

V-Hub, Bringing the Benefits of the Digital Wallet Platform to the Unbanked

Executive Summary

The COVID-19 pandemic has made a couple of things abundantly clear to the modern consumer: online shopping is a critical convenience, there are inherent health risks associated with physical transactions like cash, and about 1.7 billion [1] unbanked individuals that rely on other means such as physical storage and digital wallets to handle their funds. Cash is Visa's largest competitor and our proposal aims to start the gradual process of removing all cash from the market. The health concerns over transferring cash between individuals have been heightened by the pandemic and make this the perfect time to capitalize on cash's declining popularity. For cash to be removed from society, we must target the individuals who rely on cash the most: low income and unbanked individuals. These individuals across the globe rely on digital currencies to store their money. An estimated 70% of the unbanked have smartphones yet they utilize digital payments far less than the banked smartphone users [2]. This can be traced back to these low-income individuals relying heavily on paper checks and cash for income. Without a bank account or a means to upload cash to a digital wallet, these physical bills become trapped in the market with seemingly no exit. Our following proposal aims to introduce the V-Hub app in addition to a V-Hub plugin for ATMs, to gradually help these unbanked individuals upload their cash into digital wallets and transfer money between these wallets with ease.

Introduction

Our following proposal aims to focus on research done in the field of financial access to unbanked individuals, the role of banks and governments in making that happen. The paper introduces our solution V-Hub plugin for ATMs and includes its target audiences, cost structure, competitor analysis, and the solution at a greater depth.

Beneficiaries

According to a research report published by Accenture, it is estimated that bringing unbanked adults and businesses into the formal financial system could potentially generate USD 380 billion in new revenue for banks [3]. According to data from the UN World Tourism Organization, more than 1.5 billion people made an international trip in 2018, and the export earnings generated by tourism have grown to USD 1.7 trillion [4]. Local digital payment can help boost cross border transaction revenues for everyone involved. Half of 18- to 38-year-olds use digital wallets regularly, making them an avid user for any solution which allows them to move money across wallets.

Our targeted customer segments are those who are unbanked, travelers/tourists, and those who want to immediately transfer their funds from an ATM to any existing financial account. We hope to appeal to those who are unbanked. Moreover, travelers/tourists could benefit from our solution as it would have support for most, if not all, currencies. Furthermore, millennials and teenagers could be the potential first out customers, because they are susceptible to new and emerging payment products [5]. By the age of 28, about 56% of millennials have multiple cards in their wallets to avoid carrying cash [5]. Furthermore, about 55% of millennials use cards more than the other segments listed below [5]. Millennials and teenagers will become the customer segment that could use our technology, as they will increase their use of cards and related technologies. Millennials typically like products and features that meet their needs such as mobile person-to-person (P2P) payment capabilities to transfer funds, low fees, fee waivers, and balance transfer offers.

Partners and Channels

Our key partners in this solution are banks and national governments. Governments in association with banks can sponsor Visa prepaid debit cards as a means of providing financial service access to the unbanked (who are generally low to moderate-income consumers). Governments of several countries already transfer a variety of welfare benefits to consumers using prepaid debit [6]. For example, in the United States, some COVID-19 relief funds have been sent out as Visa prepaid debit cards. Prepaid cards can be leveraged to use as an identifier to authenticate unbanked users. Connecting to different E-wallets requires their partnership as well. Usage of E-wallets increases, Banks will have more revenue and the Government will have cash moved into the formal financial secretary making it easy to track resources.

The primary channels our product will use to reach out to customers will be through content marketing, as Databox states that 79% of marketers said content marketing (by way of organic traffic) was most effective [7]. Another channel our solution will utilize would be through Social Media, as it is estimated that 2.95 billion people were using social media worldwide [8]. The government would be promoting/using our product when assisting those in need. Additionally, ATM screens can have ads promoting our solution. Simple and Spend conceptually has a similar product that can instantaneously transfer money with no fees between digital wallets. However, there is no current solution that allows users to deposit money to an ATM and transfer it to a digital wallet.

Cost structure

Considering there are over 1.7 billion adults worldwide that do not have access to a bank account; only a fraction of this population would need to adopt V-Hub for Visa to experience massive financial gains. With a 1% adoption rate of each person spending \$1 a day via a virtual wallet, Visa would see an increase of revenue of \$163,000 each day or \$59,568,000 a year.

$$\begin{aligned}\text{Increase in Revenue} &= (\$ \text{ spent digitally instead of in cash}) * (\text{transaction market share}) * (\text{average transaction fee}) \\ &= 17,000,000 * 48\% * 2\% \\ &= \$163,000 \text{ per day } (\$59,568,000 \text{ per year})\end{aligned}$$

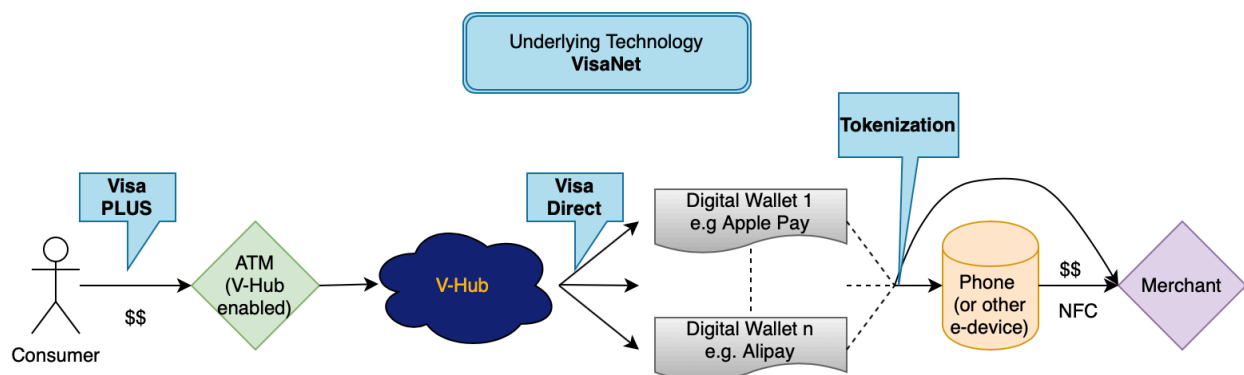
The cost to implement what we are proposing is negligible because Visa already has the technologies needed to bring this solution to life. There does not exist a product in the market today that embodies the functionality of our proposed solution. The closest alternative is the major banks' implementation of Zelle which only allows the transfer of money between bank accounts, neglecting 1.7 billion potential users. All that being said, social outreach is the main concern that our solution looks to solve, which cannot be easily expressed through numbers.

Competitors

The largest competitors at the moment are cash and closed wallet networks such as Mastercard. With these wallet models, customers need to have a bank account or credit/debit card associated with their wallets. Our solution allows customers to not have a specific bank account or debit/credit card that is tied to a particular wallet and provides more security than cash. Our target audience includes the homeless and low-income individuals. Approximately 29% of low-income adults in the U.S. make most of their purchases with cash, which is almost twice as much as any other income bracket [9]. Our solution, as a smartphone application, is accessible to even the unbanked, low-income individuals as 71% of low-income adults in the US own a smartphone [10]. Our solution allows unbanked customers an opportunity to decrease their risk of losing money on alternative services such as money orders and consolidate their funds virtually [11]. We've incorporated the voice of the customer through our team's own experience and person to person payments.

Product

To picture this solution at a high level, we must consider what current consumers currently use for mobile payments: Venmo, Apple/Samsung Pay, and their credit & debit card applications. Our application, V-Hub, would bridge these services into one general service for sweeping transactions across these platforms. Most importantly, V-Hub would seamlessly allow cash to be deposited directly into these accounts with the creation of a plugin for existing ATMs. **Visa Token Service** would allow V-Hub to access the aforementioned mobile applications and act as a meta digital wallet. **VisaNet** would provide the secure, high volume payment processing service, and **VisaDirect** technology would serve as the basis for the transmission of cash or digital funds to a different bank or payment service. And lastly, **Visa PLUS** would provide the backend technology that confirms the user's identity at the point of using the V-Hub-enabled ATMs.



Conclusion

In the early 1970s, Visa created the electronic credit card authorization system called **VisaNet** that we have all used today. It did so by thinking of the big-picture infrastructure of credit cards. Our V-Hub product would be a one-stop solution to digitize hard currency while leveraging existing Visa technologies.

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