



CENTRUM FÖR TJÄNSTEFORSKNING
CTF | SERVICE RESEARCH CENTER

Self-assessment of research quality at Service Research Center (CTF)

Per Kristensson

Professor and Director, Service Research Center (CTF), Karlstad University

December, 1st, 2023

CONTENT

Executive summary	4
Background information	5
1. Long-term vision and how research quality is enabled at CTF	5
Vision – how we want to make the world a better place	5
Success – what we deliver to Karlstad University	6
Values – what we stand for	7
The systemic view on service as a common identity	7
Research quality enablers – how do we pave way for good research?	8
Ambitions for CTF	11
Areas where we need support from other parts of Kau	11
2. Organization and leadership	13
Capacity for change	13
Internationalization, research ethics, gender equality, and multidisciplinary research	15
Ambitions for CTF	16
Areas where we need support from other parts of Kau	16
3. Competence profile	18
Competence boosting activities	18
Dynamic research areas at CTF	19
Academic partners, networks, and dissemination activities	20
Ambitions for CTF	20
Areas where we need support from other parts of Kau	21
4. Research results	23
Internationalization	23
CTF's contribution to the Kau strategy	25
Scientific quality, publications, and scholarly impact	26
Ambitions for CTF	29
Areas where we need support from other parts of Kau	29
5. Co-production and collaboration with the surrounding society	31
Societal impact	32
Research freedom and integrity	33
Ambition areas for CTF	35
Areas where we need support from Kau	35
6. The bridge between research and education	36
Ambitions for CTF	37
Areas where we need support from other parts of Kau	38
References:	39

Executive summary

This report is a self-assessment of research quality at the Service Research Center (Centrum för tjänsteforskning, CTF) at Karlstad University (Kau). The assessment is divided into six sections that follow a pre-defined format. The report has been processed through a series of workshops and seminars that were conducted within the center and externally.

The first section of the self-assessment deals with CTF's long-term vision, which is to be a world-recognized international research center that describes, explains, and improves the conditions leading to value creation through service. CTF shall contribute to positive development of individuals, organizations, and societies by conducting research and education on value creation through service. In this way, CTF's research contributes to making the world a better place.

The strategic goals of CTF are to be a *scientific thought leader*, to attract *external funding*, and to have *societal impact*. For this to happen, research quality is crucial. Our values, the systemic view on value creation as our identity, and the CTF culture pave way for research quality.

The second section deals with CTF's organization. CTF is a large research center consisting of no fewer than 80 individuals and we are a part of Karlstad University through a matrix organization, where we engage researchers from six academic disciplines.

The third section deals with our competence profile, which shows our interdisciplinarity and how we work with challenges such as gender balance and research ethics.

The fourth section deals with research quality and outlines how CTF has worked with internationalization as an important means of research quality. In addition, we present responsible metrics, and field-weighted citations, that indicate CTF's position in service research.

The fifth section deals with collaboration and what is commonly referred to in academia as co-production of research. The ability to conduct research with external organizations is a cornerstone of CTF's research. External collaborations lead to external grants and unique scientific publications.

The sixth and final section deals with the bridge between research and education. CTF has slowly but steadily increased its focus on teaching and the flagship in this regard constitutes the expert competence program ISE (Improving Value Creation through Service Education).

Each of the sections contains an identification of for areas for improvement. Some areas represent ambitions that CTF can take on by themselves, but others are areas where other parts of the university also need to engage.

Background information

This self-assessment provides an overview of CTF's research quality in six sections. The disposition follows a pre-defined template chosen by our university, and we have tried to respond to the bullet points within each section as clearly as possible. At the end of each section, we outline areas for higher ambition and support, both from the viewpoint of our center and from the viewpoint of other parts of the university.

Readers of the material should also take into account the quantitative data that we have submitted to our university (which is sometimes left out in the text below). Interested readers are also welcome to visit our web (<https://www.kau.se/ctf>) and read any of the annual reports that we have released since 2017 (<https://www.kau.se/ctf/arsrapporter>). Also, in particular, when it comes to scientific publications, data on how we perform are available through academic databases.

The content has been reviewed twice by Strategiska Rådet at CTF, and once by CTF's advisory board. Parts of the content have also been reviewed at CTF's Planning Days in Sunne (August 23–24) and also discussed in several less formal forums (workshops and seminars) with various researchers at CTF during the fall of 2023.

1. Long-term vision and how research quality is enabled at CTF

Centrum för tjänsteforskning (in English: Service Research Center) CTF is an interdisciplinary research center at Karlstad University. At the same time, as service has become increasingly important for human beings, organizations, and societies, CTF has grown. To this date, CTF consists of 80 persons and has a turnaround of approximately 49 million SEK. Since its establishment in 1986, CTF has become widely recognized for its cooperation with companies and organizations in both public and private sectors, B2B and B2C, nationally and internationally.

Vision – how we want to make the world a better place

The vision of CTF as a research center is to be a world-recognized international research center that describes, explains, and improves the conditions for individuals, organizations, and societies, leading to greater individual and collective well-being by *value creation through service*. As a research-focused center, its strengths lie in its focus on leading research, where top quality and thought leadership constitute the long-term goal.

More specifically, CTF shall contribute to the positive development of individuals, organizations, and societies by conducting research and education on *value creation through service*. In this way, CTF's research will contribute to making our world a better place. By value creation, we mean how processes occur in ways that are more time-efficient, more cost-effective, more secure, more environmentally friendly, more smoothly, and so on, that, taken together, improve the situation for a beneficiary. In this way, value creation implies service experiences that are key to competitive advantage and organizational performance, whether product-enabled (think consumer products), platform-enabled (think web/app

solutions), or human-enabled (think people interactions) and are equally important for private and public organizations. The beneficiary that is being served can be a consumer, patient, citizen, customer or business customer, a user of some kind that can use the skills, resources, and competencies that are provided by one or more organizations in certain situations.

CTF has managed to take a leading role in service research globally. For other universities, CTF has functioned as a guiding post for how to conduct research in collaboration with the surrounding society and what areas to focus on in terms of the next generation of research. Also, internally for Kau, CTF has been the flagship research center in terms of international reputation and impact. While we are proud of this achievement, we want to emphasize that we are committed to and working hard to maintain this leadership position. This includes seeking to solidify important existing competence and research areas, as well as renew and expand our competence and research areas into the next generation of CTF.

The long-term implication of CTF's vision is that – given our focus on value creation for individuals, organizations, and societies – CTF could be the natural research platform for externally funded research, with an individual, organizational, or societal mission, at Karlstad University. This means that more academic disciplines than just the six that are currently active at CTF could use the brand and infrastructure of CTF when they apply for funding and work with external missions and collaborations.

Success – what we deliver to Karlstad University

1. First, CTF reaches success by being a scientific thought leader. This means publishing scientific research in international peer-reviewed journals that are later cited and used by the research community to advance the scientific frontier.
2. Second, CTF also reaches success by attracting external funding, which enables CTF to conduct research collaborations with external organizations and commit to research projects in the long run.
3. Third, CTF reaches success by disseminating knowledge that has societal impact. This means that actors external to CTF (other than researchers) have use of the knowledge that CTF creates.

More specifically, the significant and continued success of CTF in contributing to the research frontier has built a strong international legacy and legitimacy over the years. As will be shown later (in Section 4), CTF ranks first globally in terms of “service research” from 2011–2021 (based on output and citation metrics), before Hanken School of Economics, University of Queensland, and Texas State University, to name a few. In the same timeframe, CTF is among the top institutions globally in terms of “service design” research; it was ranked second behind the University of Porto in terms of output, but first in terms of citation impact, and well ahead of Texas State University and Polytechnic University of Milan. CTF has become the reputational flagship for Karlstad University, continuously demonstrating an interdisciplinary impact on local, national, *and* international levels.

When it comes to external funding, CTF is financed through its many competitively funded projects. During its 37-year long history, CTF has managed five large externally funded

projects (NSE, SISB, SAMOT, DISCERN and ISE, which together represent a net value of 231 MSEK to Karlstad University. During 2022, CTF hosted no fewer than 47 externally funded research projects.

For examples of our societal impact, on individuals, organizations, and societies, we refer to our website and annual reports, where we illustrate how external actors have put our scientifically derived knowledge into use.

For CTF to meet its strategic goals – being a *scientific thought leader*, attracting *external funding*, and having *societal impact* – research quality is crucial. Our values, the systemic view on value creation as our identity, and the conditions that pave way for research quality are described below.

Values – what we stand for

Much of CTF's success in its 37-year history can be attributed to its culture. It is an often-repeated quote that “culture eats strategy for breakfast” and at CTF we believe that this idea has some validity. Much of the work and effort at CTF is devoted to having a good working climate where researchers can collaborate, test novel ideas, be thought-provoking, and have fun. At CTF we believe that, in a place where there are a lot of people who want to engage in service research and collaborate, and share the vision, success, and values that are being brought forward here, good things will happen.

More specifically, CTF encourages researchers to take initiative, as well as collaborate with other scholars, as high-quality research is rarely a one-man show. Thus, collaboration and curiosity to explore new topics and societal challenges are important traits among researchers at CTF. As a result, co-creation, publications, and relevance come, and dynamic development is supported. The environment and culture of CTF are highly international, inclusive, and open which represent the backbone of scientific publications, external funding, and societal impact.

The systemic view on service as a common identity

CTF's research focuses on service and, more specifically, on how value creation is enabled through service. Whether product-enabled (think physical touchpoints), platform-enabled (think digital touchpoints), or human-enabled (think people interactions), service experiences are key to competitive advantage. In essence, all organizations strive to facilitate improved service; as a goods-manufacturer, a governmental authority, or as a retail firm – each organization wants its respective users to have value-creating experiences from using the resources to which they have access to.

Over the years, service research has managed to renew itself several times, from being a niche field for the service sector to becoming a dominant business logic employed by most business sectors, to rethinking and understanding value as being systemic and as something that evolves from service experiences and in service systems over time. This latter view implies that value is central to service systems and that innovation and transformation become phenomena of interest for researchers.

To give a few contemporary examples of research, the system view on value creation through service experiences is of interest for understanding how customers engage in sustainable practices while using digital technology, how servitization transforms industrial firms, how public institutions can improve preventive health propositions for citizens who want to change behavior, or how healthcare can prevent patients from diseases by offering digital innovations that keep them healthy. All of these represent illustrative research content in CTF projects.

For researchers who are interested in the interplay between service systems and their users, or in how value is created or innovated, in business and societal systems, CTF is a research infrastructure that is open for collaboration. Researchers who come to CTF can use the services that we provide (seminar series, collaborative culture, connections to organizations and funding agencies, and so on) to take their research to the next level. The interplay between individuals (in the form of consumers, patients, citizens, users, etc.), businesses, and societal systems is dynamic, which means that new, interesting, and worthwhile research questions constantly arise. The common denominator for CTF research is a focus on value creation and valuable service experiences, and how these are created, perceived, innovated, and transformed over time.

Research quality enablers – how do we pave way for good research?

For decades, CTF has played a central role in advancing service research. With its cutting-edge international research, CTF has advanced knowledge on the service logic, contributing to a foundation of knowledge that, from the start was relevant for only the service sector but is now widely recognized as the leading thought discipline for several sectors, such as the industrial, retail, and IT sectors.

Somewhat noteworthy and coincidentally, while given the task to self-assess the quality of our center's research quality, our own field of service research has had much to say about what leads to quality in research (research being a service). Information on how CTF assesses and evaluates research quality is presented in Section 4. Here, we highlight what actions lead forward and enable research quality.

During the 1980s, our Finnish research colleague Christian Grönroos (2015), who was appointed as a senior fellow at CTF, developed a novel framework of how organizations enable quality. Other frameworks of what leads to research quality in our field (e.g., Rust & Oliver, 1993) have informed our thinking. To be compatible with Swedish academia, we use the understanding of scientific quality as defined by the Swedish Research Council (VR). In brief, this implies scientific excellence, internationalization, and research infrastructure (*Forskningskvalitet och internationell konkurrenskraft*). Regarding research excellence, we rely on a recently published article in a highly ranked journal (Lindgreen et al., 2021) and the accreditation provided by AACSB (www.aacsb.edu) as a guiding star for what research quality is. AACSB is the accreditor of Karlstad Business School.

To continue, the Swedish Research Council defines quality of research as quality in output as well as quality of co-production and collaboration with the surrounding society (www.vr.se).

This is well in line with the two concepts of rigor and relevance, which are often brought forward as the quality concepts of research. Research must be carried out in a correct way (internal validity) and be of use to someone (external validity). In Section 4 we will discuss more in detail what we think are good indicators of research quality at CTF; here, we turn our attention to the conditions that are conducive to research quality – what paves the way for research quality at CTF?

We argue that many assessments and beliefs of what leads to research quality first identify ‘individual research skills’ as an important factor. We concur with these thoughts, but wish to stress that this is probably only one side of the coin. For research quality to be enabled, cultural and social conditions also need to be in place to create a foundation for researchers. While individual research skills, such as methodological competence, analytical abilities, and theoretical knowledge, are important, these are still only the *ticket to play*. To move towards the *ticket to stay*, researchers are coming to CTF and enabling research quality because of the culture and the environment that we offer. The social get-together and lively interactions among people at CTF are more important than what most people might think beforehand.

To make this reasoning somewhat clearer, Table 1 shows activities that we at CTF engage in and that pave the way for our overall research quality.

Table 1. How CTF paves the way for research quality.

Enabling factors	Processes/activities
Individual skills and competences	<ul style="list-style-type: none"> • Theoretical knowledge, domain knowledge, academic knowledge • Methodological skills • Scholarly writing skills • Analytical skills • Data skills (using various software programs for research purposes) • Kau infrastructure (Administrative support, IT support, library, etc.)
Cultural and social conditions	<ul style="list-style-type: none"> • Open, creative, and collaborative culture • Strong presence at the workplace • Embracing international visitors and collaborators • Analytical understanding of external challenges • Investing in people and their careers • Objective, neutral, partner to organizations • Institutional innovation • Extensive international network • Extensive business network
Scientific quality outcomes	<ul style="list-style-type: none"> • Research quality (rigor) • Research that has a positive impact on external actors (relevance) • Attracting external funding (financial support) • Storytelling (in media)

	<ul style="list-style-type: none"> • Strong brand (trusted partner among public and private organizations) • Awards and other types of independent indications of scientific excellence (guest research, visiting professorship, etc.).
--	---

The figure showing enablers of research quality indicates that quality is built from a platform where individual skills related to how we conduct research serve as an important first step. These include issues such as having knowledge of theories and theoretical development. Methodological skills, such as being able to use advanced quantitative statistical programs, as well as qualitative ones, are important parts of being able to conduct research in a manner that reduces flaws and leads to analysis that characterizes good research. In addition to such technical skills, Karlstad University provides important resources and support services that are needed to enhance individuals' research quality. These include internal base-funding and co-financing, software, IT support, library services that are related to Open Access, and, not least, access to journal databases.

In line with the Swedish Scientific Council (Stärkt svensk forskningskvalitet till nytta för samhället, 2023), an important second step to research quality is the atmosphere and culture found at scientific institutions. From a CTF perspective, we identified several important aspects in this regard. The first is the international visits and exchanges that we regularly have throughout the year. Having international scholars visiting us, and our faculty being able to visit other universities, makes a profound contribution to the quality of research. Likewise, having representatives from numerous organizations, both public and private, visit us and take part in our external events enables us to better understand the challenges they experience from an analytical standpoint, which provides an excellent foundation for research and external grant applications. Most prominent among these cultural qualities is that CTF is an open, creative, and collaborative environment, which are important characteristics of our workplace climate. The culture at CTF is distinguished by a lively exchange among faculty, a strong presence at the workplace, and a positive atmosphere where people like to help each other – all of which leads to the many author constellations in academic papers we have, as well as different types of competitive bids in terms of attracting external funding. In terms of our culture, several visiting scholars have stated that they feel welcome and have a great time when they visit CTF.

“It feels like I have landed in an – if not the – epicenter of service research. Every day I am engaged in discussions about varying aspects of services, from service design to contracting, and from personal mobility services to banking. The fact that CTF integrates all those disciplines and domains at such an excellent level makes it a thoroughly inspiring place. And in addition to the research, there are also the people, who are warm and welcoming, and who will make you feel at home, right off the bat.”

Dr. Jasper van Kuijk, assistant professor, Delft University of Technology

As the above quote indicates, it is easy to become a part of our center and the representation of people is typically intensive whenever there is a seminar ongoing or when it is Friday-fika time. Other cultural and societal conditions also regard the independent drive to push research further, which is important for the longevity of our center. This means that

researchers do not just sit around and wait for an order to conduct research, but take own initiatives to apply for funding, collaborate on new article ideas, or meet with external organizations, whenever they feel this is needed. Bottom-up initiatives are equally as important as top-down initiatives at CTF, and this is the case because of our culture.

As a result of the creative and entrepreneurial environment of CTF, several innovative institutional initiatives have been created – one being ‘Värdeskapande Samtal’ (English: Value-creating chats) where one academic person from our center meets and talks with an expert from either a public or private company. These ‘chats’ have become a popular and innovative way of disseminating research to society and for researchers to come closer to challenges in organizations. Another innovative institutional initiative regards PhD students who have created their own group in which they address their needs and meet in the form of a 24-hour workshop, which often takes place at another academic institution. A third innovative institutional initiative regards ‘I huvudet på’ (English: In the head of), where one CTF employee shares what they are currently doing and what challenges they foresee so that other members of CTF are aware of what happens in the various ongoing projects. The benefit of these initiatives is that they contribute to an innovative culture at CTF.

To summarize, the individual and collective conditions that have been described above lead to results in terms of scientific quality. For CTF, the scientific quality results in *scientific leadership* (publications, internationalization, etc.), *external funding*, and *societal impact*. In total, these results collectively are responsible for creating a strong CTF brand that positively paves the way for future external collaborations and new research journeys in the future.

Ambitions for CTF

CTF needs to work harder in terms of inviting scholars from more academic disciplines. If CTF means what it says when it claims its research is to the benefit of individuals, organizations, and societies, then more academic competencies are needed. For instance, several of the research programs involve digital healthcare services, but none of the members of the research faculty are researchers from the nursing care department. A clearer and more manifest statement, coupled with actions for how those can be accomplished, that CTF wants to attract scholars from diverse academic backgrounds, coupled with strategies and action plans for how it can be accomplished, needs to be in place if CTF is to be the natural research platform for Karlstad University that it claims to be.

In the economic recession that Sweden is experiencing currently, it will be more difficult to attract external funding. Therefore, CTF must concentrate extra on this task, which will have consequences for, for example, academic publishing and societal impact, at least in the short term.

Areas where we need support from other parts of Kau

Thinking critically about CTF’s long-term survival, it is evident that there is not always a perfect fit between how Karlstad University moves forward and CTF. CTF, which strives to be an international research center with a worldwide reputation, has a narrower focus than the more wide-stretched goals of our university. This is seldom a problem, but there are

instances when the visions collide. One example regards the promotion of PhD students by Karlstad University. For CTF, where one goal is to collaborate with external organizations and seek funding for this, post-docs sometimes become a wiser priority. In addition, the strong focus on external funding sometimes also collides with the interest of increasing the number of PhD students. This is the case as our university has four-year financing as an eligibility criterion for setting up a PhD position, while many externally funded projects have a three-year contract, so post-docs will sometimes be preferred over PhD students.

For research institutions like CTF that strive for international academic excellence, it is important to have resources comparable to the resource base of comparable institutions that it competes with. External research funding is an important means of accomplishing this, and the researchers at CTF work on this throughout the year. However, it is also important to have a long-term secure base funding from the university. Such financial support enables us to reach the aims of our center (scientific leadership, external funding, societal impact). Given that our university agrees with the importance of these aims and wants to stimulate an international research environment continuously, there is a need to consider concentrating its resources to a larger extent. For CTF to keep its flagship position, or grow even further academically, continued support from Kau is required.

Finally, given the opportunity for Karlstad University to expand on CTF as a *research infrastructure* for externally funded research with an external mission, the placement of CTF on the organizational map could be discussed. Currently, CTF is placed as its own research center sorting under the dean of the HS faculty. However, to better integrate researchers from the HNT faculty, a change in the organizational structure is worth reflecting on as it could potentially facilitate more departments attracting external funding and conducting research. The research infrastructure created, and offered, by CTF is likely to be appealing to the majority of academic disciplines at Kau, who potentially could take advantage of the strong brand that CTF has created among financing bodies.

2. Organization and leadership

CTF has an established research organization led by a director (Professor Per Kristensson) and a vice director (Associate Professor Johan Quist). In addition, CTF has two administrators (Britt-Marie Shandrew and Charlotta Andersson), a communications officer (Linda Fridberg) and a controller (Madeleine Montiadis).

In order to position CTF externally, and receive advice on strategic issues, CTF has an external advisory board with members from the private sector as well as from other universities. Members of the CTF advisory board are:

- Malin Thorsén, chairman of the board, consultant at BrightPlanet AB
- Peter Rovér, consultant at Effect Management AB
- Kristina Heinonen, professor at Hanken, Finland
- Hans Karlsson, kommundirektör Arvika kommun
- Jonas Matthing, PhD, innovation manager, Compare
- Anna Skärdin, digitalization expert, Elvenite
- Mikael af Kleen, consultant at Differ Agency
- Jenny Karlsson, PhD, CTF representative
- Director Per Kristensson and Vice-Director Johan Quist also participate on the board

CTF organizes much of its activities in the form of a predefined structure that holds a seminar series and various meeting forums. Three meeting forums are *Kollegium* (every second month), where all members of CTF meet, *Strategiska Rådet* (once every month), where all professors and associate professors meet and *PhD-breakfast* (every third month), where the director and all PhD-student meet. All of CTF's research projects are operated independently and led by designated project leaders.

In terms of research infrastructure, it is mostly our consumer research group that needs infrastructure (for example, equipment that can track eye movements). Our research collaboration with the companies that manufacture this equipment makes us well-situated in this regard. Other types of research infrastructure regard computers and software, and for this we receive great service from our IT department.

Capacity for change

Much of the research at CTF revolves around change and transformation to some extent. Therefore, it is of interest to see how CTF itself manages to change. From a helicopter perspective, we do this well. For instance, a review of research areas shows evidence of how new research areas come in and old ones are left. Ahead of the turn of the millennium shift, much attention was devoted to service quality, while most researchers have now moved to other, more requested, research areas. Starting from 2010, business models became popular to study. From about the same time, different viewpoints on sustainability can be found in many of our projects. Service design is a field of study that reached its peak around 2016–2018, but is not descending in popularity.

In addition, the companies and organizations we co-create research with also undergo change. Back at the turn of the millennium, companies and organizations mostly came from the service sector. Then, from 2005 onward, retail became more interested in our research. From 2010, many industrial organizations increased as research partners, as they have interest in our research regarding innovation and servitization (for example, industrial companies that transform their business logic from product-centered to service-centered).

As mentioned above, CTF has been inventive in several ways. Not only by creating new institutional initiatives but also by establishing Karlstad University Samhällsnytta, a shareholding company that offers its services to solve complex societal challenges that call for service research to address their mission. Within just two years, Samhällsnytta has been able to fill and increase its portfolio of research projects. Several of the projects at Samhällsnytta have had contact with researchers at CTF. In the same way, some projects at Samhällsnytta have a spill-over effect to CTF, when Samhällsnytta's customers ask for research at CTF.

As a final indication of CTF's ability to renew itself, we can mention many of the awards and prizes that CTF researchers receive. During the write-up of this self-assessment, CTF researchers, together with Chalmers Industri Teknik, in the project *Retake* were nominated to the Swedish 'Återvinningsgalan'. In addition, several CTF researchers are visible on so-called international ranking lists; at Research.com, Bo Edvardsson was ranked first in Sweden and 132nd internationally, while Lars Witell (8 in Sweden and 551 internationally). Among the world's most influential researchers, CTF's Ander Visiting Professor Stephen L. Vargo was again named among the world's most influential researchers on the prestigious list of Clarivate Analytics. It is also noteworthy that Vargo has not only been one of the most cited business scholars since the turn of the millennium, but he also reports CTF/Kau as his second affiliation at Clarivate. In addition to all of the above, CTF researchers also often receive awards and honors; some examples are listed below:

- 2023 Literati Award Outstanding Paper for the study "Managing the Complexity of Green Innovation" by Andrey Abadzhiev, Alexandre Sukhov, Antti Sihvonen and Mikael Johnson.
- The study "How experts screen ideas: The complex interplay of intuition, analysis and sensemaking", authored by Alexandre Sukhov, Johan Netz, Lars E. Olsson and Peter Magnusson, received the Albert L. Page Award.
- Ingo Karpen received the SERVSIG Best Service Article for his paper entitled "Actor Ecosystem Readiness, Actor Ecosystem Readiness: Understanding the Nature and Role of Human Abilities and Motivation in a Service Ecosystem" and was runner-up for the Best Paper in *JPIM*, for the paper "Designerly ways of Entrepreneurship".
- Per Skålén won the Best Reviewer Award in *Journal of Service Research*.
- Jakob Trischler and Jessica Westman Trischler won the Best Paper awards in *Public Management Review* for their study on "Design for experience – a public service design approach in the age of digitalization".
- Margareta Friman and Bo Edvardsson are among Stanford University's list of top-cited researchers. To be appointed to the list, each researcher must be within the top 2 percent most cited researchers within their field.

- Mia Larson won the Emerald Literati Award 2022 for Outstanding Paper for the paper “The inevitability of essentializing culture in destination branding: the cases of fika and hygge”.
- Christina Öberg, was awarded for the paper “Managers, Minds and Machines in the Age of Artificial Intelligence” at the Academy of Management Annual Meeting in 2021.
- Kaisa Koskela Huotari was selected for the Highly Commended JSTP Paper Award for 2020-2021 for the article “Rethinking the actor in service research: toward a processual view of identity dynamics” published in *Journal of Service Theory and Practice*, 30(4/5).
- Fredrik Wikström and Helén Williams popular science book ‘Stoppa matsvinnet! En förpackad lösning’ was awarded the Book of the Year award by Måltidsakademin.
- Most downloaded open-access article in *Transportation Research Part D: Transport and Environment*. Issued by Elsevier for having a top downloaded open-access article linked to Sustainability Development Goals (SDGs). Awarded to Alexandre Sukhov, Katrin Lättman, Lars E. Olsson, Margareta Friman, and Satoshi Fujii for their paper: *Assessing travel satisfaction in public transport: A configurational approach*.

These examples emphasize that renewal of research is necessary for any researcher who wants to be appointed to these lists.

Internationalization, research ethics, gender equality, and multidisciplinary research

Regarding CTF’s international position, we refer to Section/Paragraph 4, where this is discussed. The same goes for interdisciplinarity, which is described in various instances in this self-assessment. Below we focus on research ethics and gender balance.

Research ethics is upheld through our national ethical approval system. There is also a support structure at the university where we can ask for assistance. From a CTF perspective, ethical considerations generally take place in several steps and sequences. For instance, when a new application is being submitted, research ethics are taken into consideration in work packages and implementation plans. Most financing bodies require some type of presentation of ethical risks in a potential future research project. When projects have been granted and are up and running, ethical considerations will naturally come into place when it is time to engage in some type of data collection. In addition, at CTF Planning Days, a two-day event every year in August, research questions with ethical aspects are discussed and problematized. Typical consideration may regard questions such as: “What is the role of a researcher during data collection?”, “What types of questions are acceptable to ask a respondent?” and “What methods can we use and how do we manage to handle GDPR issues?” Overall, we believe that discussing research ethics raises awareness among researchers at CTF.

Gender equality is something that we always strive to uphold. During 2022 our center had a balanced gender equality in terms of men and women at various positions. As of 2023, one of our female professors moved to Linnaeus University, which has resulted in an increased skewness. We always strive to recruit researchers with gender balance as an important outcome. More information on how we assess and work with gender balance is found in Section 3.

Ambitions for CTF

CTF has a good capacity to be flexible in terms of meeting new demands for research; this is evident from the many research projects and academic areas that have been covered by CTF research previously. However, it is not always easy to attract the type of researcher profile that we sometimes want. This is the case because the researcher also needs to have a natural platform for the academic subject in terms of lecturing. If the head of department (in Swedish: *prefekt*) does not see the same opportunity as we do, then it will be difficult to attract that type of researcher at CTF. For example, two different departments have felt that they could not offer teaching assignments to researchers, with the consequence that we cannot hire that person for research.

This case of conflicting goals between an academic subject and CTF is also evident when *kompetenskartläggningar* (in English: competence mapping) are made. The goal of competence mapping is to have competencies spread out over different perspectives within a subject. However, for a strong research center, it is the opposite. CTF needs to have competencies within the same area to be able to reach scientific depth. In this regard, it is evident that the heads of department have an education focus, which constitutes a risk of harming our long-term ability to conduct important research and be an agile and proactive research center.

Areas where we need support from other parts of Kau

The split between administration and support functions, on one side, and education and research, on the other, has been reported repeatedly at Swedish universities (for example: DN Debatt 230419, DN Debatt 230204). The message is that a task of those who are employed in support functions is to control and coach those who teach and conduct research (for instance, by assigning them to do a self-assessment or other types of self-reporting). From the perspective of our research center, this split is also evident at Karlstad University. CTF appreciates many of the support functions at our university, but it is also quite clear that there are functions that do not embrace a unified vision of what a university should accomplish. For research quality to flourish even more in the future, Karlstad University should adopt a (service) perspective where everyone views themselves as being part of conducting high-quality research and education; that is, everyone should view themselves as responsible for core operations, thereby avoiding the split in different functions.

In this regard, our university's processes for ethical approval and GDPR compliance need to be commented on. Although the intentions of the local research ethics committee and the faculty ethics advisors are good, in practice the process has become both complicated and time-consuming. What was intended as a support function has developed into a local bureaucratic control system, but without the authority to supersede the national requirements for ethics approval (which must still be applied for by the researcher). The result is a doubled workload for the researcher and an obvious risk that local standards are developed that set Karlstad University apart from the rest of academia in a disadvantageous way.

A related example of this is the local interpretation of the GDPR framework, where Karlstad University has decided that researchers at Karlstad University cannot use survey tools used elsewhere at other Swedish academic institutions. Setting up rules that make it more difficult to be a researcher at Karlstad University than at other institutions is likely to be contrary to what the university is trying to accomplish in terms of enhancing research quality.

CTF is a research center that was established in 1986. The term *center* has a long tradition in academic institutions (<https://provost.harvard.edu/principles-and-guidelines-establishment-centers>). The rationale behind establishing centers in academia was originally that singular academic subjects were not able to respond to societal challenges, outside of the university. In order to more proficiently respond to such calls, centers were created where several academic subjects collaboratively worked in an interdisciplinary fashion on such external challenges. In addition, for many centers, an application process typically takes place where rectors and provosts can decide about the relevance of the center. The most important criterion in such a process is likely the amount of external funding that can be attracted as a means to fund at least a substantial part of the center. Taken together, this means that (1) centers at universities need to respond to societal calls, (2) challenges should consist of members from several academic subjects, and (3) universities have a substantial part of their operations funded by external grants. We believe that Karlstad University would have a better return on its investments if it took those considerations into action.

3. Competence profile

As of 2023, 80 individuals (see <https://www.kau.se/ctf>) are engaged in research at CTF to varying degrees. These 80 people have the following titles: 13 are professors, seven are international visiting researchers (where five are professors), seven are associate professors, 28 are PhDs, 20 are PhD students, and five are administrative staff. Out of these 80, 36 are female and 44 are men. For more information about the competence profile of CTF, we refer to the background data collected by our university.

As noted above, CTF is relatively well-staffed in terms of researchers at various stages of the academic career ladder. In terms of interdisciplinarity, CTF has researchers from several disciplines: business administration, psychology, informatics, environmental and energy systems, political science, and material science. During 2023 we also had researchers from religious studies (now retired) and computer science (recently moving to JIBS). Previously, we have had researchers from working life science and economics. Also, CTF has research projects with many other academic institutions, both at Karlstad University and elsewhere in Sweden.

Competence boosting activities

CTF repeatedly applies for external funding. Whenever that is done, we continuously search and apply for new collaborations with researchers who can spend time at CTF. This means that our organizations are agile and respond to the calls for research that takes place outside of Karlstad University. The analysis that is needed for a researcher to capture and understand the challenges outside of the walls of our university calls for curiosity in terms of using new theories and methodologies. Taken together, the focus on external funding boosts researchers' competence in terms of knowledge breadth on various research areas and types.

We constantly reflect on how we can become as attractive as possible as a research center in the eyes of our faculty and strive to make the affiliation to CTF as beneficial as it can be. Activities that we undertake to stimulate this include a lively seminar series. The seminar series is also a great opportunity to embellish our research and to invite international researchers to Karlstad University (see Table 2 below). Other types of activities that we have undertaken include mentorship for emerging female scholars. Our goal of that activity was boosting young female scholars to move from PhD to associate professorship. In sum, we strive to be a place where young researchers can find a place to grow their career.

Table 2. CTF seminar series during 2023.

17 January	Pritam Padhi, half-way seminar
10 February	Per Skålen, research proposal
16 February	Peter Samuelsson, future service technologies
3 March	John-Eric Hassel, half-way seminar
March	Värdeskapande Samtal 1: Tjänstefiering i tillverkningsindustrin
4 April	Lasse Magnell, Planning seminar
12 May	Frida Skarin, PhD-dissertation

29 May	Joona Käreinen, RMIT Melbourne, Australia
1 June	Tjänsteinnovationsdagen at KCCC
1 June	Värdeskapande samtal 2: Innovation och digital utveckling inom handeln
15 June	Melaniye Kreye, York Univ.
24 Augusti	Per Kristensson, Kvalitetsutvärderingen CTF (Planning Days)
26 September	Can Song Ooi, U of Tasmania
28 September	Mats Alvesson, Lund Univ.
17 October	Elina Jaakkola, Turku Univ.
26 October	Anna Nilstomt och Janet K Rasei
26 October	Jonas Hjalmar Blom
4 October	Värdeskapande Samtal 3: Digital kompetens inom offentlig sektor
1 November	Alessandro Biffi, Milano, Politecnico U
3 November	Värdeskapande Samtal 4: Google x CTF
6 November	Jakob Trischler och Ingo Karpen
6 November	Per Kristensson, Kvalitetsutvärderingen
24 November	Christina Mele, Napoli, Italy
27 November	Per Kristensson, kvalitetsutvärdering av CTF
11 December	Sustainability Day, jointly with Karlstad Business School
12 December	Värdeskapande samtal 5: Retake

Dynamic research areas at CTF

As CTF's research starts out from the vision of being able to contribute to the positive development of individuals, organizations, and societies, it is difficult to say what specific areas we are active in. For researchers to be able to identify external challenges – applying new theories and collecting and analyzing new empirical data – the specific area of research is likely to change over time. In a broader sense, CTF's research focuses on value creation through service, which means that service management is our field of research.

As for the present, areas such as innovation, servitization, service design, sustainability, systems research, and transformation are areas where a lot of research is focused.

In line with the reasoning found elsewhere in this assessment, CTF is open to new areas and competencies at the same time as societal development and transformation point out them as relevant. While this might sound reasonable, it is worth emphasizing that this makes CTF unique in comparison with traditional academic subjects, which tend to stick with the same research areas over time (for example, a business administration researcher might focus on internal auditing reporting standards, a clinical psychologist on therapies and psychological treatments, regardless of whether this is asked for by the external society).

An illustrative example of how CTF's research is shifting focus regards our research on sustainability. Ten years ago, we had only one research project that explicitly dealt with sustainability. As the surrounding society has increasingly emphasized that our climate is under pressure, and sustainability research has been called for, CTF has increased its attention toward this dramatically. Notably, CTF has also been able to attract two knowledgeable researchers from the Environment and Energy Systems Department, which has further enhanced our performance in this area.

Academic partners, networks, and dissemination activities

CTF has several academic partners. First, the relationship with Arizona State University's Center for Service Leadership has been all the way since the establishment of these centers (CSL was founded one year ahead of CTF). Subsequent to that, the number of relationships has increased rapidly, largely because of the international profile that researchers at CTF have had. Today, CTF has important relationships and exchanges with Hanken, Svenska Handelshögskolan i Helsingfors, INN, Høyskolen i Innlandet i Norge, Roma III University in Rome, Linköping University, and Cambridge Service Alliance at the Institute of Manufacturing at Cambridge University, to name some of the most prominent networks we participate in.

In addition, to disseminate research results to receivers who really need them, and thereby making a strong impact, CTF continuously communicates its research results, both nationally and internationally, to other stakeholders by means of its web (www.ctf.kau.se) and through a designated communications officer who collaborates closely with media and is active on diverse platforms (Notified, Expertsvar and Alpagallileo etc. for press releases and news articles) and social media accounts connected to CTF (LinkedIn, Facebook, YouTube, X and Instagram) and through electronic newsletters. Notifications about projects, newsletters, blogs, and annual reports can be found on the web. Many CTF researchers also use their own social media channels to disseminate their research. In line with this, CTF researchers typically take active participation in the social debate, as well as in media, and other forums. Some recent examples of successful popular science articles are: 'Engångsmuggen ska bort, forskning ska reda ut hur' on foodsupply.se, 'Lyckad tjänstefiering kräver nytt mindset' in *Kvalitetsmagasinet*, 'Innovationerna blomstrar under pandemin' on Industrinyheter.se, "Starta pilotprojekt för samverkan om försvaret" in *Dagens Samhälle*. During the pandemic, CTF published a debate article in *Dagens Nyheter* (DN Debatt 201108).

Ambitions for CTF

CTF also needs to work harder to promote the careers of junior and upcoming researchers. Currently, a relatively small group of senior scholars produce a large proportion of CTF's academic output. Junior faculty need to contribute to a larger extent to the research outputs of the center, to advance in their careers, and to take a larger responsibility in senior positions for CTF, eventually contributing to leading the center. This is important for the long-term survival of the center. Establishing oneself as an international leading researcher is hard work. The competition for publishing in the best journals is hard. We need to prepare the next generation in such a way that they are ready to do the hard work that is needed.

Personnel at CTF have also left us for positions elsewhere at Karlstad University. The dean, two pro-vice chancellors, one former vice-rector, the director of the library, one head of department, and one rector of studies all come from CTF. Personnel from CTF are attractive and we need to raise our level of attractiveness to keep our faculty. It should be noted, however, that this is not necessarily entirely a problem. People who leave create new opportunities for collaboration and future support.

Our gender balance at the senior level does not correspond to what we are striving for.

Currently, we only have two professors and two associate professors who are women; all the others are men. This skewness is problematic and something we need help to solve. Several undesirable effects follow from this, such as difficulties in balancing research projects, supervision, and many other things. To make things worse, one female professor left us for Linnaeus University, which made our gender balance even more skewed at the professorial level. Currently, we cannot hire new personnel unless a subject has identified a need for a new position. Although we are troubled by the skewed gender balance, the only light in the tunnel regards the overall gender balance, considering all academic positions, which is better distributed (45 percent female, 55 percent male).

Gender balance is not only about numbers, but perhaps more about identifying hindrances and the glass ceiling effect. Another important gender problem, for CTF, is the situation whereby few of our female faculty, currently at the PhD level, have managed to reach the associate professor's level. We hypothesize that the underlying reason resembles the ones of the whole sector, namely that female scholars engage more in education and take on other types of more collective roles within the academic system (at the same time as young male scholars focus exclusively on publishing papers). This problem is evident from having a close look at the names with course responsibility, where women are in a clear majority. One potential solution is to employ a more rotating system at our university. As it is organized currently, many appointments are fixed which might incur some problems.

CTF has taken several steps to overcome this. For example, we created mentor networks for female PhDs and along with those network seminars that focused on academic writing and publishing (which was requested by female researchers). We have also used our international profile to equalize the gender imbalance by encouraging faculty to invite more women as visiting professors as well as international guest researchers. Furthermore, we have allocated more base funding to projects with female PhDs and we regularly – although not always – rethink how gender balance is taken into consideration at our conferences and in our newsletters. While there has been a return on investment on these initiatives, they are still not good enough. From our point of view, we are troubled by this situation as there seem to be few quickly implemented solutions to this problem, and it is a well-recognized problem in the whole university sector. We are aware of the situation that gender-balanced workplaces within academia lead to more scientific progress and a better work environment (DN 231020), something that is close to our heart at CTF. In the future, we are open to new suggestions and proposals on ways to deal with the gender imbalance. Moreover, we see the need for new collaborative initiatives in all parts to tackle this complex problem.

Finally, as mentioned in a previous note, CTF can improve in attracting researchers from other academic disciplines when traditional areas such as business administration and psychology no longer have vacancies for new employees. Here we need to rethink how we can become attractive to other academic subjects so they view us as a potential solution; for instance, when it comes to applying for external grants.

Areas where we need support from other parts of Kau

All members at CTF are employed in another department. This is the case for both faculty members and administrative staff. As in many matrix organizations, a grey area arises where

it is sometimes difficult to draw a line regarding whether a certain individual's performance can be attributed to CTF or to another department at the university. This is usually not a problem for CTF as we always strive to be inclusive and open. However, one case where this grey area becomes evident regards activities carried out, and to be listed, in evaluation processes (for instance, in a self-assessment similar to this one). One academic subject claimed that CTF 'took all of their publications', but these publications (made by faculty from their subject who had their research carried out at CTF) should also be listed as contributions in that respective subject. In situations like these, there is a misunderstanding about how a matrix organization functions. Another difficulty occurs when a faculty member is needed for education while the same person is engaged in research, and vice versa. In general, matrix organizations are beneficial for universities, so Kau must take these advantages into consideration and deal with issues that sometimes arise.

4. Research results

Internationalization

Internationalization has been a key success factor for CTF. We have a strong global position as the leading research center in our field. As a result, we have many research visitors to Karlstad, who share and co-operate in our research projects.

An important part of internationalization is to have relationships with researchers outside our own university. This is why we regularly invite scholars to visit CTF and encourage our own researchers to establish connections outside Karlstad and Sweden. Having international relationships enables our researchers to collaborate on papers at the same time as they sharpen their understanding of what is happening at the research frontier.

Internationalization not only leads to improved research quality, but it is also part of what makes the CTF brand stronger when it comes to external collaborations with organizations. In a similar fashion, applications for external grants are becoming more competitive, either by receiving advice from international scholars or by inviting them as partners in advisory boards. In sum, by being international, the overall performance of CTF increases.

There are many aspects to internationalization; the ones that we want to highlight from a CTF perspective regard (1) our visiting professor program, (2) shorter visits and exchanges, and (3) scientific conferences.

Regarding our visiting professor's program, we have five visiting professors financed by the Ander Foundation. All our visiting professors are highly respected within their field and are collaborating with us from 2024 to 2026. We have had a visiting professor's program for nine consecutive years at CTF. Our current visiting professors are:

- Helen Perks, University of Nottingham, UK
- Christina Mele, University of Naples Federico II, Italy
- Elina Jaakkola, University of Turku, Finland
- Pascal Le Masson, MinesParis Tech, France
- Martin Schreier, Wirtschafts University of Vienna, Austria

The visiting professor's program is now in its third round. This means that we have had visiting professors guiding our research, and education, previously in time. These professors are partnering up in composing research grants, writing up articles and also mentoring CTF researchers that are in need of support (for instance, PhD students).

In the same way, CTF has several senior researchers that are affiliated with international universities, as guest professors, or as global scholars, which enables important contacts and research collaborations with their respective institutions. For example, Per Skålen and Bo Edvardsson are professor II at Högskolen i Innlandet; Per Kristensson is a senior research fellow at Hanken, Svenska Handelshögskolan in Finland and was previously professor II at Norwegian School of Economics; and Ingo Karpen is a visiting professor at Adelaide Business School in Australia. We have also started building close collaboration with the Service Alliance at Cambridge University through Lars Witell. On the international note, it is worth

stressing that several members of the CTF faculty originally come from countries other than Sweden, namely: Norway, Finland, Germany, Iran, Poland, Luxemburg, Russia, Austria, the Netherlands, and Italy. Our international composition of researchers is largely a sign of international recruitment efforts and our international presence at universities abroad.

Regarding shorter visits and exchanges, there has been quite a group of scholars visiting CTF during the period from June 2022 to October 2023. Due to the pandemic (up till mid-2022), the number of visits was lower than what is usually the case at CTF. Table 3 shows a list of researchers visiting CTF.

Table 3. List of visiting scholars to CTF.

• Martin Schreier, professor, University of Vienna, Austria
• Helen Perks, professor, University of Nottingham, UK
• Johanna Gummerus, professor, Hanken, Finland
• Kristina Heinonen, professor, Hanken, Finland
• Can Seng Ooi, professor, University of Tasmania, Australia
• Mats Alvesson, professor, Lunds University
• Qusay Hamdan, PhD student, Vlerick Business School, Belgium
• Jaime Ortega Gutierrez, PhD, Universidad de Sevilla, Spain
• Elina Jaakkola, professor, University of Turku, Finland
• Anders Gustavsson, professor, BI, Norway
• Steve Vargo, professor, Oklahoma State University, USA
• Aniek Toet, PhD student, TU Delft, Netherlands
• Caspar Chorus, Dean, TU Delft, Netherlands
• Joona Keränen, associate professor, RMIT University, Australia
• Melanie Kreye, professor, dean, York University, UK
• Maaïke Kleinsmann, professor, TU Delft, Netherlands
• Magnus Persson, docent, Chalmers, Göteborg
• Marit Engen, Högskolen i Innlandet, Norway
• Suzanne Hiemstra-van Mastrigt, PhD, TU Delft, Netherlands
• Julia Dicenta, PhD student, Hohenheim University, Germany
• Eva Lexutt, research associate, Fernuniversität Hagen, Germany
• Joanna Pilawa, PhD student, Linköping University
• Maike Klip-Veltman, PhD student, TU Delft, Netherlands
• Mario Giraldo Oliveros, PhD, Universidad del Norte, Colombia
• Alessandro Biffi, PhD student, Politecnico di Milano, Italy
• Christina Mele, Professor, University of Naples Federico II, Italy
• Victoria Blom, Docent, Gymnastik- och idrottshögskolan, Örebro
• Hege Eriksen, professor, Høgskulen på Vestlandet, Norge
• Tommy Høyvarde Clausen, professor, Nord University Business School, Bodø, Norge.
• Christian Fuentes, professor, Lund University

It is important and helpful to have international scholars in the CTF environment. These researchers take part in seminars, chat with people in the fika-room and create long-lasting relationships. As a result, some CTF researchers often visit other universities or meet at conferences. As is described later in this report, many of the collaborations continue into research publications, joint PhD supervisions and joint research grants. Moreover, by being embedded across research environments (for example, at KAU and at an overseas

university), our employees benefit from multiple network effects, such as access to further resources, researchers, and knowledge circles. This combination facilitates joint publications and grant projects and can become a self-reinforcing cycle of initiatives.

Finally, in terms of internationalization, our own conference, QUIS, plays an important role. QUIS is our international conference that was inaugurated in 1989 and is held bi-annually with approximately 250 participants from all over the world. The conference started in Karlstad but have since been hosted at many places: USA (New York, Orlando, Cornell), Canada (Victoria), Germany (Wolfsburg), Portugal (Porto), China (Shanghai), Spain (Valencia), and most recently in Hanoi, Vietnam in 2023. The 19th QUIS conference will be held in 2025 at Roma III in Rome. By organizing the conference, we are being able of creating many new relationships with researchers at universities that otherwise might have been difficult to get hold of. As an extra benefit, the conference gives as a financial contribution each time it is being held. To manage the conference and coordinate its members, CTF has initiated the International Network of Service Researchers, which includes all the important service research centers in the world. The vision of the network is to strengthen and move the field of service research forward. The QUIS conference is the natural meeting point for the network.

CTF's contribution to the Kau strategy

Overall, CTF's operations are in line with five of the six strategic goals that Karlstad University (Kau) has defined for 2030. According to Kau, the strategic roadmap for 2030 includes:

1. Kau strives to promote highly recommended academic environments that can help shape the profile of the university as one where research and education are closely intertwined. CTF has a long tradition of being an excellent research environment at Kau. If given the opportunity to accomplish more research, by receiving stronger financial support, the positioning and profile of CTF would strengthen Karlstad University even further, according to the Kau strategy.
2. Kau wants to establish close relationships and connections with businesses and society at large. One of the hallmarks of CTF has been externally funded research through which a number of organizational partners have mutually collaborated in research projects. Funding from the KK Foundation and Vinnova has aided greatly in this regard and continued external funding would further strengthen collaboration with external partners from industry and society.
3. Kau wants to demonstrate a larger degree of internationalization. For CTF, this equals operations we have considerable experience in, as described above. We currently have extensive collaboration with researchers all over the world, but this collaborative spirit would be further substantiated, in several ways, if increased further support is received. For instance, the alliance with Cambridge University, visiting professors from other countries, and co-authorships with international scholars in well-renowned journals can be supported and further strengthened, with Kau meeting its strategic goals as a result.

4. Kau wants to promote sustainable social, economic, and environmental development in a systematic way. The purpose of several research projects at CTF is to guide firms in transitioning towards more sustainable business operations that are both profitable and sustainable. With this purpose, our proposal aligns directly with the sustainable development goals set by Kau.
5. Kau wants to increase the number of doctoral candidates and programs. This correlates well with the ambitions that CTF has. In addition, CTF also want to stimulate initiatives around PhD-courses, where we can share our cutting-edge research to, and create networks with other universities.

In sum, CTF is an international research environment that is firmly integrated within Karlstad University's strategy. Since CTF is open, international, and multidisciplinary at its core, CTF's research initiatives not only benefits the departments from where CTF attracts faculty, but also have important spillover effects to the entire university.

Scientific quality, publications, and scholarly impact

CTF has accomplished several things that are important for an academic institution with a good reputation. For one thing, research at CTF has shaped global thought and taken an international position in service research – the science, art, and practice of serving people and innovating for people, to improve the well-being of individuals, organizations, and societies. Service research is now an international interdisciplinary research field with its own journals and conferences. At CTF, we believe that academic publications are important and we view them as a means of quality assuring our research.

We believe that our scientific publications are a consequence of theoretical knowledge, methodological skills, analytical competence, and creative inquiry (an aspiration to approach grand challenges and big-impact topics with out-of-the-box considerations) – combined with our culture, openness, and ability to collaborate in interdisciplinary teams. Below we share some of our output resulting from those two qualities.

CTF regularly collects data to continuously monitor how we are performing over time. In line with the CoARA agreement, we avoid individual assessments and prioritize responsible measurements. This has led us to use Sci-Val (short for scientific value), which (in this case) measures how our entire center is performing over time relative to other similar institutions/centers). Figure 1 below, an excerpt from Sci-Val, shows that CTF is keeping its good position in terms of service research leadership.

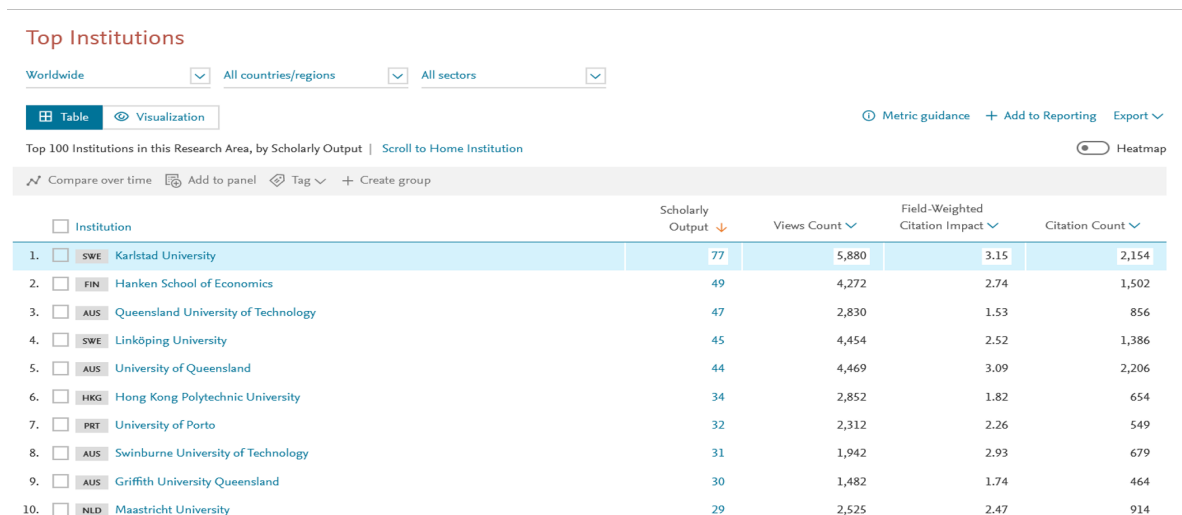


Figure 1. Sci-Val assessment of research publications in service research (service management, service design, service innovation, customer experience).

It is evident from the figure that CTF outperforms other institutions in terms of scholarly output (number of articles in indexed and peer-reviewed journals), and view counts (number of times other researchers have downloaded CTF articles). The field-weighted citation impact is the citation impact normalized by the field and it indicates how the number of citations received by a researcher’s publications compares to the average or expected number of citations received by other similar publications. Importantly, for both citation measures, CTF is on top together with the University of Queensland. Australian universities place less emphasis on external grant income than Swedish universities, which gives Australian researchers more time to focus on publishing research compared to their Swedish counterparts.

Every year, CTF summarizes its year in an annual report. These reports have been available since 2017 and each one contains examples of the scientific publications that we have managed during that specific year. In addition, by scrutinizing the authorship of the publications, it is possible to gain a snapshot of our internationalization; in this case, how many articles we publish each year together with authors from universities abroad. These publication numbers can be found in Table 4.

Table 4. Publication data 2017–2022.

	Publications (in peer-reviewed journals)	Articles published in collaboration with researchers outside Sweden	All publications (conference papers, book chapters, popular science, etcetera)
2022	51	28	127
2021	52	30	100
2020	46	25	76
2019	47	28	135
2018	56	34	139
2017	42	24	128

In Table 5, below, we present a selection of publications that have appeared in highly ranked journals during the last two years.

Table 5. Selection of articles in various highly ranked journals.

Journal	Author (-s) and title
<i>British Journal of Management</i>	Otterbring, T., Arsenovic, J., Samuelsson, P., Malodia, S., & Dhir, A. (2023). Going the Extra Mile, Now or After a While: The Impact of Employee Proactivity in Retail Service Encounters on Customers' Shopping Responses.
<i>Journal of Business Research</i>	Becker, L., Karpen, I.O., Kleinaltenkamp, M., Jaakkola, E., Helkkula, A., Nuutinen, M. (2023). <i>Actor Experience: Bridging Individual and Collective-level Theorizing.</i>
<i>Journal of Sleep Research</i>	Jakobsson Støre, S., Tillfors, M., Wästlund, E., Angelhoff, C., Andersson, G., Norell-Clarke, A. (2023). <i>The effects of a sleep robot intervention on sleep, depression and anxiety in adults with insomnia — A randomized waitlist-controlled trial.</i>
<i>Journal of Service Research</i>	Koskela-Huotari, K., Svärd, K., Williams, H., Trischler, J. & Wikström F. (2023). <i>Drivers and Hinderers of (Un)Sustainable Service: A Systems View</i>
<i>Organization Studies</i>	Varman, R., Al-Amoudi, I., & Skållén, P. (2023). <i>Workplace humiliation and the organization of domestic work</i>
<i>Journal of the Academy of Marketing Science</i>	Bolton, R. N., Gustafsson, A., Tarasi, C. O., & Witell, L. (2022). <i>Designing satisfying service encounters: website versus store touchpoints</i>
<i>Journal of Retailing</i>	Bolton, R. N., Gustafsson, A., Tarasi, C. O., & Witell, L. (2022). <i>Managing A Global Retail Brand in Different Markets: Meta-Analyses of Customer Responses to Service Encounters</i>
<i>Industrial Marketing Management</i>	Kleinaltenkamp, M., Karpen, I.O., & Kleinaltenkamp, M.J. (2022). <i>A sense-based perspective on market shaping: Theorizing strategies for the origination and propagation of new resource linkages</i>
<i>Journal of Business Ethics</i>	Petros Sebhatu, S. & Enquist. B. (2022). <i>Values and Multi-stakeholder dialog for business transformation in light of the UN Sustainable Development Goals</i>
<i>Journal of Product Innovation Management</i>	Klenner, N., Gemser, G. & Karpen, I.O. (2022). <i>Entrepreneurial ways of designing and designerly ways of entrepreneuring: Exploring the relationship between design thinking and effectuation theory.</i>

In terms of scientific thought-leadership it is also worth to mention that CTF has been asked by publishers to lead no less than to edited books, one is the Palgrave Handbook of Service Management, and the other is the Edward Elgar Handbook on Service Experience. In these books, scholars from all over the world contribute with research that builds up these books. In addition, CTF scholars also engage in Special Issues, for instance Lars Witell led a Special Issue in Journal of Business Research on the topic of B2B industrial services and Per Kristensson led another Special Issue in the same journal on new perspectives on adoption and innovation resistance. Relevant in this situation is also that several CTF researchers (Lars Witell, Ingo Karpen, Per Skållén) have been taking on editorships in journals such as Journal of Business Research, Journal of Services Marketing and Marketing Theory.

In addition to pure scientific publication measurements, there are some other indications of scientific quality. For example, in an external evaluation conducted by the Knowledge Foundation in 2012, CTF ranked among the top five service research centers in the world. From 2014 to 2019 CTF was appointed 'excellent research center'. During 2006 to 2017 we ran a Vinnova Excellence Center (Samot) at CTF, our largest research project to this date.

Ambitions for CTF

As has been mentioned elsewhere in this assessment, CTF has had difficulties increasing its number of PhD students over the last three years. This mostly has to do with the situation whereby many external grants are limited to three years, with the consequence that it is difficult to make them eligible for PhD studies at our university. We firmly believe that PhD students contribute to the lively culture and atmosphere characterizing us; therefore, we want to increase the number of PhD students in the future.

There is always a trade-off when it comes to scientific publications. The more time that is spent on writing articles, the less time will be spent on bidding for external grants. Writing articles also affects the amount of time being spent on disseminating research results with external parties (that is, improving value creation for individuals, organizations, and societies). CTF currently handles this tradeoff by discussing it at planning days and in seminars, but there is no clear-cut answer as to how to act and each researcher handles this in the way that they personally think is most optimal. The more intense the calls are becoming for increased or improved scientific publications, the more the risk of getting close to the adage of the isolated researcher in its ivory tower increases. Therefore, at CTF we need to continuously discuss and reflect on how our research is providing value for external individuals, organizations, and societies.

Areas where we need support from other parts of Kau

Our university strategy is somewhat wide and not as focused as CTF is. This situation brings many advantages with it; for example, several departments at Kau were able to participate in the creation of the strategy, thereby creating feelings of dedication and of employees being committed. Another advantage is that everyone can identify their unique sweet spot and thereby feel they contribute to strengthening our university.

However, while several positive things can be said about our university strategy, it is somewhat vague when it comes to envisioning scientific quality. We believe that the university might have an advantage in copying the scientific measurement that CTF embraces (Sci-Val) or employing the three goals we outline in our vision (scientific leadership and external funding, societal impact) as indications of research success for the university. Therefore, all departments at Kau have an opportunity to sharpen their understanding of how academic performance can be portrayed by using a field-weighted citation measure (which is a unique measure in the sense that it gives a fair indication of each academic subject). Likewise, the amount of external funding received and how many internationally co-authored papers each unit at the university produces could also be measured, likely with a heightened performance culture and research orientation as a result. It is worth

considering that the eventual absence of performance orientation in an organization might etch itself into the walls and, in the long run, lead to feelings of helplessness and/or stress among employees. Therefore, reflecting on performance orientation is important and needs to be done continuously. A university, or an academic center, can never be viewed as finalized or complete, but needs to be repeatedly improved and changed, and actions that were previously correct need to be re-tested and viewed from new angles.

Another area where we need more help regards the need to increase our funding percentage from the EU. We have had successes in Horizon over the years (Marie Curie, Horizon, and some additional). EU-funded research is expensive (and not properly paid for) and is not particularly research focused, but for the sake of internationalization and networking, CTF should still strive to increase its share of financing from EU sources.

Regarding our visiting professor's program, it should be noted that CTF has managed to receive external grants for this every time it has been given. One question that can be raised is to what extent it could be co-supported by Kau.

5. Co-production and collaboration with the surrounding society

CTF's vision is to contribute to the development of individuals, organizations, and society by conducting research on *value creation through service*. Guided by its vision, the overall aim of CTF is to conduct excellent service research and service education in close collaboration with external partners, such as business firms, public service providers, governmental organizations, consultants, and research foundations. As a result, CTF currently has a well-established reputation for high-quality research, conducted in close collaboration with both small and large firms, and public and governmental organizations. One advantage of CTF's research is that it is tightly connected to business challenges in organizations. As a result, in some projects employees from business organizations have been co-authors on papers together with CTF researchers. Moreover, CTF attracts interest from the general public by communicating interesting research results through the media. For extensive examples of the above, please visit CTF's webpage or see our annual reports.

External collaboration, to co-create research together with one or several external actors, has been one of the hallmarks of CTF since its establishment in 1986. If there is anything that should be pointed out as strategically important to CTF's growth, it is our collaboration with external organizations. External collaboration, co-production in research, leads to external grants and gives researchers real data, which is in stark contrast to data from the US, where much consumer research is the result of involuntary student participation in university labs. It also leads to internationalization, as these companies are either represented outside Sweden or have their customers in other countries. It also makes CTF attractive when it comes to talent and recruitment, as the companies we collaborate with often have an outstanding reputation. In short, the co-production of research with external organizations is the backbone of a successful academic center.

Volvo, Ericsson, Ikea, ICA, Löfbergs, Valmet, Telia, Google, Billerud-Korsnäs, Combined-X, NWT, regional counties, municipalities all over Sweden, and the Swedish Government Offices are all examples of organizations that are presently undertaking research together with CTF. The number of organizations that CTF has carried out research with is extensive and the outcomes and learnings have been instrumental in strengthening the CTF brand and have been used to support various research applications, thereby giving access to external funding. For example, in 2022 CTF received 12 msek in external funding, 8 msek in 2021, and in 2020, which was a record year, CTF received 39 msek from external grants. In all of those grants, several external organizations participate in conducting research.

"We believe that the collaboration between industry and academia is important. We want to learn more from research while also helping society to progress."

Agnes Lindell, business owner, Elvenite

Many of CTF's external partners have been collaborating for a long time. Volvo Group and Telia, to name two examples, have been partners more or less for 15 to 20 years. The fact that many organizations have long-term partnerships with CTF also indicates that our

collaborative activities are carried out in meaningful and value-creating ways that facilitate their learning and knowledge creation. As such, CTF partnerships can contribute to more successful operations of businesses and organizations. We regularly meet with organizations and discuss how our research and education can be tailored to their needs and be of the best value to them. We emphasize developing and doing research and education *with* our partners, rather than *for* them. At the same time, our research is independent of the interests of individual organizations and industries, and we do not hesitate to take a critical stance to our research results.

Societal impact

As noted elsewhere in this self-assessment, creating societal impact is important for CTF. Societal impact – whereby knowledge created in our research can be of relevance for other external parties – is one of three important goals of CTF.

“Focus is to increase awareness about services and creating complete customer solutions, and to get a better understanding of the key factors to succeed.”

Peter Santén, senior innovation manager, Volvo Group

The KK Foundation, a major funder of our research, assessed our research by commissioning an international scholar whose conclusion was that the research carried out at CTF led to the development of new customer processes, overall process support, publicity, and future manpower (by way of student recruitment).

Furthermore, as examples of what CTF has accomplished in terms of societal impact, the following impacts for key partners were noted:

- In our research with Telia we created a new method and approach for customer involvement in the development of new services; especially in the early phases, where customers contribute with innovative, producible, and valuable new ideas (most times better than the in-house R&D department).
- In collaboration with Swedbank, a new framework for business models based on the service-dominant logic and with a CSR focus was created.
- At Uddeholm Tooling the establishment of “service development” as a new area of competence in a global company was enabled through CTF’s research and knowledge.
- At Antiphon (a sound reduction solution provider), participation in a series of workshops at CTF, and several site visits by researchers contributed to the development and introduction of a new service. Activities that were previously performed for customers free of charge are now the backbone of profitable service.
- Within the research profile SAMOT (CTF’s largest project that ran between 2006 and 2017), researchers investigated the interaction between the personnel and their customers at trains, which led to several customer-oriented innovations.
- The coffee company Löfbergs based the design of its most exclusive product series on studies conducted at CTF.

- CTF have well-established connections and engages to a great extent with our regional organizations, for instance when it comes to digital welfare services, the health care sector, the paper and pulp sector, authorities such as Trafikverket, and others. In these collaborations, the external parties require practical effects and advice, along with academic results.
- CTF research have influenced sustainability strategies regarding food waste and packaging on global level, for example in UN-reports, see United Nations Environment Programme (2022). Single-use supermarket food packaging and its alternatives: Recommendations from life cycle Assessments. UNEP Nairobi.

In terms of impact, CTF can help companies improve their management and operational activities; for instance, in terms of getting new ideas for service innovations or suggesting new ways of running a certain organizational process. It is sometimes difficult for executives or employees in companies to find time to reflect on everyday procedures, routines, and processes; there might be a lack of time, or as is commonly noted in the innovation literature, they are stuck in a legacy culture. In several cases, having researchers involved has enabled companies to think outside the box boost the level of innovativeness or manage a certain type of needed transformation. Fortunately, the beneficial outcomes of collaboration are not one-sided. When engaging in collaborative and co-produced research, scholars gain access to information and learn about phenomena that other scholars does not have the opportunity to get hold of. This means that the research carried out at CTF will be perceived as important, both by academia and society, and that the research results will be published in high-quality journals.

For beneficial co-production, both parties need to benefit from the cooperation and understand that the “value in-use” is very different; for the company’s business excellence and for CTF’s scientific excellence. A researcher might have a top article as the main goal, while a manager may want to develop the knowledge about customer needs. The advantages of co-production from a business point of view are described above. However, it is also important to recognize the positive consequences of co-production research for scholars at CTF. For example, by conducting research in a co-productive way, CTF believes that challenges and problems identified in partnerships with business and society will be more relevant and interesting. Through a more traditional scholarly role of conducting research (such as, within a laboratory), discoveries of relevant processes and worthwhile phenomena are less likely to be made.

Research freedom and integrity

Given the strong focus on collaborative and co-produced research, how are research freedom and integrity maintained at CTF?

When co-creating a competitive bid for external grants, it is the researchers who are responsible for writing up the application. If the grant that the researcher is bidding for is large, CTF allocates specific financial support for the researcher who is engaged in that process, typically around 30–40 percent of the time during the application writing process.

What makes the process both more complex and more engaging is that employees from public and private organizations typically participate in setting up the application. Their responsibility is typically to point toward the challenge, the mission, that will define the area worth doing research on. It is important that the research questions identified are both of academic interest (that is, contribute to the research frontier in some way) and highly relevant for the participating organizations (that is, contribute to making them better). The projects CTF manages span a wide range of theoretical areas, as well as organizational sectors and societal challenges. The researcher defines and decides the theories to be used and the methods to be applied. The participating organizations point toward the challenge and the purpose of why they are interested in partnering up with an academic center. In this way, we believe that research integrity and freedom are, if not guaranteed, at least taken into serious consideration and action.

Collaboration in the form of co-created or co-produced research (in Swedish: samverkan) with external organizations means that interactions lead to exchanges between researchers and external actors in which knowledge is produced and valued that is both scientifically robust and socially relevant (Ozanne et al., 2017). Such interactions deviate from a traditional linear model of knowledge dissemination where a researcher collects, analyzes, and then submits results to any actor being interested. Instead, in co-produced research it is assumed that knowledge arises in complex networks that are dynamic and multidirectional. This means that researchers must take a more active role together with external actors where both parties benefit from the research while it is taking place. At a minimum, this relationship is a partnership, and the researcher engages with relevant stakeholders/actors building on their everyday understandings, interests, and expertise. The participating actors are then able to act on the knowledge created immediately, compared to the contrasting model where knowledge is packaged and disseminated after the research has been carried out.

Researchers have commonly suggested co-created or co-produced research as an alternative to traditional ways of knowledge creation, which often takes place within a single academic discipline and is sometimes classified as ground research. Co-produced knowledge, on the contrary, is best cultivated in environments that focus on interdisciplinary research and have a transformative mission to some extent. Proponents of co-produced research have forwarded it as a means to address common limitations of theories that are streamlined through its development within a single academic discipline. This means that such streamlined academic development leads to an overly specialized body of knowledge that is often displayed in such a way that it is difficult for people outside of the discipline to absorb or put it into use. Co-produced research has also been highlighted as a means of breaking the academic ivory tower, where there is a monopoly on research expertise and a detachment from those who might need this type of knowledge.

However, there are not only proponents of co-produced research. Opponents of this type of research claim that universities that engage in this type of research support capitalistic ideas of economic growth, instead of taking responsibility and critically evaluating the plethora of malicious processes that occur in a society. Economic growth, increased competitiveness, and continuous development are things that private and public organizations can deal with

themselves, and researchers should devote time to crucially assessing undergoing processes, according to opponents.

How does CTF respond to such university politics as those described above? The short answer is that we do not take any explicit position in this debate; both views are accepted, but only as long as researchers can find reasonable financial support for their position and the research they conduct. Karlstad University is a regional university with much less financial support from the government than the larger and more established universities in Sweden. Co-produced research where competitive bids are placed at financial bodies is a means of handling this situation. Externally funded research can pave the way for further funding, at other funding agencies, not demanding coproduced research. Critical research typically has fewer funding opportunities to choose between.

Ambition areas for CTF

There is research (cf. Williams et al., 2020) revealing that academic research conducted in joint collaboration with industry (that is, external organizations) is more difficult to publish and that researchers who spend time doing collaborative research are less effective in terms of publishing than researchers who can spend all their time composing academic articles. This is a challenge for researchers at CTF only funded in industry co-produced research projects. Since these kinds of projects often provide good opportunities for empirical data collection, funding writing research articles after the co-produced projects would probably prove highly effective in terms of research output.

Bringing research to practice by leveraging our partnerships with businesses and public organizations is an area where CTF has been quite successful over the years. However, given the difficulties that academia sometimes has in terms of connecting with the external society, we are convinced that this could be improved even further in the future. Perhaps this could be done by organizing more workshops, opening up our facilities for business people to visit and spend a workday, or having CTF researchers spend time at external organizations, and so on.

Areas where we need support from other parts of Kau

If Karlstad University wants to increase its external funding, and thereby play a more important role in the surrounding society, it might be worth considering tying its internal funding to received external funding, as this likely would enhance the focus on external grants.

6. The bridge between research and education

Overall, CTF strives to ensure its role as an excellent research center and conduct and develop various ambitions that are tied to education, management advice, and external relationships within its ecosystem – all in ways that feed back to its research excellence. The most important way of disseminating research results is through education at the graduate, postgraduate, and executive levels.

The most distinct way that research comes into education is through all members of CTF also being employed at a mother subject, where their actual employment is situated. This means that a researcher in marketing is employed at, for example, the business administration subject where they also are assigned to do their teaching. In their teaching, researchers can share examples from research collaborations, and case studies from business partners, and integrate research articles into students' course literature lists. Researchers also participate in planning sessions, course development, and various meetings forums, where their research can function as input that later is disseminated in education programs, course syllabuses, or single lectures.

Most senior researchers at CTF have leading roles in a variety of education programs at the bachelor and advanced levels; for example, the Master of Science in Business and Economics program, the International Business program, and the Master Program in Innovation and Service Development (a result of AVANS, an educational program where CTF applied and received external funding). Partner organizations are invited and participate in the education given at Karlstad University. CTF's external partners have a high interest in contributing to teaching and do so by providing real-world cases for students to work on or through master's thesis projects. Collaboration in education between CTF and external companies not only gives research direction that highlights current challenges that companies and societies face, but it also generates the opportunity to build relationships with students, which can be a key benefit for finding and recruiting new talents in an increasingly competitive job market.

CTF is an active partner within several research schools. For instance, MIT (management of IT) is a school that draws PhD students from several universities in Sweden. CTF also took an active role in VIPP (value in paper processes), which was a highly interdisciplinary research school. We were also partners in SDIN, a Marie Curie Initial Training Network program, where we contributed with our research knowledge on service design. We have also had some experiences in other industrial research schools (e.g. WASP and SQMA).

During 2020, CTF was granted another large research application (<31 msek), where support was given to conduct professional graduate development courses in the form of a large program, called ISE (*'Improving value creation through Service Education'*, financed by the KK Foundation). The ISE program represents a distinct example of how Karlstad University drives engagement in life-long learning initiatives and constitutes a flagship for our university. Within the ISE program, research experiences from previous externally funded projects form a platform and provide important input in courses that are offered to professionals in business firms. In these courses, research results can have a direct impact on organizational practices since the main target group is professionals working in different industry sectors.

The ISE program consists of approximately 20 courses that are offered twice during the program period. Courses within the ISE program is developed by means of a method that has been validated in our research. It is a two-way communication process where companies state their future education needs and researchers pitch their best ideas on how to meet these needs. The program, which is now in its third year, also has the unique benefit of informing researchers at CTF about challenges and questions that can later serve as input for research applications and research articles.

In addition to the expert competence courses within ISE, CTF also participates in tailor-made courses for the industry, commissioned by means of Karlstads Universitets Uppdrags AB.

As mentioned in the introduction, Karlstad Business School (KBS) is accredited by AACSB (www.aacsb.edu). The accreditation serves the purpose of strengthening the ties between CTF and KBS in a two-fold way. First, CTF researchers manages to publish scholarly work and engage with the surrounding society, which meets the accreditation standards and requirements set up by AACSB. This will help KBS to keep its accreditation. Secondly, KBS supports CTF research-wise, which enables CTF to keep up with its research. Thus, KBS supports CTF back with allocation of research time and dynamic and agile cooperation when it comes to teaching and research duties.

Ambitions for CTF

Service research needs to take place in more academic subjects than just business administration. While CTF as a research program is organized in a matrix, its teaching is not. The nursing program, several engineering programs, and the clinical psychology program, are all examples of educational programs that result in important services for our society. While often being asked to participate in teaching service at other universities, in a variety of programs, we only teach service in the traditional service management program at our own university. Using the research as a foundation, we would like to contribute to several more programs to educate the students with a mindset that will be of great help in their future workplaces. Here, CTF researchers need to take on a more active role as teachers and show how their educational offer can serve other programs and subjects at the university. After all, as Sweden has turned into to a service economy, most academic programs today educate students into the service economy. This is why a 7.5 hp flagship crash course in service management, service innovation, and customer value creation should be attractive. CTF should offer its teaching to other academic subjects and their programs, where the outcome is not service but where service management knowledge would play a value-adding role to the final exam.

CTF currently offers its service management knowledge in a siloed form only for those who may apply for jobs in the classic service sector, but we could equally well offer our knowledge platform to those in other sectors, as we know from research that many more sectors now view themselves as service-oriented. Thus, while CTF research is organized in a matrix, drawing competencies from several research fields in an interdisciplinary way, the opposite is true for service education which mostly is offered through a singular academic subject.

CTF should engage more in research schools, particularly international ones.

Areas where we need support from other parts of Kau

Several of the faculty at CTF are originally from other countries than Sweden. In addition, the five visiting professors are established researchers at well-respected academic institutions worldwide. If Karlstad University want to internationalize its educational offering, these persons can be viewed as resources as teaching is to become more internationalized.

References:

- Campanello, S. (2023). Ansvarig professor lämnade Chalmers projekt för jämställdhet i protest. *Dagens Nyheter*, 231020.
- Grönroos, C. (1982). An applied service marketing theory. *European Journal of Marketing*, 16(7), 30–41.
- Grönroos, C. (2015). *Service management and marketing*. John Wiley & Sons.
- Lindgreen, A., Di Benedetto, C. A., & Brodie, R. J. (2021). Research quality: What it is, and how to achieve it. *Industrial Marketing Management*, 99, A13–A19.
- Ozanne, J. L., Davis, B., Murray, J. B., Grier, S., Benmecheddal, A., Downey, H., Ekpo, A. E., Garnier, M., Hietanen, J., Gall-Ely, M. L., Seregina, A., Thomas, K. D., & Veer, E. (2017). Assessing the Societal Impact of Research: The Relational Engagement Approach. *Journal of Public Policy & Marketing*, 36(1), 1–14.
- Rust, R. T., & Oliver, R. L. (Eds.). (1993). *Service quality: New directions in theory and practice*. Sage Publications
- Williams, O., Sarre, S., Papoulias, S. C., Knowles, S., Robert, G., Beresford, P., ... & Palmer, V. J. (2020). Lost in the shadows: reflections on the dark side of co-production. *Health Research Policy and systems*, 18, 1–10
- Vetenskapsrådet (2023). *Forskningskvalitet och internationell konkurrenskraft*. Rapport. ISBN: 978-91-89845-04-6
- Vetenskapsrådet (2023). *Stärkt svensk forskningskvalitet till nytta för samhället*. Rapport. ISBN: 978-91-89845-04-6



The Service Research Center (CTF)

BACKGROUND DATA

Periodic Research Review

INTRODUCTION

Background data covers a three year period (2020-2022) and contains information about staff, third cycle studies, financial resources and publishing output.

Data was collected from university administrative systems to provide an overview and illustrate conditions for research at the Service Research Center (CTF).

STAFF

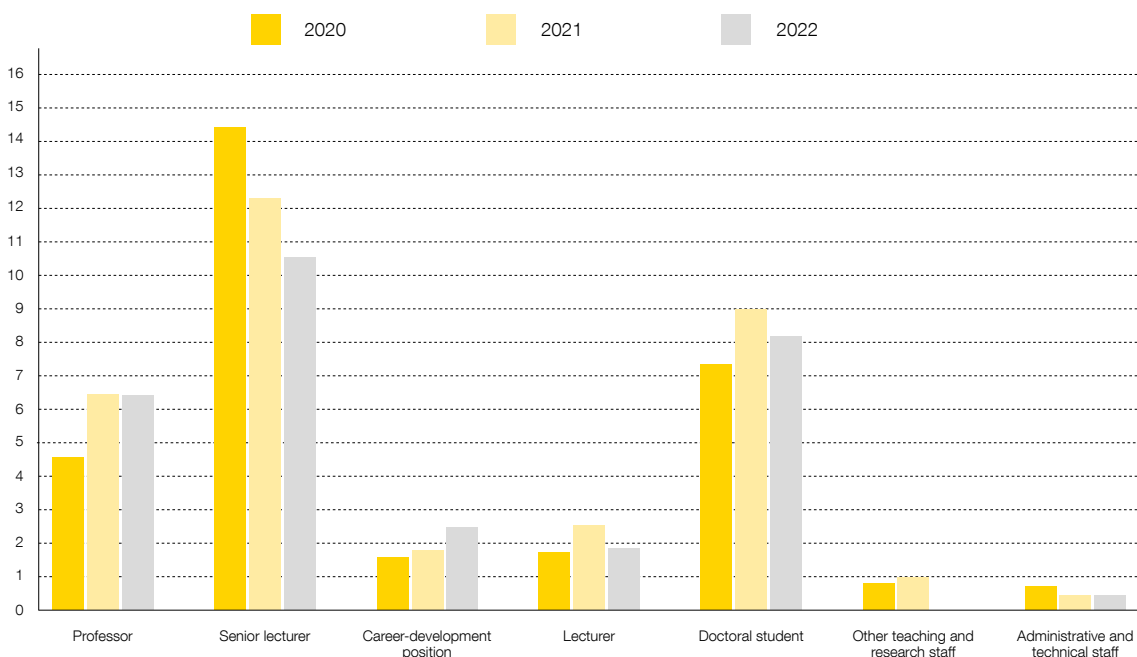


Figure 1.1 Workforce by staff category

Workforce (full-time equivalents*) engaged in research at the evaluation unit over a three-year period. Staff categories included are professor, senior lecturer, career-development position, lecturer, doctoral student, other teaching and research staff, and administrative staff. See table 1.2 for individuals in each category.

Source: KULI

* Full-time equivalent (FTE) is a unit of measurement to illustrate the number of full-time hours spent on research engagement for employees at Karlstad University connected to the evaluation unit. Research engagement includes recorded time covered by internal funding, external research funding and commissioned research funding.

Table 1.2 Staff at the evaluation unit

Staff connected to CTF. The table shows position and research subject for staff engaged in research at CTF in 2022.

First name	Surname	Position	Research subject
Peter	Magnusson	Professor	Business Administration
Mia	Larson	Professor	Business Administration
Fredrik	Wikström	Professor	Energy Systems
Ingo	Karpen	Professor	Business Administration
Martin	Grimberg Löfgren	Professor	Business Administration
Lars	Witell	Professor	Business Administration
Bård	Tronvoll	Professor	Business Administration
Christina	Öberg	Professor	Business Administration
Lars	Olsson	Professor	Psychology
Per	Skåлёn	Professor	Business Administration

First name	Surname	Position	Research subject
Anders	Gustafsson	Professor	Business Administration
Bo	Enquist	Professor	Business Administration
Margareta	Friman	Professor	Psychology
Per	Kristensson	Professor	Psychology
Per	Pettersson	Professor	Sociology
Bo	Edvardsson	Professor	Business Administration
Maria	Åkesson	Senior lecturer	Business Administration
Helen	Williams	Senior lecturer	Other Civil Engineering
Erik	Wästlund	Senior lecturer	Psychology
Samuel	Petros Sebhatu	Senior lecturer	Business Administration
Markus	Fellesson	Senior lecturer	Business Administration
Per	Echeverri	Senior lecturer	Business Administration
Sara	Davoudi	Senior lecturer	Business Administration
Peter	Samuelsson	Senior lecturer	Business Administration
Charlotte	Bäckman	Senior lecturer	Psychology
Alexandre	Sukhov	Senior lecturer	Business Administration
Carolina	Camén	Senior lecturer	Business Administration
Poja	Shams	Senior lecturer	Business Administration
Jessica	Westman-Trischler	Senior lecturer	Psychology
Johan	Quist	Senior lecturer	Business Administration
Johan	Netz	Senior lecturer	Business Administration
Anna	Fyrberg-Yngfalk	Senior lecturer	Business Administration
Jakob	Trischler	Senior lecturer	Business Administration
Martin	Fransson	Senior lecturer	Business Administration
Linda	Bergkvist	Senior lecturer	Information Systems
Jenny	Karlsson	Senior lecturer	Business Administration
Kaisa	Koskela-Huotari	Senior lecturer	Business Administration
Federico	Artusi	Senior lecturer	Business Administration
Mikael	Johnson	Senior lecturer	Business Administration
Patrik	Gottfridsson	Senior lecturer	Business Administration
Nina	Löfberg	Senior lecturer	Business Administration
Pernille	K Andersson	Senior lecturer	Social Work
Mehran	Javaneh	Career-development position	Business Administration
Ahlin	Karin	Career-development position	Human Aspects of ICT
Agnieszka	Kitkowska	Career-development position	Computer Sciences
JanErik	Odhe	Lecturer	Other Mechanical Engineering
Bodil	Sandén	Lecturer	Business Administration
Sture	Nöjd	Lecturer	Psychology
Hans	Björkman	Lecturer	Business Administration
Petter	Falk	Lecturer	Political Science
Muhammad Murtaza	Ali	Doctoral student	Business Administration
Kristin	Svärd	Doctoral student	Business Administration
Kotaiba	Aal	Doctoral student	Business Administration
Andrey	Abadzhiev	Doctoral student	Business Administration
Anna	Nilstomt	Doctoral student	Psychology
Henrik	Johansson Rehn	Doctoral student	Psychology
Sebastian	Dehling	Doctoral student	Business Administration
Jonas Hjalmar	Blom	Doctoral student	Psychology

First name	Surname	Position	Research subject
Pahdi	Pritam	Doctoral student	Business Administration
Frida	Skarin	Doctoral student	Psychology
Jana	Huck	Doctoral student	Business Administration
Janna	Dervisic	Doctoral student	Business Administration
Amie	Gustafsson	Doctoral student	Business Administration
Anne-Charlotte	Paas	Doctoral student	Business Administration
Nicklas	Salomonson	Other teaching and research staff	Business Administration
Hannah	Snyder	Other teaching and research staff	Business Administration
Charlotta	Andersson	Administrative staff	Administration
Linda	Fridberg	Administrative staff	Administration
Madeleine	Montiadis	Administrative staff	Administration
Britt-Marie	Shandrew	Administrative staff	Administration
Jörg	Pareigis	Administrative staff	Business Administration

Source: Primula

Table 1.2.1 Researchers engaged in research at CTF, but not employed at Karlstad University

First name	Surname	Position	University
Helen	Perks	Visiting professor (Ander Foundation)	University of Nottingham, United Kingdom
Satoshi	Fujii	Visiting professor (Ander Foundation)	Kyoto University, Japan
Joann	Peck	Visiting professor (Ander Foundation)	University of Wisconsin, USA
Johanna	Gummerus	Visiting professor (Ander Foundation)	Hanken Helsingfors, Finland
Martin	Schreier	Visiting professor (Ander Foundation)	University of Vienna, Austria
Stephen L.	Vargo	Visiting professor (Ander Foundation)	Oklahoma State University, USA
Qusay	Hamdan	Visiting PhD student	Vleric Business School, Belgium
Jasper	van Kuijk	Affiliated researcher	TU Delft University, Netherlands
Chatarina	von Koskull	Affiliated researcher	University of Vaasa, Finland

Source: CTF annual report 2022.

THIRD-CYCLE STUDIES

Table 2.1 Doctoral students engaged in research at CTF.

Doctoral students by discipline, year of admission and degree of activity during year 2022. Industry/collaboration/external doctoral students are marked with (I).

Name	Admission Subject	Degree of activity 2022	Year of admission	Industry/Collaboration/ External (I)
Amie Gustavsson	Business Administration	80	2020	
Andrey Abadzhiev	Business Administration	35	2018	
Anna Ragén	Business Administration	50	2021	(I)
Jana Huck	Business Administration	64,5	2018	
Janet Rasaei	Business Administration	80	2021	
Janna Dervisic	Business Administration	40	2020	
John-Erik Hassel	Business Administration	95	2021	(I)
Kristin Svärd	Business Administration	80	2019	
Murtaza Ali	Business Administration	77,5	2019	
Per Karlsson	Business Administration	65	2021	
Pritam Kumar Padhi	Business Administration	80	2021	

Name	Admission Subject	Degree of activity 2022	Year of admission	Industry/Collaboration/ External (I)
Sander Svaeri	Business Administration	50	2005	(I)
Sylvia Anne-Charlotte Paas	Business Administration	80	2019	
Petter Falk	Political Science	14	2019	
Anna Nilstomt	Psychology	50	2020	
Frida Skarin	Psychology	13	2014	
Henrik Johansson Rehn	Psychology	84	2021	
Jonas Blom	Psychology	38	2019	
Lars Magnell	Psychology	42	2022	
Sture Nöjd	Psychology	70	2017	

Source: Ladok

Table 2.2 Graduate licentiate and doctoral students engaged in research at CTF

Number of students who have completed a Degree of Licentiate or Doctor over the past three years.

Name	Subject	Degree	2020	2021	2022
Andrey Abadzhiev	Business Administration	Degree of Doctor	1		
Alexandre Sukhov	Business Administration	Degree of Licentiate			1
Jasenko Flodin Arsenovic	Business Administration	Degree of Doctor	1		
Peter Samuelsson	Business Administration	Degree of Doctor		1	
Sara Davoudi	Business Administration	Degree of Doctor		1	
Sofia Molander	Business Administration	Degree of Doctor		1	
Agnieszka Kitkowska	Computer Science	Degree of Doctor		1	
Total			2	4	1

Source: Ladok

FINANCIAL RESOURCES

Table 3.1 Research funding

The table shows research funds spent at CTF for the period of 2020–2022. Amounts in SEK 1000.

Funding	2020	2021	2022
Faculty funding (governmental funding)	18 858	17 132	20 447
External funding ¹	19 394	24 888	24 338
Internal income ²	-346	501	319
Total	37 906	42 522	45 103
Percentage external funding	51%	59%	54%

Source: KULI/Raindance

¹ Includes revenue from fees, other reimbursements and funding which can include grants from Councils, other public research funding agencies, municipalities, regions and research foundations.

² Internal income includes, for example, grants and/or compensations from other parts of the university.

Table 3.2 External research funding

Distribution of external research funds spent during the period of 2020–2022. Amounts in SEK 1000.

Funding source	2020	2021	2022
Research Councils ¹	1 986	1 334	409
Swedish Foundations ²	14 624	19 583	21 086
Direct external funding from business and industry	489	510	843
EU and foreign organizations	929	1 183	1 728
Other public bodies ³	1 366	2 278	272
Total	19 394	24 888	24 338

Source: KULI/Raindance

¹ Research Councils include the Swedish Research Council, Forte and Formas.

² Swedish Foundations include The Knowledge Foundation, Vinnova, The Swedish Energy Agency etc.

³ Other public organisations include Country Councils, municipalities etc.

Table 3.3 External research funding statistics

Number of grant applications submitted to external funding bodies, number of granted applications, amount applied for and granted, and success rate.

Amount applied for and granted refers to Karlstad University's share. Amounts in SEK 1000.

Funding source	2020	2021	2022
Number of grant applications	24	21	40
Number of granted applications	8	9	14
Amount applied	91 422	32 614	79 018
Amount granted	39 182	9 676	16 109
Success rate*	33%	43%	35%

Source: Raindance

* Success rate is calculated on the number of granted applications in relation to those submitted.

BIBLIOMETRIC ANALYSIS AND REFERENCE LIST

Summary

The evaluation unit CTF, shows that the 90 people connected to the unit, have published 197 publications between 2020–2022 (see Publication list at page 9).

To get a complete coverage of what is published within the unit, the following tables are based on registered publications in DiVA (Digital Scientific Archive), the local publication repository where researchers, teachers and students register their research publications and essays. It covers all subject areas and publication types.

Publication extraction for the years 2020-2022 has been based on the researchers individual Kau: ID, which links them with their respective publications. The list of researchers that are included in the analyses was provided by CTF and includes also researchers that are no longer part of the unit but were employed during 2020-2022.

The analysis includes all publications where at least one of the authors is affiliated with Karlstad University. The publication subcategories *presentation*, *poster*, *abstracts* and *“other”* have been omitted from the analysis because these entries are registered to a very varying extent by the researchers. Doctoral dissertations and licentiate theses are reported in detail in other parts of the evaluation and have therefore also been omitted here.

PUBLISHING OUTPUT

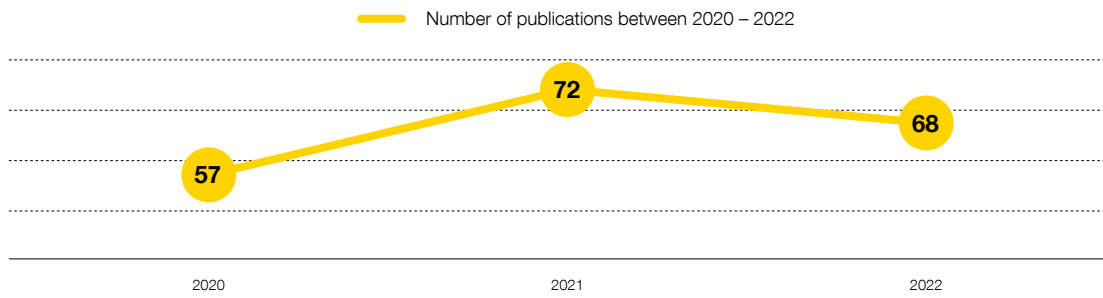


Figure 5.1 The annual total number of publications from CTF during 2020–2022

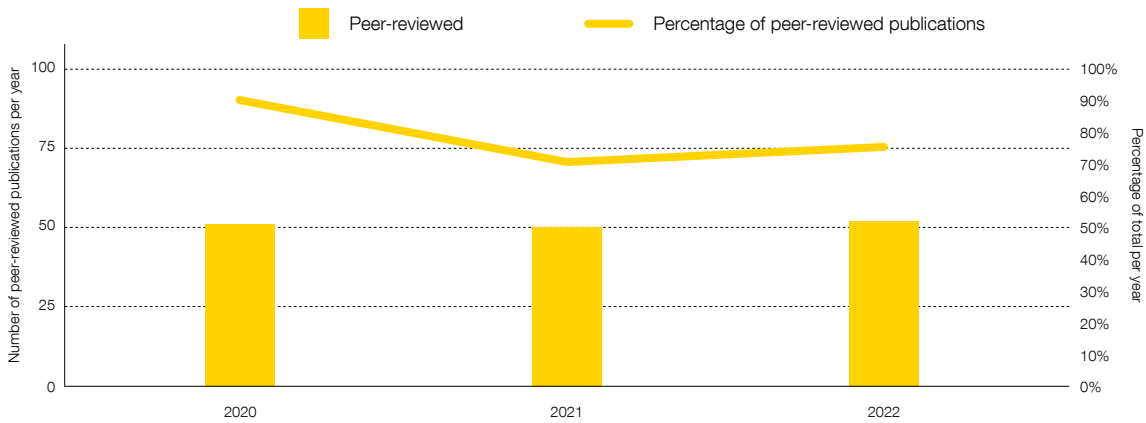


Figure 5.2 Refereed/peer reviewed publications per year

Number of peer-reviewed publications per year for the unit (bars). Percentage of peer-reviewed publications of the total annual number of publications (line).

Table 5.2.2 Number of publications for each publication type

The unit's publications sorted by publication and content type for the years 2020–2022.

	Peer-reviewed	Scientific but not peer-reviewed	Other (popular scientific, debate)
Article in journal	129	6	1
Article, review/survey	2		
Book	11	26	2
Chapter in book	12		
Collection (Editor)		2	
Report	1	4	1

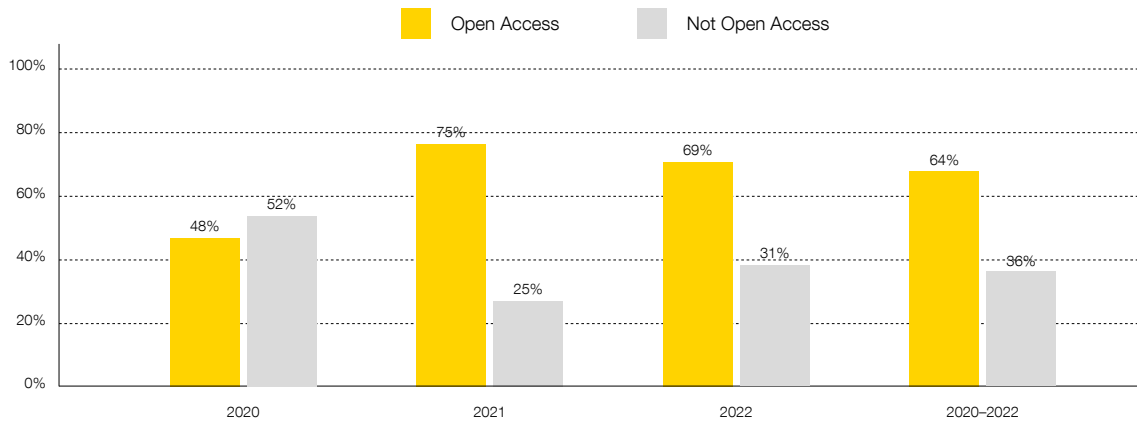


Figure 5.3 Percentage of peer-reviewed articles that are open access vs. articles behind paywalls

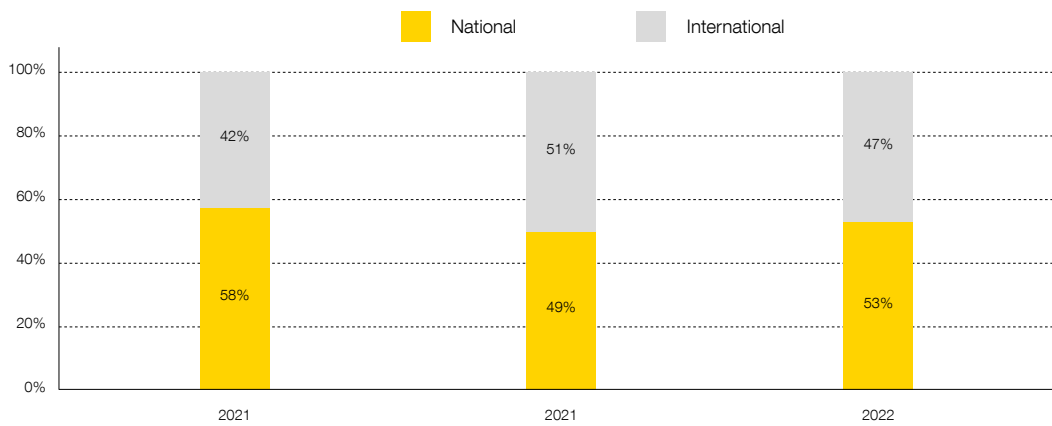


Figure 6.1 National and international co-authorship 2020-2022

Proportion of CTF publications with an international profile and publications where all authors were affiliated to Swedish organizations.

PUBLICATION LIST

Article in journal

1. Abadzhiev, A., Sukhov, A., Sihvonen, A., & Johnson, M. (2022). Managing the complexity of green innovation. *European Journal of Innovation Management*, 25(6), 850-866. <https://doi.org/10.1108/EJIM-02-2022-0098>
2. Altschwager, T., Conduit, J., Karpen, I. O., & Goodman, S. (2022). Event Engagement : Using Event Experiences to Build Brands. *Australasian Marketing Journal*. <https://doi.org/10.1177/14413582221127317>
3. Alves, H., Cepeda-Carrion, I., Ortega-Gutierrez, J., & Edvardsson, B. (2021). The role of intellectual capital in fostering SD-Oriented and firm performance. *Journal of Intellectual Capital*, 22(1), 57-75. <https://doi.org/10.1108/JIC-11-2019-0262>
4. Anderzen-Carlsson, A., Bäckman, C., & Almqvist, K. (2021). The professional relationship forms the base : Swedish child health care nurses' experiences of encountering mothers exposed to intimate partner violence. *International Journal of Qualitative Studies on Health and Well-being*, 16(1). <https://doi.org/10.1080/17482631.2021.1988043>
5. Arsenovic, J., De Keyser, A., Edvardsson, B., Tronvoll, B., & Gruber, T. (2021). Justice (is not the same) for all : The role of relationship activity for post-recovery outcomes. *Journal of Business Research*, 134, 342-351. <https://doi.org/10.1016/j.jbusres.2021.05.031>
6. Artusi, F., Magnanini, S., & Bellini, E. (2022). Embedding Values into Digital Artifacts : The Case of App Development in the Energy Sector The shift in focus from physical products to digital artifacts requires that designers understand and create new ways to embody values and experiences in the user experience. *Research technology management*, 65(2), 18-28. <https://doi.org/10.1080/08956308.2022.2017721>
7. Bolton, R. N., Gustafsson, A., Tarasi, C. O., & Witell, L. (2021). How customer experience management reconciles strategy differences between East and West. *Journal of global scholars of marketing science*, 31(3), 273-295. <https://doi.org/10.1080/21639159.2021.1921606>
8. Bolton, R. N., Gustafsson, A., Tarasi, C. O., & Witell, L. (2022). Designing satisfying service encounters : website versus store touchpoints. *Journal of the Academy of Marketing Science*, 50, 85-107. <https://doi.org/10.1007/s11747-021-00808-9>
9. Bolton, R. N., Gustafsson, A., Tarasi, C. O., & Witell, L. (2022). Managing a Global Retail Brand in Different Markets : Meta-Analyses of Customer Responses to Service Encounters. *Journal of Retailing*, 98(2), 294-314. <https://doi.org/10.1016/j.jretai.2021.03.004>
10. Bäckman, C., Bergkvist, L., & Kristensson, P. (2020). Elderly and care personnel's user experiences of a robotic shower. *Journal of Enabling Technologies (JET)*, 14(1), 1-13. <https://doi.org/10.1108/JET-07-2019-0033>
11. Bäckman, C., & Wästlund, E. (2022). The use of fitness-trackers and the role of motivational intermissions to maintain healthy behaviors : an explorative case study on runners. *South Florida Journal of Development*, 3(6), 6629-6650. <https://doi.org/10.46932/sfjdv3n6-020>
12. Camén, C., Tsaxiri, P., Aldenius, M., & Lidestam, H. (2020). Flexibility in contract design - is that possible? *Research in Transportation Economics*, 83. <https://doi.org/10.1016/j.retrec.2020.100899>
13. Caprioli, L., Larson, M., Ek, R., & Ooi, C.-S. (2021). The inevitability of essentializing culture in destination branding : the cases of fika and hygge. *Journal of Place Management and Development*(3), 346-361. <https://doi.org/10.1108/JPMD-12-2019-0114>
14. Cárdenas-Barrón, L. E., Reynoso, J., Edvardsson, B., & Cabrera, K. (2020). Inventory model optimization revisited: Understanding service inventories to improve performance. *Scientia Iranica. International Journal of Science and Technology*, 27(3), 1572-1592. <https://doi.org/10.24200/sci.2018.50333.1639>
15. Carida, A., Colurcio, M., Edvardsson, B., & Pastore, A. (2022). Creating harmony through a plethora of interests, resources and actors : the challenging task of orchestrating the service ecosystem. *Journal of service theory and practice*, 32(4), 477-504. <https://doi.org/10.1108/JSTP-06-2021-0110>
16. Carlqvist, C., Hagerman, H., Fellesson, M., Ekstedt, M., & Hellstrom, A. (2021). Health care professionals' experiences of how an eHealth application can function as a value-creating resource-a qualitative interview study. *BMC Health Services Research*, 21(1). <https://doi.org/10.1186/s12913-021-07232-3>

17. Caruelle, D., Shams, P., Gustafsson, A., & Lervik-Olsen, L. (2022). Affective Computing in Marketing: Practical Implications and Research Opportunities Afforded by Emotionally Intelligent Machines. *Marketing Letters*, 33, 163-196. <https://doi.org/10.1007/s11002-021-09609-0>
18. Chen, T., Dodds, S., Finsterwalder, J., Witell, L., Cheung, L., Falter, M., Garry, T., Snyder, H., & McColl-Kennedy, J. R. (2021). Dynamics of wellbeing co-creation : a psychological ownership perspective. *Journal of Service Management*, 32(3), 383-406. <https://doi.org/10.1108/JOSM-09-2019-0297>
19. Chu, W., Williams, H., Verghese, K., Wever, R., & Glad, W. (2020). Tensions and opportunities : An activity theory perspective on date and storage label design through a literature review and co-creation sessions. *Sustainability*, 12(3). <https://doi.org/10.3390/su12031162>
20. Colurcio, M., Edvardsson, B., & Vigolo, V. (2022). Guest Editorial : Framing Silver Economy in a management perspective: from practice to theory. *Sinergie*, 40(3), 11-16. <https://doi.org/10.7433/S119.2022.01>
21. Colurcio, M., Vigolo, V., & Edvardsson, B. (2022). Fifty years of research on silver economy : a bibliometric analysis. *Sinergie*, 40(3), 149-171. <https://doi.org/10.7433/S119.2022.07>
22. Cronholm, S., Göbel, H., & Åkesson, M. (2020). ITIL Compliance with Service-Dominant Logic. *e-Service Journal*, 11(2), 74-97. <https://doi.org/10.2979/eservicej.11.2.03>
23. Cruose, J., & Ahlin, K. (2022). Publishers Working with Open Government Data : A Work Framework. *eJournal of eDemocracy & Open Government*, 14(1), 19-49. <https://doi.org/10.29379/jedem.v14i1.688>
24. Danatzis, I., Karpen, I. O., & Kleinaltenkamp, M. (2021). Actor Ecosystem Readiness : Understanding the Nature and Role of Human Abilities and Motivation in a Service Ecosystem. *Journal of Service Research*, 25(2), 260-280. <https://doi.org/10.1177/10946705211032275>
25. Davoudi, S., & Johnson, M. (2022). Preconditions of Coordination in Regional Public Organizations. *Public Management Review*. <https://doi.org/10.1080/14719037.2022.2134915>
26. De Vin, L. J., Junghage, E., Odhe, J., & Jacobsson, L. (2020). Extending the Use of Full-Scale Lean Production Simulators : Their Role as Innovation Testbeds. *9th Swedish Production Symposium, SPS 2020, 7 October 2020 through 8 October 2020*, 13, 3-12. <https://doi.org/10.3233/ATDE200138>
27. Dehling, S., Edvardsson, B., & Tronvoll, B. (2022). How do actors coordinate for value creation? : A signaling and screening perspective on resource integration. *Journal of Services Marketing*, 36(9), 18-26. <https://doi.org/10.1108/JSM-02-2020-0068>
28. Echeverri, P. (2020). Value-forming micro-practices of managerial coaching. *Coaching: An International Journal of Theory, Research and Practice*, 13(2), 191-208. <https://doi.org/10.1080/17521882.2019.1707245>
29. Echeverri, P. (2021). Interaction value formation spaces: configurations of practice-theory elements in service ecosystems. *Journal of Services Marketing*, 35(9), 28-39. <https://doi.org/10.1108/jsm-03-2021-0084>
30. Echeverri, P. (2021). Not so 'Eco' Service Ecosystems : Value Co-destruction Practices Affecting Vulnerable Patients in Special Transport. *Journal of Creating Value*, 7(1), 103-116. <https://doi.org/10.1177/23949643211012137>
31. Echeverri, P. (2022). Professional reflexivity in customer involvement : Tensions and ambiguities in between identities. *Marketing Theory*, 22(4), 477-500. <https://doi.org/10.1177/14705931221087710>
32. Echeverri, P., & Skålén, P. (2021). Value co-destruction : Review and conceptualization of interactive value formation. *Marketing Theory*. <https://doi.org/10.1177/1470593120983390>
33. Edlom, J., & Karlsson, J. (2021). Hang with Me—Exploring Fandom, Brandom, and the Experiences and Motivations for Value Co-Creation in a Music Fan Community. *International Journal of Music Business Research*, 10(1), 17-31. <https://doi.org/10.2478/ijmbr-2021-0003>
34. Edlom, J., & Karlsson, J. (2021). Keep the Fire Burning : Exploring the Hierarchies of Music Fandom and the Motivations of Superfans. *Media and Communication*, 9(3), 123-132. <https://doi.org/10.17645/mac.v9i3.4013>
35. Edvardsson, B., & Tronvoll, B. (2020). How platforms foster service innovations. *Organizational Dynamics*, 49(3). <https://doi.org/10.1016/j.orgdyn.2019.04.007>
36. Edvardsson, B., & Tronvoll, B. (2022). Crisis behaviors as drivers of value co-creation transformation. *International Journal of Quality and Service Sciences*, 14(5), 1-15. <https://doi.org/10.1108/IJQSS-01-2021-0001>

37. Engen, M., Fransson, M., Quist, J., & Skålén, P. (2021). Continuing the development of the public service logic : a study of value co-destruction in public services. *Public Management Review*, 23(6), 886-905. <https://doi.org/10.1080/14719037.2020.1720354>
38. Fazey, I., Schapke, N., Caniglia, G., Hodgson, A., Kendrick, I., Lyon, C., Page, G., Patterson, J., Riedy, C., Strasser, T., Verveen, S., Adams, D., Goldstein, B., Klaes, M., Leicester, G., Linyard, A., McCurdy, A., Ryan, P., Sharpe, B., . . . Young, H. R. (2020). Transforming knowledge systems for life on Earth : Visions of future systems and how to get there. *Energy Research & Social Science*, 70. <https://doi.org/10.1016/j.erss.2020.101724>
39. Fellesson, M., & Salomonson, N. (2020). It takes two to interact – Service orientation, negative emotions and customer phubbing in retail service work. *Journal of Retailing and Consumer Services*, 54, 1-8. <https://doi.org/10.1016/j.jretconser.2020.102050>
40. Ferrell, O. C., Conduit, J., Edvardsson, B., & Vargo, S. L. (2021). The past and future of marketing theory and practice : a tribute to the 50th anniversary of the Academy of Marketing Science. *AMS Review*, 11(3-4), 390-394. <https://doi.org/10.1007/s13162-021-00222-y>
41. Friman, M., Lättman, K., & Olsson, L. E. (2020). Carpoolers' perceived accessibility of carpooling. *Sustainability*, 12(21). <https://doi.org/10.3390/su12218976>
42. Friman, M., Lättman, K., & Olsson, L. E. (2020). Public Transport Quality, Safety, and Perceived Accessibility. *Sustainability*, 12(9). <https://doi.org/10.3390/su12093563>
43. Friman, M., & Olsson, L. E. (2020). Daily Travel and Wellbeing among the Elderly. *International Journal of Environmental Research and Public Health*, 17(7). <https://doi.org/10.3390/ijerph17072342>
44. Friman, M., Rosenbaum, M., & Otterbring, T. (2020). The relationship between exchanged resources and loyalty intentions. *Service Industries Journal*, 40(11-12), 846-865. <https://doi.org/10.1080/02642069.2018.1561875>
45. Fyrberg Yngfalk, A., & Yngfalk, C. (2020). Modifying markets : Consumerism and institutional work in nonprofit marketing. *Marketing Theory*, 20(3), 343-362. <https://doi.org/10.1177/1470593119885169>
46. Geissinger, A., Laurell, C., & Öberg, C. (2021). Copycats among underdogs-echoing the sharing economy business model. *Industrial Marketing Management*, 96, 287-299. <https://doi.org/10.1016/j.indmarman.2021.06.006>
47. Govindarajan, V., & Wikström, F. (2022). Teachers move up from 'lecturing' to 'inspiring'. *Science Reporter*, 59(7), 34-36. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-91021>
48. Gremyr, I., Birch-Jensen, A., Kumar, M., & Löfberg, N. (2022). Quality functions' use of customer feedback as activation triggers for absorptive capacity and value co-creation. *International Journal of Operations & Production Management*, 42(13), 218-242. <https://doi.org/10.1108/IJOPM-11-2021-0692>
49. Gummerus, J., Mickelsson, J., Trischler, J., Harkonen, T., & Gronroos, C. (2021). ActS - Service design based on human activity sets. *Journal of Service Management*, 32(6), 28-54. <https://doi.org/10.1108/JOSM-09-2019-0275>
50. Gustafsson, A., Snyder, H., & Witell, L. (2020). Service Innovation : A New Conceptualization and Path Forward. *Journal of Service Research*. <https://doi.org/10.1177/1094670520908929>
51. Guyader, H., Friman, M., & Olsson, L. E. (2021). Shared Mobility : Evolving Practices for Sustainability. *Sustainability*, 13(21). <https://doi.org/10.3390/su132112148>
52. Gärling, T., Ettema, D., Fors Connolly, F., Friman, M., & Olsson, L. E. (2020). Review and Assessment of Self-Reports of Travel-Related Emotional Wellbeing. *Journal of Transport and Health*, 17. <https://doi.org/10.1016/j.jth.2020.100843>
53. Gössling, S., Larson, M., & Pumputis, A. (2021). Mutual surveillance on Airbnb. *Annals of Tourism Research*, 91. <https://doi.org/10.1016/j.annals.2021.103314>
54. Han, H. S., Lee, J., Edvardsson, B., & Verm, R. (2022). Developing a strategic viability-fit model of mobile technology adoption in hotels. *Journal of Hospitality and Tourism Technology*, 13(1), 85-99. <https://doi.org/10.1108/JHTT-05-2020-0109>
55. Han, S. H., Lee, J., Edvardsson, B., & Verma, R. (2021). Mobile technology adoption among hotels : Managerial issues and opportunities. *Tourism Management Perspectives*, 38. <https://doi.org/10.1016/j.tmp.2021.100811>
56. Henkel, A. P., Caic, M., Blaurock, M., & Okan, M. (2020). Robotic transformative service research : deploying social robots for consumer well-being during COVID-19 and beyond. *Journal of Service Management*, 31(6), 1131-1148. <https://doi.org/10.1108/JOSM-05-2020-0145>

57. Henkens, B., Verleye, K., Lariviere, B., & Perks, H. (2022). Pathways to Service System Smartness for Firms. *Journal of Service Research*. <https://doi.org/10.1177/10946705221132583>
58. Hietanen, J., Murray, J. B., Sihvonen, A., & Tikkanen, H. (2020). Seduced by “fakes” : Producing the excessive interplay of authentic/counterfeit from a Baudrillardian perspective. *Marketing Theory*, 20(1), 23-43. <https://doi.org/10.1177/1470593119870214>
59. Hietanen, J., & Sihvonen, A. (2021). Catering to Otherness : Levinasian Consumer Ethics at Restaurant Day. *Journal of Business Ethics*, 168(2), 261-276. <https://doi.org/10.1007/s10551-019-04421-3>
60. Hunter-Jones, P., Line, N., Zhang, J. J., Malthouse, E. C., Witell, L., & Hollis, B. (2020). Visioning a hospitality-oriented patient experience (HOPE) framework in health care. *Journal of Service Management*, 31(5), 869-888. <https://doi.org/10.1108/JOSM-11-2019-0334>
61. Högberg, J., Wästlund, E., Aas, T. H., Hjemdahl, K., & Nordgård, D. (2020). Herding the Hordes : Using Location-Based Services and Mobile Messaging to Affect Visitor Behavior. *Journal of Hospitality & Tourism Research*, 44(5), 870-878. <https://doi.org/10.1177/1096348020912449>
62. Johansson, L.-O., Barbopoulos, I., & Olsson, L. E. (2020). Deactivating economic motives in green consumption through social and moral salience. *Journal of Consumer Marketing*, 37(3), 247-258. <https://doi.org/10.1108/JCM-10-2018-2904>
63. Karlsson, J., & Skålen, P. (2022). Learning resource integration by engaging in value cocreation practices : A study of music actors. *Journal of service theory and practice*, 32(7), 14-35. <https://doi.org/10.1108/JSTP-09-2021-0193>
64. Karlsson, P., & Noela, M. (2021). Beliefs influencing students' career choices in Sweden and reasons for not choosing the accounting profession. *Journal of Accounting Education*, 58, 1-17. <https://doi.org/10.1016/j.jaccedu.2021.100756>
65. Karpen, I. O., Holmlid, S., & Yu, E. (2021). Service Design in the Context of Complexity : Moving between Plurality and Tension towards a Future Research Agenda. *International Journal of Design*, 15(3), 1-10. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88230>
66. Karpen, I. O., & Senova, M. (2021). Designing for Trust : Role and Benefits of Human-Centered Design in the Legal System. *International Journal for Court Administration*, 12(3). <https://doi.org/10.36745/IJCA.422>
67. Kawabata, Y., Ryo, T., Friman, M., Olsson, L. E., Lättman, K., & Fujii, S. (2020). Time Series Analysis of the Causal Effects among Perceived Quality, Satisfaction, Loyalty and Frequency of Public Transportation Use. *Frontiers in Built Environment*, 6. <https://doi.org/10.3389/fbuil.2020.00137>
68. Kelleher, C., O'Loughlin, D., Gummerus, J., & Penaloza, L. (2020). Shifting Arrays of a Kaleidoscope : The Orchestration of Relational Value Cocreation in Service Systems. *Journal of Service Research*, 23(2), 211–228. <https://doi.org/10.1177/1094670519882495>
69. Kitkowska, A., Shulman, Y., Martucci, L., & Wästlund, E. (2020). Psychological Effects and Their Role in Online Privacy Interactions : A Review. *IEEE Access*, 8, 21236-21260. <https://doi.org/10.1109/ACCESS.2020.2969562>
70. Kleinaltenkamp, M., Conduit, J., Plewa, C., Karpen, I. O., & Jaakkola, E. (2021). Engagement-driven institutionalization in market shaping : Synchronizing and stabilizing collective engagement. *Industrial Marketing Management*, 99, 69-78. <https://doi.org/10.1016/j.indmarman.2021.09.010>
71. Kleinaltenkamp, M., Karpen, I. O., & Kleinaltenkamp, M. J. (2022). A sense-based perspective on market shaping : Theorizing strategies for the origination and propagation of new resource linkages. *Industrial Marketing Management*, 100, 145-156. <https://doi.org/10.1016/j.indmarman.2021.11.005>
72. Klenner, N. F., Gemser, G., & Karpen, I. O. (2022). Entrepreneurial ways of designing and designerly ways of entrepreneuring : Exploring the relationship between design thinking and effectuation theory. *The Journal of product innovation management*, 39(1), 66-94. <https://doi.org/10.1111/jpim.12587>
73. Korbelyiova, L., Malefors, C., Lalander, C., Wikström, F., & Eriksson, M. (2021). Paper vs leaf : Carbon footprint of single-use plates made from renewable materials. *Sustainable Production and Consumption*, 25, 77-90. <https://doi.org/10.1016/j.spc.2020.08.004>
74. Korper, A. K., Patricio, L., Holmlid, S., & Witell, L. (2020). Service design as an innovation approach in technology startups : a longitudinal multiple case study. *Creativity and Innovation Management*, 29(2), 303-323. <https://doi.org/10.1111/caim.12383>

75. Koskela-Huotari, K., Patrício, L., Zhang, J., Karpen, I. O., Sangiorgi, D., Anderson, L., & Bogicevic, V. (2021). Service system transformation through service design : Linking analytical dimensions and service design approaches. *Journal of Business Research*, 136, 343-355. <https://doi.org/10.1016/j.jbusres.2021.07.034>
76. Koskela-Huotari, K., & Siltaloppi, J. (2020). Rethinking the actor in service research : toward a processual view of identity dynamics. *Journal of service theory and practice*, 30(4-5), 437-457. <https://doi.org/10.1108/JSTP-11-2018-0245>
77. Koskela-Huotari, K., Vink, J., & Edvardsson, B. (2020). The institutional turn in service research: taking stock and moving ahead. *Journal of Services Marketing*, 34(3), 373-387. <https://doi.org/10.1108/JSM-02-2019-0101>
78. Kristensson, P., Pedersen, P. E., & Thorbjørnsen, H. (2020). New perspectives on consumer adoption and diffusion of innovations. *Journal of Business Research*, 116, 522-525. <https://doi.org/10.1016/j.jbusres.2020.04.048>
79. Kriz, A., Tresidder, J., Dowd, A.-M., Weerawardena, J., Witell, L., Snyder, H., & de Pallant, R. (2022). Business model–dynamic capabilities and open innovation initiatives in research-intensive organisations : A case of Australia’s national science agency. *Australian journal of public administration*. <https://doi.org/10.1111/1467-8500.12570>
80. Lindskog, C., & Netz, J. (2021). Balancing between stability and change in Agile teams. *International Journal of Managing Projects in Business*, 14(7), 1529-1554. <https://doi.org/10.1108/IJMPB-12-2020-0366>
81. Lundberg, H., & Öberg, C. (2021). Teachers, researchers, but not innovators? : Rethinking university-industry collaboration. *Journal of business & industrial marketing*, 36(13), 161-173. <https://doi.org/10.1108/JBIM-03-2020-0126>
82. Lättman, K., Friman, M., & Olsson, L. E. (2020). Restricted car-use and perceived accessibility. *Transportation Research Part D: Transport and Environment*, 78, 1-10. <https://doi.org/10.1016/j.trd.2019.102213>
83. Mattsson, L., & Williams, H. (2022). Avoidance of Supermarket Food Waste—Employees’ Perspective on Causes and Measures to Reduce Fruit and Vegetables Waste. *Sustainability*, 14(16). <https://doi.org/10.3390/su141610031>
84. Nöjd, S., Westman Trischler, J., Otterbring, T., Andersson K, P., & Wästlund, E. (2020). Bridging the valuescape with digital technology : A mixed methods study on customers’ value creation process in the physical retail space. *Journal of Retailing and Consumer Services*, 56. <https://doi.org/10.1016/j.jretconser.2020.102161>
85. Olsson, L. E., Friman, M., Kawabata, Y., & Fujii, S. (2021). Integrating Planned Behavior and Stage-of-Change into a Cycling Campaign. *Sustainability*, 13(18). <https://doi.org/10.3390/su131810116>
86. Olsson, L. E., Friman, M., & Lättman, K. (2021). Accessibility Barriers and Perceived Accessibility : Implications for Public Transport. *Urban Science*, 5(3). <https://doi.org/10.3390/urbansci5030063>
87. Olsson, L. E., Friman, M., Lättman, K., & Fujii, S. (2020). Travel and life satisfaction - From Gen Z to the silent generation. *Journal of Transport and Health*, 18. <https://doi.org/10.1016/j.jth.2020.100894>
88. Olsson, L. E., Sinha, R., Frostell, B., & Friman, M. (2022). What Can Be Done to Change? : The Environmental and Behavioral Consequences of Interventions for Sustainable Travel. *Sustainability*, 14(3). <https://doi.org/10.3390/su14031345>
89. Otterbring, T., Bhatnagar, R., Samuelsson, P., & Borau, S. (2021). Positive gender congruency effects on shopper responses : Field evidence from a gender egalitarian culture. *Journal of Retailing and Consumer Services*, 63. <https://doi.org/10.1016/j.jretconser.2021.102738>
90. Otterbring, T., Bodin Danielsson, C., & Pareigis, J. (2020). Office types and workers’ cognitive vs affective evaluations from a noise perspective. *Journal of Managerial Psychology*, 36(4), 415-431. <https://doi.org/10.1108/JMP-09-2019-0534>
91. Otterbring, T., Elbæk, C. T., & Lu, C. (2021). Masculine (low) digit ratios predict masculine food choices in hungry consumers. *Food Quality and Preference*. <https://doi.org/10.1016/j.foodqual.2020.104168>
92. Otterbring, T., Gidlof, K., Rolschau, K., & Shams, P. (2020). Cereal Deal : How the Physical Appearance of Others Affects Attention to Healthy Foods. *Perspectives on Behavior Science*, 43(3), 451-468. <https://doi.org/10.1007/s40614-020-00242-2>

93. Otterbring, T., Wu, F., & Kristensson, P. (2021). Too close for comfort? : The impact of salesperson-customer proximity on consumers' purchase behavior. *Psychology & Marketing*, 38(9), 1576-1590. <https://doi.org/10.1002/mar.21519>
94. Pallant, J. L., Karpen, I. O., & Sands, S. J. (2022). What drives consumers to customize products? : The mediating role of brand experience. *Journal of Retailing and Consumer Services*, 64. <https://doi.org/10.1016/j.jretconser.2021.102773>
95. Patricio, L., Sangiorgi, D., Mahr, D., Caic, M., Kalantari, S., & Sundar, S. (2020). Leveraging service design for healthcare transformation : toward people-centered, integrated, and technology-enabled healthcare systems. *Journal of Service Management*, 1(5), 889-909. <https://doi.org/10.1108/JOSM-11-2019-0332>
96. Pilawa, J., Witell, L., Valtakoski, A., & Kristensson, P. (2022). Service innovativeness in retailing: Increasing the relative attractiveness during the COVID-19 pandemic. *Journal of Retailing and Consumer Services*, 67. <https://doi.org/10.1016/j.jretconser.2022.102962>
97. Popa, T., Karpen, I. O., Wright, M. R., & Dean, O. (2022). Procedural Justice in a Tribunal Context : An Exploration and Extension of the Concept from a Human-Centred Design Perspective. *University of New South Wales Law Journal*, 45(4), 1657-1692. <https://doi.org/10.53637/XCMO4701>
98. Rosenbaum, M. S., Friman, M., Ramirez, G. C., & Otterbring, T. (2020). Therapeutic servicescapes: Restorative and relational resources in service settings. *Journal of Retailing and Consumer Services*, 55. <https://doi.org/10.1016/j.jretconser.2020.102078>
99. Samuelsson, P., & Witell, L. (2022). Social Entrepreneurs in Service : Motivations and Types. *Journal of Services Marketing*, 36(9), 27-40. <https://doi.org/10.1108/JSM-08-2017-0274>
100. Sebhatu, S. P., & Enquist, B. (2022). Values and Multi-stakeholder Dialog for Business Transformation in Light of the UN Sustainable Development Goals. *Journal of Business Ethics*, 180(4), 1059-1074. <https://doi.org/10.1007/s10551-022-05195-x>
101. Shulman, Y., Kitkowska, A., & Meyer, J. (2022). Informing Users : Effects of Notification Properties and User Characteristics on Sharing Attitudes. *International Journal of Human-Computer Interaction*, 1-29. <https://doi.org/10.1080/10447318.2022.2086592>
102. Sihvonen, A., Luoma, J., & Falk, T. (2021). How customer knowledge affects exploration : Generating, guiding, and gatekeeping. *Industrial Marketing Management*, 94, 90-105. <https://doi.org/10.1016/j.indmarman.2021.02.005>
103. Skarin, F., & Wästlund, E. (2020). Increasing Students' Long-Term Well-Being by Mandatory Intervention : A Positive Psychology Field Study. *Frontiers in Psychology*, 11. <https://doi.org/10.3389/fpsyg.2020.553764>
104. Skarin, F., Wästlund, E., & Gustafsson, H. (2021). Maintaining or Losing Intervention-Induced Health-Related Behavior Change. : A Mixed Methods Field Study. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.688192>
105. Skålén, P., & Gummerus, J. (2022). Conceptualizing Services and Service Innovation : A Practice Theory Study of the Swedish Music Market. *Journal of Service Research*. <https://doi.org/10.1177/10946705211062693>
106. Snyder, H., Witell, L., Gustafsson, A., & McColl-Kennedy, J. R. (2022). Consumer lying behavior in service encounters. *Journal of Business Research*, 141, 755-769. <https://doi.org/10.1016/j.jbusres.2021.11.075>
107. Störe, S. J., Tillfors, M., Wästlund, E., Angelhoff, C., Andersson, G., & Norell-Clarke, A. (2021). The effects of a sleep robot intervention on sleep, depression and anxiety in adults with insomnia : Study protocol of a randomized waitlist-controlled trial. *Contemporary Clinical Trials*, 110. <https://doi.org/10.1016/j.cct.2021.106588>
108. Störe, S. J., Tillfors, M., Wästlund, E., Angelhoff, C., Andersson, G., & Norell-Clarke, A. (2022). The effects of a sleep robot intervention on sleep, depression and anxiety in adults with insomnia : A randomized waitlist-controlled trial. *The 16th World Sleep Congress, March 11-16, 2022 in Rome, Italy*, 100(Suppl 1), S304-S304. <https://doi.org/10.1016/j.sleep.2022.05.822>
109. Störe, S. J., Tillfors, M., Wästlund, E., Angelhoff, C., & Norell-Clarke, A. (2022). Technically sleeping? : A clinical single-case study of a commercial sleep robot. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.919023>

110. Störe, S. J., Tillfors, M., Wästlund, E., Angelhoff, C., Andersson, G., & Norell-Clarke, A. (2022). The effects of a sleep robot intervention on sleep, depression and anxiety in adults with insomnia : A randomized waitlist-controlled trial. *Journal of Sleep Research*, 32(3). <https://doi.org/10.1111/jsr.13758>
111. Sukhov, A., Lättman, K., Olsson, L. E., Friman, M., & Fujii, S. (2021). Assessing travel satisfaction in public transport : A configurational approach. *Research in Transportation Business and Management (RTBM)*, 93. <https://doi.org/10.1016/j.trd.2021.102732>
112. Sukhov, A., Olsson, L. E., & Friman, M. (2022). Necessary and sufficient conditions for attractive public Transport : Combined use of PLS-SEM and NCA. *Transportation Research Part A: Policy and Practice*, 158, 239-250. <https://doi.org/10.1016/j.tra.2022.03.012>
113. Sukhov, A., Sihvonen, A., Netz, J., Magnusson, P., & Olsson, L. E. (2021). How Experts Screen Ideas : The Complex Interplay of Intuition, Analysis, and Sensemaking. *The Journal of product innovation management*, 38(2), 248-270. <https://doi.org/10.1111/jpim.12559>
114. Tierney, K. D., Karpen, I. O., & Westberg, K. (2022). Brand meaning and institutional work : The light and dark sides of service employee practices. *Journal of Business Research*, 151, 244-256. <https://doi.org/10.1016/j.jbusres.2022.06.045>
115. Tóth, Z., Sklyar, A., Kowalkowski, C., Sörhammar, D., Tronvoll, B., & Wirths, O. (2022). Tensions in digital servitization through a paradox lens. *Industrial Marketing Management*, 102, 438-450. <https://doi.org/10.1016/j.indmarman.2022.02.010>
116. Trischler, J., Johnson, M., & Kristensson, P. (2020). A service ecosystem perspective on the diffusion of sustainability-oriented user innovations. *Journal of Business Research*, 116, 552-560. <https://doi.org/10.1016/j.jbusres.2020.01.011>
117. Trischler, J., & Kaluza, J. (2021). Co-production in the recruitment of frontline public service employees. *Policy and Politics*, 49(3), 473-491. <https://doi.org/10.1332/030557320X15986403024733>
118. Trischler, J., Svensson, P. O., Williams, H., & Wikström, F. (2022). Citizens as an innovation source in sustainability transitions - linking the directionality of innovations with the locus of the problem in transformative innovation policy. *Public Management Review*. <https://doi.org/10.1080/14719037.2022.2062041>
119. Trischler, J., & Westman Trischler, J. (2022). Design for experience : a public service design approach in the age of digitalization. *Public Management Review*, 24(8), 1251-1270. <https://doi.org/10.1080/14719037.2021.1899272>
120. Tronvoll, B., Sklyar, A., Sörhammar, D., & Kowalkowski, C. (2020). Transformational shifts through digital servitization. *Industrial Marketing Management*, 89, 293-305. <https://doi.org/10.1016/j.indmarman.2020.02.005>
121. Tuominen, T., Edvardsson, B., & Reynoso, J. (2020). Institutional change and routine dynamics in service ecosystems. *Journal of Services Marketing*, 34(4), 575-586. <https://doi.org/10.1108/JSM-06-2019-0243>
122. Vakulenko, Y., Arsenovic, J., Hellstrom, D., & Shams, P. (2022). Does delivery service differentiation matter? : Comparing rural to urban e-consumer satisfaction and retention. *Journal of Business Research*, 142, 476-484. <https://doi.org/10.1016/j.jbusres.2021.12.079>
123. Vargo, S. L., & Koskela-Huotari, K. (2020). Advancing conceptual-only articles in marketing. *AMS Review*, 10, 1-5. <https://doi.org/10.1007/s13162-020-00173-w>
124. Varman, R., Skålén, P., Belk, R. W., & Chaudhuri, H. R. (2021). Normative Violence in Domestic Service : A Study of Exploitation, Status, and Grievability. *Journal of Business Ethics*, 171, 645-665. <https://doi.org/10.1007/s10551-020-04444-1>
125. Varman, R., Vijay, D., & Skålén, P. (2022). The Conflicting Conventions of Care : Transformative Service as Justice and Agape. *Journal of Service Research*, 5(1), 86-107. <https://doi.org/10.1177/10946705211018503>
126. Vink, J., Koskela-Huotari, K., Tronvoll, B., Edvardsson, B., & Wetter-Edman, K. (2021). Service Ecosystem Design : Propositions, Process Model, and Future Research Agenda. *Journal of Service Research*, 24(2), 186. <https://doi.org/10.1177/1094670520952537>
127. Waygood, O., Boisjoly, G., Manaugh, K., Sener, I. N., Wang, B., Sun, Y., Friman, M., & Olsson, L. E. (2021). Do You Miss Your Friends? Life Satisfaction during the Second Wave of Covid-19. *Journal of Transport and Health*, 22. <https://doi.org/10.1016/j.jth.2021.101171>

128. Waygood, O., Olsson, L. E., Taniguchi, A., & Friman, M. (2020). The role of children's independent mobility and social media use for face-to-face social interaction with friends. *Transportation*, 47(4), 1987-2009. <https://doi.org/10.1007/s11116-019-10037-3>
129. Williams, H., Lindström, A., Trischler, J., Wikström, F., & Rowe, Z. (2020). Avoiding food becoming waste in households : The role of packaging in consumers' practices across different food categories. *Journal of Cleaner Production*, 265, 1-14. <https://doi.org/10.1016/j.jclepro.2020.121775>
130. Witell, L., Kowalkowski, C., Perks, H., Raddats, C., Schwabe, M., Benedettini, O., & Burton, J. (2020). Characterizing customer experience management in business markets. *Journal of Business Research*, 116, 420-430. <https://doi.org/10.1016/j.jbusres.2019.08.050>
131. Zasa, F. P., Artusi, F., & Verganti, R. (2022). Through thick and thin : The moment of meaning as a boundary object. *Creativity and Innovation Management*. <https://doi.org/10.1111/caim.12535>
132. Öberg, C. (2021). Conflicting logics for crisis management in tourism. *Journal of Tourism Futures*, 7(3), 311-321. <https://doi.org/10.1108/JTF-10-2020-0191>
133. Öberg, C. (2021). Episodic supply chains at times of disruption. *Supply chain management*. <https://doi.org/10.1108/SCM-11-2020-0595>
134. Öberg, C., & Aronsson, H. (2022). The fair trade of environmental effects and regional disparities. *Industrial Marketing Management*, 105, 311-321. <https://doi.org/10.1016/j.indmarman.2022.06.014>
135. Öberg, C., Geissinger, A., & Nykvist, R. (2021). Managers, Minds and Machines in the Age of Artificial Intelligence. *Academy of Management Proceedings*, 13120. <https://doi.org/10.5465/AMBPP.2021.13120abstract>
136. Öberg, C., & Lundberg, H. (2022). Mechanisms of knowledge development in a knowledge ecosystem. *Journal of Knowledge Management*, 26(11), 293-307. <https://doi.org/10.1108/JKM-11-2021-0814>

Article in journal, review

137. Jamei, E., Chan, M., Chau, H. W., Gaisie, E., & Lättman, K. (2022). Perceived Accessibility and Key Influencing Factors in Transportation. *Sustainability*, 14(17), 1-22. <https://doi.org/10.3390/su141710806>
138. Lagin, M., Hakansson, J., Nordstrom, C., Nyberg, R. G., & Öberg, C. (2022). Last-mile logistics of perishable products : A review of effectiveness and efficiency measures used in empirical research. *International Journal of Retail & Distribution Management*, 50(13), 116-139. <https://doi.org/10.1108/IJRDM-02-2021-0080>

Book chapter

139. Aas, T. H., Hjemdahl, K. M., Nordgård, D., & Wästlund, E. (2021). Outbound open innovation in tourism : Lessons from an innovation project in Norway. In A. L. Mention & A. Tor Helge (Eds.), *Managing Open Service Innovation* (pp. 167-185). World Scientific. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-89128>
140. Bäckström, I., & Magnusson, P. (2021). Managing digital employee-driven innovation : The role of middle-level managers and ambidextrous leadership. In P. D. Peter Ekman & K. Christina (Eds.), *Management and information technology after digital transformation* (1 ed., pp. 138-148). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-87086>
141. Börjesson, M., Friman, M., & Fadaei, M. (2021). Large increases in bus use in Sweden : Lessons learned. In *Handbook of Public Transport Research* (pp. 434-453). Edward Elgar Publishing. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-91084>
142. Edvardsson, B., & Tronvoll, B. (2022). Overview of the Book. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (1st ed., pp. 3-18). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94913>
143. Edvardsson, B., Tronvoll, B., & Witell, L. (2022). Understanding Key Market Challenges Through Service Innovation. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (1st ed., pp. 613-627). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94917>

144. Enquist, B., & Sebhatu, S. P. (2020). Sustainability in city ecosystems for societal practice in the light of the 2030 agenda. In *Key Challenges And Opportunities For Quality, Sustainability And Innovation In The Fourth Industrial Revolution: : Quality And Service Management In The Fourth Industrial Revolution - Sustainability And Value Co-creation* (pp. 233-258). World Scientific. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-85902>
145. Enquist, B., & Sebhatu, S. P. (2021). Business ecosystem for sustainability : Addressing fossil-free transformation. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 15-33). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88030>
146. Enquist, B., & Sebhatu, S. P. (2021). The circular economy and values-based sustainability business practice : People & planet positive at IKEA. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 34-54). Taylor & Francis. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88040>
147. Enquist, B., & Sebhatu, S. P. (2022). Service Management for Sustainable Business Transformation. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (1st ed., pp. 411-435). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94922>
148. Enquist, B., Sebhatu, S. P., & Edvardsson, B. (2021). Implications from business transformation for a sustainable future. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 213-225). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88032>
149. Falk, P. (2021). Towards a Public Sector Data Culture : Data as an Individual and Communal Resource in Progressing Democracy. In *SpringerBriefs in Applied Sciences and Technology* (pp. 35-45). Springer Science+Business Media B.V. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-83865>
150. Fellesson, M. (2022). Tjänstedesign och tjänstelogik. In P. Ahlström, B. Bjelke, S. Runsteen, & P. Sandberg (Eds.), *Bra bostäder för seniorer – En antologi*. (pp. 115-120). Svensk byggtjänst. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-93808>
151. Friman, M., & Olsson, L. E. (2020). Roads to Car-Free Cities– Introducing The Balanced Transport Intervention Ladder. In R. M. A. F. A. K. E. Doheim (Ed.), *Humanizing Cities Through Car-Free City Development and Transformation* (pp. 165-184). IGI Global. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-79183>
152. Geissinger, A., Laurell, C., Öberg, C., & Sandström, C. (2021). The sharing economy as an entrepreneurial evolution of electronic commerce. In E. Vinogradov, B. Leick, & D. Assadi (Eds.), *Digital Entrepreneurship and the Sharing Economy*. Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-89203>
153. Karpen, I. O., Vink, J., & Trischler, J. (2022). Service Design for Systemic Change in Legacy Organizations : A Bottom-Up Approach to Redesign. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (1st ed., pp. 457-479). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94918>
154. Kristensson, P. (2021). Transforming people's lives and world for the better : The new purpose of marketing. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 110-119). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88036>
155. Kristensson, P., Blom, J., & Wästlund, E. (2022). Behavior Change : Five Ways to Facilitate Co-creation of Service for a Better World. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (1st ed., pp. 303-314). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94916>
156. Larson, M. (2021). Letter from Mia Larson. In A. Correia & S. Dolnicar (Eds.), *Women's voices in tourism research – Contributions to knowledge and letters to future generations* (pp. 589-590). The University of Queensland. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-89430>. <https://doi.org/10.14264/817f87d>
157. Leis-Peters, A., Swart, I., Cloete, A., & Pettersson, P. (2021). A Common Spatial Scene? : Young People and Faith-Based Organisations at the Margins. In S. Ignatius, V. Auli, R. Marlize, & L.-P. Annette (Eds.), *Stuck in the Margins? Young people and faith-based organisations in South African and Nordic localities*. (pp. 247-265). Vandenhoeck & Ruprecht. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-87707>. <https://doi.org/10.13109/9783666568558.247>

158. Lindahl, G., Ahlström, P., Fellesson, M., Bjelke, B., & Nilsson, F. (2021). Why space is not enough: Service innovation and service delivery in senior housing. In P. D. C. K. Peter Ekman (Ed.), *Management and Information Technology after Digital Transformation* (pp. 72-80). Taylor and Francis. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88842>
159. Magnusson, P., & Odhe, J. (2022). Servitization and the Necessity of Becoming Ambidextrous : A 12-Year Longitudinal Study. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (pp. 201-222). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-90456>
160. Mehran, J., Olya, H., & Escallada, O. (2021). Employee well-being in guest-oriented industries : Evidence from food and beverage sector. In N. P. Anna Farmaki (Ed.), *Emerging Transformations in Tourism and Hospitality* (1 ed., pp. 154-169). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-87194>
161. Olsson, L. E., & Friman, M. (2020). Public Transport as a provider of Maas in Rural Areas : An impossible mission? In L. B. S. B. J. P. S. L. G. António Manuel Amaral (Ed.), *Implications of Mobility as a Service (MaaS) in Urban and Rural Environments* (pp. 109-124). IGI Global. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-75180>
162. Olsson, L. E., & Friman, M. (2021). Steering toward happiness in sustainable travel. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 97-109). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88037>
163. Patrício, L., Fisk, R. P., & Edvardsson, B. (2021). Designing for transformative collaboration in complex service systems. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 73-96). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88031>
164. Pettersson, P. (2020). Sweden : Silent Religious Retreat as Rehabilitation Treatment in Prison. In J. Martínez-Ariño, A. L. Zwillig, J. Martínez-Ariño, & A. L. Zwillig (Eds.), *Religion and Prison: An Overview of Contemporary Europe* (pp. 359-371). Springer Science+Business Media B.V. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-83815>
165. Pettersson, P. (2020). Utveckla kyrkans upplevelserum som en andlig resurs för svenska folket! In P.-D. Thomas & E. Annika (Eds.), *Kyrkopedagogik* (pp. 64-68). Votum förlag. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-87709>
166. Pietro, D. P., Renzi, M. F., & Edvardsson, B. (2021). Sustainable business practices for transformative change : The case of Eataly. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 55-69). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88039>
167. Sebhatu, S. P. (2021). PRME : Impact for transformative change. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 194-212). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88033>
168. Sebhatu, S. P., Enquist, B., & Edvardsson, B. (2021). Preface. In B. E. Samuel Petros Sebhatu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. xix-xx). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88035>
169. Svensson, A., Bergkvist, L., Bäckman, C., & Durst, S. (2021). Challenges in implementing digital assistive technology in municipal healthcare. In P. Ekman, P. Dahlin, & C. Keller (Eds.), *Management and Information Technology after Digital Transformation* (first ed., pp. 81-90). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-86303>
170. Sörhammar, D., Tronvoll, B., & Kowalkowski, C. (2021). Managing digital servitization : A service ecosystem perspective. In P. D. Peter Ekman & K. Christina (Eds.), *Management and Information Technology after Digital Transformation* (pp. 23-32). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88845>
171. Tronvoll, B. (2022). Expanding the Scope of Service Recovery. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (pp. 849-868). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94914>
172. Tronvoll, B., & Edvardsson, B. (2022). Defining and Framing Service Management. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (1st ed., pp. 19-33). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94923>

173. Valdés-Loyola, A., Reynoso, J., & Edvardsson, B. (2021). Advancing service research at the base of the pyramid : A service ecosystems perspective. In B. E. Samuel Petros Sebhathu & E. Bo (Eds.), *Business Transformation for a Sustainable Future* (pp. 123-140). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88038>
174. Vargo, S. L., Koskela-Huotari, K., & Vink, J. (2020). Service-Dominant Logic: Foundations and Applications. In B. Eileen & F. Kendra (Eds.), *The Routledge Handbook of Service Research Insights and Ideas* (pp. 3-23). Routledge. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-77472>
175. Wilde, S. J., Smart, W. J., Kelly, S. J., & Trischler, J. (2021). Online business models in Asia : Riding the e-commerce wave in China. In X. Jun & G. Xiangzhu (Eds.), *E-business In The 21st Century : Essential Topics And Studies* (pp. 269-289). World Scientific. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-85938>
176. Witell, L., Carlborg, P., & Snyder, H. (2022). Beyond the Line of Visibility : Toward Sustainable Service Innovation. In B. T. Bo Edvardsson (Ed.), *The Palgrave Handbook of Service Management* (1st ed., pp. 577-593). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94921>
177. Öberg, C. (2021). Acquisitions for new business models. In S. F. C. L. Cooper (Ed.), *Advances in Mergers and Acquisitions* (Vol. 19, pp. 79-99). Emerald Group Publishing Limited. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-89198>

Book, edited

178. Edvardsson, B., & Tronvoll, B. (Eds.). (2022). *The Palgrave Handbook of Service Management* (1st ed.). Palgrave Macmillan. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-94919>.
179. Sebhathu, S. P., Enquist, B., & Edvardsson, B. (Eds.). (2021). *Business transformation for a sustainable future*. Taylor & Francis. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-88034>.

Conference paper

180. Ahlin, K., & Crusoe, J. (2022). Why Should You Believe in Open Data? – A Document Study Examining Persuasion Rhetoric of OGD Benefits. Electronic Government: 21st IFIP WG 8.5 International Conference, EGOV 2022, Linköping, Sweden, September 6-8, 2022.
181. Ahlin, K., Wästlund, E., Ahmad, A., Nöjd, S., Mozelius, P., & Hassan Sodhro, A. (2022). IoT in Elementary School for Everyone – A Research Plan. Medical Informatics Europe 2022. Nice, Frankrike. 27-30 maj, 2022.
182. Alaqra, A. S., & Kitkowska, A. (2021). Impact of Intrinsic Factors and COVID-19 Pandemic on the Use of Technology. CHI Conference on Human Factors in Computing Systems Extended Abstracts (CHI '21 Extended Abstracts).
183. Bäckman, C., Kristensson, P., Bergkvist, L., & Wästlund, E. (2022). Motivational intermissions : Optimizing fitness technology for the co-creation of motivation. The 17th International Research Symposium on Service Excellence in Management (Quis17), Valencia, 12-14 January 2022.
184. Kitkowska, A., Högberg, J., & Wästlund, E. (2022). Barriers to a Well-Functioning Digital Market: Exploring Dark Patterns and How to Overcome Them. 55th Hawaii International Conference on System Sciences.
185. Kitkowska, A., Högberg, J., & Wästlund, E. (2022). Online Terms and Conditions : Improving User Engagement, Awareness, and Satisfaction through UI Design. CHI Conference on Human Factors in Computing Systems (CHI'22), April 29-May 5, 2022, New Orleans, LA, USA.
186. Kitkowska, A., Shulman, Y., Martucci, L., & Wästlund, E. (2020). Facilitating Privacy Attitudes & Behaviors with Affective Visual Design. 35th International Conference on ICT Systems Security and Privacy Protection - IFIP SEC 2020, 21-23 September 2020.
187. Kitkowska, A., Warner, M., Shulman, Y., Wästlund, E., & Martucci, L. (2020). Enhancing Privacy through the Visual Design of Privacy Notices : Exploring the Interplay of Curiosity, Control and Affe. 16th Symposium on Usable Privacy and Security, SOUPS 2020; Virtual, Online; ; 10 August 2020 through 11 August 2020.
188. Kitkowska, A., Wästlund, E., & Martucci, L. (2020). (In)escapable Affect? Exploring Factors Influencing Privacy-Related Behavioral Intentions. 53rd Hawaii International Conference on System Sciences (HICSS), Jan 07 - 10, 2020, Maui, Hawaii, United States of America.

189. Tronvoll, B., & Edvardsson, B. (2020). How firms configure and deploy innovation platforms to foster service innovations. 53rd Annual Hawaii International Conference on System Sciences, HICSS 2020, 7 January 2020 through 10 January 2020.
190. Warner, M., Kitkowska, A., Gibbs, J., Maester, J. F., & Blandford, A. (2020). Evaluating 'Prefer not to say' Around Sensitive Disclosures. CHI '20 Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems Honolulu; United States; 25 April 2020 through 30 April 2020.
191. Wik, M., & Bergkvist, L. (2022). Exploring Mobile Co-design in the Context of Use Continuous Elicitation and Evaluation of Design Suggestions. 24th HCI International Conference (HCII 2022), Gothenburg, Sweden, [DIGITAL], 26 June-1 July, 2022.

Report

192. Ahlin, K. (2022). *Design och utvärdering av modell för operationell digital mognad* (978-91-7867-326-1 (ISBN)). <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-92478>
193. Ahlin, K., & Langlo, J. A. (2022). *Rapport Digital Mognad – gemensamma resultat Vätel 2.0*. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-89908>
194. Ahlin, K., & Nöjd, S. (2022). *IoT i skolan* (978-91-7867-286-8 (ISBN)). <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-89697>
195. Bergkvist, L., & Wik, M. (2021). *Co-design av smartphoneapplikation i användningsmiljö : en studie inom ramen för projektet DigitalWell Research och innovationscaset Att hitta rätt*. <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-85644>
196. Echeverri, P. (2020). *Experiences of demand responsive transport among vulnerable travellers : A handbook on needs, demeanour, and interaction* (978-91-7867-081-9 (ISBN)). <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-86859>
197. Quist, J., & Fransson, M. (2020). *Folkbokföringsfelet : En samhällsutmaning med oklar adress* (978-91-7867-175-5 (ISBN)). <http://urn.kb.se/resolve?urn=urn:nbn:se:kau:diva-81369>



Assessment of Centrum För Tjänsteforskning,
Karlstad University,
February 2024

Brief summary

Centrum För Tjänsteforskning's (CTF) self-assessment report, background data, and the digital site visit depict a picture of a research centre with a unique profile and many strengths. The centre demonstrates that they are a world-class international centre in their field. With a 37-year long history and 80+ co-workers they have a respected position within service research. Additionally, building on a tradition of collaboration with external organizations they have a good foundation for attracting external funding and creating societal impact. As a unit within KAU the centre seems well appreciated. The current position is very strong.

CTF emphasizes their unique organizational culture, entrepreneurial spirit, and curiosity as elements of their identity. Consequently, their strategy for developing new research themes and topics has emergent features driven by external funding and project opportunities. Their overall research theme (value-creation through service) seems relevant for the future. CTF has a strong international collaboration profile and is experienced in applying for funding.

The self-assessment report focuses current, near future, and local issues. It is limited in discussing internal and external changes, how current strengths can be preserved, and what would be significant risks. Additionally, it is less clear what kind of processes are employed to support the development of the centre and its co-workers. There might be challenges in inclusivity, equal opportunities, and making informed decisions about the future without monitoring, and continuous strategic discussions. In general, the report does not examine how CTF strategically evaluate their future, considering that different disruptions may influence the opportunities and challenges.

1. Research and scientific development

When evaluating CTF's research and scientific development the stated vision, mission, and strategies of CTF should be recognized. CTF's long-term vision is to be a world-recognized international research centre that will contribute to positive development of individuals, organizations, and societies by conducting research and education on value creation through service. It is further specified that the field of research is service management. The theme and field of research is quite broad, but still gives the research centre a modern focus in terms of the concept of value creation through service. CTF can be portrayed as world-recognized in its field now. This current position is in the report attributed to some strong characteristics of the research centre considered pillars of success: the CTF culture, collaboration with the external community, and internationalization. This is validated by the information in the self-assessment report, background data and discussions with co-workers during the digital site visit.

CTF has grown and prospered over nearly four decades, in a research field that has changed considerably and continues to evolve. Therefore, it could be worthwhile to do a deeper analysis of factors potentially affecting future success. As management scholars it should be easy for CTF to apply perspectives, frameworks, methods, models, and concepts from their own field to analyse themselves in the same way they strive to give advice to external organizations. Given a good understanding of environmental changes as well as internal challenges, CTF would be well equipped to create and modify relevant research and publication strategies. The centre has in fact a unique opportunity compared to most other research centres to have the tools to elaborate on how a research centre can create value through its service.

The three core goals for CTF are specified as: to be a scientific thought leader, to attract external funding, and to have societal impact. Means to achieve research quality are specified as: CTF's values, a systemic view on value creation as the centre's identity, and the CTF culture. When CTF elaborate on continuing as a renowned thought leader in the field they refer to their current position and strengths. Balancing the three strategic goals might be different for a large and growing research centre compared to the history of CTF as a startup, especially considering environmental changes and other disruptions. Ideally, the three strategic goals can be combined and built-in into all activities. Change requires identification and creation of dynamic capabilities in the organization. In practice this means that attention should be paid to change and transformation. As CTF states in their self-assessment report that their research is focused on such issues, this knowledge could be applied to their own situation.

Although the self-assessment report and the digital site visit revealed a common appreciation of the current mission and umbrella theme it is unclear how this results in a research strategy and publication strategy for CTF. The entrepreneurial spirit, the internal strong culture and networking, combined with emerging project opportunities were seen as strong generators of research themes and directions and cherished by most co-workers. To the extent that there is a lack of deliberate strategy making, more formal and communicated research and publication strategies can be recommended. These can be dynamic and need not hinder the entrepreneurial spirit, but rather become a manifestation of CTF's approach.

The report is vague regarding the areas in which CTF is active. It is mentioned though that areas such as innovation, servitization, sustainability, systems research, and transformation have been covered in research. Further it is, however, asserted that specific areas of research are likely to change over time, and that CTF is open to new areas when a demand in society arises. Given that CTF has a long history as a leading research centre within service research it could be informative and helpful for the

development of the research centre to communicate internally and externally how they see the development of the field and their position in it. For example, it is stated that the system's view on service is a foundational pillar of CTF's research and that much of the research concerns transformation, but it remains unclear how these characteristics play out to CTF's advantage in practice.

The output of publications appears to be quite stable, resulting in good results. According to CTF policy in line with the CoARA agreement, the research centre monitors research output in terms of number of articles and citations on an aggregate level using SciVal with a focus on comparison with other research centres. It could still be useful for the research centre's management to understand how the output of articles and citations are related to projects and individual researchers without using the information for individual evaluation. Furthermore, if a key performance indicator, for example, is citations, tactics and strategies for increasing that KPI could be developed.

2. Academic qualifications and ensuring competence maintenance in the short and long term

CTF has established a strong reputation as a research centre in the field of service research. It is recognized by companies, organizations, and academia both regionally and internationally. Research quality has been essential in building CTF's brand and reputation, contributing to its extensive network. Enabling research quality is a priority at CTF. While individual skills, cultural factors and effective research processes are recognized as enablers, and some processes and activities in this regard are identified, an implementation plan for how this can be carried out in practice seems to be missing.

Esteemed researchers and collaborations with companies and organizations are integral to CTF's identity. Senior faculty members, the entrepreneurial culture, and a dedication to research quality have played key roles in achieving this recognition. To be able to maintain and further develop this significant role as a research centre, attention to academic qualifications and ensuring competence maintenance in the short and long term is essential.

The composition of the faculty/employees is crucial for maintaining competence in the short and long terms at CTF. However, CTF seems to rely on a smaller number of senior faculty who play a significant role in publishing in higher-ranked journals and applying for grants. Many of these senior faculty members are in adjunct or visiting positions, and there have been instances of turnover due to retirements or moves to management roles. This can pose challenges for research quality, as it leads to limited continuity in the organization and less availability of mentors for junior and mid-career faculty on a daily basis. It can also potentially negatively affect the "Fika culture" and reduces opportunities for daily interaction between junior and senior faculty, fundamental for the exchange of ideas and knowledge sharing.

Overall, the strong culture at CTF seems to be a unique enabler with regard to the CTF 's accomplishments over the years. However, it might be that the strong culture at CTF also creates some confusions for faculty. Do they belong to CTF or to the university? Where do they have their identity? This can be confusing when it comes to assignments, career development and what priorities to make between teaching, educational roles and pursuing research. There seems to be discrepancies regarding the perception of career development programs across management and more junior faculty. Therefore, it appears that more could be done to promote career programs for mid-career, junior, and upcoming researchers. For PhD students, planning the next career step when the PhD project is complete, might reduce the stress and insecurity, that some of the candidates indicate.

Both mid-career and junior faculty at CTF report being very happy with the work environment, it is characterized by trust, and described as friendly and supportive, with an atmosphere that encourages asking questions. However, still there seems to be variation in the extent to which individual faculty members feel included in research projects and grant applications. This could potentially inhibit future career development for some mid-career faculty, lead to unfortunate division into ingroups and outgroups and leave CTF in a vulnerable position in the near future.

To ensure and maintain competence in both the short and long term, hiring the right employees is critical. It seems that Karlstad University on the one hand has some requirements, i.e. to fulfil teaching requirements while CTF is looking for the best researchers. A plan to address this potential inhibitor of research quality, might be helpful to prioritize.

CTF has had difficulties increasing its number of PhD students over the last three years. This has mostly to do with external grants being limited to three years. This makes it difficult to make them eligible for PhD studies at the university. This challenge can affect both recruitment of researchers for the future, maintain CTF's role within the field, and affect the productivity of the researchers e.g. senior lecturers and professors in particular, that work with PhD students. A plan to address this issue seems necessary.

3. Organisation, leadership and management

The CTF culture is identified and claimed to be a key factor enabling CTFs success. At the digital site visit much of the positive views of the culture and the social inclusivity is confirmed and even praised. However, indications of less inclusivity in terms of being invited to established research and project constellations are also raised. Thus, the overall impression raises questions that are not answered in the report but would be useful for continued development: 1. How has this culture evolved, and which are critical factors and elements in the culture? 2. How resilient is the culture to changes and disruptions? (How do for example, internationalization, growth, the composition of researchers, administrative changes, etc. affect the culture), and 3. In what way is the culture different in a positive way compared to other research centres and how can it be preserved and strengthened?

In the self-assessment, there is a profound emphasis on fostering a supportive and open working climate at CTF, dedicated to facilitating collaboration, testing novel ideas, stimulating thought, and ensuring an enjoyable work atmosphere. A positive example is the practice of allocating financial support during the writing process for larger grants, amounting to 30–40 percent of the researcher's time. The appreciation of this support initiative was confirmed during the digital site visit. While deemed as a positive aspect, a deeper exploration of the mechanisms in place to ensure the effectiveness and fairness of this allocation would be beneficial, as concerns are raised during the digital site visit about how to get involved in larger grant applications qualified for this support.

How new research projects and themes arise and are adopted is described in the report as related to internal and international collaboration, individual researchers' engagements, and opportunistic responses to calls for external funding. Although such agility is a strength it raises the question to which extent there are strategies for theme selection and concerted efforts to focus on driving the market rather than being driven by the market. The report does, however, not elaborate on how research themes come about, how constellations of researchers are formed and deliberately -or indirectly - create the direction of the development of CTF.

One notable point of discussion revolves around the organizational placement of CTF. Currently positioned as an independent research centre under the HS faculty, there is a suggestion regarding a

potential repositioning. The report posits that such a realignment could potentially attract more departments, fostering increased external funding opportunities, and facilitating a broader spectrum of research activities. There are challenges associated with matrix organizations, where individuals are employed by various departments but associated to CTF. Difficulties arise e.g. in attributing individual performance (particularly regarding ownership of publications), planning of teaching, and distribution of educational roles. This dynamic necessitates a more thorough examination to understand the complexities and in a structured way assess and document challenges, as well as benefits of the current organisational position.

Attention is drawn to management's role in steering towards a more equal gender distribution on all academic levels, not only encouraging female faculty to concentrate more on research but also in motivating male faculty to expand their roles, particularly to education. The report raises the crucial question of creating an environment where stress, particularly related to funding concerns, does not disproportionately drive young faculty, perhaps especially females, towards educational or administrative roles. The report lacks details on management's strategies in place to balance these dynamics and foster an equitable, stress-free environment.

Finally, in terms of funding, grants from the KK Foundation and Vinnova have aided greatly with research funding, as well as to incentivising relationships and connections with business and society. As outlined in the report other types of funding streams, e.g. EU grants would be beneficial in creating financial stability. Responding to such calls is likely aided by a more formal and structured approach to planning for future research areas to target, as elaborated on earlier.

4. Collaboration, utilization and impact of research

CTF has established itself as an international research centre, boasting a strong brand and robust infrastructure that can bring significant advantages to other departments within Karlstad University. Although the specific mechanisms for collaboration are not outlined, it is valuable to explore and establish concrete plans for future growth and development for both the university and CTF. Taking proactive steps in this regard will foster mutually beneficial outcomes for all parties involved.

CTF appears to possess a broad network comprising of both international academic partners and international and domestic companies. The value of this network and the collaborative efforts between its members have undoubtedly played a crucial role in the development and expansion of CTF. Moreover, it is highly likely that this network will continue to be significant for the future of CTF. Given the lack of extensive elaboration, conducting an analysis on the role of this network with the various partners involved, and how the network and collaborations are maintained in response to the continuous changes in the environment would likely offer valuable insights for CTF.

Over the years, CTF has successfully attracted esteemed scholars, solidifying its prominent position in the international arena of its discipline. These visiting researchers actively contribute to collaborative research projects, co-authored publications, shared supervision of PhD students, and secured research grants, demonstrating the mutual advantages derived. However, it is worth contemplating whether an excessive reliance on external resources renders CTF overly dependent and vulnerable. Conducting an analysis to determine the pros and cons, and how to continue and optimize this collaboration and network, is likely to provide valuable insights for the future success as well as international endeavours of CTF.

A longstanding tradition of collaborating with organizations and companies, both small and large, engaging in shared research projects and co-creating value, is established at CTF. However, it is not

explicitly mentioned whether this particular mode of collaboration has any potentially adverse implications for CTF future success when it comes to generating novel insights and contributing to the research field. An analysis of these activities may be necessary for CTF's ability to continue the success under continuous environmental changes.

CTF seems to actively contribute to five out of six goals set by Karlstad University's strategy. It plays a crucial role in creating an excellent research environment, fostering strong connections with businesses and society, promoting internationalization, facilitating sustainable economic and environmental development, and intends to increase the number of doctoral candidates and programs. However, the specific sixth goal that CTF does not contribute to remains undisclosed. Consequently, the significance of this particular goal for the collaboration between CTF and the university is currently unknown.

Since its establishment, CTF has made noteworthy contributions to the advancement of the research field, influencing global perspectives and attaining a reputable international standing. These achievements have been driven by the commitment to scientific excellence, evidenced by high-quality publications and scholarly impact. The evaluation of CTF's research impact adheres to the CoARA agreement. To fulfil this objective, Sci-Val is employed to measure performance relative to other institutions and centres over time. Applying these measures, CTF is performing very well compared to other institutions/ centres. If other KPI's or measures would provide the same results is unknown. An assessment of CTF along other rankings and KPIs might be worthwhile, particularly this might become more critical due to the accreditation bodies' requirements, e.g. AACSB that Karlstad University actively works towards complying with.

The report highlights the importance of societal impact for CTF and mentions several examples of how their research has already made a difference. Collaborations with organizations and sectors, as well as contributions to UN reports on sustainability, demonstrate CTF's commitment to societal impact. However, the report does not provide details on how CTF plans to enhance its impact in the future. The interviews conducted suggest that there is some uncertainty at CTF regarding the definition of societal impact and which activities to prioritize. It appears that CTF aims to align its understanding of societal impact with that of Karlstad University, which the panel learned is still a work in progress. In order to clarify these issues and better operationalize societal impact, it would be beneficial for CTF to engage in a discussion with the university. By discussing what societal impact means for the university and how CTF can contribute in this regard, in different domains and activities, CTF can establish a clearer direction and focus their efforts for greater societal impact.

5. Internationalisation, gender equality, research integrity and multidisciplinary collaboration

CTF's current internationally established position and a strong image within service research represents a valuable asset for the future. It has been built through international networking, collaborative initiatives, and influential individuals over a long period of time. CTF has clearly focused on internationalization on one hand but has on the other hand been successful in creating relationships with the regional business community. The visiting professor program attracts global experts, fosters diverse perspectives, and likely enriches the academic environment. There are frequent shorter visits and exchanges with international, well-established researchers, facilitating knowledge transfer and establishing international connections. Active participation in scientific conferences demonstrates the institution's commitment to an international discourse. Internally, CTF's international workforce is also contributing to a dynamic and inclusive academic atmosphere. This emphasis on internationalization

positions CTF as a hub for global collaboration. More examples are needed of how international possibilities, including international visits are made available for junior faculty and PhD students, especially as concerns are raised about economic constraints on participation in international conferences from junior staff at the digital site visit.

Assuming that a critical issue in academia generally is that of an increased number of female senior researchers, it is important to clarify what CTF sees as a balanced gender distribution (argued in the report to have been the case in 2022). The self-assessment report acknowledges the critical issue of an increased number of female senior researchers and mentions mentorship programs to support emerging female scholars. However, there is a need to clarify the implementation of these activities as they in practice were reported to be consisting of few and general meetings.

Given that many senior staff members at CTF actively participate in highly successful research collaborations nationally and internationally, it is crucial that mentorship is strategically designed to include concrete opportunities for emerging scholars to be invited to such collaborations (e.g. opening up for co-authorship), rather than offering general mentorship. This raises concerns about the inclusivity of author constellations and whether improvements in this aspect could contribute to long-term efforts for enhanced gender equality at the associate professor and professor levels. Moreover, a fact-based discussion about gender distribution across academic levels, teaching, educational roles, and roles related to academic citizenship is encouraged. We acknowledge that CTF is not the employing organization, but CTF does constitute the research environment to which many staff identify and thus could still benefit from doing a gender distribution mapping for its connected faculty.

Research integrity and ethics are described as being discussed both within projects and at CTF during CTF's yearly Planning days. Entering, as stated in the report, into more projects in the healthcare area ethics questions will be more prominent and needs to be more formalized by applications to the governmental ethical board.

The importance of interdisciplinary collaboration in CTF's research is evident as it currently comprises employees from various disciplines, with business administration and psychology being the majority. However, to further diversify their team, CTF aims to attract employees from other disciplines like nursing and engineering. This goal necessitates a concrete plan and an analysis of how broadening the perspective would impact the various enabling factors for research quality.

6. Connection between education and research

Most of the researchers at CTF have their home base in business administration or psychology, although also some other subjects are represented. CTF is based on a matrix organization principle where researchers representing different subjects have teaching duties within their subject. Consequently, according to the report, most senior researchers at CTF have leading roles in the education programs in their subject. In these activities they can draw on research in their teaching as well as use connections to CTF's business partners. Collaboration between CTF and external companies creates a bridge between companies and students potentially benefiting both parties. This kind of collaboration appears to have long and successful traditions at CTF. Although it is obvious that individual researchers excel in teaching when they get the opportunity to focus on their own topics the challenge may be how the collective knowledge of CTF is utilized in teaching.

For the future CTF has ambitions to expand its educational services to other subjects within Karlstad University. They have identified immediate potential customers in certain subjects that could have factual use for a course/courses in service topics. As such this idea represents a good example of how

an existing resource and capability can be utilized to create a new market. Along the same lines of thinking similar opportunities might be available outside Karlstad University. Challenges and obstacles to implement these ideas are not, however, explicated and need to be scrutinized. For example, what teaching resources are available and how do these activities affect CTF's research?

Furthermore, CTF has created various forms of education programs for companies and individual professional development. In line with the focus of the research centre a large program called ISE (Improving value creation through service education) has been created financed by external funding. CTF provides courses offered to professionals in business firms, drawing on CTF's research in previously conducted externally funded projects. This represents an innovative attempt to utilize external funding to further develop both the connection between CTF and companies as well as disseminating CTF's research findings and expertise. If this pilot project turns out successful it represents an innovative platform to connect research and education. CTF also connects research and education in tailor-made courses for companies administered by Karlstad Universitets Uppdrags AB and in Karlstads Universitet Samhällsnytta AB. These initiatives indicate that CTF is actively engaged in transforming research into educational activities.

It is obvious that research-based teaching and education can be linked to external funding and the task to create societal impact. One challenge is the allocation of researchers' time and capabilities between research and teaching. Another challenge is the divergence in topic and level of knowledge that is required in scientific vs practical settings. Hence the most productive solutions probably are where research can be designed to simultaneously fulfil research requirements and practical interests. Disruptions in the business environment or society might naturally represent such areas. Although not brought forward in the self-evaluation report it might be something for CTF to explore for the future, and perhaps something that CTF is familiar with.

7. Concluding assessment and recommendations for continued development

Concluding assessment

CTF has an internationally established position and a strong image within its field of research: service management. This represents a valuable asset for the future. It has been built through international networking, collaborative initiatives, and influential individuals over a long period of time. The challenge for the future is to preserve this position which based on the documentation is recognized by the research centre, i.e. managing and developing a nowadays mature organization. This can provide a challenge as the culture is presented more as of a start-up nature.

CTF has a clearly stated vision and mission as well as an articulated view on how research quality can be achieved. The core theme for CTF's research "value creation through service" is broad but represents the core in current service research and a useful guide for future research. The challenge is to navigate in changing scientific and practical service environments and to translate the overall theme into research activities in practice. The task in this respect requires a balancing of CTF's strategic goals, to be a scientific thought leader, to attract external funding and to create social impact. A risk is that the vision and direction of research is too much driven by funding calls, which might risk a lost focus on services and competition to other research environments with stronger track-record in these "new" areas e.g. circular economy. Therefore, it is important to anchor new themes strategically and intentionally in CTF's focus "value creation through service".

The environment is project-driven with an emergent and agile approach to development of projects e.g. new areas to position research in. Entrepreneurial and open, but a risk to be too reliant on network, personalities, and roles in the group. There needs to be an evaluation of the risks related to this approach e.g. exclusion of certain individuals or groups, or too much reliance on few individuals. The site visit confirmed some of these risks, but also pointed to a risk-reducing initiative in a recent large grant application where work package leadership was more deliberately assigned to mid-career scholars in need of such merits. Development of a more formalized, complementary process to balance the entrepreneurial project driven culture is advised for a more mature centre: as expressed by a senior faculty member at the digital site-visit “we need to be ambidextrous”.

CTF as a research centre is, however, not only about position, image, culture, and strategies. There is a constant in-flow and out-flow of human resources, researchers, visitors, and other personnel, representing the competence and capabilities forming the future of the centre. The challenge is to constantly balance different restrictions and opportunities to achieve the goals set. CTF has in this respect specified their own current ambitions and identified areas where support from KAU is requested. An even broader and more long-term risk analysis could be informative. CTF has a strong internal culture that the research centre is aware of and proud of. The challenge is to identify key factors and mechanisms to maintain the culture in changing environments and conditions. This should be paid attention to, alongside the risks associated with a very informal culture. A lack of awareness regarding individuals' diverse interests in teaching and research can pose risks to career development. For instance, certain career milestones such as achieving the position of associate professor require scientific qualifications, and failing to acknowledge this may hinder progress in individual faculty's career development. By prioritizing career development of mid-career faculty CTF decrease it's future vulnerability by avoiding a situation where they potentially lack critical competence and experience when more senior faculty leaves.

As much effort has been put into creating the self-assessment report, the text would benefit from an overall editing, for example, combining overlapping text segments and repetition from different sections, focusing on key arguments, streamlining the style in different parts of the document, and creating summaries to emphasize conclusions, towards a strategic plan for CTF for the future.

Recommendations for continued development

- In each section of this review remarks made by the panel can be taken as suggestions for further development.
- CTF presents several ambitions and requests for support from KAU In each section of the self-assessment report. For a clearer total overview of ambitions and requests a structured summary list could be created to communicate these important aspects. This list could also be used to formulate strategic initiatives, “programmes” to engage in to achieve certain objectives. More emphasis could be placed on evaluating potential disruptive forces in the environment affecting the research centre. This also involves understanding more deeply the past, present and future of the field of research, but also the “business and markets” of CTF as a research centre. CTF has relevant conceptual and methodological tools that can be applied to understand how a research centre can create value through service. Furthermore, CTF could engage in a risk analysis identifying factors in the organization and operations as well as in the environment that may have a disproportionate large effect on the research centre.
- Develop, or state in similar reports as the self-assessment, the publication strategy at the CTF level and how this is linked to KPIs being evaluated by the university. If publication strategy points to requirement on publications in top journals it needs to be ensured that senior

researchers publishing in these journals are present in the day-to-day work at CTF. Moreover, mid-career researchers could be deliberately assigned one of these as mentor based on a process of matching research interests, and perhaps the mid-career researcher can even get invited into some new author constellation.

- There is a need for some more formalized processes to ensure future success, inclusiveness, and less reliance on few individuals; we suggest that Table 1 in the self-assessment report can function as a starting point where each of the items/rows could be linked to a new column of “how” this is supported and implemented.
- Inequalities need to be explicitly assessed, gender-based as well as on other bases. The impression is that discussion on gender distribution and inequalities has been rather limited, and at the digital site-visit this is confirmed by both senior, mid-career, and junior employees. We advise a mapping of how roles in education, projects, teaching duties, and participation in author constellations look like today as a basis for fact-based discussions and workshops on what the situation looks like today and how to support a more equal environment in the future. Moreover, roles e.g. in education should be mapped and it needs to be ensured that roles rotate between individuals. There is a risk that individuals hang on to the roles not to be under-financed, perhaps extra funding for a limited period of time can be set aside for individuals leaving an educational role to be able to get back into research.
- There is a need to develop career-development programs to support mid-career researchers, e.g. including hands-on and time-set goals. Such goals and requirements for different academic levels need to be clearly stated and documented. Key to ensure support for development of the skills needed to reach these goals. If mentorship programs are considered they should be designed so that mentors can provide hands-on support to acquire the skills needed. However, we acknowledge that the matrix organization adds to unclarity of the responsibility for employees’ career development.

Ida Gremyr

Gothenburg, February 19th, 2024

Tore Strandvik

Helsinki, February 19th, 2024

Line Lervik-Olsen,

Oslo, February 19th, 2024