018.

In 2018, CTF researchers were invited to speak at seminars, public events and research conferences, for example: Servsig, 25th International Conference on Recent Advances in Retailing and Consumer Service Sciences, 27th Frontiers in Service Conference, 8th European Conference on Sensory and Consumer Research, and 6th Forum on Markets and Marketing. We arranged 29 CTF seminars during the year, and co-arranged some events outside the University, for example:

Service Convention Sweden 2018 was held on November 28-29 at Karlstad Congress Culture Centre in cooperation with Karlstad Municipality, Region Värmland and Visit Karlstad. The conference had almost 150 participants, and the theme was future welfare services.

Service-Dominant Logic Days were held on October 17, and doctoral workshop on October 18. The program was formed around Professor Stephen L Vargo, one of the researchers behind the marketing theory.

NoRD 2018 - 10th Nordic Workshop on relationship Dynamics. The research conference was held on September 19-21 at Hennickehammar. 28 researchers from 7 different countries attended the conference.

PLS Seminar. On October 25-26, Christian M. Ringle, Hamburg University of Technology held a two-day workshop on partial least squares structural equation modelling.

Seminars with Professor Andy Neely, Pro-Vice Chancellor: Enterprise and Business Relations at University of Cambridge and Director of Cambridge Service Alliance, were held on April 10th at Karlstad University.
CTF researchers and PhD students are frequently featured in media. Our research on food waste, transportation, consumer behavior and consumer experience had the biggest media impact during the year, and appeared for example in: The Sun, The New Zealand Herald, The Daily mail, Harvard Business Review, Svenska Dagbladet, Expressen, SVT, TV4, DN, Sveriges Radio, Metro, NWT, VF, and others. Examples of CTF in media:

Anna Fyrberg Yngfalk  “Svårt att värja sig mot trakasserier om kunden "alltid har rätt" (DN)
Anna Fyrberg Yngfalk  "Vilken kunskap förmedlar vi forskare egentligen?" (tidningencurie.se)
Johan Kaluza  "Forskare: Ett jobb att få ut sjukersättningen" (SR P4 Värmland)
Jenny Karlsson  "Bättre tjänster med involverade medarbetare (Kvalitetsmagasinet)
Per Kristensson  "Shoppinghetsen snart ett minne blott" (TT)
Lars E Olsson  "Äldres resvanor kartläggs i nytt projekt" (SR P4 Värmland)
Tobias Otterbring  "Open plan offices can make you MISERABLE" (Daily mail)
Tobias Otterbring  "Study finds work-from-home employees more productive than office workers (The New Zealand Herald)
Tobias Otterbring  "Men buy more from manly men (Harvard Business Review)
Tobias Otterbring  "Großraumbüros machen Mitarbeiter unglücklich" (Computerwelt)
Jessica Westman  "Children who walk or take the bus to school get better grades than those driven by parents" (The Sun)
Jessica Westman  "Aktiv skolväg ger gladare barn" (Svenska dagbladet)
Jessica Westman  "Låt barn gå eller åka buss till skolan bättre än att få skjuts" (NWT)
Jessica Westman  "Skolskjuts bra för barns koncentration" (svt.se)
Fredrik Wikström  "Forskare: sluta förlöjliga stödet till elcyklar" (NyTeknik)
Helén Williams  "De har skapat agenda kring förpackningar och matsvinn" (Packnyheter.se)
Helén Williams  "Förpackningen avgör om man återvinner" (svt.se)
Erik Wästlund  "Sämre samtal i öppna kontorslandskap" (SVT Värmland)
Maria Åkesson  "Hon forskar om hur tjänstefiering kan omsättas i praktiken" (Vd-tidningen)
Education

In addition to research, CTF has an important role in undergraduate, graduate, and post-graduate education at Karlstad University, and are variously involved in disciplines such as: business administration, psychology, information systems, environmental and energy systems, and working life science.

CTF researchers have leading roles in all three education programs offered by Karlstad Business School: Master of Science in Business and Economics Program (Civilekonomprogrammet), Real Estate Agent Program (Fastighetsekonomiprogrammet), and International Business Program (Internationella affärer). Researchers associated with CTF also have leading roles in the two 2-year master’s programs: Master in Service management and Master in Marketing. In psychology, researchers at CTF are involved in teaching in the registered Psychologist program. Furthermore, researchers at CTF are involved in Master of Science in Industrial Engineering and Management (Industriell ekonomi). Karlstad University has the authority to award degrees at two-year master’s level as well as doctoral degrees. During 2018, 22 PhD students in Business Administration and 4 PhD students in Psychology were associated with CTF. Additionally, around 20 Master students’ thesis projects in Business Administration were connected to research within CTF’s field of research.

Since 2014, CTF develop and offer flexible online courses in service innovation based on CTF’s world-leading research in the field. The courses are developed in collaboration with organizations and companies and are intended for professionals working with or having an interest in service, customer experiences and business development.
ISE, Improving value creation through service education, is a new Graduate Professional Development Program funded by the Knowledge Foundation between 2018-2020. The program aims to strengthen Sweden’s competitiveness by supporting professional skills development, and further educate professionals through tailor-made courses developed by strong research environments. Through the program, CTF is given the opportunity to target education initiatives for the business sector, which aims to strengthen their competencies and competitiveness.

CTF will develop and offer tailor-made courses in cooperation with around 15 companies and organizations, they will contribute with important knowledge and experience from the business sector and possible new research questions which in the prolonging can lead to new project ideas. Participating companies are: Almega, Attitude, BillerudKorsnäs, Cellcomb, Compare, Färjestads BK, Live Nation Nordic AB, Löfbergs, NWT, Miller Graphics Group, RISE, SMA Mineral AB, Uddevholm AB, Volvo Bus Corporation and Zynapp.

Carolina Camén
Program Manager

“This is the first time that Karlstad University has a Graduate Professional Development Program. This is an acknowledgement that research carried out at the university, and in this case at CTF, is important both to the research community and for the business sector. It is in line with the strategic goals of the university, which is to combine research and education into complete environments. This will be possible through the support from the Knowledge Foundation”.

Patrik Larsson, Dean of the Faculty of Humanities and Social Sciences, Karlstad University
Web-based courses for international positioning of strategic research groups

To further strengthen the ties between research and education, and to profile and position CTF through online courses, CTF, in collaboration with other research groups at Karlstad University, answered a call from the Swedish Knowledge Foundation. The project WISR 16 received funding 2017-2019 to develop and carry out web-based cutting edge Masters’ level courses in cooperation with companies. It is part of the Online Education for International Positioning Programme by the Knowledge Foundation.

During 2018, we developed two courses: Idea management and Servitization, aimed at different target groups in the Swedish and international business arena. Building on earlier achievements from the project Use.it, the course design combines the advantages of providing targeted courses on advanced level, with the advantages of massive open online courses, and enables CTF to list courses in international databases, such as Class Central, and thereby raising CTF’s international visibility and profile.

During the year, we also produced and disseminated a variety of open educational resources, many in the form of short video lectures. In both courses we collaborated with several companies, for example: Valmet, Billerud-Korsnäs, MacForum and Idea2Innovation Sweden, who actively contribute to the course development and ensure the highest possible match to business sector needs, while the flexible format supports scalable life long learning.

The course Idea management was held during 2018, with about 100 participants. We received very positive feedback on the course, and are running the next iteration in 2019. The course Understanding Customer Experience was also offered during the year, and had over 200 applicants, and almost 2000 unique visitors at the course webpage during the year. The course Servitization will initially be held in 2019. The results show that we are on the right track, and that our research and courses are meeting a need for global life long learning.

Jörg Pareigis
Project Leader
Attachments
# Researchers

<table>
<thead>
<tr>
<th>Name &amp; Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pernille K Andersson, PhD in Psychology</td>
</tr>
<tr>
<td>Linda Bergkvist, PhD in Informatics</td>
</tr>
<tr>
<td>Charlotte Bäckman, PhD in Psychology</td>
</tr>
<tr>
<td>Carolina Camén, PhD in Business Administration</td>
</tr>
<tr>
<td>Per Echeverri, PhD in Business Administration</td>
</tr>
<tr>
<td>Bo Edvardsson, Professor in Business Administration</td>
</tr>
<tr>
<td>Bo Enquist, Professor in Business Administration</td>
</tr>
<tr>
<td>Marit Engen, PhD in Business Administration (Postdoc)</td>
</tr>
<tr>
<td>Markus Fellesson, Associate Prof. in Business Administration</td>
</tr>
<tr>
<td>Martin Fransson, PhD in Business Administration</td>
</tr>
<tr>
<td>Margareta Friman, Professor in Psychology</td>
</tr>
<tr>
<td>Anna Fyrberg Yngfalk, PhD in Business Administration</td>
</tr>
<tr>
<td>Heiko Gebauer, PD Dr EAWAG</td>
</tr>
<tr>
<td>Besma Gla, Assistant Professor in Business Administration</td>
</tr>
<tr>
<td>Patrik Gottfridsson, Associate Professor in Business Administration</td>
</tr>
<tr>
<td>Anders Gustafsson, Professor in Business Administration</td>
</tr>
<tr>
<td>Mikael Johnson, PhD in Business Administration</td>
</tr>
<tr>
<td>Per Kristensson, Professor in Consumer Psychology and Innovation</td>
</tr>
<tr>
<td>Nina Löfberg, PhD in Business Administration</td>
</tr>
<tr>
<td>Martin Löfgren, Associate Professor in Business Administration</td>
</tr>
<tr>
<td>Peter Magnusson, Professor in Business Administration</td>
</tr>
<tr>
<td>Johan Netz, PhD in Business Administration</td>
</tr>
<tr>
<td>Lars E Olsson, Associate Professor in Psychology</td>
</tr>
<tr>
<td>Tobias Otterbring, PhD in Psychology</td>
</tr>
<tr>
<td>Jörg Pareigis, PhD in Business Administration</td>
</tr>
<tr>
<td>Samuel Petros Sebhatu, PhD in Business Administration</td>
</tr>
<tr>
<td>Per Pettersson, Professor in Religion</td>
</tr>
<tr>
<td>Johan Quist, Associate Professor in Business Administration</td>
</tr>
<tr>
<td>Poja Shams, PhD in Business Administration</td>
</tr>
<tr>
<td>Per Skålen, Professor in Business Administration</td>
</tr>
<tr>
<td>Antti Sihvonen, PhD in Business Administration</td>
</tr>
<tr>
<td>Jakob Trischler, PhD in Business Administration (Postdoc)</td>
</tr>
<tr>
<td>Bård Tronvoll, Associate Professor in Business Administration</td>
</tr>
<tr>
<td>Jessica Westman, PhD in Psychology (Postdoc)</td>
</tr>
<tr>
<td>Fredrik Wikström, Associate Professor in Engineering and Chemical Sciences</td>
</tr>
<tr>
<td>Helén Williams, Associate Professor in Engineering and Chemical Sciences</td>
</tr>
<tr>
<td>Lars Witell, Professor in Business Administration</td>
</tr>
<tr>
<td>Erik Wästlund, Associate Professor in Psychology</td>
</tr>
<tr>
<td>Maria Åkesson, PhD in Business Administration</td>
</tr>
</tbody>
</table>

# Phd Students

<table>
<thead>
<tr>
<th>Name</th>
<th>Affiliation &amp; Discipline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kotaiba Aal</td>
<td>MIT / Business Administration</td>
</tr>
<tr>
<td>Andrey Abadzhiev</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Jasenko Arsenovic</td>
<td>MIT / Business Administration</td>
</tr>
<tr>
<td>Vasileios Charitsis</td>
<td>MIT / Business Administration</td>
</tr>
<tr>
<td>Sebastian Dehling</td>
<td>SDIN / Business Administration</td>
</tr>
<tr>
<td>Rolf Finsrud</td>
<td>INN / Business Administration</td>
</tr>
<tr>
<td>Jana Hück</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Sara Högström</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Johan Högberg</td>
<td>CTF / Psychology</td>
</tr>
<tr>
<td>Caroline Jennings Saul</td>
<td>EAWAG / Business Administration</td>
</tr>
<tr>
<td>David Joelsson</td>
<td>RISE / Business Administration</td>
</tr>
<tr>
<td>Johan Kaluza</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Jenny Karlsson</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Kaisa Koskela-Huotari</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Charoren Lu</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Katrin Lättman</td>
<td>CTF / Psychology</td>
</tr>
<tr>
<td>Sofia Molander</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Sture Nöjd</td>
<td>CTF / Psychology</td>
</tr>
<tr>
<td>Marcus Olsson</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Peter Samuelsson</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Frida Skarin</td>
<td>CTF / Psychology</td>
</tr>
<tr>
<td>Alexandre Sukhov</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Josina Vink</td>
<td>SDIN / Business Administration</td>
</tr>
<tr>
<td>Xiaohong Wang</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Huang Yidan</td>
<td>CTF / Business Administration</td>
</tr>
<tr>
<td>Henrik Öhlin</td>
<td>CTF / Business Administration</td>
</tr>
</tbody>
</table>
## Visiting researchers

<table>
<thead>
<tr>
<th>Date</th>
<th>Name</th>
<th>Title</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>8-12 January</td>
<td>Linda Nasr</td>
<td>Ph D</td>
<td>Texas State University, USA</td>
</tr>
<tr>
<td>1 March-30 June</td>
<td>Raphaela Maier</td>
<td>Student</td>
<td>University of Hasselt, Belgium</td>
</tr>
<tr>
<td>13-19 March</td>
<td>Steve Vargo</td>
<td>Professor</td>
<td>University of Manoa, Hawaii, USA</td>
</tr>
<tr>
<td>15-16 March</td>
<td>Hope Jensen Schau</td>
<td>Professor</td>
<td>University of Arizona, USA</td>
</tr>
<tr>
<td>26-27 March</td>
<td>Sharyn Rundle-Thiele</td>
<td>Professor</td>
<td>Griffith University, Australia</td>
</tr>
<tr>
<td>30 April-4 May</td>
<td>Martin Schreier</td>
<td>Professor</td>
<td>University of Vienna, Austria</td>
</tr>
<tr>
<td>20-25 May</td>
<td>Joann Peck</td>
<td>Professor</td>
<td>Wisconsin School of Business, USA</td>
</tr>
<tr>
<td>21-25 May</td>
<td>Johanna Gummerus</td>
<td>Ph D</td>
<td>Hanken School of Economics, Finland</td>
</tr>
<tr>
<td>26-30 May</td>
<td>Anita Zehrer</td>
<td>Professor</td>
<td>MCI, Management Center, Innsbruck, Austria</td>
</tr>
<tr>
<td>4-5 June</td>
<td>Steven Alter</td>
<td>Professor</td>
<td>Universtiy of San Fransisco, USA</td>
</tr>
<tr>
<td>18-20 June</td>
<td>Satoshi Fuji</td>
<td>Professor</td>
<td>Kyoto University, Japan</td>
</tr>
<tr>
<td>10-14 September</td>
<td>Martin Schreier</td>
<td>Professor</td>
<td>University of Vienna, Austria</td>
</tr>
<tr>
<td>27-28 September</td>
<td>Thierry Regnier</td>
<td>Professor</td>
<td>Tshwane University of Technology, South Africa</td>
</tr>
<tr>
<td>7-10 October</td>
<td>Laurel Andersson</td>
<td>Associate Professor</td>
<td>CSL, Arizona State University, USA</td>
</tr>
<tr>
<td>15-19 October</td>
<td>Steve Vargo</td>
<td>Professor</td>
<td>University of Manoa, Hawaii, USA</td>
</tr>
<tr>
<td>16-17 October</td>
<td>Jaakko Siltaloppi</td>
<td>Ph D</td>
<td>Aalto University, Finland</td>
</tr>
<tr>
<td>24-27 October</td>
<td>Christian Ringle</td>
<td>Professor</td>
<td>Hamburg University of Technology, Germany</td>
</tr>
<tr>
<td>29-31 October</td>
<td>Katrin Eling</td>
<td>Professor</td>
<td>Eindhoven University, Netherlands</td>
</tr>
<tr>
<td>17-21 November</td>
<td>Joann Peck</td>
<td>Professor</td>
<td>Wisconsin School of Business, USA</td>
</tr>
<tr>
<td>19-23 November</td>
<td>Johanna Gummerus</td>
<td>Associate Professor</td>
<td>Hanken School of Economics, Finland</td>
</tr>
<tr>
<td>26-28 November</td>
<td>Satoshi Fuji</td>
<td>Professor</td>
<td>Kyoto University, Japan</td>
</tr>
<tr>
<td>17-21 December</td>
<td>Timo Dietrich</td>
<td>Ph D</td>
<td>Griffith University, Australia</td>
</tr>
</tbody>
</table>
Publications

Journal articles


Wästlund, E., Shams, P., and T. Otterbring (2018) Unsold is unseen...or is it? Examining the role of peripheral vision in the consumer choice process using eye-tracking methodology. Appetite, Vol. 120, pp. 49-56.

Conference papers


Andersson, P. K., Nöjd, S., Otterbring, T., and E. Wästlund (2018). Digitalized valuescapes: Digitalizing services in physical places as a way to create value for companies and customers. The 25th International Conference on Recent Advances in Retailing and Consumer Services Science, July 16-19, 2018, Madeira, Portugal.


Lättman, K. Capturing the human (individual) dimension of accessibility in transport, Transport Research Arena (TRA) 2018, Vienna 16-19 April


Sebathu, S.P., and Enquist, B. (2018). Challenges driven Service Innovation for Smarter Supply Chain in the light of Agenda 2030, 6th Symposium on Marketing Ethics and CSR, Nottingham, UK., April, 2018


Books, book chapters and reports


**Dissertations**


Value creation through service