

MEMORANDUM – Fintech Seminar

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1. Description of Business Idea

1.1. Concept

INPASSI will be a PISP (Payment Initiation Service Provider) System for consumers with online investing opportunities for effortless long-term wealth accumulation by investing values saved on promotional sales. This will be a Fintech in the field of Banking specializing in payment systems.

The problem with promotion sales from merchants is, that they keep the consumer in the illusion of saving money although they do not save the money in a literal sense but. Consumers tend to use the saved money not in a conscious way. This is why there is actually no money saved at the end because most of the time it is spend on other goods. In times of a dawning recession, it is to be presumed that the incentive to buy will decrease and the interest in building financial reserves will rise. Both aspects can be solved at once by INPASSI.

The business concept covers the following principles: Users of the service will be always paying the whole, non-reduced price at the moment they are purchasing the goods or services. The actual amount (reduced price) will be paid to the merchant just as it is with normal payment systems. However, the surplus-amount up until the level of the un-reduced price will be transferred to a separate savings account of the user. The money accumulated in this savings account will be automatically invested. This investment will go according to a specific investment plan developed by the User with the support of the Service.

With this solution it will be possible to incentivize consumers to keep on consuming and enable them to build a financial reserve or give them even the possibility of long-term wealth accumulation. The concept is advantageous for the consumer as well as for the merchant. Both parties are needed to implement this concept broadly.

1.2. Technicalities

There are different technical aspects of the business concept in need of further explanation.

1.2.1. PISP System

First, there is the type of payment system. For this concept a Payment Initiation Provider-system (PISP-System) will be developed. The concept regarding paying for the purchased products will not much differ from other PISP-Systems. A normal PISP-System is not a bank itself but operates as an intermediate between the customer, the merchant, and the consumer's bank. In the moment of the transfer between the customer and the merchant, a payment authorization is sent to the PISP which sends a payment initiation notice to the customer's bank and sends a payment statement to the merchant itself. The customer's bank then will send an immediate clearance to the merchant's bank which then sends the payment confirmation to the merchant. The traditional credit card system works somehow differently. First, the customer gives the merchant its payment authorization data which is then sent to the merchant's bank. The information will then be given to the credit card network and from there to the customer's bank. From there approval or disapproval concerning the transaction is given the information-chain back to the merchant. After the sale, the amount will be credited to the customer's account at the customer's bank. From there the money and fees will be transferred through the credit card network and the merchant's bank to the merchant. As one can see only in these brief explanations the PISP-System is due to its simplicity cheaper and faster and thus, superior in terms of economic interests to the traditional credit card system. Therefore, for this business, the PISP-System was chosen.

1.2.2. Encrypting and Requesting Merchant's Data

For this business concept, it is essential to be aware of all promotions given by the merchant on the articles purchased by the customer. To be able to get the needed information it is necessary to develop a data protection system to protect the trade secrets of the merchants. This will be achieved by encrypting the data coming from the merchant. Also, in the instance of payment INPASSI will send signals to the merchants' server requesting information about the promotion on a certain product which will then be provided by the merchant

1.2.3. The Software

The software for requesting and encrypting the data of the merchant will be installed and integrated into the system of the merchant. Important in this regard is, that it does not mean any high efforts for the merchant. It is extremely important that the software can be able to integrate

into any system the merchants use. Although integration is more complex to achieve than a completely separate payment system, especially in terms of interoperability, this is essential.

1.2.4. Payment Method

To fulfill a payment, it is always necessary to exchange payment details. Online this is done by entering your credit card credentials or connecting the purchase with the account of your online payment system (e.g. PayPal, Klarna). Physically today one pays by cash, credit card, or by an electronic device (Smartphone/Smartwatch). Both these types of payment have to also be offered by INPASSI. Online this will happen by connecting the purchase to the payment systems account. Offline it will be possible to integrate the payment method in your device's wallet (e.g. Apple Wallet) for paying by an electronic device.

1.2.5. Investment Platform

The consumer will then be able to invest the money in the savings account. The investment platform will be similar to that of an online broker. The consumer will have the possibility to invest in the stock market. Different investment plans will be offered which in part will be executed automatically by an artificial intelligence program. However, the consumer will have the possibility to change his investments or withdraw the money at any time. Here INPASSI will try to cooperate with or integrate the investment algorithms of other online brokers.

1.2.6. Logo and Name

The name of the business will be "INPASSI". This term can be separated into three parts. The first part ("IN") comes from the word "investment". It is used here because the first objective of the business is to help the customers to invest their saved money for long-term savings. The second part ("P(A)") comes from the word "payment" since the system is mainly built as a payment system. Thirdly, the term "(A)SSI" is a reference to the word "assistant" because the service provides assistance in investment and payment.

The logo will consist of seven vertical stripes, which are evenly spaced. Stripes in parallel arrangement convey constancy, seriousness, and trustworthiness. The stripes will extend from left to right at the bottom and top. This symbolizes the desired increase in assets. All in all, the logo will be kept minimalistic and modern. This also facilitates the placement of the logo in

stores or online stores. A color is explicitly not assigned to the logo, because it should be recognizable in any color at any time.

Logo:



1.3. Options of Business Development

There are different possibilities to commercialize this startup idea. Most likely are the following three possibilities: First, there is the possibility to charge the consumer a fixed periodical service fee. Second, it is possible to charge the consumer for each transaction and service provided. This would be a small percentage of the money saved with each savings transaction and a small percentage of the returns of the investments. Third, it is possible to charge the consumer for each transaction and give the option for a premium version paid periodically for extra services such as more diversified investments.

1.4. Argumentation

One of the advantages of the first option is the steady cash flow for the company. With this, it is easier to plan and build a solid cash base for the company. The disadvantage however lies with the customer who is paying not for the use but for the possibility to use the service. The more consumers use the system the more merchants will join (direct network effects). The customer is to be encouraged to register to the system and have no financial burdens just by doing so. So preferably the customer should only be charged for the service rendered. However, an option for more premium service does not deter consumers to register for the service and has the same advantages as option one. Therefore, option number three will be implemented.

1.5. Result

The business model will be charging the customer for every savings transaction and for each return from the investments. As an optional extra charge, there will be a premium version with advanced options in particular investments with higher risk and return possibilities.

2. Region of Application

To start a venture geographic and economic circumstances are crucial. Therefore, the ideal environment for the specific venture has to be found.

2.1. (Dis-)Advantages of Different Regions

Due to their economic importance for the international markets, they can be differentiated between the regions of China, the U.S. (or the Americas), Europe, and Africa. Each of these regions have their advantages and disadvantages.

2.1.1. U.S.

The United States of America (U.S.) are one of the pioneers and leading countries in the fintech field. In the U.S. around 52% of the banking and finance-sector has already adapted to Fintech by 2019 (Source: Statista). The total number of new Fintech startups in the Americas rose from around 5,700 in 2019 to 8,700 in 2020 and 10,700 in 2021 (Source: Statista). The worldwide revenue in 2018 amounted to 35 billion EUR and is predicted to reach 63 billion EUR in 2024 (Source: Statista). One of the main factors of which Fintech businesses are benefiting from is the distances in the U.S. in particular in between the east- and west-coast as well as an openness to new technological innovations in society. In the U.S. Fintech is mainly depending on startups and venture capital funding. The regulation regarding Fintech is still at a low level.

2.1.2. China

China is also one of the pioneers and leading countries in the Fintech field. In China around 92% of the banking and finance-sector has already adapted to Fintech by 2019 (Source: Statista). The total number of Fintech startups in the Asian Pacific Region (APAC) has been around 2,800 in 2018, 2,800 in 2019 and 4,700 in 2020. The worldwide revenue of the Fintech sector of the APAC amounted 2017 up to 32 billion EUR and predicted to be 96 billion EUR in 2024. At the beginning of the rise of Fintech starting in 2008 China did not have a particular developed financial and banking system. Therefore, it was easy for the people to adopt these new technologies without encountering too much change in their habits. The Fintech companies in China are mainly depending on and dominated by large companies. The regulation regarding Fintech is still at a low level.

2.1.3. Europe

Although, Europe is one of the most important economic regions in the world it lacks behind in terms of Fintech development. The only country in Europe being advanced in Fintech is the United Kingdom. With a 41 % of Fintech adaption in the field of banking and payments in 2019 (source: Statista) it is the country having the fifth highest adoption rate in the world. The worldwide revenue of startups in Europe amounted in 2018 up to 19 billion EUR and is estimated to be 29 billion EUR in 2024. At the beginning of the Fintech rise starting from 2008 there already had been a highly developed payment and banking system in place. Therefore, the need for financial innovations were lower than in other parts of the world. Also, European countries such as Germany has a very conservative approach to banking and payment. With this comes a high regard for cash. This attitude is increasingly dwindling towards a solely digital payment environment. The covid pandemic had been a huge accelerator for this development. Also, aspects such as money saving, and wealth accumulation are huge aspects of the German mindset regarding finances. The regulation regarding Fintech is still at a low level.

2.1.4. Africa

Apart from mobile transactions and South Africa the African region, with its in comparison higher development, is not very developed in terms of Fintech. The environment of unstable political systems and currencies makes it very difficult for banking and payment systems to prevail in Africa.

2.2. Advantages for Business Model

INPASSI is a banking and payment Fintech. It works without cash and gives its customers the opportunity of wealth accumulation without any increased efforts. As this startup will not be coming from a large company therefore it will need an environment build for small startups and good financing options. This environment is best found in the U.S. and Europe, especially in the U.K. but increasingly also in continental Europe. The Fintech market in the U.S. has already grown a lot in the past years whereas the market in Europe is evolving slowly but was accelerated during the recent years of the pandemic. Since the regulatory level for the field of Fintech is not very high in all the analyzed regions this is not yet an important factor to be considered. Regarding the high financial potential in Europe, its recent acceleration in Fintech and the already high number of potential competitors in the U.S. the European region seems to be best to start with. Preferably it would have to be a financially strong country such as

Germany. Due to its conservative but evolving approach to finances Germany is the ideal region for this business model.

2.3. Result

INPASSI should be starting in Europe and particularly in Germany due to its regional benefits.

3. Intellectual Property Protection Used

Nowadays the protection of Intellectual Property (IP) is essential. It is an important aspect of building a value around the business attractive especially for potential investors. Therefore, it is necessary to analyze the possible IP protection possibilities in depth right at the beginning of the venture.

3.1. Options

The different legal frameworks in general provide the same areas of IP protection system. The most relevant ones are Patents, Copyrights as well as Trademarks.

3.1.1. Patents

Patents seek to protect an invention. It gives the owner the right to exclude others from using the innovation in any way for a certain period of time. The application for a Patent has certain requirements (Eligible Subject Matter, Utility, Disclosure, Novelty, Inventive Step). For an application at the patent authorities the disclosure of the patent is necessary. The standard to be met for a patent nowadays especially in the Fintech field are very high. The numbers of Patents are decreasing because since the *Alice* case in the U.S. the authorities have been very strict with their decisions. Therefore, although Patents have a strong protection potential, and they are highly interesting to investors it is very hard and costly to obtain such. The definition of the European Patent Office for patenting software is narrow. The software needs to bring a further technical effect going beyond the interaction between software and hardware serving the technical character of the invention.

3.1.2. Copyrights

Copyrights seek the protection of original ideas in form of a performance or creative work. In terms of software Copyright, the code itself is protected. The requirements for obtaining a Copyright for software is lower than for patents. However, the protection extends only to the expression of the coding. Programming around the protected code with the same functions is

not regarded as an infringement. Therefore, a Copyright is easy to obtain but not much worth for investors.

3.1.3. Trademark

Trademarks seek to protect the uniqueness of a name, design, sign, or expression to distinguish the service or product offered from others. There are various forms of Trademarks that can be protected such as words, colors, or symbols. It is to be noted that the registration of a Trademark is not essential to the protection of the rights, but it has some advantages including the burden of proof and the possibility of others to notice the right. Since it has become even more difficult to obtain a software Patent the need for Trademark protection rose. Investors regard consumers' identification of the product by the relevant sign a high value. It is easy to obtain but still a good way of ensuring IP protection.

3.2. Needed Protection

The most important aspects of INPASSI are its business model with the information from the merchant, payment to the merchant (external payment) and the investment of the surplus amount (internal payment) in one system, the software behind the system as well as the logo and name of the firm. These assets need protection.

The business model is not based on a special technical innovation but on the newly arranged process of incoming data, external payment, and internal payment. As this is the case there is no need to go through the expensive and difficult procedure to obtain a Patent. Also at least the requirement of the inventive step would most likely be not met accordingly.

Although the coding is one of the central parts more even the backbone of the business model the content of the code and its actual execution is not. Only the business idea and the arrangement of processes is unique and essential to the business. As already concluded for Patents also Copyright protection is not being the right IP protection for this business.

Trademark protection ensures the distinguishability of the product from the competition's products and with this creating customer loyalty and value for the firm. Other than Patents or Copyrights does a Trademark ensure that the business is to be seen as the first of its kind and regarded as unique. Also, the logo will be important for customers to realize the possibility of payment in a store or online shop if shown there. This is a value worth protecting for this business. Also, it is important that the logo and name is not used by others because this fuels

mistrust and increases the recognizability of the product. Therefore, a Trademark for the logo as well as for the name of the company will have to be registered.

3.3. Result

For the business there will be a trademark registered for the name and the logo to ensure a value creation to attract investors and ensure a strong position on the market.

4. Intellectual Property Strategy

Having an IP-strategy early on can be beneficial in many ways, especially when your business is still small and lacks the recourses bigger firms have.

4.1. Options for Used IP

According to the “Strategic Management of Intellectual Property”-approach by William W. Fisher and Felix Oberholzer-Gee, which INPASSI will try to follow, IP strategy is not necessarily excluding everyone from using any of these assets. There are other offensive approaches such as licensing or even donating the IP rights. On the other hand, there are some defensive tactics which should also be considered by laying out the IP strategy. Therefore, the different strategies are to be weighed against each other to find the right strategy for this business.

4.1.1. Strategy for own IP rights

An offensive IP Strategy can be pursued by the owner of IP. There are different options how to use this position to maximize its effectivity.

This business will be the owner for Trademarks regarding its name and logo and in need for rapid growth to profit from networking effects. Using IP ownership to exercise market power means only use the IP rights themselves and allowing to interference by others in any way. In terms of being able to adjust prices and production this approach can seem to be advantageous. On the other hand, this approach bears the risks of giving an increased incentive for innovation to the competitors and, being harder to develop a complements market. Since INPASSI will need a high usage of merchants and customers its logo and name need to be easily reproduced by these. Exercising exclusive market power would not fulfil this goal.

A licensing-strategy might be more successful in this regard. A licensing-strategy means that the owner of the IP rights does not sell or exclude the use from others but grant licenses so that

others are allowed to use the IP of the owner. This way it is possible for merchants to use the logo and name of INPASSI to advertise with offering the payment system. For some businesses licensing would be an important part of their profits, in this case however, this should be just a side factor. It is necessary that there are almost no boundaries and no greater burdens for merchants to get the license. It is even possible to think about giving the licenses away for free. The only objective of exercising the IP rights will be having control of the use of the Trademarks.

Another option in this regard would be donating the Trademarks. This however would not make any sense because in this case a registration of the Trademarks would not have made any economic sense. A donation is not a valid option due to the reasons given regarding the necessity of a Trademark in this case.

4.1.2. Strategy for external IP rights

Moreover, INPASSI needs different assets for its business concept which are to be acquired from other firms if possible. Therefore, it must be seen as more a defensive firm in terms of IP strategy.

4.1.2.1. Merchants' software

To engage with the merchant's software to create a link enabling the information exchange it will be necessary to get the necessary coding of the merchant's software. Depending on its IP protection either just building the code without any permission (weak or no IP protection) or trying to get a License/Collaboration with the owner (strong IP protection) will be the strategies that have to be pursued.

4.1.2.2. Payment by Phone

For the payment by phone INPASSI will have to engage in the software of the mayor smartphone or smartwatch-software provider (IOS, Android). Here it will be best to acquire a license for the respective IP rights.

4.1.2.3. Online Broker Software

In regard of the increasing numbers for online broker applications INPASSI will engage in collaborations or try to get otherwise permission to use the software of such applications. With this INPASSI will be able to focus completely on the first step of the service (payment service

software) to rapidly grow. In a later stadium there is the option to develop a own online broker software to be more independent.

5. Conclusion

In conclusion is INPASSI a PISP firm connecting payment systems with investing certain amounts arising at the moment of the purchase. It will develop own payment software as well as software to interact with the merchants. With this INPASSI will be able to give the consumer the opportunity to save and invest money in relation to their payment behavior. Additionally, INPASSI requires different IP usages to build the complete service such (As a link to merchant's software, payment by phone, and online broker software).

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