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### Summary

This preliminary report provides a thorough review of research in self-serving technology, human interaction, and customer satisfaction. The aim of the study is to investigate the effect of human interaction (HI) and self-service technology (SST) in service encounter on satisfaction. Previous research is contradictory when it comes to the subject. We hypothesize that HI and SST will have different effects on consumer satisfaction and customer loyalty. We assume that customers are more satisfied with a successful outcome from a HI, compared to a successful outcome of SST. We argue that even if the IKEA-effect can be strong when the customer use SST, the relational attributes that occur in a successful HI service encounter will be perceived as more satisfying for the customer. We also hypothesize that customers will be less dissatisfied with an unsuccessful outcome of SST, compared to more dissatisfied with an unsuccessful outcome of HI. We use attribution theory including self-serving bias to argue and test that the customers attribute negative responsibility to external factors and not internal factors, making the customer less dissatisfied with the negative outcome. Furthermore, we assume that the customer might attribute responsibility to the service person involved in the HI in an unsuccessful outcome of the service encounter. Overall, the hypothesis aims to suggest that; even though existing literature state that HI is the most important factor for loyalty and satisfaction, SST is also an (increasingly) important factor.

# Satisfaction and loyalty in Self-Service Technology

# 1. Introduction

While previous research has proposed that service with a smile impacts customer attitudes and behaviors through its effect on cognitive judgments of the behaviors, such as perceived service quality and expectations (Oliver, 1997; Parasuraman, Zeithaml, & Berry, 1985), machine interaction in service businesses increases today. In the strive to improve service productivity, businesses often substitute expensive service persons with machines and dynamically encourage customers to use self-service technologies (SST) on a daily basis (White, Breazeale, & Collier 2012). In recent years, the increase in the use of SST across the service sector has dramatically changed the nature of the service delivery process. Although previous research has investigated how customers evaluate a new SST and what drives the initial adoption, little is known about how customers value SST interaction compared to human service interaction (HI), and how this affect the satisfaction of the service encounter. Therefore, this study aims to focus on the dynamic process through which customers evaluate satisfaction in HI and SSTs, and if they respond to them in the same way. More precisely, we address (1) that HI and SST encounter will have different effects on consumer satisfaction and customer loyalty, and (2) how and why customer evaluation of satisfaction may differ. We intend to investigate how the customer satisfaction is affected by the shift from HI to SST in the bank and insurance industry in Norway. At the Norwegian Confederation of Trade Unions (LO) conference in 2015, the Norwegian Minister of Finance stated that new technological solutions can change the customer loyalty. The minister further state that so far, the loyalty to the banks has not yet been weakened, but that it possibility can happen in the future, when credit cards and account number are switched out with phone number and apps (regjerningen.no 2015).

## 1.1 Technology in the bank and insurance industry

Financial technology, also known as FinTech, is an industry composed of companies that use new technology and innovation in order to compete in the marketplace of traditional financial institutions in the delivering of financial services (Chrishti and Barberis, 2016). In the past years, this industry has changed dramatically. According to a report from EY (2014), the largest growth within

FinTech has been user-to-user platforms, online payment, data and analysis products for credit checks, capital markets, and insurance. Deloitte (2016) specified that the emergence of a more digital economy has led to new customer preferences. Deloitte and Word Economic Forum (2015) created a study that looked at the development in the bank and insurance industry to get a deeper understanding of how innovation changes the industry. They found that increased rivalry will push some of the service providers out of the competition, and that the Internet of things, sensors and analytics will create changes in health care, transport, environment at home, and our lifestyle. This will in return change the insurance industry. Individual insurances policies will provide customized and tailored insurance premiums, and companies that not follow the trends can lose valuable customers (Deloitte and WEF 2015). Driven by generational shifts and quick consumer adoption of technology, customers' channel preferences for financial products and services are shifting rapidly. Changing customer preferences have established a number of innovations, from the development of virtual banks to the evolution of mobile banking. As customer expectations for banks continue to rise, financial organizations will be required to create a more valuable online experience that is more customer driven, potentially changing the role of service providers (Deloitte and WEF 2015). This is also consistent with what Bendapudi and Leones' (2003) states in their research; encouraging customers to be co-producers and participating in their own value creation, is the next frontier in competitive effectiveness. Insurance is typically considered as one of the slowest of adoption within innovative financial services, but the increase of online insurance marketplaces will force big changes (Deloitte and WEF 2015). In an increasingly competitive environment, the risks of customers being more indecisive will increase, and to create loyal customers through technological innovation will become more important (Deloitte and WEF 2015).

There are numerous studies that has investigates SST adoption, SST readiness, customer response to SST, implementing successful SST, and SST experiences, but there are only a few studies that has investigated if HI and SST differ in satisfaction, and if so, how and why. Also, there is no study that has measured this in the bank and insurance industry. Moreover, previous research on this topic offers contradictory conclusions, and we want to add value to the literature by offering a study that tests the predictions in these studies. On the one hand, some

studies claim that HI is needed to create satisfied customers, and that SST not yet has completed to create the same customer satisfaction. Service where a smile from HI is included, for example, will increase the service quality and expectations (Oliver 1997; Parasuraman, Zeithaml, & Berry 1985) Additionally, researchers has claimed that HI service encounter can go beyond the core service, where friendliness and other social treatments can increase the satisfaction (Bendapudi and Berry, 1997; Gwinner et al., 2005; Gwinner, Gremler and Bitner, 1998). On the other hand, some studies state that SST may help the firm. Not only can SST create customer satisfaction, but also decrease labor costs, time consumption, effectiveness, and availability (Curran and Meuter 2007; Elliott, Meng and Hall 2012; Kim et al. 2014; Meuter et al. 2003). Moreover, that SST can improve the trade-off between customer satisfaction and productivity (Huang and Rust, 2013). You will find supplementary and additional contrasting theory in the literature review.

#### **1.2 Research Question**

We want to investigate how SST's in the bank and insurance industry in Norway affects customer's satisfaction. Is there a change in satisfaction when the service encounter change from HI to SST? And if so, how does customer react differently and why?

The purpose of this research is twofold: a theoretical and empirical analysis of the satisfaction on HI and SST and the extent to which this create loyal customers.

#### **1.3** Contribution

With this research we hope to add value to the existing research on this topic by investigating this topic. More specific, we will contribute to existing research by examine how this topic will affect the bank and insurance industry. Second, this research will be of interest to managers because it can help them to understand how they can generate satisfied customers that will be loyal. We believe that the bank and insurance industry today is getting more and more competitive, and it of with high importance to meet the customers need in a business world where technology is becoming increasingly important, both for the customer and the service provider. Therefore, this research will be helpful for a marketing manager

since the findings of this research possibly can change how they offer SST to their customers, and also possibly change the way the use service employees to interact with their customers.

In the following text, we present a find literature review on the following topics: self-serving technology; human interaction; service encounters; experience; customer satisfaction; customer loyalty; customer value; the IKEA-effect; attribution theory; the self-serving bias; person sensitivity bias; and social response theory. We also hypothesize different assumptions we intend to test. Furthermore, we propose to do the study with a scenario based survey experiment, and at the end of the report we present the conclusion including our contributions and limitations of the study. However, this is still a preliminary report and a work in progress. The final thesis is not final yet, and there may be change or moderation along. Lastly, the appendix will include a progression plan for our goals with the master thesis throughout this semester.

## 2. Literature Review

#### 2.1 SST versus HI

Service researchers have in the past proposed that service with a smile impacts customer attitudes and behaviors through its effect on cognitive judgments of the behaviors, such as perceived service quality and expectations (Oliver 1997; Parasuraman, Zeithaml, & Berry 1985). The concept of a service encounter is usually the image of face-to-face interaction between a customer and a service employee (Bitner 1990), but that picture is changing. Service businesses worldwide are taking advantage of the increasing technological innovation and are integrating SSTs into their service delivery systems (Curran and Meuter 2007; Elliott, Meng and Hall 2012; Kim et al. 2014; Meuter et al. 2003; Oghazi et al. 2012; Robertson, McQuilken and Kandampully 2012; Walker et al. 2002; Zhu, Wymer and Chen 2002). Replacing HI service encounters with SST has helped firms to decrease labor costs and improve consistency in service operations (Bitner 2005; Kim et al., 2014; Meuter et al., 2005) Fitzsimmons (1985) states that when customer participate in production, it reduces labor cost and enable to offer a lower price for customers. Productivity is use in many businesses to reduce cost and boost their profit. Parasuraman (2010) found that by improving service

productivity and service quality simultaneously, managers could capitalize on the synergy. Through SST it is easier to reduce cost coherently with having a customer centric view. Furthermore, Huang and Rust (2013) found that SST could improve the trade-off between customer satisfaction and productivity. They find that companies can be abler to cost-efficiently satisfy their customer through SST.

Customers also take advantage from SSTs as they experience service accessibility and convenience, time and cost savings, and more perceived control and competence (Bitner, 2001; Houliez 2010; Kim et al. 2014; Lee and Allaway 2002; Meuter et al. 2000; Oghazi et al. 2012). Service encounters with HI are the service that is provided by the frontline employees to customers (Bitner et al. 1990). Frontline employees interact with customers to learn and understand the customer's problems, needs, and requests, and then deliver the requested service to them (Chen 2011). According to Ganesh et al. (2000), HI can be the most crucial factor that affect the overall customer satisfaction and repurchase intention. As opposed to HI, SSTs are defined as any use of a technological interface (e.g., computer, laptop, tablet, interactive television smartphone/telephone, etc.) to create a service for the customer without the direct involvement of a serviceperson (Meuter et al. 2000). SSTs characterize the crucial customer participation where service is produced entirely by the consumer without any interaction or assistance from service personnel (Elliott, Meng and Hall 2012; Zeithaml, Bitner and Gremler 2012). Within different service firms, customers still have choices between HI service encounters versus SST service encounters. In the bank and insurance sector for example, customers can choose whether to do the service encounter online by SST or by visiting the office and get help by HI.

Customers are more likely to use an SST service encounters over HI service encounters when they have strong motivation and capacity with respect to the use of technology (Meuter et al., 2005). Customer readiness is the mental desire that affect the choice of whether to use SST (Lin and Hsieh 2006; Parasuraman 2000). Research shows that when customers perceive SSTs as useful, easy to use, cost saving, reliable, and fun, they are more likely to use the technology (Elliot, Meng and Hall, 2014; Ho and Ko 2008; Kim et al., 2014; Weijters et al., 2007). Therefore, SST characteristics have a positive effect on customer readiness (Ho and Ko 2008). Other customer individual differences such as experience level (Meuter et al., 2005), customer trust (Suh and Han, 2002) and customer adoption of SSTs might have an impact. However, researchers have stated that technology can weaken social connections and affect customer loyalty negatively (Gremler and Gwinner, 2000; Selnes and Hansen 2001), and that some managers are averse to embrace SSTs too readily, observing that the technology can remove the personal touch provided by HI (Curran and Meuter, 2007). Customer dissatisfaction with SSTs is still familiar despite extensive online competition and the increased accessibility of SSTs (Harris et al., 2006; Johnson, Bardhi and Dunn, 2008; Robertson and Shaw, 2009). This research implies that SST services has room to be improved in order to gain more customer satisfaction, and thereby get loyal customers that want to repurchase.

The relationship that a customer may experience during a HI service encounter go beyond the core service of for example providing special treatments, friendliness, creating friendship, customization, and social benefits (Bendapudi and Berry, 1997; Gwinner et al., 2005; Gwinner, Gremler and Bitner, 1998; Price and Arnould, 1999). According to some researchers, these factors are especially important for creating long-term loyalty and by that create larger revenue and profits (Reichheld, 1993; Reichheld and Teal, 1996). Pine and Gilmore (1998) stated that interaction with service personnel is critical in achieving personal connection. A highly personal and emotional connection is considered important in order to create memorable experiences. Since SSTs replace the HI, the SST atmosphere must take on a new role when delivering the service in order to please the customers. Potentially, SST can help to strengthen and build relationships and create positive customer feedback as supported by previous research on service challenges in traditional HI services (Booms and Bitner 1982; Bitner 1990, 1992; Mari and Pogessi 2013). According to Booms and Bitner (1982), the servicefirms' environment and image must stimulate the behavior from potential customers and recognize customer needs in order to be affective. Moreover, the firm's environment influences customer expectations and satisfaction with a given service and therefore influence purchase and repurchase behavior Booms and Bitner (1982). Thus, it is interesting to investigate how customers today evaluate the perceived satisfaction of SST compared to HI in service encounters.

As discussed above, the literature offers different expectations of how Hi and SST influence costumer satisfaction. We assume to find that there is a difference in consumer satisfaction between HI and SST, but in what degree is unclear. Therefore, we seek to investigate the following contradicting hypotheses to test the effects of HI and SST on costumer satisfaction:

H1a: Satisfaction increases more with HI, compared to SST, when there is a successful outcome of the service encounter.

H1b: Satisfaction increases more with SST, compared to HI, when there is a successful outcome of the service encounter.

H2a: Satisfaction decreases more with HI, compared to SST, when there is an unsuccessful outcome of the service encounter.

H2b: Satisfaction decreases more with SST, compared to HI, when there is an unsuccessful outcome of the service encounter.

#### 2.2 Satisfaction and Loyalty

Customer satisfaction is a measure of how products and services supplied by a company meet or exceed <u>customer</u> expectations, and provide an indicator of consumer purchase intentions and <u>loyalty</u> (Oliver, Rust and Varki 1997). Customer satisfaction is defined as "the number of customers, or percentage of total customers, whose reported experience with a firm, its products, or its services exceeds specified satisfaction goals" (Farris et al. 2010). Firms generally ask customers whether their product or service has met or exceeded expectations. Therefore, expectations are a key factor behind satisfaction. When customers have high expectations and the outcome do not meet the expected results, the customer will be disappointed and most likely rate their experience as less satisfying (Farris et al. 2010; Oliver, Rust and Varki 1997).

Customer satisfaction are broadly recognized as key influence in the creation of consumers' purchase intentions in service environments (Taylor and Baker,1994). In some cases, customers will demand the SST alternative and will demonstrate

their displeasure by going to a competitor if it is not provided. If the new SST solution is viewed as better than the HI alternative, customer satisfaction can actually increase (Bitner, Ostrom, and Meuter 2002). Customer appreciates SSTs when it is convenient and easy access, but all the advantages are lost when SSTs fail (Bitner, Ostrom, and Meuter 2002).

Two general views of customer satisfaction stand out in the literature: service encounter or transaction-specific satisfaction and overall or cumulative satisfaction (Bolton and Drew 1991; Cronin and Taylor 1994; Shankar et al. 2003). Since cumulative satisfaction is a satisfaction that accrues across a series of transactions or service encounters, it can be used as an indicator of the firm's past, current, and future performance. Therefore, in our research, we will focus on transaction-specific satisfaction that may provide specific analytical information about an individual service encounter (Bitner and Hubbert 1994; Oliver 1996; Rust and Oliver 1994).

Prior studies of customer satisfaction that are based on the pattern of not significant results towards expectations (Cadotte, Woodruff, and Jenkins 1987) have rarely addressed the role of customer perceived value as an indication of customer satisfaction. Theoretically, customer value can be considered as a cognition-based standard that capture any benefit-sacrifice difference, whereas customer satisfaction is primarily an affective and evaluative response (Oliver 1993). According to Weiner (1982), the cognitive thinking processes activate affective responses, suggesting that customer value judgments affect perceptions of satisfaction. Customer value can be explained as an association of weighted attributes where the customer "gets" to attributes where the customer "gives" (Heskett et al. 1994). Buzzell and Gale (1987) suggest that customer value is a relationship between total advantage received to total losses, based on the suppliers' prices and offerings.

Looking at customer loyalty, Oliver (1999) states that customer loyalty is the customer's overall affection or commitment to a brand, service product, or organization. The loyalty concept is similar to relationship commitment as an enduring desire to be in a valued relationship (Anderson and Weitz 1992; Moorman, Zaltman, and Deshpande 1992; Morgan and Hunt 1994).

Customer loyalty has a powerful impact on firms' performance and is considered by many companies an important source of competitive advantage (Heskett, Sasser, and Schlesinger 1997; Rust, Zeithaml, and Lemon 2000; Woodruff 1997). According to Lam et al. (2004), customer loyalty, as a concept, represent two separate dimensions; recommending the service provider to other customers, and an intention to repeat the purchase. Understanding how several factors relate to customer loyalty can help managers to understand and improve customer loyalty successfully. Similarly, if customer loyalty has a positive effect on customer satisfaction, then managers can focus directly on loyalty-building initiatives (Lam et al. 2004).

Customer satisfaction is considered a key driver of the long-term relationship between suppliers and buyers (Geyskens, Steenkamp, and Kumar 1999). Previous research has presented that customer satisfaction affects variables that are indicators of customer loyalty or emphasis toward a long-term relationship (e.g., Ganesan 1994; Mittal and Kamakura 2001; Mittal, Ross, and Baldasare 1998).

This means that satisfied customer's affect toward a service provider could motivate the customer to support the provider again in the future and recommend the provider to other customers. Therefore, we assume that customer satisfaction has a positive effect on the loyalty dimension. Previous research studying SST have found that there is a correlation between satisfaction, future intention and loyalty (Anderson and Srinivasan 2003; MacDonald and Smith 2004; Taylor and Hunter 2002; Yang and Peterson 2004; Yen and Gwinner 2003). Furthermore, studies show that customer satisfaction has a positive effect on repurchase intentions and customer loyalty towards SSTs (Taylor et al., 2002; Van Riel et al., 2001). Heskett et al. (1997) suggested that customer loyalty should increase quickly after customer satisfaction passes a certain level. That is, the more satisfied a customer is, the larger is the chance of becoming loyal. According to Oliver, Rust, and Varki (1997), "extremely satisfied" or "delighted" customers have a large potential to remain customers of an organization than those who are merely "satisfied". Furthermore, loyal customers are much less vulnerable to negative information about a service than disloyal customers (Ahluwalia, Unnava, and Burnkrant 1999). Therefore, there is a joint effect of customer loyalty on

customer satisfaction. While this effect is relevant for the support component of loyalty, there is no strong justification to suggest that it applies to loyalty. However, prior studies have highlighted the linkage between customer value and customer satisfaction (Heskett et al. 1997), and the linkage between customer satisfaction and customer loyalty (Oliver 1999; Reichheld and Sasser 1990). Thus, we seek to test the following hypothesis:

H3: Customer satisfaction has a positive effect on customer loyalty.

#### 2.3 Technological DIY

Today, bank and insurance branches are closing some of their offices to focus more on SST solutions online. Bitner, Ostrom and Meuter (2002) state that selfservice technologies enable the customers to perform the entire services on their own without direct assistance from employees. When customers perform services on their own, the theory of the IKEA effect can be applied. Norton, Mochon and Ariely (2011) suggest that the labor alone can be sufficient to generate a better liking of the result of one's work, which refers to the IKEA effect.

Norton, Mochon and Ariely (2011) found that customers saw their unskilled creation as valuable as the creation of an expert. Furthermore, they found that when the participation is successful, it leads to people feeling competent and value the product higher. Mochon, Norton and Ariely (2012) propose evidence considering the essential role that competence plays a role in creating consumer interest in self-created products and in making their efforts feel rewarding. Still, Norton, Mochon and Ariely (2012) state that the higher value of participation is only visible when it is a successful completion of the task. When banks and insurance companies reduce the availability of HI, by for example closing branches, customers may have to perform the service encounter through SST. Therefore, based on the IKEA effect, we will assume that customers who successfully complete SST services encounters will have a higher valuation of the service/be more satisfied. On the contrary, Mochon, Norton and Ariely (2012) further found that when the task was unsuccessfully completed, the effect of competence and valuing of the outcome dissipated. Therefore, the effort made did

not have a successful result and we assume that the customer who does not successfully complete the service through SST will be less satisfied.

H4: Customers are more satisfied with a service encounter using SST when the outcome is successful, and less satisfied with SST when the outcome is unsuccessful.

#### 2.4 Attribution Theory

According to Kassin, Fein, and Markus (2010), attribution in social phycology, is the process by how and why individuals explain the causes of behavior and events as they do. Humans are motivated to assign causes to the behavior of themselves and others (Moskowitz 2005). Weiner (1982) states that consumers draw conclusions for cause of success or failure of a service based on three dimensions: locus of causality, stability, and control.

Locus of causality focuses on the internal and external cause, whether the failure is to blame on the firm or customer (Smith, Bolton and Wagner 1999). It also influences the emotional reaction to the product performance (Weiner 2000). Extending this to service encounter, a customer may feel pride when they use SST and by this performs the entire service on their own. On the contrary, this pride may disappear if the service encounter through SST fails (Weiner 2000).

Internal attribution involves two or more individuals where people assume that an event or behavior is due to personal factors such as ability, personality, mood, efforts, attitudes, or disposition (Heider 1958). When actions or motives of a person are questioned, one has to give reasons (Jaspars, Fincham, and Hewstone 1983). If the service is done by HI, and the outcome turns out to be unexpected (negatively), the customer might infer that the serviceperson, is behaving in a certain way or that an event is due to factors related to the person. And therefore directly attribute the responsibility to the serviceperson for the behavior and outcome. On the other side, if the outcome of the service person as having a good service attitude, that the serviceperson was very qualified in the job, and get the feeling that the person liked him or her.

External attribution, also called situational attribution, refers to understanding someone's behavior as being caused by the situation that the individual is in which the behavior was seen such as the task, other people, or luck (Heider 1958). For example, if the service is done by SST, and the customer is not able to finish the procedure, the customer might attribute that to bad internet service or challenging webpage. By blaming external factors, the customer makes sense of the event without any discomfort that it may in reality have been the result of the customer's low technology knowledge. If the outcome turns out to be as expected (positively) or better, the customer might make sense of fast internet or a great online service, rather than the customer having a good technology knowledge and being able to do the service encounter online by oneself.

The stability dimension refers to whether the causes are likely to recur or changes over time (Bitner 1990). This focus on whether the consumer views the cause of the experienced service encounter as permanent and lasting or temporary and changing. Weiner (2000) state that "perception of causality along stability dimension influences the anticipated likelihood of product satisfaction". This suggests that if a customer ascribes an outcome (either successful or not) as stable, they expect the same outcome in the future. Contrary, if a customer finds the cause unstable, the future outcome is more likely to be uncertain and differ from previous experiences. Therefore, if a customer experience a service failure and perceive the cause to be stable, they are more dissatisfied, than if they believe the outcome is an unstable event (Bitner 1990). Accordingly, we assume that when a failure occurs when using SST and customer perceive the outcome to be stable they are more dissatisfied than if they perceived it as unstable.

H5: When a SST service encounter is unsuccessful, the customer that perceive the cause to be stable are more dissatisfied than when the customer believe that the cause is unstable.

Lastly, Weiner (2000) states that the "perception of causality along a controllability dimension influence judgment of responsibility and retributive actions." The controllability dimension is divided into causes one can control and causes that cannot be controlled. Furthermore, the controllability is referred to the

extent of customers believes that the failure of service could be prevented by the firm or beyond their control. Weiner (2000) states that an external attribution that are controllable are much more damaging than the uncontrollable. This because an external service failure that are controllable, could be avoided and increases possibility of the customer taking active actions to go against the firm instead of just avoiding it. Therefore, we assume that when a service fails through SST encounter, and we expect the firm to have control over the cause the customer will be more dissatisfied than if the firm has no control.

H6: When a SST service encounter is unsuccessful, the customer is more dissatisfied if the external factors could be controlled than if they could not.

#### 2.5 Self-serving bias and person sensitivity bias

A self-serving bias (SSB) is any cognitive or perceptual process that is biased by the need to maintain and improve self-esteem, or the tendency to perceive oneself in a very favorable manner (Myers 2015). It is the belief that individuals tend to assign success to their own abilities and efforts, but blame failure to external factors (Campbell et al. 1999). When a person focuses on their strengths and successes but overlook their mistakes and failures, or when a person takes more responsibility for group work than they give to other members, the person is protecting the ego from threat and injury. These cognitive and perceptual tendencies perpetuate illusions and error, but they also serve the self's need for esteem (Forsyth, Donelson 2007). According to Shepperd et al. (2008), there are two types of motivation affect the SSB, self-enhancement and self-presentation. Self-enhancement aims to support the person's self-worth. To attribute successes internally and failures externally can help individuals in their self-enhancement. Self-presentation is the motivation to carry a desired image to others and make self-serving attributions to achieve impressions (Shepperd et al. 2008). People claim personal responsibility for successes but not for failures when they try to influence how others perceive them (Shepperd et al. 2008). Motivation works in combination with cognitive factors to generate personally satisfying and selfpreserving attributions for different outcomes (Shepperd et al. 2008). Bendapudi and Leone (2003), found that customers who use SST in production is subject to the SSB and that this tendency is reduced when a customer has a choice of

whether he or she will participate in SST. Providing choice in participation can reduce the SSB and thus make a customer more willing to take the credit as well as the blame for an outcome (Bendapudi and Leone 2003).

According to Campell and Sedikides (1999), SSB is to take credit for personal success, but blame external factors for personal failure. By conducting a service encounter through a HI, the customer relies on the fact that this person will provide service and help. If the service is conducted by HI, the customer might blame the service provider for either a good or negative outcome. Contrary, when customers are using SST to perform a service encounter, they may take credit for a successful outcome, but if the outcome turns out to be unsuccessful, the customer may blame external factors. Therefore, we assume that when the customer relies on SST to help them in a service encounter, they will exhibit a SSB. More specific, if the customers are dissatisfied with the outcome, they will tend to blame external factors, and if the customers are satisfied with the outcome; they will take personal credit.

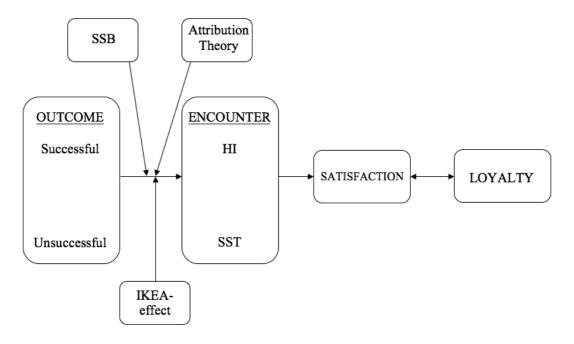
H7: When a service encounter is performed using SST and the outcome is unsuccessful, the customer will attribute responsibility to external factors rather than internal factors.

(Moon and Conlon, 2002) conducted a study of a direct contrast between human and non-human objects performing the same task under both positive and negative performance conditions. They tested the person sensitivity bias by examining whether decision maker's perceptions and evaluations are influenced by the outcome depending on whether the source is human or non-human. They found that the outcome of HI was evaluated higher and got more credit than non-human interaction under good performance conditions. But they also found that HI was given more blame for bad outcomes than the non-human counterparts. This gives us an assumption that customers will attribute responsibility to a serviceperson for an unsuccessful outcome, and thereby be more dissatisfied, compared to an unsuccessful outcome using SST. This assumption builds upon previous assumption that if the outcome using SST is below expectations, the customer blames external factors. H8: When the outcome of a service encounter with HI is successful, the customer will be more satisfied, compared to if it was a successful outcome using SST.

H9: When the outcome of a service encounter with HI is unsuccessful, the customer will be less satisfied, compared to if it was an unsuccessful outcome using SST.

# 2.6 Summary of Literature Review

There exist diverse and contrary views in prior research on the topic of HI and SST, and how they affect customer satisfaction. Some researchers argue that HI is the most important element for customer satisfaction, while other researchers have presented studies supporting that SST is progressively changing this image. Furthermore, researchers have argued if there is only HI, SST, or a combination of both that would better fit the service firms to generate loyal customers. Some research also argues that HI and SST is the same from a service perspective, because the customers interact in the same social way. Lastly, the question of who the customer blame for an unsuccessful outcome arises. Some research shows that external and internal factors is the responsible factor, but how this changes with difference in of HI and SST is unclear. This literature review attempted to enlighten the different views in order to support the presented hypothesis in this report.



# 3. Methodology

Our study will be done in two stages. First, we will interview leaders in Gjensidige and Sparebank1 to get an insight in how they experience the shift towards SST, and what thoughts they have about the topic. At this moment, we are not sure how much value it will give us, but being able to communicate with them might give us some new valuable insights.

In the second and main part of our study will do a quantitative scenario based survey experiment to test our hypotheses about the change in costumer satisfaction when moving from HI to SST. Through this experiment we will be able to manipulate different aspects of hypothetical scenarios. So far, we have decided that the study will apply a 2x2 randomized between subject factorial design. This will require 4 different treatment groups that will be subjected to different scenarios. The two different treatment groups are: successful vs unsuccessful and HI vs SST.

The survey will be done in two parts. The first part explores successful vs unsuccessful outcome with HI vs SST and moderating effects of IKEA effect, attribution theory and SSB with a dependent variable of satisfaction. The second part will explore how satisfaction affects customer loyalty. We still see some research technical challenges when researching the satisfaction effect on loyalty, and are continuing trying to find a good solution for that. The plan is to test the independent and dependent variables on a Likert scale. To analyze the data, we aim to use multiple regression analysis since we have several independent variables, and since we will include moderating and mediating effects. However, we may also make use of a structural equation model because of its ability of the observable variables to attribute the relationships between unobserved construct. Lastly, another possibility is to use ANOVA in order to compare the means in the population. This is not fully decided on, and will be further discussed and evaluated to find the analysis that best benefit the research question.

## 4. Conclusion

The main purpose of this study is to examine the effect of customer satisfaction and loyalty in human interaction and self-serving technology service encounters. Previous research has identified the effects of SST on different customer aspects, but no study had before compared HI and SST satisfaction in service encounters within the bank and insurance sector. The question therefore was if they differ in service encounters, and if so, how and why? In order to answer this question, we developed a deep and comprehensive understanding of the current state of research involving SST, HI, satisfaction, and loyalty. We build our study on previous research, and was able to hypothesis our assumptions.

When the survey is done, and we are able to do some analysis in order to test our hypotheses, we believe that we have contributed to the existing research in the field of marketing. With this study, we will be able to close a gap in the literature concerning different satisfaction in service encounter of HI or SST, in the bank and insurance industry. Moreover, the study will be more up to date, compared to a large amount of previous research. With this research we hope to add value to the field of academia by offering research that build further on previous research. In addition, we believe that this research will have a managerial contribution as well. This study can help the managers to learn more about how customer's satisfaction is affected when using SST, compared to SST. It can have great value for managers in today's business since the technology rapidly is changing along with customers needs and demand.

The limitations of this research is challenging to find before we have conducted the testing, but we believe that one of the limitations in this study, is that we not are able to implement an experiment. Experiments would give some interesting results on how the customer satisfaction is affected without using scenarios, but unfortunately they are expensive and usually take a large amount time.

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# 6. Appendices

# 6.1 Appendix 1: Progression Plan

	Plan for thesis progression
	Turn in Preliminary
Januar	Continue to read research articles
	Continue to work on the model
	Decide further direction
	Get Preliminary feedback
February	Continue to read research articles
	Start to prepare for interviews with Gjensidige and Sparebank1
	Start to prepare for data collection
	Interview with Gjensidige and Sparebank1
March	Data collection (pretest)
	Data collection
	Work on potentially weaknesses of study
	Apolycic
A	Analysis
April	Discussion part
	Feedback from Line
	Adjust/improve method, results, discussion part
May	Limitation and further research
	Send last verson to Line
June	Last finishing touch
July	
	Deliver the thesis