## **FINTECH AND TRUST**

# A study of the Social and Structural Determinants of Trust on a Fintech Savings Platform

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**Key words:** Fintech, Trust, Structural Assurance, Social Dimension, Attitude, Financial Services, Intended Use.

#### **ABSTRACT**

The developing field of Fintech, financial technology, has grown to accompany banks and other financial institutions in providing financial services. The rapid, continuous, evolution within the field and the increasing number of adopters of the technology makes it a relevant field for marketers to study from a user perspective. In this new market, Fintech companies have the possibility to capture users who have become skeptical towards traditional financial institutions. Thus, trust plays a central role as the provision of financial services involves managing sensitive user data.

Trust and its contexts have been academically researched in many settings. This study adds the perspective of what determines propensity to trust in the context of a specific field, Fintech. In this research, the potential influence of two major dimensions was investigated; social aspects and structural assurance. The social aspect brings up the increased online social activity and what role it plays regarding trust in Fintech, while as structural assurance includes traditional institutional frameworks in place to ensure success of the service provision. Varieties of these two determinants were tested through an extensive survey with a total of 167 respondents.

The results indicated that there is little evidence for social dimensions taking a major part in the trust-building process in Fintech. On the other hand, there was proof suggesting that the traditional tool of structural assurance highly affects the trustworthiness of a Fintech platform in a positive way. Moreover, it was determined that attitude towards a Fintech savings platform is positively affected by trust in the platform, and attitude in turn positively affects intention to use.

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#### 1 Introduction

During the World Economic Forum in Davos (2016), Daniel Shulman, CEO of Paypal, summarized the five major trends that are shaping the financial industry. The first trend is the digitalization of money. 85% of the numbers of transactions in the world are still conducted in cash, but the digitalization is moving forward fast. The second trend is the explosion of the use of mobile devices and smartphones. All of a sudden consumers have the power of a bank branch in the palm of their hand. Also, the increased access has the possibility to include people who have until now been excluded from the financial system. Thirdly the amount of available and stored data is increasing exponentially. This can result in improved value propositions for consumers but also exposes consumers to a series of risk. The fourth trend Shulman mentions is the blurring of industry and product lines which leads to a redefinition of commerce. Last but not least, security has gotten full attention, as companies now need to be able to protect user data and spot abnormal behavior.

In addition to this, financial institutions such as traditional banks are still recovering from the financial crisis of 2008 and working to rebuild the lost trust according to Tom de Swaan, chairman of the Zurich Insurance Company Ltd (World Economic Forum, 2016). Fintech, computer programs and other technology used to support and enable banking and other financial services (McAuley, 2015), exists and thrives in the middle of all of the trends above. The fact that mobility increases and the arena for financial services is changing gives the opportunity to a plethora of start-ups to potentially disrupt markets and consumer patterns.

The issue of trust, however, still remains. As Shulman mentions there are challenges ahead for all stakeholders in the financial industry but they have evolved together with the landscape. Therefore, all players in the industry have an interest in understanding the trust-building mechanism of the digital consumer.

Nowadays, the vast amount of information available e.g. through the Internet is characteristic of the new economy, referred to as the "information economy" by Ben-Ner and Putterman (2011). The authors also argue that the availability of high quality information and its rapid collection and transmission decreases asymmetric information, thus creating trust in a variety of markets. On the other hand, in this environment, interactions have changed and gone from face-to-face interactions to more anonymous and temporary interventions undermine traditional trust-building mechanisms such as repeated interaction.

This is just one example of how diverse and relevant trust has become in today's markets. Moreover, Edelmann et al. (2015) argue that the changes on the market, enabling increased product and service comparison online etc., have empowered consumers and led firms to take on a reactive role in order to positions themselves according to consumers' demands. As companies are focusing on relationship marketing in order to build long-term relationships with consumers, trust is a critical aspect and thus understanding the trust-building mechanisms has become a major focus. In this respect, research can provide valuable insights both in academic terms and for practitioners to gain a better understanding of consumer behavior within the areas of trust in Fintech.

In order to investigate the effects of a changing society in regards of the new provision of financial services, Fintech, and the ever-present trust issue, this paper is an attempt to understand the trust-building process linked to a Fintech savings platform. It aims at answering the question of whether social mechanisms and structural assurance are factors contributing to build trust in the context of such a platform. In order to do so, a collaborative and discussion-based cooperation was formed with Dreams, a Fintech savings platform. Collectively it was possible to look into the topic of trust in Fintech from both an academic and a practical perspective.

1.1 Definitions and clarifications

To begin this report, definitions of the terms employed are necessary in order

to clarify the concepts used that can, in certain cases, have different

meanings. The chosen definitions below are selected to provide a proper

understanding of the reasoning and the results of this study.

Trust: Trust is referred to as a trustor's belief that the trusted party, the

trustee, will not behave opportunistically or take advantage of a situation.

Trust involves the assumption that the commitments will be fulfilled by the

trustee (Luhmann, 1979).

Fintech: Fintech is "an economic industry composed of companies that use

technology to make financial systems more efficient" (McAuley, 2015)

Banks: Banks are referred to as financial institutions active in traditional,

private and personal banking. Naturally banks have many different ways of

operation, fields of expertise, etc., but for the purpose of this research it is

sufficient to categorize banks in general terms.

WOM, Word-of-mouth: Word-of-mouth communication between potential

adopters and actual adopters of a product or service, involves the

interpersonal exchange of information (Maxham, 2001) both offline and online

(electronic word-of-mouth). The content of the exchange does not directly

derive from the manufacturer or marketing division of the product or service

(Arndt, 1967).

SA, Structural assurance: The extent to which users rely on institutional

structures such as "guarantees, regulations, promises, legal recourse, or

other procedures are in place to promote success" (McKnight et al. 2002).

Social interaction: The exchange between two or more people is defined as

social interaction. It is to be considered a pillar of society because through

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interaction, individuals define rules as well as systems and institutions, according to which they aspire to live in.

Social influence: The forms of social influence range from conformity to peer pressure, form persuasion to socialization, from marketing to sales. It is the result of the influence on an individual's emotions, behaviors and opinions by others.

#### 1.2 Literature review

The literature of this study provides an overview of the available findings in the areas of Fintech, Trust and Cybertrust in order to lay the ground for this report. All topics are studied also in regards of structural assurance and the human social dimension. This section brings up where research stands today, and what has been concluded this far.

#### 1.2.1 Fintech

The Internet-of-Things, IoT, is defined as "individual, man-made or natural objects and interrelated collections of objects ... that become virtually represented in wireless and wired Internet structures" (Andersson and Mattsson, 2015) and has been a key driver of service innovation. One main residual of the IoT is the involvement of multiple areas of knowledge and a connection between new and established actors from different industries. While exploiting the information economy, Fintech coexists with the IoT by providing financial services in a new way. It exploits wireless technologies and reshapes the traditional human interaction dynamic that has for so long been central to the service provision in the banking industry.

Alt and Pushman (2012) claim that the IoT combined with the evolving customer behavior and the offering of financial services by non-banks is causing the financial industry to become more customer-oriented. Fintech solutions seem to perfectly meet the market's changing demand. A study conducted in Korea investigating the acceptance of online payment Fintech

services revealed that the two most important variables were convenience and usefulness (Kim et al., 2016). Thus, this research seems to confirm the relevance of customer orientation.

Fintech is by nature a sector that provides services that are competing with traditional financial service providers. Therefore, Fintech handles sensitive customer data in different extents, depending on the type of service. Guo et al. (2015) argue that privacy-related concerns result in lower intention to adopt a new technology. This is true because people are less willing to trust the company who is in charge of handling their personal information. Therefore, when a potential user of Fintech considers becoming an actual user, he or she weights to risks associated to the sharing of sensitive information. This is due to the fact that people constantly try to limit the amount of information they give out as they are primarily utilitarian (Lee and Carnage, 2011). These findings are applicable to the sector of Fintech and therefore trust plays a central role in its spread and acceptance among the general public.

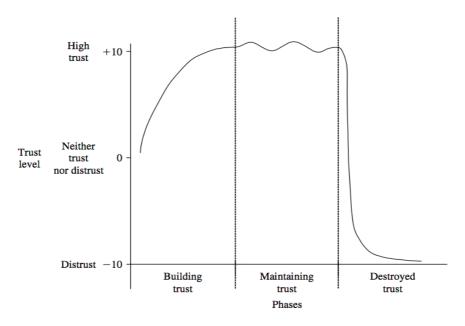
Furthermore, since Fintech provides a service, according to research buyers are more exposed to opportunistic behaviors by the seller. The provider of a service may decide to withhold information or mislead the buyer. This phenomenon is defined as the "problem of agency" (Bergen et al, 1992; Eisenhardt, 1989), in which principals are unable to evaluate their agents. This concept is closely linked to the management of risk. The fact that customers are more exposed to risk when consuming services with respect to goods makes trust particularly relevant (Johnson and Grayson, 2000). In fact, Deutsch (1958) defines risk taking and trust as two sides of the same coin.

#### 1.2.2 Trust

The German sociologist Luhmann (1988) also connected trust to risk in the following way;

"Trust presupposes a situation of risk... Trust is based on a circular relation between risk and action, both being complementary requirements. Action defines itself in relation to a particular risk as external (future) possibility, although risk at the same time is inherent in action and exists only if the actor chooses to incur the chance of unfortunate consequences and to trust."

Luhmann (1979) also claims that the purpose of trust is to reduce complexity. Moreover, trust changes over time (Bachman and Zaheer, 2006) and is affected by a variety of elements. Curall and Epstien (2003) show this through a graph, which describes the levels of trust in different phases and how trust evolves over time. It also implies that when trust is lost it takes more effort to rebuild then the initial effort it took to reach a certain level. Trust is demanding to build, easy to lose, and once lost very difficult to regain.



Currall and Epstein (2003).

In practical terms, this implies that the assessment of the trustor (the person who is deciding to trust) of whether to trust the trustee (the person being trusted) is constantly updated (Bachman and Zaheer, 2006). In the context of a service provision setting, the trust level of users has to be maintained through continuous effort from the provider.

Moreover, the characteristics of trust are multifaceted (Lewis and Weigert, 1985). It is defined as a cognitive process, rather than a constant state of being. Thus, it distinguishes persons, groups, or institutions as being

distrusted, trustworthy and unknown. Trust also has a practical function as it reduces complexity in a faster, more economic and thorough way than prediction. Akerlof (1970) explores another function of trust related to information in a buyer-seller relationship. Information on the quality of a service, product, such as the seller's trustworthiness, is key for the well functioning of a market. This type of information can be spread through word-of-mouth social networks, media coverage and formal records (Ben-Ner and Putterman, 2011). When these three sources of information work efficiently, individuals can collect high quality information on the parties they are entering transactions with. This leads to individuals placing greater trust in their transactions, which in turns affects market efficiencies. However, all those aspect make trust hard to quantify and measure (Glaeser et al., 2000).

## 1.2.3 Cybertrust

Cybertrust can be defined as "Trust in the Internet and related information and communication technologies" (Dutton and Shepherd, 2003). It is considered as a critical aspect in the development of online services. Cybertrust has the potential to impact a user's choice to use online services. This is because the Internet of Things environment is defined by the process of data according to users' rights and needs by different devices (Sicari et al. 2015). However, trust in such a setting can be eroded since online transactions and interactions can be affected by lessened communications. As a consequence, physical cues that are vital and non-verbal are less easily observed (Wallace, 2001). These cues have traditionally been considered the main tools for detecting deception are body language and facial expression. In their absence, it is more difficult for individuals to understand and interpret the intentions of the other party.

Furthermore, Fodd and Tseng (1999) explore how technology can be a carrier of trust when individuals are interacting. They state that "trust indicates a positive belief about the perceived reliability of, dependability of, and confidence in a person, object or process". This trust can be increased when big amounts of information available are used effectively and by exploiting the

availability of social networks online via Internet-based interactions (Ben-Ner and Putterman, 2002).

The explosion of online products and services raises the issues of data collection, security and privacy. Slyke et al, (2004) conducted a study on Amazon, comparing it to less famous online retailers seeking to uncover how consumers' worries related to information privacy affect their willingness to commit in transactions online. One of their finding when it comes to e-commerce revealed that when a brand has a strong reputation, customers don't feel concerned about risks associated to the product they are purchasing. Instead, their concerns regard risks associated to data provision. Therefore, data provision becomes a primary issue when there is initial trust in the e-vendor through strong reputation.

Trust is also strongly related to marketing. The so-called "trust-based marketing" is considered as a key success factor for the provision of products and services through the Internet (Urban & Sultan, 2000). As previously stated, it has the power to shape users' actions online - e.g. online banking, shopping or chatting - and can explain when they decide not to trust. Additionally, in order to increase the perceived trustworthiness of online retailers, Urban and Sultan strongly recommend to increase perceived human presence by promoting virtual advisors on the websites. They go as far as saying that "trust is the currency of the web". Therefore, trust is a crucial ingredient for the success of service provision online such as Fintech.

#### 1.3 Problem area

The traditional banking industry has for a long time been connected to high trust levels in regards of sensitive information and concerns for security (Cheskin, 1999). As stated before, this industry is encountering changes and development in many fields that open possibilities for banking, not the least. Fintech mobile applications have come to a point where they could potentially replace traditional banking services. To bring up one example, the app Tink offers users a spending analysis in real time as well as an overview of their past activity. This would traditionally be considered as an extra service offered by a person's bank and is now the main service offered by a Fintech app.

When looking into the plethora of Fintech it becomes clear that many specialize in a particular area or target a single task. The discussions with the company Dreams revealed that many players in the Fintech private banking sector believe that consumers will be increasingly able to, and will, cherry-pick among the services available. One client might have one bank for savings, another for their personal accounts and a third for unexpected expenses, etc. There is therefore reason to explore the changing attitudes towards Fintech and banks to understand what is perceived as trustworthy, especially when consumers will progressively "outsource" banking services.

The development of the Fintech industry is also in line with Pine and Gilmore's (1998) "Experience Economy" which studies how technological development creates opportunities for service and consumer experience. They go as far as saying that it is admirable to stage those kinds of consumer experiences for successful brand building. In order to do so, however, customers must perceive the contact as personal, memorable and as trustworthy as possible. This points to the fact that the Fintech industry has much to gain from developing an optimal consumer experience and building trust by investing in building long-term relationships and two-ways communication with their users.

Research conveyed by Bloomberg (Matlack, 2012) revealed that people's perception of banks' trustworthiness has been changing. When rating their

level of trust their banks received a lower score than Facebook. It is therefore debatable if consumers trust banks or Facebook more. Some even claim that they would prefer Facebook to handle their private banking rather than their actual bank. Considering this phenomena in the actual context of a digitalized world, the social aspect (such as platforms, comments, likes etc.) seems to potentially have an impact on how trustworthy a Fintech service is perceived as.

Once the link between trust and trust-building activities online is uncovered it will be of high relevance for practitioners as well as researchers. Defining as well as measuring trust has been a topic under discussion for a long time (Barney and Hansen, 1994). Regardless of the initial standpoint, trust building indicators are of interest. Identifying key activities explaining trust, or a trust building pattern, could be interpreted as such indicators and are therefore of high importance. If, for example social activity on a Fintech platform generates trust, the social activity itself could be used as a measurement indicating trust.

Trust is also a major issue that continuously challenges marketing practitioners in an attempt to understand their consumers better in order to build strong relationships based on trust. Morgan and Hunt (1994) study Relationship Marketing and argue that "all marketing activities directed toward establishing, developing, and maintaining successful relational exchanges". They state that marketers who are encouraged to work for relationship commitment also build trust. Through reducing uncertainty, they can increase efficiency and effectiveness, and ultimately generate productivity in all industries. Social ties may appear differently in an increasingly digitalized world and previous theory and research in the field needs to be tested and accurately evaluated in those settings. The recent emergence, and continuous growth of the Fintech industry is an example of a field that could benefit from research regarding social attributes and trust-building mechanisms.

To conclude, the research in the field of social platforms and their effect on trust is limited. More specifically, research in the area of Fintech and the

changing environment for traditional banks, lacks in-depth insights. It is arguable that this field of knowledge should be under constant scrutiny since the continuous evolution of technology is changing both the services and products offered, but also behavioral patterns of human beings. In order to look further into this gap in research, this study focuses on trust building activities, their effect on perceived trust in a Fintech saving platform, and in turn how that affects attitudes and actual use.

## 1.4 Purpose of the study

This study attempts to uncover the notion of trust related to the Fintech sector by zooming in on savings. The idea is to grasp the trust-building mechanism in order to acquire knowledge that can help practitioners improve their service offerings and target users in a more attractive way while providing a better fit to their actual needs. As previously stated, it will also allow brands to develop long-lasting relationships with their customers based on trust. On the academic side, this paper is aiming at testing existing theory but in a new combination and research field by the developed model.

Trust related to Fintech is the central element of this study. In order to gain further understanding, the aim is to investigate the attitudes towards banks and structural assurance together with different kinds of social influences and how they can affect trust in a Fintech savings app. Furthermore, the purpose of this study is to gain a deeper comprehension of the relation between trust and attitude towards Fintech and uncover a possible connection between trust and the generation of actual use.

The main ambition with this research is to examine whether a social settings and structural assurance have a direct connection to trust, and thus possibly influence attitudes towards using Fintech. Investigating this possible relationship will allow the exploration of the strategic relevance of trust and its building mechanism in the context of Fintech.

Therefore, the main research question is:

Do social aspects such as interaction and influence combined with

different types of structural assurance, affect trust in a Fintech savings

app?

The main question can the be divided into three sub-questions:

RQ1: Does user trust in Fintech increase when there is a social dimension

associated to the service offering?

**RQ2:** Does the traditional structural assurance mechanism apply to user trust

in Fintech?

RQ3: Can people's trust in Fintech be a sufficient condition to convince

potential customers to become actual users?

1.5 Expected knowledge contributions

The knowledge contributions of this report are laid out in the section below.

There are three main areas of research where this study aims to contribute

besides from direct practical implications for marketers and professionals in

the Fintech sector.

First of all, this study aspires to further contribute through to the field of trust

research. Trust has many, and often overlapping, definitions since it is

considered a cornerstone in many fields of research. Besides from the

academic field of marketing trust is also a main subject in disciplines such as

sociology, psychology, economics, behavioral science etc. Therefore, the aim

of this paper is not to provide a new definition of the concept but rather to

understand its practical and theoretical implications in the field of Fintech.

Trust develops between human beings and society is constantly influenced by

external factors. Thus, trust is indirectly affected by those factors such as

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technology, and evolves together with society. Therefore, research on trust should be constantly led and updated. This paper investigates how a technological development such as Fintech relates to the concept of trust. The contribution will lie in the studying of selected antecedents to trust that are linked to structural assurance and social aspects and their potential to lead to trust.

Second, this paper has the ambition to further explore the relatively new field of Fintech and how certain activities possibly affect the perception of its trustworthiness in regards of saving money. Fintech apps can be considered as newcomers, in comparison to traditional banks, in the industry of financial service. Thus, the general activities provided on such platforms or apps have not yet been fully mapped out. It is therefore of high interest as a sociobehavioral study to investigate this field and gain knowledge applicable to marketing research. With that said, this study looks at Fintech through the setting of a savings app but it does not aim at investigating saving behaviors.

The third aspect is the general contribution derived from studying a social world going through deep changes in social settings. Understanding how brands, platforms, forums etc. can potentially grow by creating positive attitudes and through that generate users, gives input to the research of start-ups, entrepreneurships and not the least Unicorns (start-ups with extreme exponential growth). Attaining a greater understanding regarding this can therefore contribute to the field of marketing strategy.

Finally, it is important to also bring up the practical contributions of this research. Understanding the trust building mechanism in Fintech platforms could help marketers and business developers to leverage the social aspect when branding themselves in order to avoid possible trust-related issues with potential users. Furthermore, it will also provide them with insights concerning how structural assurance is related to trust, and thus communicate a relevant message to the targeted users. This is important because marketing has become relationship-based. Thus in order for brands to develop these long-term relationships with their users, trust is a solid and necessary foundation.

#### 1.6 Delimitations

In this section the inevitable delimitations of this study will be brought up. As a result of the exploratory nature of the research conducted, the first limitation identified is linked to the fixed amount of time that was available to conduct the study. In turn, the scope of the study was also limited and it is arguable that the study could have been further developed without the time and scope restrictions.

Another important aspect to underline is the complex definition of trust. As mentioned before, trust has been defined in almost as many ways as there are trust researchers. As this study chose one approach, it can ultimately be contested by followers of other schools of thought. However, generally speaking, the purpose of this study is not to criticize previously conducted research on the topic of trust but rather to understand its building mechanism in a specific context, Fintech.

A similar issue can be identified in the field of Fintech in regards of its definition. However, the source of the problem differs since Fintech is a relatively recent concept that has not, to this date, been extensively researched like trust. Resulting from this, the definitions available keeps evolving. This can be partly attributed to the time-consuming regulation process of accompanying the progressive development of new markets. This is relevant because regulations also partly shape definitions. There are other factors preventing Fintech from acquiring a final definition as technology is constantly developing, money is becoming increasingly digitalized and innovation is a strong driver in this new business sector.

The research design also implies some limitations. This study was conducted in partnership with Dreams, a Fintech app that provides a savings service. Thus, the model developed was built and tested in relation to one of the many services provided in Fintech. As a result, the conclusions of this study are only applicable in a Fintech savings setting. Furthermore, the factors selected to

test trust were chosen on the grounds of what is theoretically applicable to the field of Fintech and trust. Therefore, one can acknowledge that there are a vast variety of factors that could affect trust different from the ones in this study.

Finally, another aspect that could have potentially affected the results of this study is the trust aspect related to familiarity. Because of this particular reason, it was chosen not to mention a name of a Fintech brand in the survey. There are reasons to believe that if a well-known brand would have been communicated on purpose, one can predict that trust levels would have been affected (*Hawkins, Best and Coney, 2003*). In fact, throughout the lifecycle, brands develop personalities. By interacting with consumers, familiar brands expand their brand personalities and thus affect users' perception of trust.

## 1.7 Report outline

This report is composed of 5 parts: introduction, theory and hypotheses, methodology, results and analysis, and discussion and conclusions.

The first part consists of an introduction to the study followed by a literature review on the topics of Fintech, trust and cybertrust. Thereafter, a definition of the problem area that builds the foundation to this study is provided. The following sections elaborate on the purpose of the study and the expected knowledge contributions and delimitations.

The second part focuses on the theory used and the hypothesis generation. A model is generated illustrating how the hypotheses link the different constructs.

The third part elaborates on the methodology. The reasoning behind the choice of topic in relation to the selected scientific approach is elaborated. The overall research design is laid out consisting of main study, sampling and questionnaire. This chapter ends with an explanation on the choice of analytical tools and considerations on the data quality.

Part four comprises the results and analysis of the survey. The results of the

hypothesis testing are outlined and summarized.

In the final fifth part, the results of the analysis are discussed and conclusions

are drawn. Theoretical, managerial and practical implications are deduced

from the study. Finally, critique of the study is brought up as well as potential

further research.

2 Theory and hypotheses

This section initially explains the structure and the creation of constructs for

this study. Furthermore, it brings up the academic background supporting this

research and the main topics of trust, Fintech and social dimensions are

explored further theoretically. Based on a thorough literature review, the

hypothesis of this research bind the constructs together defining the research

model.

2.1 Categories and constructs

In order to structure the reasoning behind the hypothesis, categories

concerning areas of interest were laid down and thereafter constructs were

built. This resulted in a scheme where each category has subcategories,

which correspond to the constructs that are used.

The first category is "Disposition to trust banks" and it is only built by the

construct with the same name. This construct, and its category is a general

starting point for this study and initiate the deeper research.

The second category is "Social influence" and is constructed by "Social

influence on saving money", "social influence of using a Fintech savings app",

"Social interaction" and "Social assurance". This category is destined to look

into how potential users perceive social aspects in a Fintech savings app

setting and how they affect trust. This is relevant because within the category

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of "Social influence" there are different constructs that nuance the social dimension in order to provide a dynamic picture of reality.

Thirdly, the next category used is referred to as "Structural assurance". This category is particularly applicable to specific contextual situations and therefore the following two constructs were formulated; "Structural assurance of Internet banking", and "Structural assurance on a Fintech savings app". Testing those two constructs can lead to valuable information when comparing how such mechanisms work and whether they differ in their effectiveness when comparing Internet banking to Fintech.

The fourth category identified in this study is "Perceived trustworthiness of a Fintech savings app" which is the main area of interest of this research paper. Therefore, this category is consisting of only one construct, which is the category itself. Furthermore, the fifth and the sixth categories are also built by single building blocks namely "Attitude towards a Fintech savings app" and "Actual use of a Fintech savings app". It was decided that it would be relevant for this study to look into how trust can potentially lead to actual use by mediation of attitude, and thus these categories and constructs were included.

## 2.2 Hypotheses generation

In this section of the study, hypotheses are generated based on previously conducted research. Subsequently, the constructs are linked together and based on them, the research model constituting the framework for this research is presented.

#### 2.2.1 Disposition to trust banks

According to Driscoll (1978), people's disposition to trust can be classified in two different ways. First there is the global aspect, which corresponds to the personality-based consideration on trust disposition. The author refers to the two subcategories of global trust as attitudinal, the state of mind in regards of a person or a thing, and affective, the emotional attachment. They correlate

and coexist and there is often no clear line separating the two. The global aspect corresponds to an individual's general propensity to perceive others as being trustworthy (Rotter, 1967). The second component of disposition to trust (Driscoll, 1978) is referred to as the specific aspect, which is explained as cognitive and situational. Further, it is also debated whether the global component stays constant throughout different contexts.

Balasubramanian et al. (2003) argue that there is no perfect causal relationship between trust disposition and trustworthiness, which means that trust can be developed as easily in people who have a low disposition to trust as in people who have a high one. In the relationship between disposition to trust and actual trust, the authors introduce perceiver environmental security and perceived operational competence as two mediating variables.

Furthermore, Balasubramanian et al. (2003) claim that according to sociological views on society and economy, when regulatory institutions provide clear standards and regulations they can build trust among individuals and between economic institutions and individuals. Therefore, regulatory institutions can frame the trust building mechanism between individuals and economic institutions. "It is also likely that trusting individuals will more readily transfer their beliefs regarding environmental security from the conventional to the online context." This relationship can be transferred and tested in the context of banks, that are considered traditional financial institutions and subsequently Fintech, the new provision of financial services online. This leads to the following hypothesis:

H1: Disposition to trust banks has a positive effect on trust in a Fintech savings app.

## 2.2.2 Structural assurance

People's perception of physical banks is correlated with high levels of trust in terms of privacy and security concerns (Cheskin, 1999). This means that people will have higher regards concerning banks that they perceive as

reliable when it comes to security and privacy matters. Furthermore, the provision of banking services through the internet challenges the traditional trust building mechanisms because of the impersonality of interactions and thus troubles the traditional equilibrium. Gefen et al. (2003) state that "Institution-based beliefs of structural assurances and situational normality have by far the most effect on trust". Therefore, providers of goods and services online can use structural assurances to actively build trust.

The extent to which customers consider that structures and procedures exist to maintain order, such as legal recourse, regulations and guarantees, is the definition of structural assurance (McKnight et al. 2002). Sha (2009) tested the relationship between structural assurance and consumers' trust intentions in business-to-consumer settings online. It was found that vendor specific guarantees and seals of approval did have a positive impact on consumer willingness to trust the e-vendor. So, structural assurance seems to increase the level of trust in an offline as well as in an online environment.

As privacy and security issues are central when it comes to the provision of financial services, it is relevant to understand how trust affects users' willingness to provide sensitive data. Sinclaire (2007) found that consumers' willingness to give up sensitive information in an online environment is positively affected by institutional characteristics on websites. An example of this could be when providing a personal email address having the opportunity to tick the "no advertising emails"-box. Structural assurance in combination with the online environment of the web-based platforms of traditional banks is an important part of this research. This is because it is considered a first step in the creation of the Fintech industry as Fintech is defined as "an economic industry composed of companies that use technology to make financial systems more efficient" (McAuley, 2015). This leads to the following two hypothesis.

H2: Structural assurance of Internet banking has a positive effect on trust in a Fintech savings app.

H3: Structural assurance of a Fintech savings app has a positive effect on trust in a Fintech savings app.

## 2.2.3 Social Influence

#### 2.2.3.1 Social assurance

Social assurance, the reassuring aspect of a social environment, has been studied in many contexts. Friedman et al. (2000) state that trust occurs in human social settings and that "people trust people, not technology" which provides a particularly relevant point of view for this research. In online interactions, technology and human beings fuse, altering the traditional human trust-building mechanisms. Social platforms and the many easily accessible ways of communication alter the previously fixed building blocks of trust.

One possible explanation for why there could be difficulties for trust to spread naturally through technology is that technological systems lack two fundamental characteristics of human beings. These are that in human relations, individuals are conscious and have agency, which is the fact that individuals act freely based on their own free decisions.

On the other hand, social mechanisms, from a sociological point of view, allow the creation of trust and build social order (Lewis, 1985). This is referred to as social assurance. The author also argues that trust should grow with human presence. Gefen and Straub (2003) tested this in an online setting and their study revealed that trust in an e-commerce platform increases with social presence. Examples of online social presence are the possibility to chat with an advisor or simply a phone number for customer service.

From a marketing perspective, the topic of social support and how it relates to service relationships has been previously researched. The studies concluded that the spoken as well as the unspoken communication has the possibility to increase the satisfaction level of customers as well as the perceived social connection to other individuals (Adelman et al, 1993). Social support is

important to customers because it increases their perceived sense of control by reducing uncertainty. Considering the fact that uncertainty, or risk, is a prerequisite for trust its reduction builds trust. This leads to the following hypothesis:

H4: Social assurance of a Fintech savings app has a positive effect on trust in a Fintech savings app.

#### 2.2.3.2 Social influence and interaction

Social influence and interaction are strongly linked to human behavior. In his model, Banerjee (1992) claims that people behave the way other people behave instead of using accessible information as a basis for their decision-making. Human beings are not rational and this optimized rule for decision making, which reduces time and effort, is referred to as herd behavior. This entails that people's actions potentially influence other individuals' actions and vice-versa. The phenomena can be partly explained by the salient values similarity model developed by Siegrist et al. (2000). According to the authors, people perceive other individuals as worth trusting if they share similar salient values - "the individual's representations of the goals and means in responding to a problem". Harley (2006) further defines the concept as similarity being a prerequisite for trust in human relationships, which can be in terms of, identified groups (e.g. same church), value or even personality attributes. Therefore, people are influenced by other individuals' actions when they are similar to each other, which can lead to the building of trust.

Furthermore, when an individual lacks the resources necessary to completely assess a situation he/she needs other sources of information that he/she accesses through word-of-mouth (WOM). Word-of-mouth is a trust-building mechanism, which applies to offline as well as online environments (Abdul-Raham and Hailes, 2000). This is also true for artificial entities (e.g. software) when the purpose of their function is supporting human beings through interactions. Consumers consider word-of-mouth as more reliable compared to other types of information, even more credible than mass media (Murray,

1991). Therefore, the spreading of information and opinions through word-of-mouth is strongly linked to perceived trustworthiness of products and services.

Additionally, online word-of-mouth transmission has an impact on attitude to use among potential customers regarding a product or service (Huang et al. 2012). Information retrieved through word-of-mouth communication has an influence on consumers' beliefs of innovation use and attributes (Parry and Kawakami, 2014). Therefore, an individual can reconsider the usage of a new technology, such as Fintech, just because he /she was given additional information through his/her relationship network. This newly acquired information affects the assessment of the hedonic and utilitarian value of the innovation's attributes, thus affects the intention to trust and subsequently potential use.

A prerequisite for WOM is human interaction, which is considered as a trust-building mechanism by Wu et al. (2010). The authors found evidence that perceived interactivity positively affects intention to trust an unknown online vendor. Previously conducted research has also shown that social interaction does increase trust between individuals (Putnam, 1995). Thus people develop trust through interacting. When considering the online context, it was also found that people and companies increasingly exchange input and information through online social networks, which implies their great relevance to interaction (Godes and Mayzlin, 2004).

Interaction between consumers online occurs in virtual communities and on social media. These communication channels are becoming crucial venues for the adoption of new technologies because the actions of one's connected others are highly influencing (Peng and Mu, 2011). The online social networks affect leadership, lock-in, imitation, similarity, etc. Furthermore, the importance of reference groups and their influence on technology adoption is discussed by several authors. Sinclaire (2007), for example, finds that social influence of friends and family has a positive effect on the perceived trust of the internet. It is relevant to test these mechanisms in the context of Fintech, therefore the following is hypothesized:

H5a: Social influence on saving money has a positive effect on trust in a

Fintech savings app.

H5b: Social influence on using a Fintech savings app has a positive effect on

trust in a Fintech savings app.

H5c: Social influence of interaction has a positive effect on trust in a Fintech

savings app.

2.2.4 Attitude towards a Fintech savings app

As with all new consumer products and services, consumers' attitudes are

crucial and determine whether a product or a service enters their set of

consideration when evaluating alternatives. Chuang et al. (2016) study

customers' intentions to use Fintech based on the Technology Acceptance

model, TAM, developed by Davis in 1989. The model is built from the idea

that human behavior follows a specific flow when adapting to a technological

innovation. Initially, the model states that attitude toward using a new

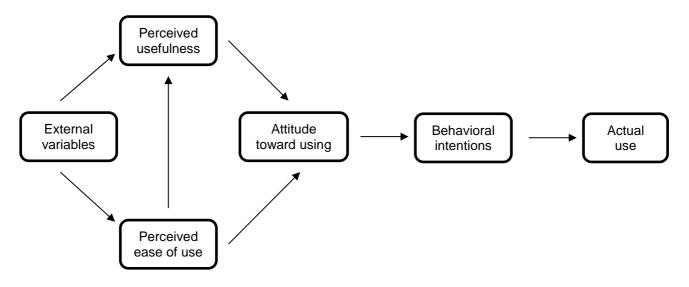
technology is determined by its perceived usefulness and perceived ease of

use, which in turn depend on external variables. Subsequently, attitude

toward using an innovation has an effect on behavioral intention to use, and

finally actual use.

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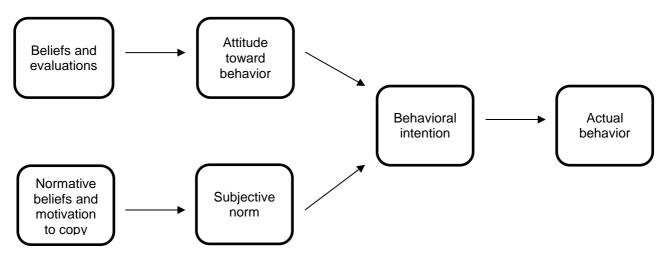
Technology Acceptance Model (Davis, 1989).

In their research, Chuang et al. use service and brand trust as factors impacting consumers' behavioral intention. They find that brand and service trust positively influence attitudes towards Fintech. This implies that trust in the brand and also a Fintech savings platform would have significant positive effect on the attitude towards using it. Therefore, the following hypothesis is:

H6: Trust in a Fintech savings app has a positive effect on the attitude towards a Fintech savings app.

## 2.2.5 Intended use of a Fintech savings app

There are various mechanisms and factors that can lead to the actual use of a new technology. In the context of Fintech, Chuang et al.'s research appears to be relevant as it combines TAM with the Theory of Reasoned Action model, TRA, to further explore the relation between attitude and actual use. The TRA was developed by Fishbein and Ajzen in 1975 in order to examine the relation between beliefs and evaluations leading to attitude toward behavior and finally actual behavior. The model looks at how beliefs and evaluations lead to attitude and then behavioral intention, as well as how normative beliefs and motivation to copy lead to subjective norm and behavioral Intention. The final step of the TRA is actual behavior.



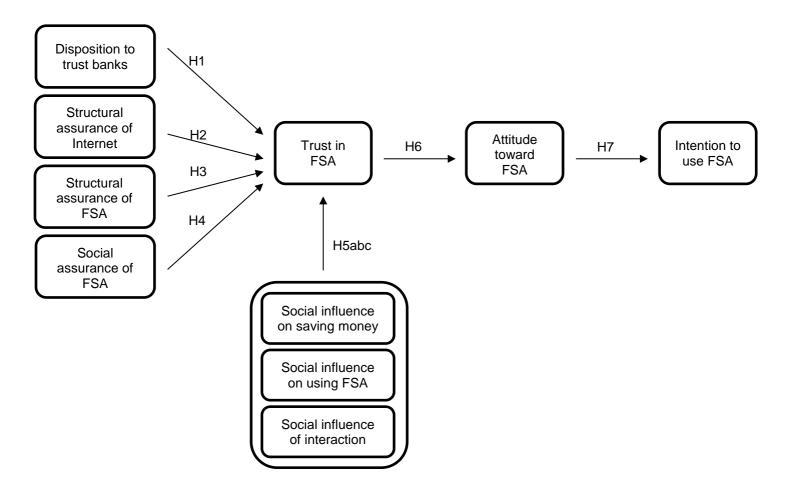
Theory of Reasoned Action (Fishbein and Ajzen, 1975).

Chuang et al. (2016) incorporate TAM between the constructs *Attitude toward Behavior* and *Behavioral intention*, applied to the adoption of Fintech. They find that attitude towards new technology positively affects the intention to use it. This finding is expected to be also applicable in the case of a Fintech savings app, thus the final hypothesis is:

H7: Attitude towards a Fintech savings app has a positive effect towards intention to use a Fintech savings app.

## 2.3 Summary of hypothesis and research model

The summary of the hypothesis produces the following research model. "Disposition to trust banks", "Structural assurance of Internet banking", "Structural assurance of a Fintech savings app" and the "Social assurance of a Fintech savings app" are by theory and the hypothesis generated linked to perceived "Trust in a Fintech savings app". Further, the three construct "Social influence on saving money", "Social influence on using a Fintech savings app", and "Social influence of interaction" are grouped together because of their similar nature and then linked to "Trust in a Fintech saving app". "Trust in a Fintech savings app" is then connected to "Attitude towards a Fintech savings app" which is in turn linked to "Intention to use a Fintech savings app". Described below is the research model with constructs and corresponding hypothesis.



## 3 Methodology

The focus of this chapter is to elaborate on the approach and the chosen methodology of this research. This part will also go through the logic behind the structure of this study. The he topic and its relation to Dreams, the company that initiated the idea of this work, will then be discussed. Subsequently the scientific method used and the outline of the questionnaire and the related sample will be elaborated. The concluding part of this chapter will be the examination of the research quality.

## 3.1 Dreams and topic

The research topic was initiated with a strong interest in trust and how digitalization has challenged trust in institutions. The choice of studying trust linked specifically to the Fintech industry arose after meeting with the Swedish startup Dreams. They define themselves as a savings app with the ambition

to challenge the preconceptions on money and private finances. Their goal is to become a viable alternative to "obsolete banks". By using the most recent technological solutions and research on behavior science they want provide a superior user experience. The first step on their journey is a savings platform with the aspiration to motivate people to save money.

In existing research, trust and Fintech are two topics that have been previously investigated, however they have not been extensively explored in relations to each other. The issue of trust online is a growing topic and has been researched in many fields such as banking, retailing and service provision online. The fact that the Fintech sector is still developing and changing an industry that has been based on a traditional model for centuries, challenges consumers' trust and habits. The provision of financial services through technologies and online opened up social aspects in platform solutions and raises the questions on how the interaction of users online affects the trust in the service. The aspects of this topic are relevant for academia as well as practitioners.

## 3.2 Scientific approach

The approach of this study is deductive. In a deductive approach, the hypotheses are deduced based on knowledge and theoretical considerations related to a domain. The hypotheses are then tested empirically (Bryman and Bell, 2011). Initially, the research began with an in-depth review of previously published literature on the topics of Fintech, trust and cyber trust. Subsequently, hypotheses were created on the basis of theory concerning trust, social influence, structural assurance and subsequently attitude and potential use. Thereafter, the data was collected, the hypothesis tested and thus either supported or rejected. Conclusions and implications were inductively developed from the findings of the research.

Based on a quantitative research strategy (Bryman and Bell, 2014), s self-completion questionnaire was developed and sent out to participants online. Surveys are a convenient and reliable mean of collecting data and a suitable

tool when testing a relationship that involves consumers' perceptions in an effort to collect their opinions without risking to influence them.

## 3.3 Overall research design

The overall research design builds on an extensive quantitative collection of data to test the hypothesis. As Dreams was able to provide valuable insights and in depth information concerning the situation in the Fintech industry in Stockholm resulting from previously conducted research. Therefore, a pre study was considered redundant in providing new information necessary to base the study on and it was decided to not conduct one considering the time constraint.

As the model created is quite extensive, the survey that was submitted to respondents covered all the constructs in order to provide data that could be tested with different methods of analysis. In designing the research, the focus was the investigation of potential causality, which made a quantitative approach suitable. A quantitative research also supposedly provides an objective view of social realities and context. (Bryman and Bell, 2011) which was determined as appropriate in this situation.

## 3.4 Main study

In order to conduct this study, all respondents answered the same questionnaire online. As previously mentioned, the concept of Fintech is relatively new and its definition has been evolving in recent years. Therefore, an explanatory introduction was necessary to ensure that all participants had the minimum level of knowledge necessary to fully understand the questions and thus participate in the study. Because of that reason, the questionnaire began with a brief introduction of Fintech;

Generally speaking Fintech, or financial technology, is defined as the simplified provision of financial service through technology. Originally the term was employed to define the digitalization of financial institutions. An early

example is online banking, providing depositors with the possibility to manage their accounts through the Internet instead of through the phone or at a physical bank branch.

The Fintech sector has grown exponentially in the past few years. Today, most Fintech companies are startups. They offer a variety of services such as money transfer, equity funding, peer-to-peer lending, mobile payments, trading platforms etc. challenging the traditional banks and other financial services providers.

Thereafter, the questions followed. They covered the research topics extensively and they were subsequently reduced in the defining phase of the model. This selection led to the final categories then used in the study.

The first category was social influence and it covered the constructs of "Social influence of saving money", "Social influence on using a Fintech savings app", "Social influence of interaction" and "Social assurance of a Fintech savings app". The next categories defined were "Structural assurance of Internet banking", "Structural assurance of a Fintech savings app" and "Disposition to trust banks". The three final categories tested through the questionnaire were "Trustworthiness of a Fintech savings app", "Attitude towards using a Fintech savings app" and "Intention to use a Fintech savings app". All categories covered one or more constructs developed from theory. The categories and the related constructs are summarized in the following table.

Category	Constructs
Disposition to trust	Disposition to trust banks
Structural assurance	Structural assurance of Internet banking Structural assurances of Fintech savings app
Social Influence	Social assurance of FSA  Social Influence on saving money  Social influence on using a Fintech savings app  Social interaction
Perceived trustworthiness of a Fintech saving app	Perceived trustworthiness of a Fintech saving app
Attitude to FSA	Attitude toward a Fintech savings app
Intended use of FSA	Intended Use of FSA

## 3.5 Sampling

A convenience sample was used to draw representative data. This statistical method was used because of the easy access to available respondents and thus the potential to provide a high response rate. Another benefit of this method is that it allows to collect data in a timely manner. However, there are risks associated to convenience sampling because the sample might not be representative of the population and respondents might be biased in their answers since they are volunteering (Bryman and Bell, 2011).

Saunders, Lewis and Thornhill (2009) argue that when there is low variation in the population sample the risks are minor. In this study, there were no significant differences predicted concerning the population. Therefore the convenience sample was considered appropriate for this study. The data was mainly collected one social media where users were invited to fill in the survey and pass it forward in order to maximize the response rate in a limited amount of time. This potentially created a nonprobability snowball effect. The nonprobability sample is defined by Bryman and Bell (2011) as a sample that is not randomly selected which means that some respondents have a higher chance of being selected in the full population. Considering the similarity among people connected through social media, the acquired respondents were predicted to be similar to the primary research sample.

The data was collected from 212 respondents between October 31st and November 14th 2016 through the Qualtrics survey platform. Nevertheless, after data screening, 45 surveys were judged incomplete and had to be removed from the final sample. It appeared that the length of the survey might have affected the number of surveys actually completed, and in order to use complete data all surveys which were not completed to the end had to be removed. This resulted in 167 usable responses that were considered an appropriate sample size.

In the end of the survey the respondents were asked a few control questions, below are the overall demographic information regarding our sample.

One question regarded respondents' familiarity with Fintech. Answers revealed that the sample had a quite wide spread. 24.55% were not familiar at all and 16.17% were slightly familiar which means that more than a third of the sample size was quite unfamiliar with Fintech. 31.14% were moderately familiar, 24.55% were very familiar and 3.59% were extremely familiar, which overall represents slightly less than a third of the sample.

The respondents were also asked to answer a question about their general current occupation. The largest group of respondents was composed of students and accounted for 55.69% of the total share. Employed people followed representing 41.92% of the respondents. The residual share of respondents, corresponding to 2.40%, selected "other" as their current main occupation were employees.

When it comes to gender, the spread of recipients can be considered equal since no group reached a higher percentage than 60%. 43.71% of the respondents were male, and 55.69% answered that they were female.

Looking into current users, it was found that most people who answered the questionnaire were not actually using a Fintech application. 79.76% answered that they were not users of Fintech products, 20.24% answered that they were. From the section about familiarity we can see that since about a third was familiar, a third moderately familiar, and a third not familiar, it seems reasonable to deduce that some respondents were familiar with Fintech but not actual users.

The age group of the people who answered the survey ranged from 20 years old to 65 years old. The mean, however was 27.27 years, and the median 25, which indicates that our crowd consisted of young adults to the largest part.

#### 3.6 Questionnaire

The questionnaire was designed based on the created model. The initial categories of topics consisted of constructs. Each construct was then linked by an hypothesis based on theory. In order to explore the constructs questions were created connected to each one of them.

The questionnaire was developed in English as the sample chosen was international. The participants were asked to answer 42 questions concerning factors potentially affecting trust, attitude and use intention. Moreover, the respondents were asked 5 questions concerning familiarity with Fintech and demographics. In total, the questionnaire was composed of 47 questions most ranging from 1-7. This 7-item Likert scale is usually used to gain consistency, improve reliability and to uncover respondent's attitudes (Söderlund, 2005, Saunders et al., 2009). Each number corresponded to an adjective stating attitude towards the question asked, ranging from "Strongly disagree" to "Strongly agree". This scale therefore also allowed respondents to stay

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neutral when they did not have an opinion on the question by answering

"Neither agree or disagree". There are examples of studies made with an

even number of options which forces the respondent to answer. In this

research it was important to see whether the questions could be answered or

not since interesting conclusions could be derived from respondents' neutral

opinions too.

The 47 questions that the survey was composed of were divided as follows:

main research questions, control questions, category familiarity and

demographics questions.

The questions that are important to this study, the main research questions,

were based on the constructs of the model previously explained. Each

construct was composed of 2-6 questions measured through the 7-point Likert

scale. These questions are detailed below.

3.7 Main questions and their constructs

Disposition to trust banks

In order to measure people's disposition to trust banks, the respondents were

asked their opinions to the following questions: "Generally I believe that

Internet banks have the best interests of customers at heart" and "The

average Internet bank, in general, is honest" The answers were measured

through 7-point multi-item scales ranging from "Strongly disagree" to "Strongly

agree".

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# Structural assurance of internet banking

To measure how people perceive structural assurance in regards to Internet banking, respondents were asked to take a stand concerning the following statements: "Internet Banking has enough safeguards to make me feel comfortable using it to conduct personal financial transactions", "I feel that the legal structures of Internet banking adequately protect me from problems conducting personal financial transactions using Internet Banking", "I feel confident that encryption and other technological advances of Internet Banking make it safe for me to conduct personal business transactions using Internet Banking" and "I feel that Internet Banking policies and statements of guarantees make it safe to conduct personal financial transactions using Internet Banking". All answers were ranged on a 7-item Likert scale.

# Structural assurance of Fintech savings app

To measure the perceived structural assurance of a Fintech savings app, the following questions were asked; "I feel safe using a Fintech savings app if it provides me with a number of someone working with the company to contact", "I feel safe using a Fintech savings app if it enables me to communicate in real time with someone at the company", "I feel assured using a Fintech savings app if it provides me with guarantees", "I feel safe using a Fintech savings app if it provides me with tips and advice on how to use it", "I feel safe using a Fintech savings app if it provides me with help when needed in a timely manner" and "I feel safe if I can communicate in real time with other customers of the Fintech Savings App who share my interests." Again, all answers were measured with a multiple-item scale that ranged from "strongly disagree" to "strongly agree".

### Social assurance of Fintech savings app

The social assurance perceived by respondents on a Fintech savings app was measure based on the following statements: "I feel safe using a Fintech savings app if it enables my friends to use it too", "I feel safe using a Fintech savings app if I can interact with my friends through the app", "I feel safe using a Fintech savings app if I can see my friends' activity on the app" and "I feel safe using a Fintech savings app if it enables me to save money together with

*my friends*". Here too, respondents were asked to answer based on a 7-point Likert type of scale.

# Social influence on saving money

Social influence on people's attitudes when saving money was measured through the following questions: "I consider the opinions of my friends when I make decisions about saving money", "I often look to my friends for advice on how to save money" "I frequently gather information from my friends on how to save money" and "I would start saving money if my friends suggested me to do so" The answers were translated to a scale of 1 to 7.

# Social influence on using a Fintech savings app

In order to measure how respondents perceived their friends' opinions when considering a Fintech savings app, they were asked to what extent they agreed with the following statements. "I would look to my friends for advice on how to use a Fintech savings app", "I would gather information from my friends on how to use a Fintech savings app", "I would not save money on a Fintech savings app if my friends did not approve" and "I would save money through a Fintech savings app if my friends suggested me to do so". The degree to which they complied with the statement was measured on a 7-point Likert scale.

# Social influence of interaction

The interactive aspect of a Fintech savings app was explored through the following questions; "A Fintech savings app should enable me to see my friends' activity on the app", "A Fintech savings app should enable my friends and me to interact through the app" and "A Fintech savings app should enable me to save money together with my friends". As previous questions, this section was also answered through seven options ranging from "Strongly disagree" to "Strongly agree".

# Trust in a Fintech savings app

As previously stated in this research paper, trust is very hard to define and thus to measure. However, the following statements are an attempt to assess how trustworthy respondents perceive a Fintech savings app to be: "A Fintech savings app is a reliable way for me to save money", "I cannot trust a Fintech savings app to save money; there are just too many uncertainties" and "I am comfortable saving money through a Fintech savings app". Here again, the respondents were asked to assess this type of trust through a 7-point Likert scale.

# Attitude towards a Fintech savings app

In order to ascertain people's general attitude towards a Fintech savings app, the respondents were requested to react to the following statements: "I think it is convenient to save money through a Fintech Savings app", "I think saving money through a Fintech savings app is a good idea" and "I like the idea of saving money through a Fintech savings app". Their attitude was estimated on a 7-point Likert scale going from "Strongly disagree" to "Strongly agree".

# Intention to use a Fintech Savings app

Finally, the last part of the main questions brings up the intention to use Fintech. The following questions correspond to this construct: "I am very likely to use a Fintech savings app to save money", "I want to save money using a Fintech savings app" and "I see myself using a Fintech saving app". Like the rest of the main questions, a scale from 1 to 7, representing "strongly disagree" to "strongly agree" was used.

### 3.8 Analytical tools

The analysis of the data was run using the computer program IBM SPSS Statistics, version 23. All the responses were gathered on the Qualtrics platform that was used to make and run the survey. The data was directly exported from Qualtrics to SPSS.

Since measurements of each construct were done through multi-item scales, indexes were formed. Two questions had inverted bipolar scales so the answers had to be recoded to have the same value as the other measurements, and thus enable comparison and analysis. Subsequently, the

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Cronbach's alpha was tested for each construct to test internal consistency.

All constructs passed the approved limit of 0.8 recommended by Bryman and

Bell (2011). Thus, it was concluded that the indexes were highly consistent

internally.

3.9 Data quality

The following sections are dedicated to discussing the reliability of the data,

which reflects trustworthiness, and validity, which assesses that the goal of

the research is validly examined. These aspects are relevant in order to

indicate the quality of data collection and thus of the overall research (Bryman

and Bell, 2011).

3.9.1 Reliability

Reliability is defined as "the consistency of a measure of a concept" (Bryman

and Bell, 2011). There are three factors determining reliability; stability that

corresponds to cohesion over time, internal reliability, inter-observer

consistency.

When stability is observed, one can conclude that the results do not fluctuate

over time.

One way of testing stability is through the test-retest method (Bryman and

Bell, 2011), which implies testing the same measure at different points in time.

As the topic of this research appears unexplored so far, repeating the test

could possibly lead to stronger results.

In order to satisfy internal reliability the Cronbach's alpha was used in this

study. As previously stated, all measures were accepted at a level higher than

0.8 (Bryman and Bell, 2011). Therefore, one can conclude that the variables

used in this study were highly consistent internally.

Inter-observer consistency is important in order to reduce subjectiveness to a

minimum level when investigating the data collected. During the data

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collection process, subjectivity was attempted to be limited by using the same multi-item scale throughout the entire survey and by avoiding open-end questions requiring interpretation and coding. Furthermore, the second hand data used was mostly peer reviewed and the contact with Dreams also provided professional input related to trust and Fintech issues.

# 3.9.2 Validity

The previous section was concerned with ensuring that the study employed the appropriate measurements. This section focuses on whether the appropriate elements were measured. According to Bryman and Bell (2011), validity is built upon four pillars: internal, external and ecological validity as well as validity in measurement.

The first one, internal validity, investigates causality between the dependent and independent variables (Bryman and Bell, 2011). The level of internal validity in this study is considered high as poor quality data was removed from the sample and the risk of further contamination is considered low. Moreover, the sample was composed of independent respondents, and the risk of them influencing each other is considered low.

External validity is whether the conclusions of the research can hold in other contexts and whether the sample can speak for a larger population. This study handles sensitive topics, trust and new technology adoption, that can be influenced by a variety of external factors. Therefore, one can predict that the results in non-similar settings could vary greatly. One example could be conducting this study in the countryside compared to a big city like Stockholm. Results could differ considerably and one possible explanation could be linked to a lower technological penetration rate. However, the aim of this study was to investigate the technology adoption related to trust and by collecting a convenience sample the main group of respondents was based in Stockholm. Further, the sample was distributed evenly amongst the intended target group. Therefore, this study ensures a good reflection of the population that was designated for this study.

The criterion of ecological validity deals with whether the social scientific findings of the research can be applied to individuals' daily natural social settings (Bryman and Bell, 2011). The findings of this study have limited ecological validity because respondents answered a questionnaire, which is an unnatural setting. Thus, even though the findings are technically valid, they cannot be directly linked to people's everyday lives.

Last but not least, measurement validity reflects how well the measure defined to examine a concept mirrors the reality of the concept (Bryman and Bell, 2011). The hypotheses tested derive from previous research and the methodology employed is based on experiments conducted antecedently. Therefore one can conclude that the measurement validity condition is met.

# 4 Results and analysis

In this section, the results of the analytical testing of the model are presented. The statistical results of each hypothesis will be introduced and analyzed. Thereafter, the possible relationships between the constructs will be displayed and either confirmed or rejected. The hypothesis testing will follow the flow of the theory section presented above. In the final part of this chapter, a table providing a summary of the main findings will be displayed.

# 4.1 Hypothesis testing

In this section of the chapter the focus is on the explanation of the hypothesis based on the results of the statistical testing. Different statistical tests were run on the data with SPSS Statistics, version 23.

In order to explore the possible relationships between the different constructs present in the model, correlations were tested. The results confirmed positive relationships between all the constructs linked by an hypothesis. However, even though correlation is a good indicator of a mutual relationship between two variables, it does not provide information on the directionality of the

relationship and which variable affects the other. Therefore, it was concluded that further testing was of interest in order to investigate causality through regression analysis.

To be able to conduct a regression analysis, both regarding multiple and simple linear regression, the conditions below need to be fulfilled. Further, an explanation and proof for this research follows;

- Variable type: At least two variables are necessary, one outcome and one predictor.
- Linear relationship: a linear relationship between the two variables needs to exist.
  - The linear relationship is confirmed through scatterplots created in SPSS.
- Non-zero variance: There should be some variation in the predictor observations.
- No perfect multicollinearity: The predicting variable(s) cannot show perfect linear relationship.
- Homoscedasticity: Similar variances should be observed across all predictor variables, which mean the data does not show heteroscedasticity. SPSS provides the tools to run a Koenker test and to fulfill this condition, a p value <0.05 is necessary.</li>
- Normally distributed errors: The model should have normally distributed residuals with a mean of 0, which can be tested through SPSS.
- Autocorrelation: The residuals should not show correlations and this is tested through a Durbin-Watson statistic in SPSS.

To test the model, it was decided to divide it into three parts to run the regression analysis of the hypotheses. The first part was investigated by conducting a multiple linear regression between the independent variables and the dependent variable, "Trustworthiness of a Fintech savings app". The second part tested the linear relationship between "Trustworthiness of a Fintech savings app" and attitude towards using it. The last relationship was

tested with a linear regression between attitude and use of a Fintech savings app. The three parts of the model are explained in further detail below.

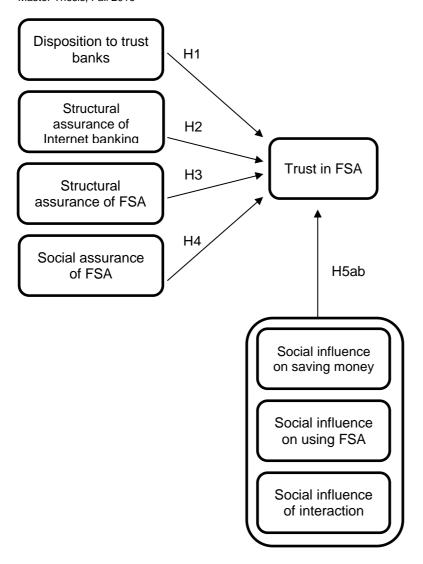
# 4.2.1 Trust in a Fintech savings app

This sections focuses on the multiple regression analysis run on the first part of the model. In order to test this part, it was decided to run a multiple regression analysis through SPSS. The idea was to try to determine if and how the selected constructs affect trust in a Fintech savings app.

Multiple regression analysis is considered a continuation of simple linear regression. It is employed when two or more predicting variables are tested to predict an outcome. This type of analysis makes it possible to investigate whether or not the independent variables identified impact trust in a Fintech savings app.

Multiple regression analysis requires the independent variable to fulfill the conditions of variable type, linear relationship, non-zero variance, multicollinearity, homoscedasticity, normally distributed errors and autocorrelation explained. The detailed explanation can be found in the previous section.

The results of the multiple regression analysis are summarized in the table below. The adjusted value of 0.349 reveals that the independent variables account for 34.9% of the variation in trust in a Fintech savings app. In this case, the adjusted R²-value is preferred to the R²-value because it is the adjusted version of the R²-value according to the number of independent variables included in the analysis. This analysis includes seven independent variables corresponding to the constructs. The potential links of these constructs to the dependent variable of trust in a Fintech saving app are being investigated through hypothesis testing. The results will now be examined one by one, following the first part of the model.



# Disposition to trust banks

The independent variable tested in the first hypothesis is "Disposition to trust banks" and whether it does positively affect "Trust in a Fintech savings app". This value is not significant because p-value>0.05. Therefore, it can be concluded that this model does not significantly predict that "Disposition to trust banks" positively influences "Trust in a Fintech savings app".

Thus, H1 is rejected.

# Structural assurance of internet banking

The second hypothesis is concerned with investigating whether structural assurances such as safeguards, legal structures or guarantees positively affect "Trust in a Fintech savings app". The p-value<0.05 indicates that the

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value is significant. This suggests that "Structural assurance of internet banking" can significantly predict "Trust in a Fintech savings app".

H2 is consequently supported.

Structural assurance of a Fintech savings app

The third hypothesis questions the "Structural assurance of a Fintech savings app" and its potential positive effect on "Trust in a Fintech savings app". Just like hypothesis 2 and the case of structural assurance of internet banking, this regards safeguards, legal structures, guarantees etc. The regression analysis provides a p-value<0.05, and signals significance of the value. This means that "Structural assurance of a Fintech savings app" has a positive effect on "Trust in a Fintech savings app" on a significant level.

H3 is therefore supported.

Social assurance of a Fintech savings app

The fourth hypothesis looks into how "Social assurance of a Fintech savings app", such as perceived connection with friends through the platform impacts "Trust in a Fintech savings app". The regression analysis provides a p-value>0.05 thus this value is not significant. This implies that the model cannot significantly predict that "Social assurance of a Fintech savings app" positively influences "Trust in a Fintech savings app".

Hence, H4 is rejected.

Social influence on saving money

Going forward, the first part of the social dimension category deals with how "Social influence on saving money" can impact "Trust in a Fintech savings app". Examples of this could be whether the respondent considers advice from friends when making decisions concerning saving money. The multiple regression analysis provides a p-value<0.05 thus the value is considered statistically significant. This implies that the model significantly predicts that

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"Social influence on saving money" positively impacts "Trust in a Fintech

savings app".

H5a is thus accepted.

Social influence on using a Fintech savings app

The second part of the social dimension investigates the degree to which

people are susceptible of being influenced by their friends' opinion on Fintech

savings app and whether it translates in "Trust in a Fintech savings app". The

regression analysis provides a p-value just over 0,05 and therefore the value

is not statistically significant and has no explanatory value in predicting "Trust

in a Fintech savings app".

H5b is hence rejected.

Social influence of interaction

The final part of the social dimension corresponds to questioning if "Social

influence of interaction" can affect "Trust in a Fintech savings app" in a

positive way. The results provide a p-value>0.05 indicating no significance in

the value. The fact that "Social influence of interaction" affects "Trust in a

Fintech savings app" in a positive way is thus not significantly predicted by

this model.

Therefore, H5c is rejected.

4.2.2 Attitude towards using a Fintech savings app

A linear regression model is used to conclude whether two variables are

significantly correlated. Moreover, it is used in the case of a directional

hypothesis testing which provides a direction of the relation between the two

variables tested.

The two variables, trust and attitude, fulfilled the necessary conditions to be

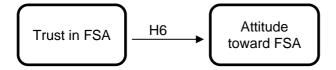
suitable for a regression analysis. By doing so, it was possible to test whether

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"Trust in a Fintech savings app" influences the "Attitude towards a Fintech savings app".

The regression coefficient predicts the dependent variable's outcome and corresponds to the gradient of the line. The coefficient that represents the variables' degree of relationship can be positive, negative or equal to 0. The further from 0 the coefficient is, the greater the relationship.

The results of the regression are summarized in table (). "Trust in a Fintech savings app" and "Attitude toward a Fintech savings app" correlate positively as shown by the R-value of 0.635. Furthermore, the R<sup>2</sup>-value of 0.404 indicates that "Trust in a Fintech savings app" accounts for 40.4% of the variation in "Attitude toward a Fintech savings app". Also, the values are significant since p<0.01. Therefore, it can be concluded that this regression model significantly predicts that "Trust in a Fintech savings app" positively influences the "Attitude toward a Fintech savings app".



H6 is consequently supported.

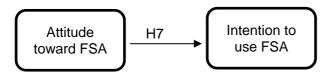
## 4.2.3 Intended use of a Fintech savings app

A linear regression analysis was also used to test the final part of the model which investigates the causal relation between "Attitude toward a Fintech savings app" and the actual "Intention to use a Fintech savings app". The explanation provided in the section above concerning the explanatory value of a linear regression analysis also applies in this case. Furthermore, both variables fulfilled the necessary conditions to run a linear regression analysis so the test was conducted through SPSS computer program.

The R-value of 0.769 indicates a positive correlation between "Attitude towards a Fintech savings app" and "Intention to use a Fintech savings app".

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Further, the R<sup>2</sup>-value of 0.591 suggests that attitude accounts for 59.1% of the variation of "Intention to use a Fintech savings app". The values are significant since p<0.01. Therefore, it can be deduced that this regression model significantly predicts that "Attitude toward a Fintech savings app" has a positive influence on "Intention to use a Fintech savings app".



H7 is thus supported.

# 4.3 Summary of the hypotheses testing

A summary of the results of the hypotheses testing is provided in the table below.

# **Summary of Results** H1 Disposition to trust banks has a positive effect on Rejected trust in a Fintech savings app. **H2** Structural assurance of Internet banking has a **Supported** positive effect on trust in a Fintech savings app. **H3** Structural assurance of a Fintech savings app has a Supported positive effect on trust in a Fintech savings app. **H4** Social assurance of a Fintech savings app has a Rejected positive effect on trust in a Fintech savings app. H<sub>5</sub>a Social influence on saving money has a positive **Supported** effect on trust in a Fintech savings app. H<sub>5</sub>b Rejected Social influence on using a Fintech savings app has a positive effect on trust in a Fintech savings app. H<sub>5</sub>c Social influence of interaction has a positive effect on Rejected trust in a Fintech savings app. **H6** Trust in a Fintech savings app has a positive effect **Approved** on attitude toward a Fintech savings app. **H7** Attitude toward a Fintech savings app has a positive **Approved** effect towards intention to use a Fintech savings app.

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### 5 Discussion and conclusions

In this chapter the findings of this research will be discussed and conceptualized. In the following paragraphs the research questions will be answered. Subsequently, the theoretical and practical implications will be elaborated on. The report ends with a critical evaluation of the study and openings for future research.

### 5.1 Conclusions

The aim of this research paper was to investigate trust in Fintech and understand whether users perceive a platform as being more trustworthy if there is a social dimension to it, combined with structural assurances. In order to get prominent results, this study was conducted with the example of a Fintech savings app. This was done in order to test participants in a concrete setting. Below, the three sub-questions of the main research question will be discussed and answered. Finally, the main research question and related conclusions will be examined.

**RQ1:** Does user trust in Fintech increase when there is a social dimension associated to the service offering?

Deconstructing the main question, it seems logical to begin with the social aspect. In this regards, there is a lack of support for our research question. Four hypotheses were developed in order to test the social dimension, but they all failed to be significant except for the one testing the effect of "Social influence on saving money" that was supported. This shows that a social aspect is important in regards of saving money as a human behavior. However, in a Fintech context people seem to be unaffected by their entourage's opinion regarding the new technology and its usage. Thus, this research concludes that trust in the context of Fintech is not built through social dynamics.

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**RQ2**: Does the traditional structural assurance mechanism apply to user trust

in Fintech?

When looking into the structural assurance perspective on trust and Fintech,

there seems to be evidence supporting the existence of a link between the

category and the construct of "Trust in a Fintech savings app". People seem

to respond positively toward structural assurance mechanisms online, both in

the context of online banking and in Fintech. On the other hand, disposition to

trust traditional banks offline does not seem to affect trust in Fintech.

Structural assurance is therefore still considered as an effective mechanism to

build trust among users in a Fintech platform.

RQ3: Can people's trust in Fintech be a sufficient condition to convince

potential customers to become actual users?

The other part of the study focused on investigating the effect trust has on

actual use of Fintech, mediated by attitude. In this study, it was revealed that

trust in Fintech does lead to a favorable attitude toward Fintech, thus trust can

be considered as an antecedent of attitude. Moreover, when people are

confident in their attitude toward Fintech it translates into potential use. Thus

one can conclude that trust in Fintech does lead to likelihood of use.

**Main research question**: Do social aspects such as interaction and influence

combined with different types of structural assurance, affect trust in a Fintech

savings app?

The evidence provided by this study only partially confirms the main research

question. The social dimension overall does not significantly influence how

users perceive the trustworthiness of Fintech whereas structural assurance

clearly does. Furthermore, trust does lead to attitude and potential use.

5.2 Discussions

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#### 5.2.1 The effect of social dimension on trust

Even though this study did not provide unanimous support regarding the effect of the social dimension on trust, it still provided interesting insight regarding users' perception and influence. The theory used as a base for this study leans in the direction that people are social and therefore the potential influence people have on each other is considerable. This is supposedly true in a context of word-of-mouth and interaction both offline and online. However, the results of this study concerning social influence in Fintech did not support this. The findings seem to contradict the theory regarding users' general behavior online where the social dimension is increasingly important. This is especially true because in the online environment, people rely on influencers and actively research what their environment does and thinks in order to decide which action to take. Furthermore, the use of online communities and exchange of information is a primary determinant of people's opinions. Therefore, social influence is crucial in determining people's opinion - but it apparently not in all Fintech contexts. This finding is further surprising since people are constantly confronted to their environment's behavior and opinion online and offline, even when not actively seeking this type of information.

It is through interacting that information and opinions are exchanged among human beings. Thus interaction is an important aspect to take into consideration when looking into social influence. The results, however, do not provide significant evidence linking interaction and influence to trust in Fintech. The aspect of societal development does undoubtedly play a relevant role in this. Considering the rapid evolution and widespread application of Fintech, it is reasonable to consider that the perceived trustworthiness of Fintech is related to familiarity - or the lack of it. Therefore, it would likely change over time as people acquire general information and knowledge of Fintech and as use become more widely spread.

## 5.2.2 The effect of structural assurance on trust

The other part investigating the factors generating trust was related to structural assurance. The link between trust and structural assurance was evident. As mentioned before, banking, and specifically private banking, has a history of using such assurances to convey trust and reliability. The financial crisis of 2008 challenged the long-standing perception of trustworthiness associated with the financial sector, in particular banks. Therefore, one could expect that this phenomena would have been translated in the results of this study as the equilibrium has changed. This would incentivize people to actively seek alternatives to the traditional financial services provision in an attempt to get away from the old, flawed, system. This in turn should have positively affected emerging sectors such as Fintech that provide these old, but necessary, services in a new way. Nevertheless, the results of this research reveal that trust in banks does not lead to trust in Fintech whereas structural assurance of Internet banking and a Fintech platform do. This leads to believe that people perceive Fintech and banks as two clearly separated entities.

Another relevant point to bring up is that banks are evolving and providing services that can be labeled as "Fintech". However, the reputation and familiarity people associate with banks can make it hard to change people's perception and change the brand associations. It is likely extremely hard for those entities to alter their brand image even though they are heavily investing in innovation in order to keep up with the rapid expansion of the Fintech sector.

The fact that structural assurance is perceived, still, as relevant for users can be linked to the lack of transparency often associated with the banking sector. It has a reassuring effect on users that justifies why it is also relevant in Fintech. Transparency is even more important because in financial services, providers managers sensitive users' data.

One of the core starting points of this study was the statement made by Friedman et al. (2000) - "people trust people, not technology". This can be interpreted as trust develops among human beings and should thus be harder

to build in a "non-human" setting. However, the results of this study point in the opposite direction. In fact, the social dimension in Fintech has little or no effect on trust whereas the more technically assuring side of the platform does.

# 5.2.3 The effect of trust on potential use

The study also uncovered that people react positively to potential use of Fintech if they trust it. Therefore, it seems likely that trust is a factor contributing to attitude, as it is the mediating variable between trust and intention to use. This indicates that when people perceive a platform or a brand as trustworthy, the service provided enters their set of consideration during the evaluation of alternatives process users go through in an attempt to satisfy an unmet need. When users are confronted with various options the winning one is most likely going to be the one that they perceive as being the trustworthiest. Therefore, this process is also applicable to situations where people seek alternatives to banks in regards to private financial services. Thus, when Fintech companies manage to successfully communicate trust to potential users, who are considering an alternative to traditional banking, it might be the deciding factor leading them to switch to a more innovative and untraditional option. Therefore, in this particular case, trust can overrule familiarity.

The next step in the model tested brings up the link between attitude and potential use. The previous paragraph and the findings of this study indicate that a positive attitude does lead to potential use because of the initial trust condition. Furthermore, in this research risk was introduced as the opposite of trust. Thus, when people trust Fintech and they consider using it the associated risk is perceived as low. As a consequence, potential use increases which directly links risk to usage. This is especially true since it is beneficial for individuals to engage in activities avoiding risk exposing them to uncertainty of an outcome. Furthermore, as Fintech deals with sensitive information and privacy issues regarding its users in the provision of financial services, the risk perceived by users must be minimized. Regarding the

protection of sensitive information and its non-disclosure, the risk perceived by potential users has to be as low as possible in order for them to actually use the service.

### 5.3 Critical reflections

This section of the study focuses on analyzing the shortcomings of the research design together with potential methodological difficulties and limitations.

To begin with, this study was made based on a survey that contextualized trust and Fintech through a savings app. As mentioned, the aim of this study was not to deeply investigate the saving habits of people but to conceptualize the relationship between trust and Fintech. Furthermore, to make sure the questions were posed in a clear way, the context of a savings app was used. It is possible that the activity itself, e.g. saving, is characterized by privacy and lack of sharing digitally compared to other financial activities. It appears that people are willing to discuss and take into consideration their environment's opinions, however when it comes to the specifics of the activity of saving, they seem to be willing to share less, and thus privacy become an important aspect. As earlier mentioned, Fintech is still a relatively new and evolving field and people are not yet familiar with it. Thus one can expect a more suspicious attitude toward it and the social influence does not compensate fully for the lack of knowledge and information. This behavior is associated with savings and one can expect that this study would lead to different results when tested in a context of a different financial activity, for example investing, as well as when tested in the future when people will be more familiar with Fintech. Therefore, the conclusions of this study are only applicable to Fintech providing savings services today.

Going forward, it is relevant to bring up the fact that this study was built on a questionnaire experiment and not actual real life observations. The survey started with a short description of Fintech in order to clarify the concepts

brought up in the questions for people who were unfamiliar with it. This potentially influenced respondents' answers. Moreover, if this study had been conducted in a real life setting, one can expect that people would have acted differently thus leading to a potential change in the results. The sample of the study might have had an impact on respondents' attitude as well as the fact that young people are generally more familiar with technology. Furthermore the fact that the survey was conducted online might have made it favorable to a younger, more tech-savvy, crowd. All these aspects imply a risk of biasedness. It is also important to bring up the fact that some respondents were already familiar with Fintech and even actual users, which could have translated into a favorable predisposition to trusting Fintech.

Furthermore, it could be argued that a manipulation check should have been used to ensure the quality of the answers given in the survey. As manipulation checks are often very effective, and not very costly in terms of the respondent's time and resources, it could have reassured parts of the input received from this study. Manipulation checks are however, foremost relevant when the independent variable is in fact indirectly affected. The manipulation check then confirms that the variable was actually manipulated successfully. As this study focuses on a variable that is directly influenced by many independent variables without mediation, e.g. trust affected by social dimensions, perceived trust in banks and different kinds of structural assurances, the manipulation check is of less relevance. Not to diminish its purpose, it could have been relevant for the descending hypothesis linking the constructs of attitude and use.

Conducting a pretest could have revealed beforehand the effectiveness of the questionnaire. There is reason to believe that a portion of the respondents did not complete the survey because it was considered too long, due to comments and incomplete answers. A pre-test of the questionnaire could have revealed this, thus making the actual research more efficient and leading to a greater amount of responses. Furthermore, a pretest could have revealed strengths and weaknesses regarding phrasing, question order, and format, thus making it possible to improve it.

# 5.4 Theoretical implications

The ambition of this study was first and foremost to explore and investigate the social aspect of trust in Fintech. To build the hypotheses, and the study as a whole, a vast amount of previously conducted research was used as building blocks pushing the existing research scope. The results derived from this study aimed at, besides from expanding previous academic findings, uncovering potential new research areas. These could in turn be explored and further complement the field of marketing research.

This research argues that propensity to trust banks will not have a positive effect on perceived trust in Fintech. According Balasubramanian et al. (2003) there reason to believe that trust could travel from an economic institution, as a bank for example, to its subsidiaries and other activities. Found here is an example where that potentially does not apply. The surrounding factors seem to have a relevant impact and opens up for further research and development of theory in different situations.

Sha (2009) tested structural assurance in an e-vendor and found that it had a positive effect on the perceived trustworthiness in an e-vendor setting. This research takes this concept one step further in testing an online service setting, more specifically a Fintech savings app. Furthermore, Sha's research could be applied in new situations and put into numerous contexts to provide input to the existing theoretical framework. This research also confirms what Sinclaire (2007) finds in her research regarding institutional characteristics on website and their positive effect on consumer willingness to provide sensitive information in an online environment. This study provides a contribution to her theory in adding the Fintech field to her conclusions.

Lewis (1985) explains how social assurance creates the prerequisites for social order. Further he argues that trust should grow together with human presence. In the line of this reasoning Friedman et al. (2000) argue that

people trust people and not technology. This research points towards the fact that a social aspect in the setting of Fintech is not effective in building trust. Interestingly enough, this does not necessarily contradict previous research. Instead, it might derive from the same conclusions, simply stating that the social setting possible in a Fintech savings app just does not communicate the threshold level for social assurance to build trust.

Gefen and Straub (2003) researched the trust-building mechanism of social assurance on an e-commerce platform and their study revealed that trust in an e-commerce platform increases with social presence. This study tested this in the context of Fintech and the findings contradict their results. Instead they reveal that there is no causal relationship between social assurance and trust in a Fintech savings app.

This study also expanded existing research on social influence and its link to interaction and word-of-mouth. Abdul-Raham and Hailes (2000) argue that WOM is a trust-building mechanism offline as well as online. This paper does not lead to the same conclusions. In an offline context this research agrees with Abdul-Raham and Hailes, but when studied in an online Fintech context the results point in the opposite direction. The other aspect of social influence researched in this paper is interaction, which is defined as a trust-building mechanism because it is a prerequisite for WOM (Wu et al., 2010). Also in this case, the findings challenge these conclusions. Therefore these two aspects of WOM, e.g. influence and interaction, could be further developed theoretically and tested in new settings.

Chuang et al. (2016) conducted an extensive study on attitude and use in Fintech. It was done by combining two renowned models; TAM which is the Technology Acceptance Model developed by Davis (1989), and TRA which is the Theory of Reasoned Action Model developed by Fishbein and Ajzen (1975). This study contributes to the findings of Chuang et al. by concluding that trust is an antecedent of attitude and attitude leads to potential use in a Fintech savings app.

It is clear that the field of Fintech can be further explored and examined through theory and many of the previously developed theories can be tested in different settings related to Fintech. Especially the contradictory finding of this study are encouraged to be further investigated.

# 5.5 Managerial and practical implications

This research was conducted in a way that leads to theoretical as well as managerial implications. As trust is a topic relevant to many fields and professions, in this part the most prominent ones within marketing and management will be brought up with the ambition to create favorable attitudes and attain and keep loyal users.

According to Vargo and Lush (2004) marketing is becoming increasingly relationship-based and trust comes in as a prerequisite for any kind of business conducted with a long-term ambition. On one hand, the findings suggest that in the Fintech sector users do associate structural assurance as a signal of trustworthiness. On the other hand, since banks are still recovering from the financial crisis of 2008 and the loss of consumer trust incurred, there seems to be a gap in the market where Fintech is expanding. Therefore, since users are looking away from traditional actors, Fintech companies need to pick up on this trend and focus their branding on positioning themselves as a valid option. Furthermore, financial services deal with very sensitive consumer data and therefore, Fintech apps need to reassure users in this regard and push mechanisms such as structural assurance to convey trustworthiness.

Fintech is still evolving and defining its boundaries and role in people's daily lives. Therefore, the findings concerning social influence seem to be logical in the sense that it is not a user's primary concern when they consider financial services. Thus, Fintech companies should focus less on the social dimension of their service and more on function and security aspects in order to raise potential consumers' trust.

The trend has been to focus on trust building and making loyal customers out of existing ones. The conclusions of this research suggest that it might be a unique selling point also in the first contact with a potential user. This is especially relevant as it results that trust in Fintech leads to positive attitude and subsequently potential use, clearly incentivizing manager to act accordingly. This can be due to the fact that the service of Fintech is directly linked to offerings of banks, and thus connected to the importance of conveying trustworthiness at an initial stage.

It is important to recognize that the constant development of services within Fintech, and also the level of adoption throughout the connected world, will likely change people's perception of Fintech in general and thus its trustworthiness. It has been mentioned before that familiarity has an effect on trust and brand perception which means that if management and marketers aim at being on the forefront in establishing brand and service trust they need to be flexible and receptive to consumers behaviors.

Perhaps the most relevant contribution to practitioners is a further confirmation of the importance of trust and that it does explain a large part of the attitude and use of Fintech services. Knowing that trust has many antecedents it becomes clear that after identifying relevant ones it is of interest to develop a way of measuring them. To this day, a reliable way of doing so has not yet been discovered but companies should focus on building suitable KPIs in order to track their progress and expand their business. In addition to that, this will allow Fintech companies to market their service better, reach their target customers and thus achieve growth.

### 5.6 Further research

In this part, suggestions for future research are laid down based on the findings of this study.

The aim of this paper was to initiate the research concerning trust-building mechanisms in Fintech. As the research question finds partial support, there is further research to be conducted in order to grasp what drives perceived trust in Fintech. When there is an understanding of the context of trust online in Fintech, there can also be further investigations and exploratory studies testing how trust affects people's behavior.

First of all, this report aims to investigate trust in Fintech. However, this research is conducted through the medium of a savings app whereas Fintech includes a variety of financial services. Therefore, further investigation in different settings such as the traditional ones (investment, private banking, loans, etc.) or the more innovative ones (robot investment, crowd funding, microloans, etc.) is necessary. Looking into the different types of services provided by Fintech will provide a complementary view on the whole sector and allow for findings applicable to Fintech generally.

It was previously stated that a shortcoming of this particular paper was the fact that the context was only researched through an online questionnaire. In order for this investigation to gain significance, different testing methods could be combined with a focus on real life setting experiments. With this said, the obvious continuation of this research would be valuable to attain a multifaceted picture of the acceptance of Fintech in society. An example of further research could be conducting the experiment through a simulation of a Fintech app allowing users to navigate and experience the service, therefore developing an opinion on trust on based on a realistic setting.

Additionally, this study only looks into a specific set of factors potentially influencing trust. However, the combinations of aspects that can lead to trust are numerous. Thus another way of conducting this experiment leading to valuable insights would be using theory looking into different antecedents of trust. This would imply altering the factors of the model, keeping the structure unchanged. Some suggestions could include familiarity with Fintech or technology in general, tech-savviness, reputation, satisfaction, etc.

Concerning methodology, the model developed in this study can be tested as a structural equation model, SEM. Therefore, to gain further insights the SEM analysis should be conducted with SPSS Amos which would allow to analyze the model as a whole, without dividing it into different parts necessary for a regression analysis. This investigation could give more insight concerning cause and effect by taking into account indirect effects. In practical terms this means for example that the relationship between trust and attitude would take into account the antecedents of trust and their indirect effects on attitude.

Another way of conducting this study could be in a comparative way. Significance was found in parts of the model. However, to really grasp the extent of the impact of each part, a comparison could be made with an identical study testing different antecedents. Also, a study comparing means of different age groups or sexes could be interesting to widen the scope and attain an understanding of what the spread in society looks like.

These are just some suggestions on how to further develop this study. However, there is a diversity of ways of how to expand this study, such as digging into structural assurance types, investigating how Fintech influence banking or even how banks react to the emergence of this new sector. This study lays the ground for further research in the domain of Fintech and trust.

# 5.7 Concluding remarks

The primary ambition of this study was to gain a deeper understanding of trust-building mechanisms, with a specific focus on the Fintech sector. Previous and current research revealed that trust is a concept that has not yet been generally defined. Therefore, it appears logical that it is hard to understand and measure.

Furthermore, this study aimed at providing a connection between the social dimension and structural assurance and the building of trust. The purpose was also to analyze and understand how trust can potentially drive actual use

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of a Fintech platform by mediation of user's attitude. Finally, the findings of this study revealed a relevant input to practitioners within marketing and management. Subsequently, this study also aimed at gaining an understanding of how consumers perceive Fintech and what aspects should be put forward in order to be recognized as a more trustworthy and a reliable alternative to traditional financial service providers, such as commercial and investment banks as well as insurance and investment companies.

The testing of the model developed in this report suggest that only structural assurance actually builds trust, as opposed to the social aspect which did not result as significant influencers of the perceived trustworthiness of the Fintech platform. Moreover, this investigation confirmed that trust is a valuable prerequisite to attitude, which in turn positively affects potential use of a Fintech savings app.

As a conclusion, the flow of trust and how it can influence potential use of a Fintech application are examined. Results however seem to suggest that when there is a lack of familiarity due to the novelty of an innovation, building trust is a complex mechanism and the social dimension is not potential users' primary concern. Therefore, further investigation is needed to gain a better and more complete understanding of users' behavior in regards to Fintech.

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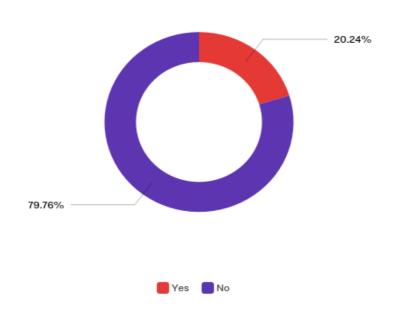
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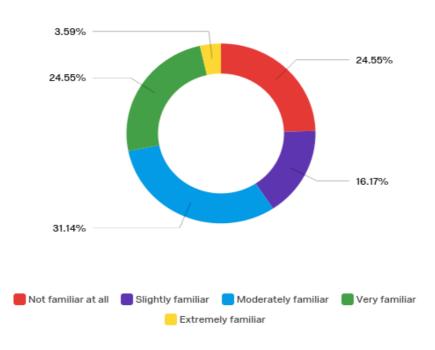
#### **Appendix**

## 1 Demographics Graphs

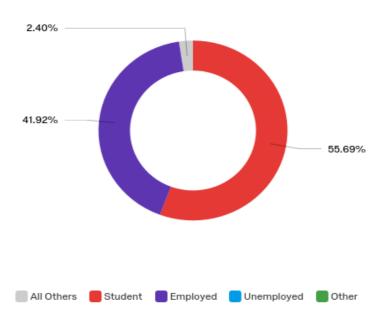
#### Proportion of users



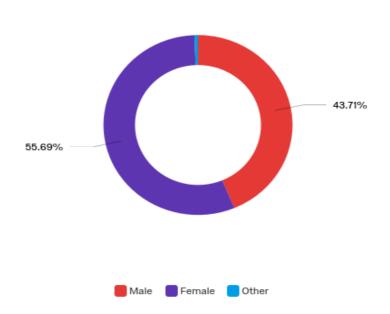
## Familiarity with Fintech



#### Occupation



#### Gender



# 2 Categories, Constructs and Questions

Category	Constructs	Questions
Disposition to trust	Disposition to trust banks	Generally I believe that Internet banks have the best interests of customers at heart. The average Internet bank, in general, is honest.
Structural assurance	Structural assurance of Internet banking	Internet Banking has enough safeguards to make me feel comfortable using it to conduct personal financial transactions.  I feel that the legal structures of Internet banking adequately protect me from problems conducting personal financial transactions using Internet Banking.  I feel confident that encryption and other technological advances of Internet Banking make it safe for me to conduct personal business transactions using Internet Banking.  I feel that Internet Banking policies and statements of guarantees make it safe to conduct personal financial transactions using Internet Banking.
	Structural assurances of Fintech savings app	I feel safe using a Fintech savings app if it provides me with a number of someone working with the company to contact.  I feel safe using a Fintech savings app if it enables me to communicate in real time with someone at the company.  I feel assured using a Fintech savings app if it provides me with guarantees.  I feel safe using a Fintech savings app if it provides me with tips and advice on how to use it.  I feel safe using a Fintech savings app if it provides me with help when needed in a timely manner.  I feel safe if I can communicate in real time with other customers of the Fintech Savings App who share my interests.
Social Influence	Social assurance of FSA	I feel safe using a Fintech savings app if it enables my friends to use it too. I feel safe using a Fintech savings app if I can interact with my friends through the app. I feel safe using a Fintech savings app if I can see my friends' activity on the app. I feel safe using a Fintech savings app if it enables me to save money together with my friends.
	Social Influence on saving money	I consider the opinions of my friends when I make decisions about saving money. I often look to my friends for advice on how to save money. I frequently gather information from my friends on how to save money. I would start saving money if my friends suggested me to do so.
	Social influence on using a Fintech savings app	I would look to my friends for advice on how to use a Fintech savings app. I would gather information from my friends on how to use a Fintech savings app. I would not save money on a Fintech savings app if my friends did not approve. I would save money through a Fintech savings app if my friends suggested me to do so.
	Social interaction	A Fintech savings app should enable me to see my friends' activity on the app. A Fintech savings app should enable my friends and me to interact through the app. A Fintech savings app should enable me to save money together with my friends.
Perceived trustworthiness of a Fintech saving app	Perceived trustworthiness of a Fintech saving app	A Fintech savings app is a reliable way for me to save money. I cannot trust a Fintech savings app to save money; there are just too many uncertainties. I am comfortable saving money through a Fintech savings app.
Attitude to FSA	Attitude toward a Fintech savings app	I think it is convenient to save money through a Fintech Savings app. I think saving money through a Fintech savings app is a good idea. I like the idea of saving money through a Fintech savings app.
Intended use of FSA	Intended Use of FSA	I am very likely to use a Fintech savings app to save money. I want to save money using a Fintech savings app. I see myself using a Fintech saving app.

#### 3 Questionnaire

Hi,

We are two master students from Stockholm School of Economics currently writing our master thesis. This is our master thesis study and we are happy that you are participating. The following questions revolve around Fintech and saving habits. The survey takes about 5 min to complete and please bear in mind that there are no right or wrong answers.

Before answering the questions please read the following two paragraphs carefully.

Thank you for taking the time!

Helena & Lili

Generally speaking Fintech, or financial technology, is defined as the simplified provision of financial service through technology. Originally the term was employed to define the digitalization of financial institutions. An early example is online banking, providing depositors with the possibility to manage their accounts through the Internet instead of through the phone or at a physical bank branch.

The Fintech sector has grown exponentially in the past few years. Today, most fintech companies are startups. They offer a variety of services such as money transfer, equity funding, peer-to-peer lending, mobile payments, trading platforms etc. challenging the traditional banks and other financial services providers.

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#### Please respond to the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I consider the opinions of my friends when I make decisions about saving money.	0	0	0	0	0	0	0
I often look to my friends for advice on how to save money.	0	0	0	0	0	0	0
I frequently gather information from my friends on how to save money.	0	0	0	0	0	0	0
I would start saving money if my friends suggested me to do so.	0	0	0	0	0	0	0
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I would look to my friends for advice on how to use a Fintech savings app.	0	0	0	0	0	0	0
I would gather information from my friends on how to use a Fintech savings app.	0	0	0	0	0	0	0
I would not save money on a Fintech savings app if my friends did not approve.	0	0	0	0	0	0	0
I would save money through a Fintech savings app if my friends suggested me to do so.	0	0	0	0	0	0	0

Please respond to the	e following	statement	s:				
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
A Fintech savings app should enable me to see my friends' activity on the app.	0	0	0	0	0	0	0
A Fintech savings app should enable my friends and me to interact through the app.	0	0	0	0	0	0	0
A Fintech savings app should enable me to save money together with my friends.	0	0	0	0	0	0	0
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I feel safe using a Fintech savings app if it enables my friends to use it too.	0	0	0	0	0	0	0
I feel safe using a Fintech savings app if I can interact with my friends through the app.	0	0	0	0	0	0	0
I feel safe using a Fintech savings app if I can see my friends' activity on the app.	0	0	0	0	0	0	0
I feel safe using a Fintech savings app if it enables me to save money together with my friends.	0	0	0	0	0	0	0

#### Please respond to the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Internet banking is reliable.	0	0	0	0	0	0	0
Internet banking cannot be trusted, there are just too many uncertainties.	0	0	0	0	0	0	0
I am comfortable using Internet banking to conduct personal financial transactions.	0	0	0	0	0	0	0
I believe using Internet banking is convenient to conduct personal financial transactions.	0	0	0	0	0	0	0

	Strongly disagree	Disagree	Somewhat disagree	nor disagree	Somewhat agree	Agree	Strongly agree
Internet Banking has enough safeguards to make me feel comfortable using it to conduct personal financial transactions.	0	0	0	0	0	0	0
I feel that the legal structures of Internet banking adequately protect me from problems conducting personal financial transactions using Internet Banking.	0	0	0	0	0	0	0
I feel confident that encryption and other technological advances of Internet Banking make it safe for me to conduct personal business transactions using Internet Banking.	0	0	0	0	0	0	0
I feel that Internet Banking policies and statements of guarantees make it safe to conduct personal financial transactions using Internet Banking.	0	0	0	0	0	0	0

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree	
A Fintech savings app is a reliable way for me to save money.	0	0	0	0	0	0	0	
I cannot trust a Fintech savings app to save money; there are just too many uncertainties.	0	0	0	0	0	0	0	
I am comfortable saving money through a Fintech savings app.	0	0	0	0	0	0	0	

## Please respond to the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I feel safe using a Fintech savings app if it provides me with a number of someone working with the company to contact.	0	0	0	0	0	0	0
I feel safe using a Fintech savings app if it enables me to communicate in real time with someone at the company.	0	0	0	0	0	0	0
I feel safe assured using a Fintech savings app if it provides me with guarantees.	0	0	0	0	0	0	0
I feel safe using a Fintech savings app if it provides me with tips and advice on how to use it.	0	0	0	0	0	0	0

I feel safe using a Fintech savings app if it provides me with help when needed in a timely manner.	0	0	0	0	0	0	0
I feel safe if I can communicate in real time with other customers of the Fintech Savings App who share my interests.	0	0	0	0	0	0	0

#### Please respond to the following statements: Neither agree Strongly Somewhat nor Somewhat Strongly disagree Disagree disagree disagree agree Agree agree I think it is convenient to save 0 0 0 0 0 0 0 money through a Fintech Savings app. I think saving money through a Fintech 0 0 0 0 0 0 savings app is a good idea. I like the idea of saving money 0 0 0 0 0 0 0 through a Fintech savings app.

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I am very likely to use a Fintech savings app to save money.	0	0	0	0	0	0	0
I want to save money using a Fintech savings app.	0	0	0	0	0	0	0
I see myself using a Fintech saving app.	0	0	0	0	0	0	0
Please respond to th	e following	g statemen	its:				
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I believe that human beings are helpful and caring.	0	0	0	0	0	0	0
The average person, in general is honest.	0	0	0	0	0	0	0
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Generally I believe that Internet banks have the best interests of customers at heart.	0	0	0	0	0	0	0
The average Internet bank, in general, is honest.	0	0	0	0	0	0	0

Finally some questions	about yourself	:			
Are you currently using	a Fintech savi	ng app?			
Yes					
No					
Please respond to the	following stater	ment:			
	Not familiar at all	Slightly familiar	Moderately familiar	Very familiar	Extremely familiar
How familiar are you with Fintech?	0	0	0	0	0

What is your primary current occupation?

Student
Employed
Unemployed
Other
What is your gender?
Male
Female
Other
How old are you?

Please leave you email if you would like to see the results of this survey:
Would it be possible for us to contact you for further information?
Yes
No
Is there anything else you would like to add related to saving money through a Fintech savings app?

#### 4 Results

## 4.1 Multiple regression results

Hypothesis	R	R Square	Adj. R Square	
Multiple	0,164	0,377	0,349	

Hypothesis	Beta	P-value <0.05
H1	0,031	0,577
H2	0,286	0,000
Н3	0,222	0,004
H4	0,045	0,553
H5a	0,153	0,023
H5b	0,169	0,051
H5c	0,076	0,250

## 4.2 Linear regression results

Hypothesis	R	R Square	Adj. R Square	Beta	P- value	Significance level
H6	0,635	0,404	0,400	0,635	0,00	<0.01

Hypothesis	R	R Square	Adj. R Square	Beta	P- value	Significance level
H7	0,769	0,591	0,588	0,937	0,00	<0.01