

MEMORANDUM

TO: Professor Terry Fisher

FROM: Tayma Tayfour & Dunia Adhaiem

SUBJECT: PayDis - A new Digital Wallet Platform

DATE: December 12, 2022

I. Executive Summary : PayDis

At PayDis, we offer dignity, we offer inclusivity, we offer comfort. We aim to inspire our customers to be the best version of themselves and to be confident and find ease in accessing everyday markets, facilities and resources through an accessible digital wallet. The company also offers a supplemental reward system in the form of AdapTCoins for the consumers that would upload technical information and resources about their experiences that have helped them to support other members of society.

Problem Summary

Although these new digital wallets and FinTech platforms offer a wide range of benefits to consumers and are accessible to the population at large, they are not specifically designed around the needs and abilities of people with varying degrees of disability. They find themselves limited by the construction of typical E-wallets due to the lack of features that promote accessibility and inclusivity, and are thereby inherently excluded from the financial mainstream.

Moreover, our potential customers' daily experience included those facing economic exclusion. Typically, family members of people with disabilities would have to work around and reduce their work schedule to provide care and support to their family member with disability. As a result they may face extra costs, most of the time they are direct out-of-pocket costs. These costs may include personal assistance, health costs, costs of accessible and convenient housing, extra costs for food/special diet, and more costly transportation (i.e. cars, vans) to accommodate the person's disability. Statistically and according to the National Disability Institution, a household containing a person with a disability requires 28% more as income to meet a similar standard of living of a household not containing a person with disability.

Visiting a bank in person is a hassle as it is, for a person with a disability it can be a particularly daunting task, including the time and cost of getting to the bank in the first place. Therefore, people with disabilities are less likely to set up a bank, this has resulted in them having no spending records due to the lack of access to financial assistance and loans.

Solution Summary

This is where financial technology can fill in the gap by providing convenience and at home access. The potential that financial technology can reach in terms of personalized financial services with assistive technology to those with a disability can help overcome barriers to inclusion. Our product may also encourage financial independence for people with disabilities. Our App consists of various functions that can accommodate a variety of disabilities. The consumer can choose the disability and the digital wallet we created, PayDis, will automatically display a function that shelters and assists the consumer.

In the already limited accessibility in built environments such as in transportation systems and public accommodation, which contributes to lack of integration as they may be discouraged from looking for work opportunities or accessing health care, can be aided by having all the health passes and incentives in the PayDis App, and depending on the region what options are available for their specific needs.

We believe that people are not limited by their impairment, but they are limited by barriers created in society. It is our responsibility to adjust the financial environment to meet the needs of ALL.

Market Opportunity

PayDis provides its service on the lower-price, inclusive market catering to people aged 16 to 40 with disabilities or mobility issues and caretakers of young adults with adaptive needs. Our target audience is 16-40 because most people in that age group have direct and immediate access to mobile phones, thus allowing them to easily download our products and use them right away.

Our products in this market promise high business growth potentials with the combination of inclusivity, personalization and lower price point aspect. With the market gap in the digital financial market, we believe that our products, the digital wallet PayDis and the platform AdapTech will be of great use to our target audience. PayDis and AdapTech are aimed primarily at people with disabilities - nonetheless, anyone that meets certain criteria can use PayDis.

PayDis is available for citizens and/or permanent residents of Sweden for now with trajectories to grow in the EU and beyond.

II. Company Description

Our Business Plan is two-fold:

Essentially, **PayDis** is a niche FinTech digital wallet app aimed at individuals with disabilities. It aims to break new ground and allow a better lifestyle for the disabled community through achieving financial inclusivity.

It is an open wallet, issued in partnership with PayPal, which is the most widely used open wallet worldwide. This will allow the users to make all kinds of transactions (withdrawals, transferring funds, etc) from their device.

This customized system and portfolio allows the disabled persons to connect to stores to simplify and enhance their customer experience.

Built in parallel with the individual customer journey, this mobile app manages all their transactions from the comfort of their homes. It can credit and debit cards, but also national cards that permit for public benefits such as: transportation passes, medicare and medicaid permits, coupons and membership cards.

On the other hand, this E-wallet is connected to the online platform, **AdapTech**, an open online community that aims to support and share innovative ideas that may help other members of the community. It supports an overall more inclusivity in the digital world, which allows individuals to share their experiences and product designs for example. On the platform, immediately, depending on the disability, receive a list of products that are of relevance and customized to the particular disability.

When they share these posts, AdapTech in collaboration with PayDis grants AdapTCoins as a reward, continuing to enable these members of the community to collaborate and share insights to allow for growth.

PayDis E-Wallet

When the user installs the PayDis app, prior to being directed to submitting their personal data, such as identification documents, loyalty and public incentive cards, etc. the users will they will be redirected to a screen to enter their personal details and input their preferences and their specific disabilities (e.g. hard of hearing will receive custom communication support, but customer with physical challenges and relying on wheelchairs will get more catered support in terms of mobility and use).

This digital wallet will be an escape to carrying physical cards or wallet, which is already a huge advantage to make it more accessible since the app will be convenient and catered to each disabled person's needs. It also allows for the users to interact with a familiar device such as their smartphone instead of the kiosk when they withdraw cash for example.

Voice-powered Portfolio

When accessibility features are enabled, a layer of audio feedback is provided to each screen tap. A blind person touches on a specific area of the screen and hears information about what they have pressed. They can then touch again to access the app or activate the button within the app. As a result, even while blind, a user may grasp what is on the screen thanks to audible feedback.

Further, personalized systems that embed debit card spending restrictions and transaction monitoring through text-to-speech or speech-enabled techniques can be quite beneficial for financial inclusivity

GPS Systems

Payments may be made in person using an app, or the visually impaired can also utilize its assisted GPS address to find the nearest ATM location for instance, with guidance through wheel-chair friendly routes.

Support services

To connect the communication gap between employees and the deaf and hard of hearing communities in need of assistance for the app, PayDis also supports a 24-hour video chat support desk with sign language interpreters and transcription technology that translates voice audio to text.

Beyond the Wallet

Other features include the ability for transferring money, creating budget plans to manage the allocated funds as well as saving schemes. Further, there are options to trade stocks and invest in crypto currencies in an comprehensible manner.

AdapTech Platform

As aforementioned, this platform creates a community and compliments the PayDis business through having a reward-based publishing incentive.

A prosaic example would be when an adaptive clothes designer decided to publish findings on developments on adaptive clothing. For example, for those with scoliosis, these findings would consider the anthropometric points and the morphological contours of the person when designing the garments. Sharing these developments will not only give hope but support in the community to aid in overcoming the barriers related to self-dressing, comfort and fit.

An opportunity to earn for sharing, contributing to the data economy and creating a supportive community, which can be extremely useful as financial stress is almost 3 times more likely among people with disabilities in paying bills for example. Through this minor and simple reward system, it will potentially ease this stress for those disabled and family members alike.

AdapTCoins

This lucrative credit system can be used to gain credits on the PayDis open wallet, which can be exchanged among used, converted to Swedish Krona or Euros on other platforms, or as Credit points redeemable at partner companies.

III. Profitability Considerations

Firstly, serving similarly to traditional ‘cash-back’ offerings, AdapTech and AdaptCoin will allow PayDis to gain more users, which will be more profitable in the long run.

PayDis has no sign-up fees. It will make money due to its relationship with PayPal. PayDis is building and fortifying a strong relationship with PayPal. Each time a PayDis customer uses its platform, PayPal processes the purchase and gives a small fee back.

Other sources of income include currency exchange, charging a 0.5% fee for certain currencies outside of foreign exchange market hours, and advertisements in the E-wallet.

Aside from being profitable, it will contribute to a more inclusive fintech landscape and further financial health.

Maximizing Interoperability

Our niche business model for the emerging PayDis focuses on a simple digital wallet structure incorporating other passes and coupons. PayDis also is placing comprehensive effort to maximize interoperability within the market. In terms of Upstream interoperability, PayDis is able to operate with legacy businesses such as PayPal and others, as consumers will not fully abandon them completely and quickly.

Equally important is downstream interoperability, which facilitates the emergence of compliments. Stand alone enterprise becomes more valuable when before other companies make complimentary products or services. This is why AdapTech is created: to fully begin the development of accessibility in the digital financing sphere, and beyond.

Purchasing Power and Opportunity

Individuals with disabilities make less money than people without impairments, they are a sizable and increasing group within the world population. With an estimation of the disposable income for persons of working age with impairments being set at \$490 billion (air.org), there is a clear market potential. Further, with friends, family, carers, coworkers, and others who are related to consumers with disabilities considered, it is an even larger market. As a whole, Societal trends indicate a significant increase in the number and inclusion of individuals with disabilities.

IV. Choice of Jurisdiction: Sweden

The choice to launch PayDis in Sweden is because Sweden has the highest percentage of people with disabilities in the European Union.

Top 10 European Countries With the Highest Disability Rates

	Country	Monthly Disability allowance	No. of disabled people	% of population
1st	Switzerland	£7,149.55	1.8 million	20.9%
2nd	Norway	£2,561.19	373 669	10.7%
3rd	Denmark	£2,198.53	174,930	16%
4th	France	£751.71	12 million	17.8%
5th	Sweden	£706.52	2.06 million	20%
6th	UK	£679.90	14.6 million	21.7%
7th	Germany	£626.37	7.9 million	9.4%
8th	Spain	£533.92	2.5 million	5.3%
9th	Italy	£236.82	3.2 million	5.3%
10th	Poland	£212.43	2.49 million	7.1%

Source : Middletons

Tapping into Sweden’s disabled community, will allow our business to adequately serve our target audience and improve the accessibility of their offerings. Around one in five Swedish households has a child or an adult with a disability. There is a huge gap in the Swedish financial market in regard to technologies specifically made for people with disabilities, making it extremely difficult and almost impossible for people with disabilities to independently manage financial tasks.

In connection to AdapTech, this platform will be particularly useful in Sweden considering the current financial assistance schemes in place. For example, those disabled through vehicle accidents or similar occurrences are able to obtain financial aid to make the necessary home modifications that make it more comfortable and accessible, such as making places wider for wheelchair passage and relocating bedrooms to the ground floor from the upper levels. Once the members of the community have made these adjustments to their homes, they are then able to share their techniques and experiences on the platform, easing others going through similar new experiences to adapt and implement these innovative and niche adjustments to their own homes.

Further, launching our FinTech in Sweden would be beneficial as it is a well known hotspot for cultivating FinTech innovations. It is a nerve center for fintech startups, especially in Stockholm, where it is considered a hub for fintech investments. Honorable mentions would be Tink, Trsutly, and Klarna and Zettle by PayPal – financial technologies that are dominating the industry.

According to ICLG.com, tax incentives for those who invest in small companies (investeraravdrag) - granted in deduction from capital income amounting to 50% of total acquisition cost of the investment, up to SEK 650,000 per person per year. Also, special tax rules apply to employee stock options granted by start-ups - to encourage these start up businesses.

EU regulations and directives transposed into Sweden allow for a greater EU regulatory framework, making it easy to infiltrate and offer our services to other EU Member States after gaining momentum.

Our company, like similar FinTech platforms, contributes to the democratization of financial transactions. Fees are much lower and instant clearing. There are many similar platforms emerging in continental Europe and capitalizing on this model. In perspective, it is convenient to launch PayDis in Sweden as both Sweden and the EU offer reduced barriers to entry as opposed to other jurisdictions.

V. Trademark(s)

The company name, PayDis, and our logo design need to be trademarked. In the initial stage, the acquisition of EU trademarks would be enough but would have to expand to global trademarks

when PayDis expands the business globally. This will be essential as throughout the user interface of the app we will include echos of the trademarked logo throughout the app and beyond to maintain cohesivity and promote our brand as a key market player.

One of the most important steps we will be taking in order to protect our product is by trademarking it. We will trademark the names and logos of “AdapTech” and “PayDis” to avoid risk of breaching copyright regulations.

Since our product will be released in Sweden, in order to protect our trademark we will need to apply to the Swedish Intellectual Property Office (Patent- och registreringsverket, PRV). We will apply electronically. A Swedish trademark registration is valid for ten years and we can extend it for ten years at a time.

Firstly, we made sure that the names and logos of the Digital Wallet (PayDis) and Fintech platform (AdapTech) we created are unique and different from our competitors. To ensure that the names and logos we created are not similar to any existing businesses in Sweden, we can access the Swedish Trademark Database to check for any similarities. Afterwards we must apply for trademark protection at the Swedish Patent and Registration Office. We plan on expanding our product to the European Market as well. To protect our trademark across the European Union, we will apply directly to the EUIPO - the European Union Intellectual Property Office.

On the abovementioned platforms, both in Sweden and the EU, we will register the following trademarks:

- **AdapTech – Name**
- **Adaptech – Logo**
- **PayDis – Name**
- **PayDis – Logo**

Once we have received the registration certificate confirming our trademark protection, we will have exclusive right to commercial exploitations and unlimited protection time (extendible every 10 years)

It is important to make sure that our trademarks are unique and distinctive. According to the Trademarks Act in Sweden, “a trademark must have a distinctive character in order to be registered. This means that your trademark must be able to be distinguished from other trademarks”.

VI. Intellectual Property Protection : Sweden and the EU used to shield the business from competition

The various forms of Intellectual Property (IP) used to shield the FinTech business from competition in Sweden and abroad is as follows:

Copyright

Copyright for financial technology is less valuable for innovators because it became easy to obtain. Obtaining a copyright is simple and straightforward but not particularly effective in shielding fintech software. Competitors have little incentive to copy consumer interfaces which can be easily invented.

Moreover, protection against replication of APIs is now very limited and would be of minimal value, thus, API protection will not extensively complement our FinTech business plan which largely depends on interoperability.

Our product, AdapTech, respects the IPRs of its users and those that upload creative and original works to the platform, this allows for an alleged Infringement. There will be designated copyright agents that will aid in the investigation process, and potentially terminate the accounts of those who infringe copyrights. This will be outlined under the Policy and Support page on the platform with details on the extensive protection mechanisms we will provide for the users.

Patents

Patents, on the other hand, are difficult to obtain, but are highly valuable to technical innovations. This is why PayDis will be open to pursuing patents. We will rely on patents in our

business model in order to maximize the potential for patentability across various jurisdictions, not only Sweden. Especially once our business begins to grow and expand, it is essential that we develop effective patent protection to shield our business from potential competition.

Fintech Intellectual Property on innovation is extremely valuable, yet often difficult to obtain. We will work towards obtaining patents for our Fintech platform by incorporating the technical innovations of our product with patentable fintech innovations through similar successful strategies used by the Paypal AR and Amazon one to protect their innovations.

Aside from submitting requests to the Swedish Intellectual property office (PRV), Sweden is a Member State to the European Patent Office (EPO). This membership offers unitary patents that provide “uniform protection and has equal effect in all the participating Member States” as per the EPO Unitary Patent Guide, through submitting the one application to the EPO.

VII. The Intellectual Property Strategy

Offense

PayDis will pursue a few *offensive* strategies.

It will exercise market power through primarily gaining trademark protection and potentially patents, but will not solely rely on this strategy to suppress competition. Although obtaining legal exclusivity and developing an extensive IP portfolio, it may be detrimental while the company grows to be subject to lawsuits and IP infringement claims from other companies, which will subject PayDis to an extensive amount of time, manpower and investment to counter these claims, ensure effective enforcement and continue exploiting its assets.

Another IP strategy that PayDis employs is through donating its IP.

Publishing information to the public domain to prevent its patentability could limit the risk of future holdup and infringements related to IP. Similar to how Merck, by placing the Merck Gene Index in the public research domain allowed two notable advantages: faster scientific progress, as well as negated the risk of rival firms attempting to patent relevant research to his. In our

case, deploying similar strategies by contributing to the data economy and publishing our information into the public domain makes PayDis' sales as well as marketing capacities more influential. Considering that the disabled community market is under researched, by placing our work into the public domain would incentivize and allow for greater research progress to be done within our research field.

PayDis will consider its capital market concerns and publish its otherwise patentable information. This makes clear our company's worth to the capital market and opens up the potential for better equity financing in relation to our FinTech innovations.

Overall, utilizing this IP strategy will aid in our development in the long run and will set the path to uninterrupted and smooth growth of the company.

Defense

PayDis will pursue a *defense* strategy of gaining permission to use existing IPRs through licensing agreements with established open wallet platforms, such as but not limited to PayPal for payment softwares, or even to platforms that allow for voice-assisted app control to be used in PayDis. Considering the different accessibility options that PayDis provides, licensing agreements with established companies and research facilities will be vital.

Obtaining licenses and authorization from well-established FinTech platforms will eliminate the risk of IP infringement and promote healthy competition within the market, and give compensation to PayPal under mutually agreed terms. Considering PayDis has consumers with disabilities as the target consumers, and keeping in mind that the technology is possible to be invented in a non-infringing, affordable and practical manner, PayPal may consider partaking in licensing agreements which are potentially advantageous to both parties.

With these licensing agreements, such as for software, would allow PayDis to quickly bring our service to the market and utilize the benefits of being part of the PayPal network.

VIII. Conclusion and Summary of Findings

Conclusively, PayDis aims to provide true accessibility for all, especially the minority. By providing a digital wallet specifically made for the biggest minority group in the world - disabled persons - it is a compassionate approach to the financial needs of disabled people. Our motive is to support people with disabilities by creating innovative financial technology solutions. Our product accommodates people with various types of disabilities, including: hearing, visual, mobility, cognitive and more.

The agility offered by PayDis primarily curbs the restrictions offered by other digital wallets and traditional banking institutions as a whole, thus allowing for greater inclusivity to the disabled population. The complimentary AdapTech platform, through the AdapTcoin reward offering not only sets clear indications of its interoperability, but from a broader welfare point of view contributes to the data and the digital economy. These platforms create an opportunity for the industry to continue working towards providing innovative accessibilities for the biggest minority group in the world. Addressing the need of people with disabilities will make a positive impact on our societies worldwide.

Finally, Our focused IP protection on trademarks to reinforce branding, coupled with extensive IP Strategy pursued will set the base for concentrated growth and expansion to support the disabled community as a whole.