

Absorptive capacity as enabler for service improvements - the role of customer satisfaction information usage

Downloaded from: https://research.chalmers.se, 2020-07-11 06:28 UTC

Citation for the original published paper (version of record):

Birch-Jensen, A., Gremyr, I., Halldorsson, A. (2020)

Absorptive capacity as enabler for service improvements - the role of customer satisfaction information usage

Total Quality Management and Business Excellence, In Press http://dx.doi.org/10.1080/14783363.2020.1761786

N.B. When citing this work, cite the original published paper.



Total Quality Management & Business Excellence



ISSN: 1478-3363 (Print) 1478-3371 (Online) Journal homepage: https://www.tandfonline.com/loi/ctqm20

Absorptive capacity as enabler for service improvements – the role of customer satisfaction information usage

Andrea Birch-Jensen, Ida Gremyr & Árni Halldórsson

To cite this article: Andrea Birch-Jensen, Ida Gremyr & Árni Halldórsson (2020): Absorptive capacity as enabler for service improvements – the role of customer satisfaction information usage, Total Quality Management & Business Excellence, DOI: 10.1080/14783363.2020.1761786

To link to this article: https://doi.org/10.1080/14783363.2020.1761786

9	© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group
	Published online: 12 May 2020.
	Submit your article to this journal 🗹
hh	Article views: 186
Q	View related articles 🗗
CrossMark	View Crossmark data ☑



Absorptive capacity as enabler for service improvements — the role of customer satisfaction information usage

Andrea Birch-Jensen, Ida Gremyr* and Árni Halldórsson

Department of Technology Management and Economics, Chalmers University of Technology, Gothenburg, Sweden

Customer satisfaction information (CSI) is of great relevance for customer-oriented and service-led organisations, where customer experience is highly associated with the inuse phase of products and services. This paper explores how firms turn customer satisfaction information into knowledge and actions in a manner that enables service improvements. Based on a study of 24 organisations in six different service sectors, this study investigates CSI usage with respect to absorptive capacity. The paper concludes that efficient CSI usage requires multiple sources of customer satisfaction data that need to be used broadly in the organisation by creating accountability of employees across the organisation, rather than CSI being an issue for the communication function. To release this potential, CSI usage requires mechanisms that reside within the organisation, including ensuring actionability of initiatives, assignment of responsibility for actions and follow up, and providing incentives to mobilise change support. Further, the paper shows that in order to fully understand CSI, research must move beyond focusing on processes and activities to study the underlying capacities needed to release the potential of CSI to serve as a basis for service improvements.

Keywords: service improvements; customer satisfaction; customer satisfaction information usage; absorptive capacity

Introduction

In a time of rapid market changes, firms need the ability to quickly gather, learn from, and act upon market intelligence (Wang & Wei, 2005; Narver & Slater, 1990) and exploit customer knowledge to form new services (Garver & Gagnon, 2002; Storey & Larbig, 2018), as well as improve existing ones (Lervik Olsen et al., 2014). This ability has been associated with the firms' market orientation (MO), defined as 'the ability of a firm to understand and respond to its environment' (Morgan et al., 2005, p. 131). More specifically, firms need to link external market information with internal processes and activities in order to capture the potential value of market information (Wang & Wei, 2005). A subset of MO is customer orientation (CO), which can be defined as 'the sufficient understanding of one's target buyers to be able to create superior value for them continuously' (Narver & Slater, 1990, p. 21). Being customer-oriented and creating such value requires a 'process that a company applies to think strategically, measure and use customer satisfaction data' (Lervik Olsen et al., 2014, p. 558).

^{*}Corresponding author. Email: ida.gremyr@chalmers.se

Efficient use of customer satisfaction information (CSI) is especially critical for service firms, as services are characterised by intangibility and simultaneous production and consumption in an exchange between a provider and the customer. Services strategies build upon 'value-in-use' (Lusch et al., 2016), and data that potentially can drive improvements is created during the provision and use of services; that is, in the customer domain (Macdonald et al., 2016). Although CSI is the most commonly used non-financial performance measure (Bititci et al., 2012; Fornell et al., 1996), many firms have failed to connect their CSI usage (CSIU) to improvements (Lervik Olsen et al., 2014). In such situations, CSIU can be regarded as a symbolic activity that does not enhance a firm's knowledge about its customers (Rollins et al., 2012). To advance from symbolic to knowledge-enhancing use of CSI, firms must pay more attention to the use phase of CSIU; for example, by using customer information to prepare for customer interactions or to develop solutions to customers' problems (Rollins et al., 2012). This creates a need to explain why firms struggle in the use phase in the CSIU process.

Previous research on CSIU has primarily focused on phases and activities (Morgan et al., 2005; Lervik Olsen et al., 2014) rather than the underlying capacity needed for firms to efficiently carry out these activities. One such capacity is absorptive capacity, which is 'the ability of a firm to recognise the value of new, external information, assimilate it, and apply it to commercial ends' (Cohen & Levinthal, 1990, p. 128). As CSIU takes place in the customer interface, where demands and needs are constantly changing, absorptive capacity is critical in responding to the dynamics in the firm's environment by capturing information about the changes, but also being able to act upon them. More specifically, absorptive capacity aims to turn customer information into new knowledge and even knowledge application (Lam et al., 2017). In order to improve services offerings, organisations need a process that specifically absorbs customer knowledge (Storey & Larbig, 2018). Identifying and building absorptive capacity is likely a means to move beyond symbolic CSIU, where CSI is collected as tokenism without contributions to improvements affecting customer satisfaction (Rollins et al., 2012).

Against this background, the purpose of this paper is to explore how firms turn customer satisfaction information into knowledge and actions in a manner that enables service improvements. This paper's contributions lie in the fact that it does not just focus on CSIU itself, but on absorptive capacity as a means to understand and enhance the link from CSIU to service improvements. More specifically, the insights derived from this are threefold: understanding what is needed for CSIU to lead to service improvements; outlining the activities necessary to collect CSI and to exploit this information; and capturing the absorptive capacities that characterise symbolic, action-oriented, and knowledge-enhancing CSIU.

The remainder of this article is organised as follows. We first introduce the theoretical underpinnings of absorptive capacity and CSIU, respectively, that have guided the examination of the conversion of CSI into new service improvement efforts. Next, the qualitative interview-based research design is presented, including sampling, data collection and data analysis. The findings are structured around the studied firms' absorptive capacities in relation to CSIU, followed by discussion and conclusion sections.

Theoretical background

A key to organisational success has been a firm's ability to continuously learn from its surroundings (Lam et al., 2017) and particularly its customers (Storey & Larbig, 2018), which can be attributed to how well they are able to learn from market intelligence (Wang & Wei,

2005) and CSI. A specific subset of learning that deals with how firms learn from their external surroundings is referred to as firms' absorptive capacity (Easterby-Smith & Lyles, 2011). In order to explore how firms turn CSI – a type of external market information – into knowledge and actions in a manner that facilitates service improvements, we draw upon the conception of firms' absorptive capacity (Cohen & Levinthal, 1990) and how it applies at the customer interface (e.g. Lam et al., 2017; Storey & Larbig, 2018). We have adapted the distinction between knowledge and learning from Easterby-Smith and Lyles (2011), who described knowledge as the *content* and learning as the *process* of acquiring the content.

Absorptive capacity

Firms possess absorptive capacity if they have the capability to (1) acquire, (2) assimilate, (3) transform, and (4) exploit external knowledge (Cohen & Levinthal, 1990). Since absorptive capacity not only requires the acquisition and assimilation of new knowledge, but also the transformation and exploitation of this knowledge for commercial ends, the requirements on the firms' knowledge-flows not only lie in the firm-external environment interface, but also in intra-organisational interfaces between sub-units and departments (Cohen & Levinthal, 1990). Furthermore, possessing absorptive capacity has been found to positively influence firms' innovation capacity and competitiveness (Kostopoulos et al., 2011), as well as service performance (Lam et al., 2017; Storey & Larbig, 2018). Firms' absorptive capacity can be divided into potential absorptive capacity (PACAP) and realised absorptive capacity (RACAP) (Zahra & George, 2002). The former, PACAP, entails the firm's capacity to value, acquire, and assimilate novel external knowledge, whilst the latter, RACAP, is the firm's capacity to integrate and reconfigure the existing organisational knowledge with the newly acquired knowledge (Camisón & Forés, 2010). More specifically, RACAP entails the transformation of existing processes, activities, and competences, as well as the exploitation of new operations and competences in response to the newly acquired knowledge (Camisón & Forés, 2010; Zahra & George, 2002). PACAP and RACAP act as distinct and complementary capacities, and firms might be more successful in one than the other (Easterby-Smith & Lyles, 2011). To exemplify, a firm might possess the ability to acquire external knowledge but fail to exploit it; or it might have the ability to successfully transform existing processes and competences, as well as create new ones, based on newly acquired external information, but have limited ability to identify and acquire this new, external knowledge (Mäkinen & Vilkko, 2014).

Specifically, customer satisfaction measurements are the most commonly used non-financial performance measurement (Bititci et al., 2012), although they are still reported to have limited impact in turns of concrete improvements (Lervik Olsen et al., 2014). Hence, PACAP is in the nature of CSI as it is built on acquiring new external knowledge, whereas RACAP is potentially critical in aiding firms to move from solely collecting CSI to actually *using* it for service advancement.

Customer satisfaction information usage

Despite the commonly accepted criticality of CSIU, firms struggle to create a link between CSIU and improvements (Rollins et al., 2012), and further research on customer involvement and service improvement has been called for (e.g. Storey & Larbig, 2018). Problems observed in relation to CSIU for improvements include a lack of integration between customer satisfaction measurements and other performance measurements (Garver & Gagnon,

2002), a lack of knowledge regarding processes supporting CSIU (Birch-Jensen et al., 2020), and a lack of activities to establish the purpose and strategy of CSIU. This calls for a further understanding of the utilisation phase of the CSIU process (Morgan et al., 2005), a process that Lervik Olsen et al. (2014) identified as having three phases: strategy, measurement, and analysis and implementation.

With regard to the utilisation of CSI, three types of usage have been suggested: symbolic, action-oriented, and knowledge-enhancing customer information usage (Rollins et al., 2012). Symbolic usage is one of tokenism; measurements are made for appearance sake with no influence on decision-making; action orientation means that measurements have an impact on actions and customer interaction; finally, knowledge-enhancing is a strategic use of CS measurements with an indirect use of CS data to enhance the firm's customer knowledge. In their study of various types of service organisation, Birch-Jensen et al. concluded that these two latter types of usage (knowledge and action) should be combined since 'merely working in a knowledge-enhancing manner without focus on actions in individual customer relationships might risk turning into a symbolic use of CSM' (2020, p. 581). Regarding the link between CSIU and actual improvements, few studies have reported on CSIU in practice and 'little is known of the implementation process, in other words, when results from customer satisfaction surveys are operationalised into a firm's change process' (Lervik Olsen et al., 2014, p. 558). This calls for a further investigation of the usage part of CSIU, particularly the capabilities needed herein that act as underlying mechanism for supporting service improvements.

Absorptive capacity and customer satisfaction information usage

Absorptive capacity may receive particular attention at the customer interface of the firm, but the two underlying dimensions of PACAP and RACAP imply that it does not reside in one particular part of the organisation, and instead manifests as organisational routines and changes at a firm level (Lam et al., 2017). Drawing on the classical framework of Mintzberg (1983), there are five basic parts of an organisational structure (strategic apex, middle line, operating core, technostructure, and support staff). The ownership of CSI, and thus the responsibility to use it, has traditionally been attributed to the sales and marketing functions, which has led to challenges with the dissemination of the customer information throughout the organisation (Chen & Popovich, 2003). Thus, Mintzberg's (1983) classic identification and description of organisational structures referred to the functions that most often harbour the different types of CI, including CSI, as part of the firms' support staff. A situation in which CSI often ends up outside the operating core, or where different parts of the organisation are not well connected, might be one of the explanations for the reported difficulty in CSIU leading to actual improvements of a firm's offerings (e.g. Lervik Olsen et al., 2014).

In summary, the conception of AC has been chosen to explore how CSIU can be mobilised from being solely a way to capture *market* intelligence towards making use of *customer* satisfaction information as potential input for that service improvements. Although AC is a somewhat natural part of the *usage* part of CSIU, it adds to a deeper understanding of the process through which this takes place. RACAP takes this further by enhancing the description of how firms can move from solely collecting CSI towards the actual use of it for service improvements.

Method

This paper is based on a qualitative research approach as it focuses on a phenomenon in a specific context (Voss et al., 2002); that is, the use of CSI to facilitate service improvements.

Sampling

The initial sampling was purposive (Flick, 2014) in that the sampling of organisations was designed to represent a variety of service firms. The focus on service firms was based upon (Wang et al., 2016, p. 227), who suggested that 'service firms are more likely to pursue a customer-oriented strategy'. To ensure high experience levels in the firms studied (Pettigrew, 1990), collaboration was established with a market research institute to identify firms that have experience working with the phenomenon under study, in this case CSI. The sample control – that is, factors held constant across the case organisations (Voss et al., 2002) – was the firm's engagement in customer satisfaction work and them being commercial service firms. The organisations studied were chosen to represent a spectrum of scores on the EPSI customer satisfaction index (Eklöf & Westlund, 2002), ranging from high through medium to low.

Data collection

The empirical evidence consists of 35 semi-structured face-to-face interviews conducted in 24 organisations in the following service sectors: banking, energy, information and communications technology (ICT), staffing and recruiting, insurance, and health and fitness (Table 1). The length of the interviews ranged from 40 to 90 min and all interviews were recorded and transcribed.

The criterion for selection of interviewees was senior management level with relevant experience in working with non-financial performance measures. All interviews followed the same interview guide, which was structured around the use of CSI and practices in analysing, disseminating, and acting upon CSI. Examples of interview questions are: 'How do you use the result from measurements of non-financial performance measurements like customer satisfaction measurements? Please describe what happens when you get results from these measurements'; 'Who in the organisation is responsible for the results on non-financial performance measurements?' and 'Do you connect, and if so how, the non-financial performance measurements to your organisation's strategy and goals?'

Data analysis

The data was analysed in three steps, starting with (1) open coding of the interview transcripts and notes to structure the data, with a focus on how the firms worked with CSIU. At this initial stage, the coding framework evolved inductively. Next, (2) data was analysed in a thematic analysis following a process of pattern-matching linking the empirical data to patterns and descriptions from previous studies (Gibbert et al., 2008), in this case studies on absorptive capacity as well as the CSIU phases of strategy, measurement, and analysis and implementation (Lervik Olsen et al., 2014). Finally, (3) the initiatives identified within each of the codes were analysed further and refined through an iterative process in relation to extant literature.

Research quality

As a means of strengthening the analysis, the data analysis was carried out jointly by the authors (Meredith, 1998). However, the data collection was mainly carried out by the first author, so the second and third authors can be regarded as external investigators in the analysis, hence strengthening the reliability of the analysis (Eisenhardt, 1989).

Table 1. Overview of interviews, sector and interviewees' positions.

Industry	Position of interviewee		
Banking	Customer Insights Manager		
Banking	CEO		
Banking	Senior VP and Sustainability Manager		
	HR Manager, Employee Branding		
	Branch Manager		
Banking	Customer Insight Manager		
Banking	Management Partner		
Banking	HR Manager, Employer Branding		
	Employee Working Environment Manager		
	Branch Manager		
Energy	Customer Service Manager		
Energy	Net Promoter Score Manager		
Energy	CEO for a subsidiary in an energy company group		
Energy	CEO		
Energy	Marketing and Sales Manager		
Energy	Business Area Manager		
Energy	Business Area Manager		
Energy	Quality and Sustainability Manager		
Energy	CEO		
	Customer Process Manager		
Health & Fitness	Communications Manager		
ICT	Communications Manager		
	Director of Customer Experience		
	NPS Manager		
ICT	Customer Relationship Manager		
ICT	Senior Business Analyst Manager		
ICT	Customer Relationship Manager		
	HR Business Partner		
	HR Director		
ICT	Customer Relationship Manager		
	Strategy Manager		
	Quality Manager		
Insurance	Insurance Manager		
Staffing Industry	Quality Manager		
Staffing Industry	Business Process Development Manager		

Findings

This section presents the findings of the conducted study. The section starts with an overview of the studied firms' absorptive capacity with regard to their CSIU. The firms' PACAP- and RACAP-related activities in their CSIU is then elaborated on.

Absorptive capacity

In terms of the presence of absorptive capacity overall, all firms showcase certain abilities in acquiring external knowledge in terms of CSI. However, the exploitation of this new knowledge in terms of improvements or innovations differs greatly between the studied firms. Table 2 presents identified initiatives associated with the firms' PACAP and RACAP, alongside illustrative quotes from the firms studied.

In the following, findings related to firms' PACAP activities will be elaborated on, before the firms' RACAP is explored.

Table 2. Initiatives exemplifying absorptive capacity in relation to CSIU.

Absorptive Capacity	Initiative	Illustrative quote
PACAP	P1. Valuing CSI as a strategic asset. Relevance P2. Employ internally and externally developed CSI-acquiring methods. Multiple sources of CSI	'I think that one reason for our success [with high CS results] is that our executive board is very devoted to the customer satisfaction question; having the most satisfied customers in our industry is one of our corporate-wide goals.' [Quality manager, staffing and recruiting firm] 'We measure [CSI] in many different ways Customer Service automatically sends out surveys to all customers once they use one of our services where they are asked to answer how satisfied they are Then we also measure [CS] in our stores, and since a few months back, we have a large NPS [Net Promoter Score] project running, where we have used in-depth interviews with senior leaders in the firm, in depth-interviews and group-interviews with tons of customers And then we have analytical tools to analyse all this material, to see what has the highest effect on CS.' [Analysis manager, ICT
	P3. Employ regular CSI meetings; frequency varies between weekly and yearly, but generally occurs weekly. <i>Engaging people</i>	firm] 'Every Wednesday at 9 am we have a 30-minute stand-up meeting where we discuss all NPS values and what changes have happened since last week. Oftentimes during that meeting the whole senior leadership, including the CEO, are present [] Many middle managers and specialists who feel some kind of ownership over these results are present.' [NPS manager, ICT firm]
	P4. Disseminate CSI throughout the organization. Organisation-wide communication	'On the intranet we show these bonus targets, where CSI is an important part, and there is also an executive summary stating what are current levels are so it reaches everyone.' [Analysis manager, ICT firm]
RACAP	R1. Use the regular CSI meetings to discuss changes in CSI, identify which actions to take and follow up during upcoming meetings. Actionability and accountability	'During the weekly stand up-meetings, me and my colleague usually read the CSI results out loud for everyone there, and then we decided that we [the NPS team] are only going to talk about general CSI changes, and now you, if you own a CSI result, you have to be knowledgeable about your

Table 2. Continued.

Absorptive Capacity	Initiative	Illustrative quote
	R2. Tying incentive structures to CSI changes and goals.	team's CSI score, and you have to explain what is happening, why, and what you will do about it. So now everyone needs to be knowledgeable about their CSI. And it will get really awkward if you're not knowledgeable about your CSI results when the CEO is present at the meeting.' [NPS manager, ICT firm] 'We work with breaking down these numbers [the CSI], and last month we
	Incentives to mobilise change	had a workshop with the whole firm where we determined the target goals for next year, before we broke down those targets for each quarter. Then we had an exercise, 'given these targets, what does each individual have to do?', and then of course it mattered which role in the firm that each individual has.' [HR business partner, ICT firm]
	R3. Develop training courses for employees based on the CSI. <i>People skills to mobilise change</i>	'In our analysis [of CSI] we have concluded that our employees need become better at addressing these customer needs. So, we have developed a course, a method or strategy, for this we have an online course and then we have workshops to practice this method.' [Quality manager, staffing and recruiting firm]

Potential absorptive capacity (PACAP)

All the studied firms are acquiring some degree of external knowledge by obtaining different types of CSI, thus showcasing PACAP to varying degrees. Derived from Table 2, four categories (P1–P4) of initiatives related to PACAP have been identified. First, realising the *relevance* (P1) – that is, the strategic reasoning leading up to the acquiring of CSI – differs between the studied firms. Some firms have showcased numerous strategic reasons for wanting to acquire CSI, whilst others lack an outspoken strategy or purpose. The lack of a CSIU strategy appears to result in firms struggling with assimilation-related activities. Planning of the operationalisation and assimilation of the CSI strategy is generally very limited, or even non-existent: 'I hardly dare say what we do with the CSI results ... Usually the results are in time for our yearly company meeting, so our CEO goes up on stage and says, 'We won this year again!' and then we don't really do anything more [...] I might write some sentences in my newsletter' [communications manager, health and fitness firm].

Second, a prerequisite for using the new external knowledge appears to lie in *multiple* sources of CSI (P2) in terms of how data is collected. The firms that value and acquire CSI, both by use of internally and externally developed measurements – that is, obtaining CSI that has information regarding individual customer experiences as well as aggregated

CSI on different customer segments, and geographical areas — showcase more activities related to the assimilation of the CSI. Thus, it appears critical to 'measure [CSI] in many different ways ... Customer service automatically sends out surveys to all customers once they use one of our services where they are asked to answer how satisfied they are ... Then we also measure [CS] in our stores, and since a few months back, we have a large NPS [Net Promoter Score] project running, where we have used in-depth interviews with senior leaders in the firm, in depth-interviews and group-interviews with tons of customers ... And then we have analytical tools to analyse all this material, to see what has the highest effect on CS' [analysis manager, ICT firm].

Third, in terms of regular meetings or established forums to discuss CSI, some firms employ a more shared approach on dissemination to *engage people* (P3). Such a shared approach aims to ensure that all employees are exposed to the CSI through presentations on all levels, from top management to operative staff. However, the firms appear to experience difficulties in terms of being able to analyse the CSI in a manner that is relevant and actionable for all employees. A key challenge is attributed to the difficulty of feeling ownership over the measurements and their results. According to the NPS manager of an ICT firm, this can be attributed to the difficulties for an employee to understand what the measurements and their results really mean in relation to one's own work.

Finally, the function designated for receiving and assimilating CSI is commonly the communications department, implying that it should be responsible for an *organisation-wide communication* (P4) of CSI throughout the organisation: '... the communication departments are the ones driving and paying for these types of measurements [the CSI measurements]... and then you notice that the discussion about taking action based on the CSI results revolve around image questions, for example that we have to change our advertising agency. So, you just keep repainting the surface' [customer insight manager, bank]. However, some firms have not designated the ownership of the CSI results to any department or team, whilst other firms formally designated ownership on team and/or individual levels. In one of the ICT firms, the NPS team deliberately transferred ownership from itself to other teams, as a means of encouraging prioritisation of the matter as well as facilitating a sense of urgency.

Realised absorptive capacity (RACAP)

When it comes to realising the potential absorptive capacity related to CSI, the firms employ few, if any, designated activities and processes to transform existing or develop new organisational processes, competences, or offerings in response to the newly acquired external CSI knowledge. Three categories (R1-R3) of RACAP-activities have been identified, as can be seen in Table 2. The degree of RACAP varies between the firms; naturally, the firms that employ few PACAP-related activities are also showcasing few RACAP-related activities. Thus, the transition from CSI to concrete improvements is often non-existent, where firms repeatedly fail to take next steps after having the results presented for the senior leadership. To counteract this, one firm is trying to identify low-hanging fruit: 'Some actions [to improve CS] are probably easy to do. So now we are trying to find those easy things' [analysis manager, ICT firm]. A challenge shared by several firms is the perceived difficulty of transitioning from informal ways of exploiting CSI to formal transformation processes supporting service improvements: 'When we were a smaller firm, we could drive this [the CSIU for service improvements] solely through our organisational culture, the understanding of how important it is to work with having satisfied customers [...] As the firm has grown, it has become more difficult to only rely on our culture for this; we have to systemise it somehow to ensure that it permeates all our processes' [quality manager, staffing and recruiting firm].

First, a set of activities to systematise the use of CSI is to establish a regularity in the discussions of CSI measurements, thereby supporting actionability and accountability (R1) in relation to CSI. As an example, the NPS manager at the ICT firm has deliberately transferred the responsibility for who should be knowledgeable and have ownership over CSI to the respective teams and employees. This is achieved by transferring the responsibility to present, analyse, and suggest actions on how to improve CS during the firm's weekly CS meeting. According to the interviewee, this has also resulted in a change of behaviour, where CSI has taken a more prominent position in the day-to-day work of many teams, as well as increased the level of organisational knowledge regarding CSI.

Second, by establishing *incentives that mobilise change* (R2) related to CSIU, some of the studied firms have found that their organisational culture has become more CSI-focused. This increased attention on CSI has been supported by the formalisation of CSI-related incentive structures: 'Before it was always me or my colleague who tried to raise the relationship between our actions and the NPS score ... now it is the managers themselves who are saying 'If we do this, our NPS scores will increase' or 'This will have a negative effect on our NPS score', which creates organisational awareness' [net promoter score manager, ICT firm].

Third, some of the studied firms develop employee workshops and/or courses to support development of competences and *people skills to mobilise change* (R3) in the CSIU. One of the studied firms, which is in the staffing and recruiting industry, has developed an online course based on CSI results, which employees are encouraged to take. The material of the online course is also practiced in workshops that are available to employees. These activities enrich the employees' knowledge regarding the customers and also aim to transform their behaviour in order to increase CS. However, the actual transformation of the employees' competence and behaviour is not followed up on, so it cannot be said whether these RACAP-activities result in transformed behaviour.

Discussion

This paper has introduced absorptive capacity (AC) as a way of deepening the understanding of CSI, with particular emphasis on the U (usage) of CSIU as a potential support for service improvements. When viewed in terms of AC, the findings reveal that companies engage in a number of CSIU initiatives. AC imposes both an outside-in dimension to CSIU through PACAP, and when it comes to releasing that potential focuses more internally through RACAP; that is, transforming an existing practice or creating a new one (Eisenhardt, 1989; Zahra & George, 2002). There is a need to study and understand how CSIU can be used in a way that leads to actions in the form of service improvements (Lervik Olsen et al., 2014). The findings in the present study complement the current process view on CSIU by identifying dimensions of AC that enable CSIU to move to move beyond a symbolic activity and towards those that are knowledge-enhancing and action-oriented. The findings reveal that the firms studied vary in their AC and that this influences the usefulness of their CSIU work in terms of achieved impact on areas such as service improvements. In the following, we map the APAC initiatives that emerge from the empirical findings against the sub dimensions of PACAP and RACAP (Zahra & George, 2002), and then discuss how the types of CSIU (symbolic, action-oriented, and knowledge-enhancing) (Rollins et al., 2012) relate to organisations' AC.

Potential and realised absorptive capacities

P4

R2

R3

RACAP R1

Our findings point to a range of initiatives (Table 2) manifesting the studied firms' absorptive capacity. Table 3 relates these to the sub dimensions of PACAP and RACAP, namely acquisition, assimilation, transformation, and exploitation (Zahra & George, 2002).

Three main points emerge from Table 3: (1) the influence of pre-acquisition initiatives (P1 and P2) on firm's ACAP; (2) shared ownership of, and mandate to influence, CSIU (P3, P4 & R1) as potential bridging initiatives between PACAP and RACAP; and (3) the emphasis on transformation-capabilities (P4, R1, and R2), and scarcity of exploitation-related initiatives, related to the firms' RACAP.

First, prior to employing the firm's capacity to acquire external knowledge, some firms mentioned the importance of *creating a sense of urgency* and establishing *relevance* (P1), along with deciding what *various sources of CSI* would best benefit the firm (P2). These pre-acquisition initiatives are elements found in the strategy phase of the CSIU process (Lervik Olsen et al., 2014). Thus, for PACAP initiatives to be successful, there appears to be a need to extend the ACAP frame to include initiatives that prepare the organisation for the acquisition, assimilation, transformation, and exploitation phases that follow.

Second, PACAP and RACAP are complementary capacities (Easterby-Smith & Lyles, 2011; Mäkinen & Vilkko, 2014) and bridging initiatives in both of these dimensions are needed in order to turn CSIU into actions such as service improvements. An example of an initiative acting as a bridge between ACAP and RACAP is the *organisation-wide communication* (P4) through which CSI is disseminated in a firm. Moreover, when aiming to turn CSI into action, several of the studied firms have highlighted the need to feel ownership over the CSI results and thus having the mandate to influence CSI. These initiatives transcend from PACAP into RACAP, by first *engaging people* (P3) to feel ownership over the CSI results, before ensuring *actionability* and *accountability* (R1) over the results.

Third, as previous research on CSIU points to the difficulties in moving from collecting CSI to using it for improvements (Morgan et al., 2005; Rollins et al., 2012), the initiatives related to RACAP are critical in terms of transforming and exploiting CSI. The studied

2002).							
	PACAP		RACAP				
	Acquisition	Assimilation	Transformation	Exploitation			
PACAP							
P1	ß Relevance, creating sense of urgency						
P2	Multiple sources of CSI						
P3		Engaging people					

Actionability and accountability

People skills and mobilising change

change

Incentives to mobilise

Organisation-wide communication

Table 3. Empirical findings mapped to sub dimensions of PACAP and RACAP (Zahra & George, 2002).

firms appear to be aware of the criticality of transforming CSI into something perceived as useful across the firm through *organisation-wide communication* (P4), and also create *actionability* and *accountability* (R1) for the improvement of CS; for example, through various *incentives to mobilise change* (R2). However, except for education initiatives to develop *skills to mobilise change* (R3) where employees receive education on how to act on customers' expressed needs, there is an absence of initiatives in relation to the exploitation of CSI.

Understanding different types of customer satisfaction information usage

Using the lens of PACAP and RACAP in relation to the different types of CSIU provides depth and greater understanding of the CSIU types by helping identify within which activities their respective strengths and shortcomings lie, as well as how to address these. To further expand the knowledge of firms' CSIU in relation to the firms' ACAP, the different CSIU types are analysed based on how they allocate, move, and utilise *organisational ownership* of CSI.

Firms that employ a symbolic CSIU showcase limited capabilities to identify, evaluate, and recognise the value of CSI - referred to as firms' PACAP (Easterby-Smith & Lyles, 2011). Furthermore, they lack capabilities that can assimilate the CSI into the existing knowledge base as well as exploit this newly acquired knowledge to improve their services, referred to as firms' RACAP (Camisón & Forés, 2010). Thus, the symbolic CSIU firms have limited PACAP and their PACAP never transcends into RACAP. One way for symbolic CSIU firms to improve their capability to realise their potential AC is to bridge their PACAP-related activities and capacity with RACAP-related activities and capacity. Even if the knowledge-enhancing and action-oriented firms showcase both PACAP and RACAP, it is challenging for both types to realise PACAP into RACAP. Firms that showcased a knowledge-enhancing or action-oriented usage often relied on more than one way of acquiring CSI, such as complementing internally developed NPS or CS measurements with external, industry-wide and/or national CSI-measurements. Thus, it could be argued that the external-firm knowledge flow fundamental to ACAP (Cohen & Levinthal, 1990) is limited in symbolic firms, whilst knowledge-enhancing and action-oriented firms facilitate a more holistic PACAP of CSI.

Action-oriented firms generally showcase more RACAP-related initiatives than the knowledge-enhancing firms, which arguably makes them better at exploiting the external knowledge (Camisón & Forés, 2010) and means they possess a higher efficiency factor (Mäkinen & Vilkko, 2014). In contrast, knowledge-enhancing firms possess a stronger emphasis on PACAP activities. This could imply that even though action-oriented firms might be better at realising their PACAP-initiatives, they risk being less prepared to respond to environmental turbulence than knowledge-enhancing firms (Mäkinen & Vilkko, 2014) as they are not as strong in their PACAP initiatives. Since having a strong focus on RACAP-initiatives does not automatically ensure that a firm has strong PACAP (Mäkinen & Vilkko, 2014; Easterby-Smith & Lyles, 2011), a combination of the action-oriented and knowledge-enhancing usage appears to be a viable strategy for exploiting CSI and turning it into action.

Besides differences related to AC (either potential or realised), a key differentiator between firms showcasing symbolic, action-oriented, and knowledge-enhancing CSIU is the view on CSI ownership. More specifically, depending on which type of CSI-usage the firm displays, a number of differences in the organisational ownership appear. Firms' AC requires knowledge flows both in the firm-environment interface as well as in intra-

organisational interfaces between different departments (Cohen & Levinthal, 1990). Moreover, AC cannot be present in one part of an organisation only, but requires changes in routines at the firm level (Lam et al., 2017). The findings indicate that various levels of the organisation take ownership of CSIU, ranging from the top management through individual functions towards teams and even individuals herein. A common situation is, unfortunately, that a communications office takes on the main responsibility for CSIU; in other words, responsibility for CSIU lies with the firms' support staff (Mintzberg, 1983). Firms in which CSIU is handled by support staff risk ending up in symbolic CSIU, as the operating core (Mintzberg, 1983) with mandates and resources to initiate service improvement activities are neither aware of nor made accountable of CSIU. In comparison, the firms that have initiatives in place to support both ACAP and RACAP, and therefore might be able to use CSIU to drive service improvements, have shared and disseminated ownership of CSIU so that it lies not only with support staff but also in the strategic apex and the operating core (Mintzberg, 1983) of the organisation.

Future research

The scope of the presented research feeds into proposals for potential future research avenues; whilst this paper draws its insights from a broader, multiple-case approach, one further direction is to deepen the understanding of a firm's use of ACAP in relation to its CSIU through an in-depth case study. Furthermore, the link between ACAP-initiatives and service improvement activities needs to be elaborated on and clarified further, in order for service firms to be able to fully take advantage of the potential of CSI. This paper has presented the first step in that journey, but further investigations of the configurations of firms' CSIU, ACAP and service improvements are encouraged.

Conclusions

This paper set out to explore how firms turn CSIU into knowledge and actions in a manner that enables service improvements. In summary, the identified PACAP-related initiatives can be summarised in terms of establishing sense of urgency (relevance) and existence of multiple sources of CSI in acquiring new knowledge and by engaging people in that process. This is followed by a step that appears quite logical in this context: organisation-wide communication. The more internally focused realisation (RACAP-related initiatives) is concerned with the creation of momentum in the organisation through creating actionability and accountability for CSIU among more employees, and by creating incentives to mobilise changes based on CSIU alongside developing the people skills needed to act upon the CSIU.

The contributions of this paper lie in its focus on CSIU not in itself, but on absorptive capacity as a means to understand and enhance the link from CSIU onwards to service improvements. On one hand, circumstances need to be put in place to create a *potential* absorptive capacity, primarily through efforts that can be associated with the organisation and systems that have the potential to mobilise CSI but are not necessarily realised. These include establishing a sense of urgency in the organisation, use of multiple sources of CSI, communication, and engaging people. These initiatives are characterised by coordination and synthesis. On the other hand, activating this causal power of systems and the organisation for CSI use requires mechanisms that can be associated with *realised* absorptive capacity. This ensures actionability of initiatives, assignment of responsibility for actions and follow-up, and provides incentives to mobilise change support use by their

transformative and exploitative nature. To this end, the study further discusses what underlying absorptive capacities help explain the differences between symbolic, action-oriented, and knowledge-enhancing CSIU; in other words, what explains why certain organisations achieve service improvements from the CSIU. In terms of PACAP, this input side of CSIU is limited for the symbolic CSIU firms and the RACAP is non-existent. For action-oriented and knowledge-enhancing firms, there is a range of PACAP activities and also RACAP activities, although action-oriented firms focus more on realising their PACAP initiatives than do knowledge-enhancing firms, which focus more on a variety of sources for CSI. Hence, to ensure actions on service improvements that accommodate as many as market issues as possible, a combination of the action-oriented and knowledge-enhancing CSIU appears to be viable. Further, the study shows that, for this to happen, it is critical that the responsibility for CSIU lies at the operating core of the organisation, rather than with support staff.

Acknowledgements

The authors gratefully acknowledge financial support for this study from the Area of Advance Production at Chalmers University of Technology, and from the EPSI rating group.

Disclosure statement

No potential conflict of interest was reported by the author(s).

References

- Birch-Jensen, A., Gremyr, I., Hallencreutz, J., & Rönnbäck, Å. (2020). Use of customer satisfaction measurements to drive improvements. *Total Quality Management & Business Excellence*, 31 (5–6), 569–582. https://doi.org/10.1080/14783363.2018.1436404
- Bititci, U., Garengo, P., Dörfler, V., & Nudurupati, S. (2012). Performance measurement: Challenges for tomorrow*: performance measurement. *International Journal of Management Reviews*, *14* (3), 305–327. https://doi.org/10.1111/j.1468-2370.2011.00318.x
- Camisón, C., & Forés, B. (2010). Knowledge absorptive capacity: New insights for its conceptualization and measurement. *Journal of Business Research*, 63(7), 707–715. https://doi.org/10.1016/j.jbusres.2009.04.022
- Chen, I. J., & Popovich, K. (2003). Understanding customer relationship management (CRM): People, process and technology. *Business Process Management Journal*, 9(5), 672–688. https://doi.org/10.1108/14637150310496758
- Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. Administrative Science Quarterly, 35(1), 128–152. doi:10.2307/2393553.
- Easterby-Smith, M., & Lyles, M. A. (Eds.) (2011). *Handbook of organizational learning and knowledge management* (2nd ed). Wiley.
- Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, 14(4), 532–550. https://doi.org/10.5465/amr.1989.4308385
- Eklöf, J. A., & Westlund, A. H. (2002). The pan-European customer satisfaction index programme current work and the way ahead. *Total Quality Management*, 13(8), 1099–1106. https://doi. org/10.1080/09544120200000005
- Flick, U. (2014). An introduction to qualitative research (5th ed). Sage Publications.
- Fornell, C., Johnson, M. D., Anderson, E. W., Cha, J., & Bryant, B. E. (1996). *The American Customer Satisfaction Index: Nature, Purpose, and Findings.* 14.
- Garver, M. S., & Gagnon, G. B. (2002). Seven keys to improving customer satisfaction programs. Business Horizons, 45(5), 35–42. https://doi.org/10.1016/S0007-6813(02)00241-0
- Gibbert, M., Ruigrok, W., & Wicki, B. (2008). What passes as a rigorous case study? *Strategic Management Journal*, 29(13), 1465–1474. https://doi.org/10.1002/smj.722

- Kostopoulos, K., Papalexandris, A., Papachroni, M., & Ioannou, G. (2011). Absorptive capacity, innovation, and financial performance. *Journal of Business Research*, 64(12), 1335–1343. https://doi.org/10.1016/j.jbusres.2010.12.005
- Lam, S. K., Sleep, S., Hennig-Thurau, T., Sridhar, S., & Saboo, A. R. (2017). Leveraging frontline employees' small data and firm-level Big data in frontline management: An absorptive capacity perspective. *Journal of Service Research*, 20(1), 12–28. https://doi.org/10.1177/109467 0516679271
- Lervik Olsen, L., Witell, L., & Gustafsson, A. (2014). Turning customer satisfaction measurements into action. *Journal of Service Management*, 25(4), 556–571. https://doi.org/10.1108/JOSM-01-2014-0025
- Lusch, R. F., Vargo, S. L., & Gustafsson, A. (2016). Fostering a trans-disciplinary perspectives of service ecosystems. *Journal of Business Research*, 69(8), 2957–2963. https://doi.org/10. 1016/j.jbusres.2016.02.028
- Macdonald, E. K., Kleinaltenkamp, M., & Wilson, H. N. (2016). How business customers judge solutions: Solution quality and value in use. *Journal of Marketing*, 80(3), 96–120. https://doi.org/10.1509/im.15.0109
- Mäkinen, S. J., & Vilkko, M. K. (2014). Product portfolio decision-making and absorptive capacity: A simulation study. *Journal of Engineering and Technology Management*, 32, 60–75. https://doi.org/10.1016/j.jengtecman.2013.09.004
- Meredith, J. R. (1998). Building operations management theory through case and field research.
- Mintzberg, H. (1983). Structure in fives designing effective organizations. Prentice-Hall.
- Morgan, N. A., Anderson, E. W., & Mittal, V. (2005). Understanding firms' customer satisfaction information usage. *Journal of Marketing*, 69(3), 131–151. https://doi.org/10.1509/jmkg.69.3. 131.66359
- Narver, J. C., & Slater, S. F. (1990). The effect of a market orientation on business profitability. *Journal of Marketing*, 54(4), 20–35.
- Pettigrew, A. M. (1990). Longitudinal field research on change: Theory and practice. *Organization Science*, 1(3), 267–292. https://doi.org/10.1287/orsc.1.3.267
- Rollins, M., Bellenger, D. N., & Johnston, W. J. (2012). Customer information utilization in business-to-business markets: Muddling through process? *Journal of Business Research*, 65(6), 758–764. https://doi.org/10.1016/j.jbusres.2010.12.013
- Storey, C., & Larbig, C. (2018). Absorbing customer knowledge: How customer involvement enables service design success. *Journal of Service Research*, 21(1), 101–118. https://doi.org/10.1177/ 1094670517712613
- Voss, C., Tsikriktsis, N., & Frohlich, M. (2002). Case research in operations management. International Journal of Operations & Production Management, 22(2), 195–219. https://doi. org/10.1108/01443570210414329
- Wang, E. T. G., & Wei, H.-L. (2005). The importance of market orientation, learning orientation, and quality orientation capabilities in TQM: An example from Taiwanese software industry. *Total Quality Management & Business Excellence*, 16(10), 1161–1177. https://doi.org/10.1080/ 14783360500236270
- Wang, Q., Zhao, X., & Voss, C. (2016). Customer orientation and innovation: A comparative study of manufacturing and service firms. *International Journal of Production Economics*, 171, 221– 230. https://doi.org/10.1016/j.ijpe.2015.08.029
- Zahra, S. A., & George, G. (2002). Absorptive capacity: A review, reconceptualization, and extension. *The Academy of Management Review*, 27(2), 185. https://doi.org/10.2307/4134351