



Vemanti USD (USDV) Stablecoin

White Paper



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2. ABSTRACT

Vemanti Group, Inc. (“Vemanti”) is a Nevada corporation headquartered in Irvine, California. It is a fully reporting entity and regulated by the Securities and Exchange Commission (SEC) in the United States. It is currently publicly traded under the ticker symbol VMNT. As an organization, Vemanti is focused on utilizing technology to advance financial inclusion. It has designed a financial ecosystem that will provide a range of services to the banked, underbanked, and unbanked around the world. Code-named *The Divitia Network* (Divitia), this system will provide direct access to financial services to anyone with a smart device via a community-driven blockchain-based ecosystem.

At the center of Divitia is a proprietary 1:1 USD-backed stablecoin, Vemanti USD (USDV), that will enable the functioning of this financial ecosystem. A myriad of financial services will be built around USDV in a way that is directly and conveniently accessible and in an environment of stability and trust to anyone, anywhere seeking to build wealth.

USDV is unique among stablecoins as it is designed not only to maintain a stable value but also to meet current and future financial regulations.

In summary, The Divitia Network:

- Is constructed around the idea of financial inclusion and delivering digital financial services to the billions of consumers and businesses around the world currently excluded from this market.
- Will provide direct access to digital financial services to any individual or merchant with an internet-enabled device like a personal computer, tablet, or smartphone.
- Will provide services designed to fill the needs of users wanting to enter the digital economy, accumulate wealth, build businesses, and more, even at the micro level.
- Is made possible by technical innovation built around a proprietary stablecoin, the Vemanti USD (USDV), a one-to-one (1:1) United States Dollar (USD)-backed stablecoin.
- Is designed to be compliant with all present, proposed, and projected regulations, the USDV being regulated, insured, and transparent.

3. INTRODUCTION

Financial services play an important role in the growth of economic and social development. It is hard to achieve progress if we are forced to use cash only or rely on predatory lenders for credit. At Vemanti, we see financial inclusion as a fundamental priority as we set out to help build a fairer, more sustainable world. We believe that in the 21st century, social equality and economic justice means everyone should have easy access to essential financial services, no matter what you earn or where you live.

To make this vision a reality, Vemanti has designed a financial ecosystem, code-named as Divitia (“divitia” being Latin for “wealth”), that will provide a range of financial services to the banked, underbanked, and unbanked around the world. This system will address a growing demand for financial services among underserved individuals and businesses, especially in developing economies like Southeast Asia and Latin America.

Many of us living in connected parts of the world take for granted that we can send money, arrange loans, buy insurance, and manage our investments from our computers or smartphones. But, there is an entrance fee to this digital world—a bank account.

Those unable to meet the requirements for a bank account are known as the unbanked or underbanked and number in the billions, including millions of Americans. This lower- to middle-income demographic found around the world rely on cash for their daily needs and engage in costly alternatives when they want to access digital financial services.

Vemanti wants to serve the needs of this market by delivering a range of financial services without the need for a bank account, enabling anyone, anywhere to build wealth. Divitia will provide direct access to digital payments, remittances, lending, insurance, investment, and more to anyone with a computer, tablet, or smartphone. Following a marketplace-type model, services will be provided by Vemanti and by approved independent providers of financial services.

By using their Internet-enabled device, a user of Divitia will access a menu of financial services. After being approved, he or she will sign into their account and surf to the type of service they need: getting a loan, sending a remittance, making investments, buying insurance, and etc. These services will be readily available on their screen or app and accessed with just a click or tap.

Divitia is built upon a 1:1 USD-backed stablecoin, Vemanti USD (USDV), that will enable the functioning of the system. Vemanti chose to issue its own convertible virtual currency as stablecoins have become recognized as the key component to any system that seeks to expand financial inclusion. Stablecoins, working on a blockchain, allow for lower transaction costs and can work from apps on smartphones, avoiding the need for bank accounts.

The USDV stablecoin, as a monetary medium, is intended to operate within its own ecosystem, which includes minting, purchasing, payments, and redemption, and on various financial platforms, being a safe alternative to unregulated digital currencies. Being blockchain network agnostic, it can operate on multiple networks and accommodate demand for a compliant stablecoin through various methods such as deployment, wrapping, or atomic swaps.

The USDV stablecoin is unique as it was built to be compliant with all present, proposed, and projected regulations around the world. In part, this is done through the utilization of entities that are insured by the Federal Deposit Insurance Corporation (FDIC), regulated by the United States Securities and Exchange Commission (SEC), or subject to other stringent regulations and audits. Regulated, insured, and transparent, the USDV stablecoin has trust built into its design and thus into the entire Divitia ecosystem. Being issued and governed by an SEC regulated entity, USDV allows corporations, governments, and individuals to rely on a digital currency that meets or exceeds existing and future regulations.

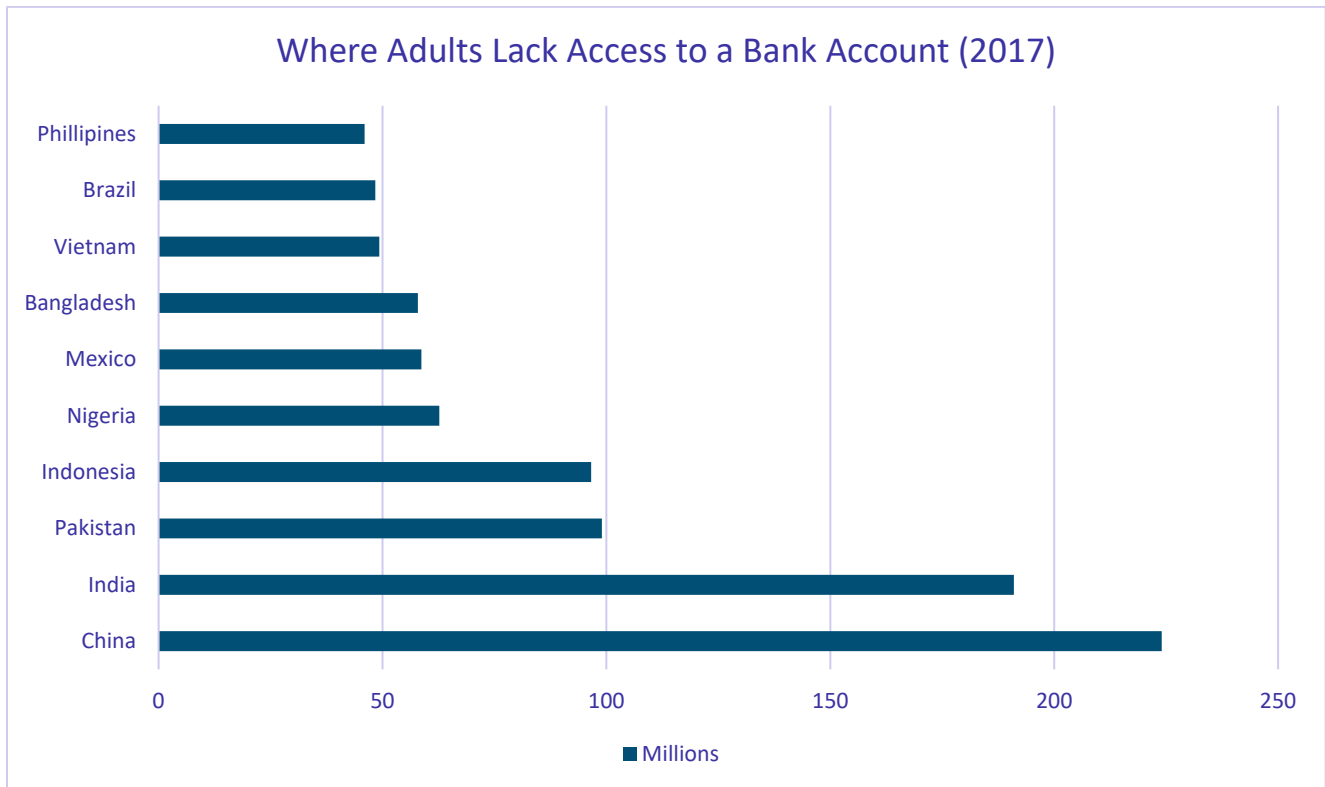
The USDV stablecoin is also meant to co-exist in a world of Central Bank Digital Currencies (CBDCs) and other official state currencies. Designed to work in its own ecosystem, the USDV does not seek to challenge existing or developing state currencies in the world of retail payments. Instead, it occupies its own specialized niche in the payment world that can complement developments in CBDCs or other official digital currencies. USDV also has the flexibility to adjust to changes in regulations involving existing or new Central Bank currencies.

In the Divitia ecosystem, a myriad of financial services built around USDV will be provided to anyone, anywhere in a way that is directly and conveniently accessible and in an environment of stability and trust.

4. THE MARKET DEMAND

Divitia is constructed around the idea of financial inclusion and bringing into the financial world all those currently excluded from services that many of us take for granted. The financially excluded make up a huge market for services like digital payments and remittances and consists of different socioeconomic groups such as the unbanked and the underbanked.

The World Bank defines financial inclusion as individuals and businesses having “access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way.”¹ However, the entry price of inclusion is an account with a bank or other service provider. With an account, individuals and businesses can accumulate money and make payments while simultaneously having access to other financial services.



Source: *Gains in Financial Inclusion, Gains for a Sustainable World*, The World Bank, 18 May 2018: www.worldbank.org/en/news/immersive-story/2018/05/18/gains-in-financial-inclusion-gains-for-a-sustainable-world?cid=ECR_TT_worldbank_EN_EXT.

¹*Financial Inclusion*, The World Bank: www.worldbank.org/en/topic/financialinclusion/overview.

Those without such accounts must depend on cash and face an everyday life that is burdensome and costly.² They have difficulties making long-term plans and dealing with financial emergencies. For them, it is simply hard, not just harder, to buy a house, insure against illness, fund an education, or start or run a business. Individuals and businesses in such a situation are usually referred to as the unbanked and underbanked.

The unbanked are those who have no checking or savings accounts with a bank or other financial institution. They work on a cash basis, day-to-day, and are forced to use alternative banking services, like payday loans, money orders, money transfer services, and check cashing. The underbanked are those who have some sort of bank or other institutional account but use these alternatives on a regular basis because of a lack of access to traditional finance and credit.

Worldwide, the number of unbanked individuals numbers around 1.7 billion or one-third of the world's adults. The unbanked are concentrated in China, India, Africa, Southeast Asia, and Latin America.³ However, significant numbers of the unbanked also exist in the developed economies. In the United States, for example, it was reported in 2019 that 6 percent of all American adults or 17 million did not have a bank account.⁴

In the United States, the underbanked numbered 16 percent of all American adults. In other words, 46 million people had bank accounts but were forced to use alternative banking services, or worse, shadow banking services (like loan sharks), on a regular basis.⁵

There are no figures on the number of underbanked worldwide. However, if we use the United States as a model, we can say that approximately 4.6 billion individuals are underbanked worldwide.⁶ In

² Claire Greene, Fumiko Hayashi, and Joanna Stavins, "Delivering Benefits of Faster Payments to the Underserved," *Consumer & Community Context*, Board of Governors of the Federal Reserve System, 2, 1 (August 2020): 2-8; Raphael Bostic, et al., *Shifting the Focus: Digital Payments and the Path to Financial Inclusion*, Federal Reserve Bank of Atlanta, 2020, 21-1 (September 2020), 8-10.

³ Asli Demirgüç-Kunt, et al., *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution* (Washington, DC: World Bank, 2018), 35-36.

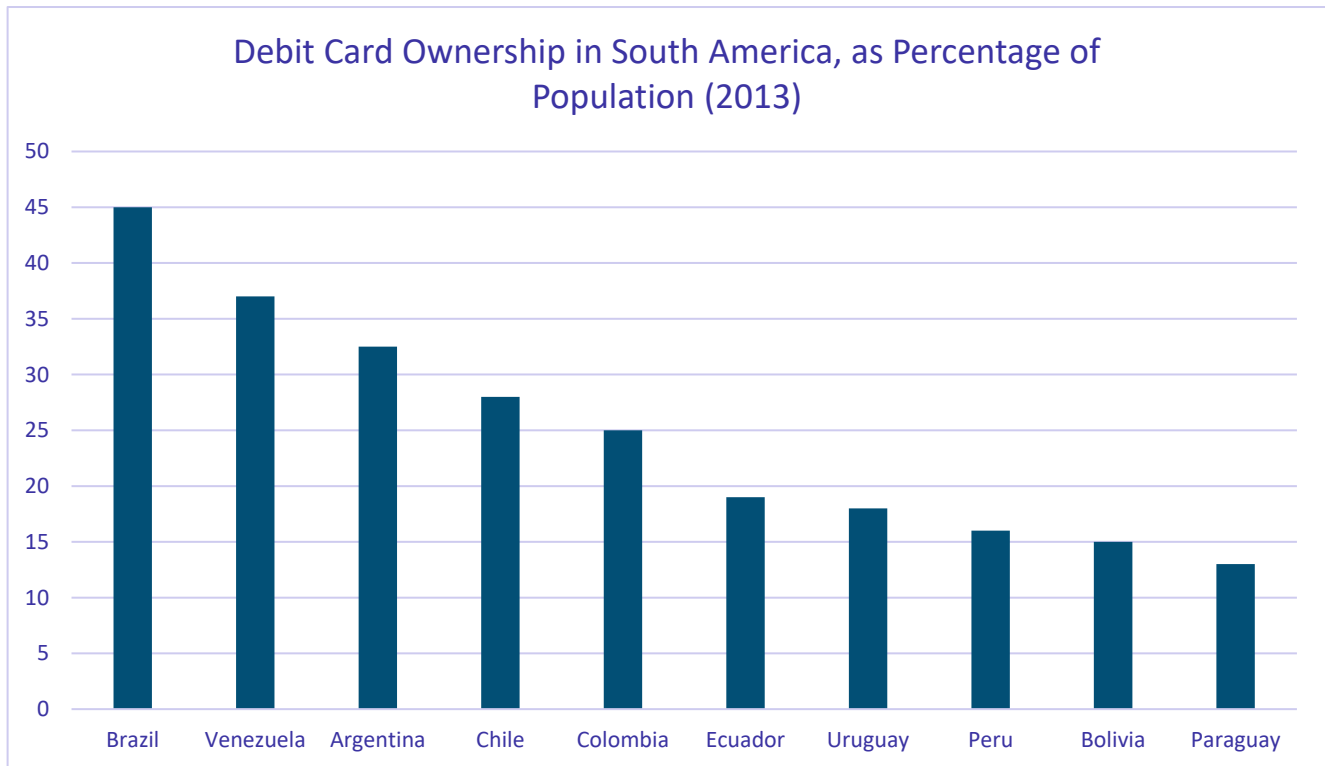
⁴ *Report on the Economic Well-Being of U.S. Households in 2018* (Washington, DC: Board of Governors of the Federal Reserve System, 2019), 25. Alternatively, the Federal Deposit Insurance Corporation put the number of unbanked Americans at 5.4 percent of U.S. households (approximately 7.1 million households): Federal Deposit Insurance Corporation (FDIC), *How America Banks: Household Use of Banking and Financial Services, 2019 FDIC Survey* (October 2020), 1.

⁵ *Report on the Economic Well-Being of U.S. Households in 2018* (Washington, DC: Board of Governors of the Federal Reserve System, 2019), 25; Mehrsa Baradaran, "It's Time for Postal Banking," *Harvard Law Review Forum*, 127: 165 (24 February 2014): 166-67.

⁶ This figure was calculated by multiplying United States' figures by 100. As there are 1.7 billion unbanked worldwide and 17 million in the United States, the degree of difference is 100. Assuming, that this difference remains constant, we then

sum, 6.3 billion individuals around the world are financially underserved, being either unbanked or underbanked.

And, the underbanked are not limited to individuals, small and medium-sized enterprises struggle to access insurance or business loans. For example, in Latin America, almost all businesses have a transaction account of some sort. Yet, only 50 percent have the ability to get a loan from a bank.⁷



Source: *Unbanked and Underbanked Consumers in South America: A Market for E-Payments*, Mercator Advisory Group, 2014: vdocuments.net/unbanked-and-underbanked-consumers-in-south-america-a-market-for-e-payments.html.

So, worldwide, there are billions of individuals and businesses in need of financial services with limited or no access to financial institutions. But, what services do the financially underserved need? The unbanked and underbanked, who depend on cash and alternative financial services to serve their everyday needs, need a few basic services: ways to make payments, ways to build wealth, and ways to safeguard assets.

multiply the number of underbanked in the United States (46 million) by 100 to get the worldwide number of 4.6 billion. This is indeed a rough calculation.

⁷ *G20 Financial Inclusion Indicators*, Global Partnership for Financial Inclusion: datatopics.worldbank.org/g20fidata.

Safeguarding assets involves having the ability to store your value in a savings account or an equivalent way to safely hold wealth and the ability to purchase insurance against the loss of property or wealth.⁸ Building wealth demands the opportunity to make investments and take out loans, which allow for strategic purchases, business building, and education.⁹ Making payments not only means the ability to make purchases but also to make remittances. All these services are available for the banked. But, for those working on a cash basis, these services are either unattainable or only available through expensive alternatives like payday loans, pre-paid cards, and money transfer agencies.

There have been many efforts to provide the financially underserved with the services they need. Traditionally, the solution to the problem of the unbanked was to lower the threshold for getting an account at a bank. In the United States, for example, the “Bank On” program has sought to expand financial inclusion by offering low-cost bank transaction accounts that may offer basic checking accounts with low minimum balances and minimal fees.¹⁰ While this program has had some success, providing minimal services does not exactly open up the world of financial services to an account holder.¹¹ This has led to calls in the United States for some form of public banking run by the Federal Reserve through offices of the United States Postal Service.¹²

Such a postal bank actually existed in the United States from 1910 to 1966, offering to low-income individuals a range of banking services, including saving and investing (often on a micro level).¹³ Postal banking, in general, has a long history, dating back to the nineteenth century, and still exists in

⁸ Guiherme Suedekum, *Advancing Financial Inclusion through Access to Insurance: The Role of Postal Networks* (Universal Postal Union, 2016), 8.

⁹ Mehrsa Baradaran, “It’s Time for Postal Banking,” *Harvard Law Review Forum*, 127: 165 (24 February 2014): 170-71.

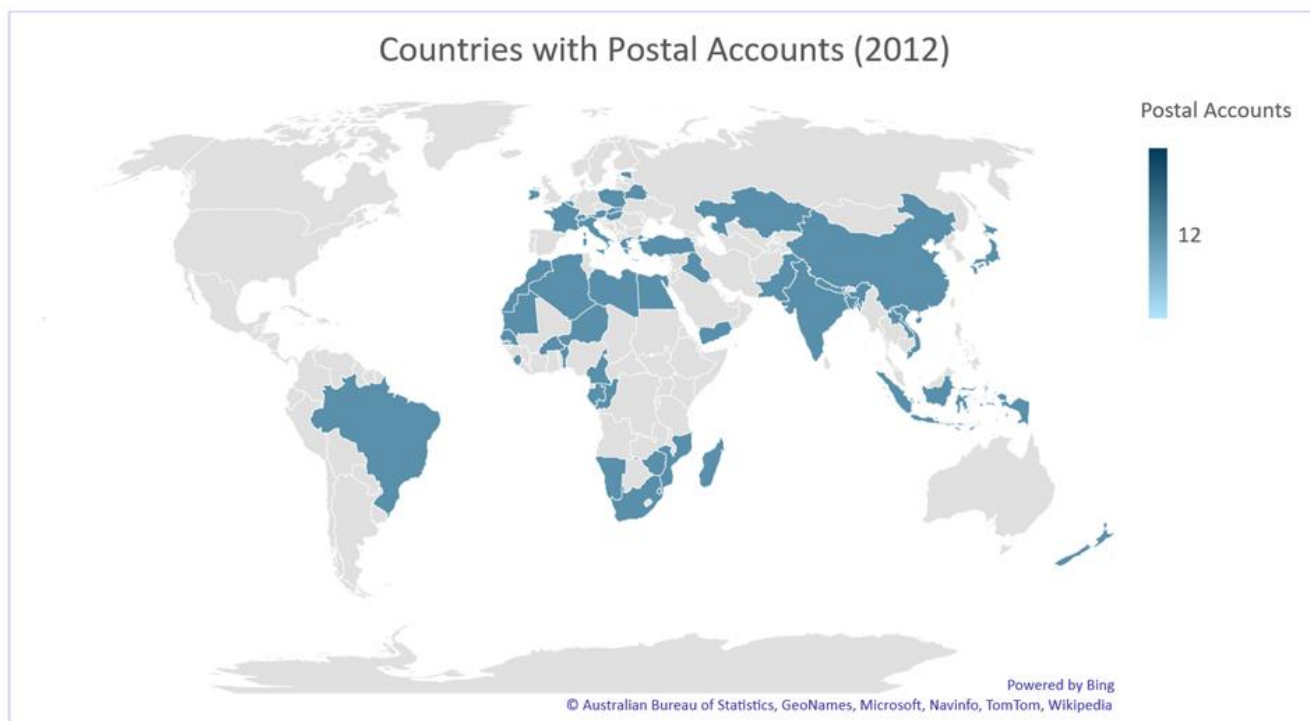
¹⁰ Paul Calem, “Bank On” *Transaction Accounts and Financial Inclusion*, Bank Policy Institute (19 July 2021): bpi.com/bank-on-transaction-accounts-and-financial-inclusion.

¹¹ Mehrsa Baradaran, “It’s Time for Postal Banking,” *Harvard Law Review Forum*, 127: 165 (24 February 2014): 168, 174-75.

¹² Raphael Bostic, et al., *Shifting the Focus: Digital Payments and the Path to Financial Inclusion*, Federal Reserve Bank of Atlanta, 2020, 21-1 (September 2020): 16.

¹³ The latest calls for a United States postal bank came in 2020. See, for example, Sylvan Lane, “Biden-Sanders unity task force calls for Fed, US Postal Service consumer banking,” *The Hill*, 8 July 2020: thehill.com/policy/finance/506469-biden-sanders-unity-task-force-calls-for-fed-us-postal-service-consumer; Jake Johnson, “To Provide Public Alternative to ‘Predatory’ Wall Street Banks, Sanders and Gillibrand Unveil Postal Banking Act,” *Common Dreams*, 17 September 2020: www.commondreams.org/news/2020/09/17/provide-public-alternative-predatory-wall-street-banks-sanders-and-gillibrand-unveil; Mehrsa Baradaran, “It’s Time for Postal Banking,” *Harvard Law Review Forum*, 127: 165 (24 February 2014). On the United States Postal Savings System see Donald Bruce Schewe, *A History of the Postal Savings System in America, 1910-1970* (Columbus, OH; Ohio State University, 1972) and Steven Sprick Schuster, Matthew Jaremski, and Elisabeth Ruth Perlman, “An Empirical History of the United States Postal Savings System,” *NBER Working Paper Series*, 25812, May 2019.

numerous countries around the world.¹⁴ They offer transaction accounts at little or no cost and provide a range of financial services that can range from digital payments to insurance. One of the largest postal banks is the Japan Post Bank, which currently has 120 million accounts and a net income of \$2.48 billion.¹⁵ In fact, postal banks are particularly popular in Asian countries.¹⁶



Source: Alexandre Berthaud and Gisela Davico, *Global Panorama on Postal Financial Inclusion: Key Issues and Business Models*, Universal Postal Union, March 2013, 33.

Another approach to the unbanked is through e-money and cash-in/cash-out networks.¹⁷ These networks allow users to convert cash into e-money and back again for a low fee,¹⁸ usually using a

¹⁴ Nils Clotteau and Bsrat Measho, *Global Panorama of Postal Financial Inclusion, 2016* (Universal Postal Union, 2016), 9, 17-26; Nils Clotteau, David Avsec, and Yury Grin, *The Role of Postal Networks in Digital Financial Services*, ITU-T Focus Group Technical Report, International Telecommunication Union, 10/2016, 6-8.

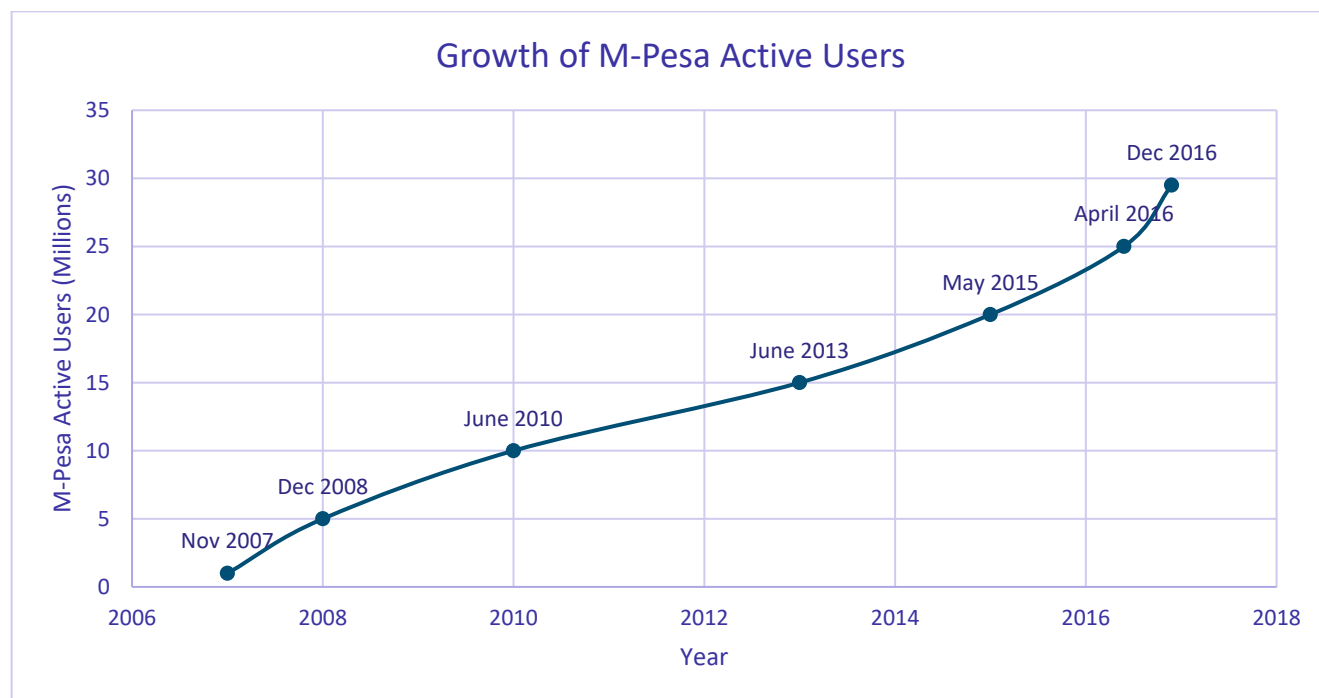
¹⁵ *Annual Report 2020*, Japan Post Bank (31 March 2020), 12, 14.

¹⁶ Mark J. Scher, *Postal Savings and the Provision of Financial Services: Policy Issues and Asian Experiences in the Use of the Postal Infrastructure for Savings Mobilization*, DESA Discussion Paper No. 22, United Nations, December 2001, 8-9, 18-20.

¹⁷ The term e-money refers to electronic money, a private, electronic version of cash that is commonly used on pre-paid cards and payment services like PayPal or WeChat Pay. E-money is neither a cryptocurrency, predating Bitcoin, nor a direct obligation of a central bank. See, for example, Janine Firpo, "E-Money – Mobile Money – Mobile Banking – What's the Difference?" *Private Sector Development Blog*, 21 January 2009, World Bank: blogs.worldbank.org/psd/e-money-mobile-money-mobile-banking-what-s-the-difference. On cash-in/cash-out networks, see Raphael Bostic, et al., *Shifting the Focus: Digital Payments and the Path to Financial Inclusion*, Federal Reserve Bank of Atlanta, 2020, 21-1 (September 2020): 15.

¹⁸ Post offices or postal banks often serve as cash-in/cash-out agents. See Nils Clotteau and Bsrat Measho, *Global Panorama of Postal Financial Inclusion, 2016* (Universal Postal Union, 2016), 25.

portable phone. Kenya's M-Pesa is the premier example of such a network. With their money now digitized, users can join the digital economy. Through various banking agents, M-Pesa users can deposit and transfer money and access services usually found in postal banks. The M-Pesa model has been adopted by regional banks to create "agency banking" wherein the mobile platform is used to access authorized agents of a bank and create low-cost accounts.



Source: *M-Pesa at 10: How Africa become the leader in mobile money*, Brand South Africa, 3 March 2017: www.brandsouthafrica.com/investments-immigration/africa-gateway/m-pesa-10-africa-become-leader-mobile-money.

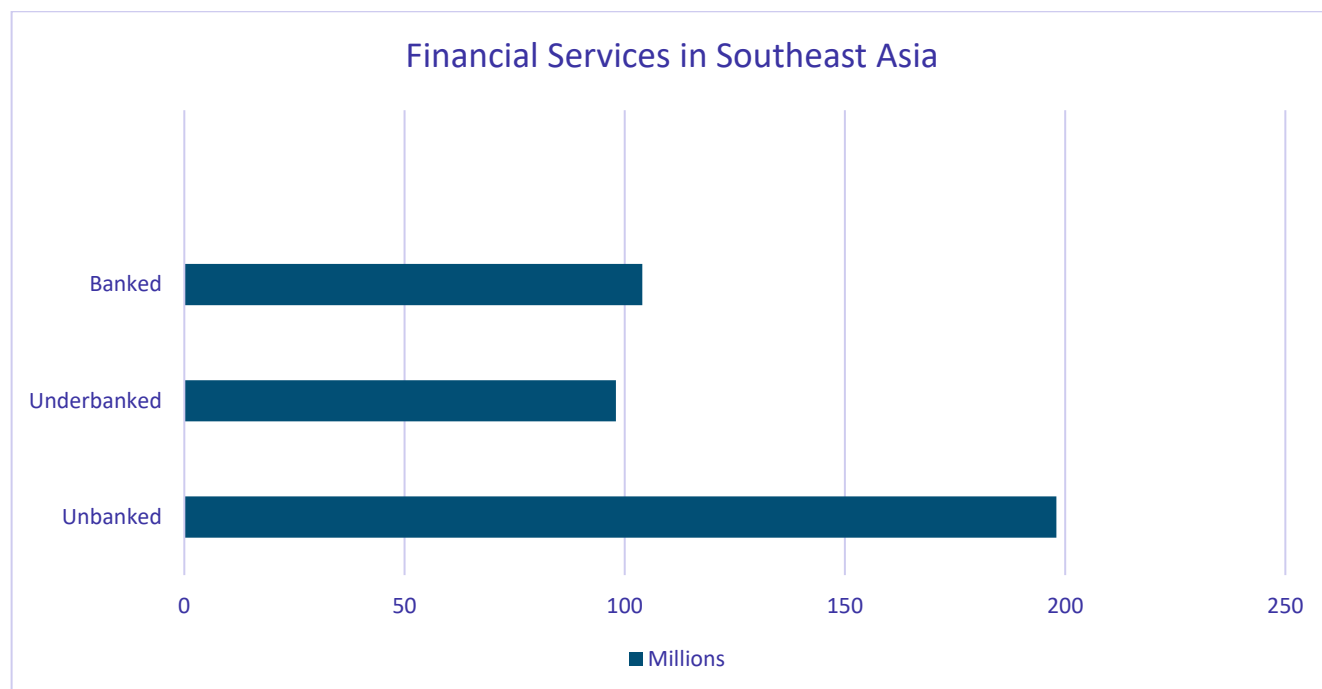
The success of postal banking and cash-in/cash-out networks suggest that there is a high demand for low-cost financial services, especially those that do not require a traditional bank account, both in the developed world and in emerging economies. There is a tremendous demand for digitally-based services: saving, insurance, investment, lending, payments, and remittance.¹⁹ In 2014, the United States Postal Service estimated the market for comparable services in the United States at \$89 billion.²⁰ And, as the Japan Post Bank points out, these services are very popular in Asia, which contains a larger proportion of the world's unbanked and underbanked population than the United States.

For example, China, with the world's largest unbanked population has embraced mobile, digital financial services. Ant Group, subsidiary of Alipay, introduced financial services on a micro scale,

¹⁹ Florian Hoppe, Aadarsh Baijal, Thomas Olsen, and Usman Akhtar, *Fulfilling Southeast Asia's Digital Financial Services Promise*, Bain & Company, 30 October 2019: 4 (figure 3).

²⁰ Office of the Inspector General, United States Postal Service, *Providing Non-Bank Financial Services for the Underserved* (RARC-WP-14-007), 27 January 2014, i, 16.

including a money market fund into which users could sweep unused change. This Yu'e Bao, "leftover treasure," fund has close to 600 million users and over \$160 billion in assets.²¹



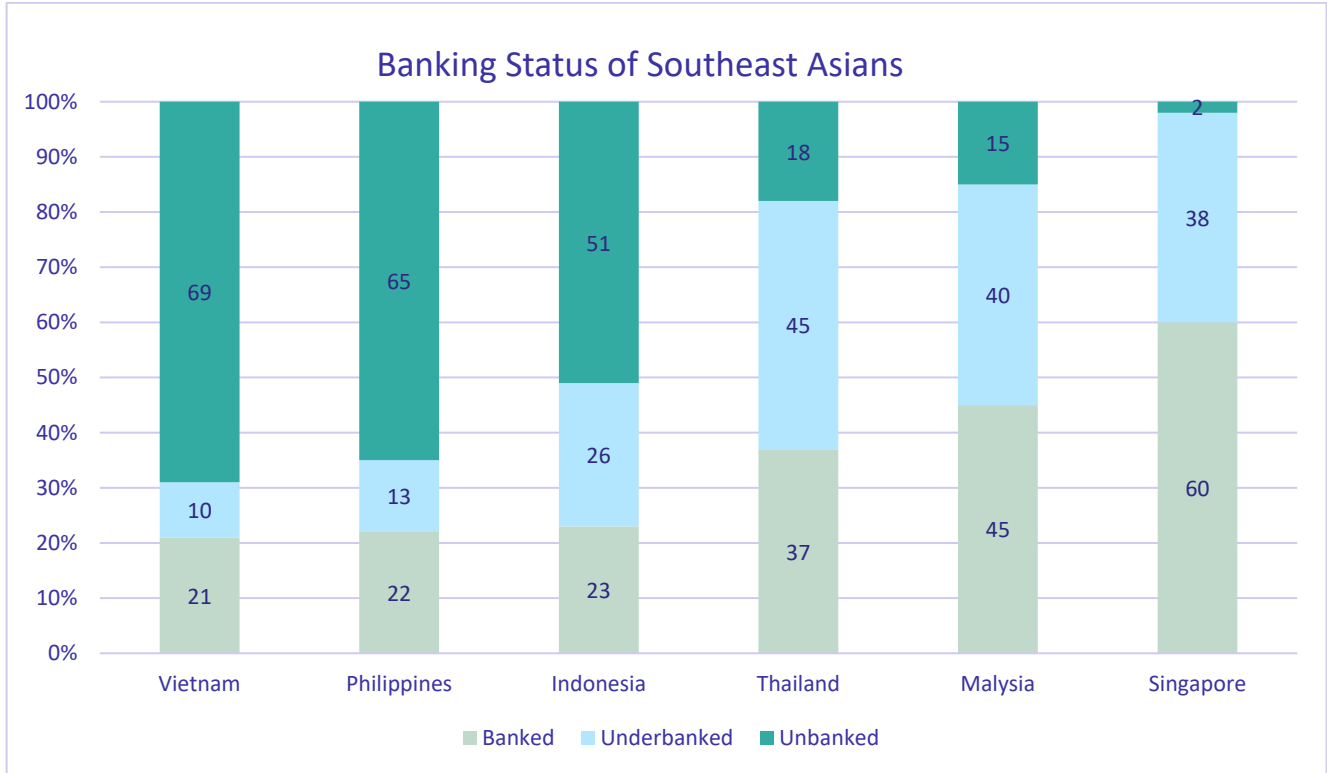
Source: Chanyaporn Chanjaroen, Yoolim Lee and Saket Sundria, "Grab, Singtel Team Up on Singapore Digital Bank License Bid," *Yahoo!Finance*, 29 December 2019: finance.yahoo.com/news/grab-singtel-team-bid-singapore-235219020.html.

Meanwhile, Southeast Asia, viewed as the ten member states of ASEAN (Association of Southeast Asian Nations) has the 7th largest economy in the world. Yet, its population of 650 million people remains a largely untapped market for digital financial services. With a combined GDP of over \$3 trillion and an economy with an annual growth rate of 5 percent, this region is largely underbanked with most adults and businesses having only limited access to financial services.

Growing exports and consumer demand for goods and services along with lack of inclusive banking infrastructure makes Southeast Asia a prime market for digital financial services. In fact, one study states that consumer and business digital financial services will create around \$38 billion in annual revenue by 2025 and could expand to \$60 billion in later years.²²

²¹ Stephen Stonberg, *Cryptocurrencies are democratizing the financial world. Here's how*, World Economic Forum, 22 January 2021: www.weforum.org/agenda/2021/01/cryptocurrencies-are-democratising-the-financial-world-heres-how/.

²² Florian Hoppe, Aadarsh Baijal, Thomas Olsen, and Usman Akhtar, *Fulfilling Southeast Asia's Digital Financial Services Promise*, Bain & Company, 30 October 2019: 1.



Source: "Delivering digital financial inclusion in Southeast Asia," 2021 Macquarie Technology Summit, 18 June 2021: www.macquarie.com/au/en/perspectives/delivering-digital-financial-inclusion-in-southeast-asia.html.

In sum, there are numerous individuals and businesses around the world that are financially underserved and are seeking ways to enter the digital economy to obtain vital services that will help them safeguard assets, build wealth, and make payments.²³ And, they want to do this in a way that is easy, convenient, secure, and low cost. The provision of such a service is the purpose of Divitia, which employs a proprietary stablecoin, Vemanti USD (USDV).

²³ Office of the Inspector General, United States Postal Service, *Providing Non-Bank Financial Services for the Underserved* (RARC-WP-14-007), 27 January 2014, ii.

5. THE SOLUTION

Divitia will provide direct access to digital financial services to any individual or merchant with an internet-enabled device like a personal computer, tablet, or smartphone. These services are designed to fill the needs of users wanting to enter the digital economy, accumulate wealth, build businesses, and more, even at the micro level.

For many, entering the digital economy simply means being able to send/receive electronic payments, maintain savings accounts, make investments, and transact online. While the majority of the world takes this capability for granted, it is a major advancement in the lives of those forced to live on a cash only basis in their daily lives.²⁴ From such a position, joining the digital economy often involves expensive and burdensome alternatives like pre-paid cards. Such frictions impede personal consumption, reducing not only convenience but also the ability to access the best goods and services at the lowest prices.

Being restricted to cash also hampers business growth. To fully tap its market, a business needs to reach beyond local buyers and think nationally, if not internationally. Businesses now face a globalized economy with potential customers in many countries around the world. Such a perspective is also becoming increasingly important in the hiring of talent. Employees and contract workers can be located anywhere, given our ever-growing connected world. To address these new realities, a business needs to be able to accept and send digital payments. Divitia will allow users to establish accounts with which they can make and receive borderless digital payments. For some businesses, this will also include Point-of-Sale (POS) devices.

Making and receiving borderless digital payments also applies to remittances. Transferring funds to distant relatives, employees, or businesses is of major interest among the financially underserved.²⁵ In 2019, the World Bank noted that remittances greatly exceeded official aid.²⁶ In Asia, remittances are a significant source of income and foreign exchange.²⁷ And, this does not include small and medium-sized businesses trying to do business internationally. To those living outside the digital economy, making a remittance is a costly process that involves a money transfer service and fees on the average

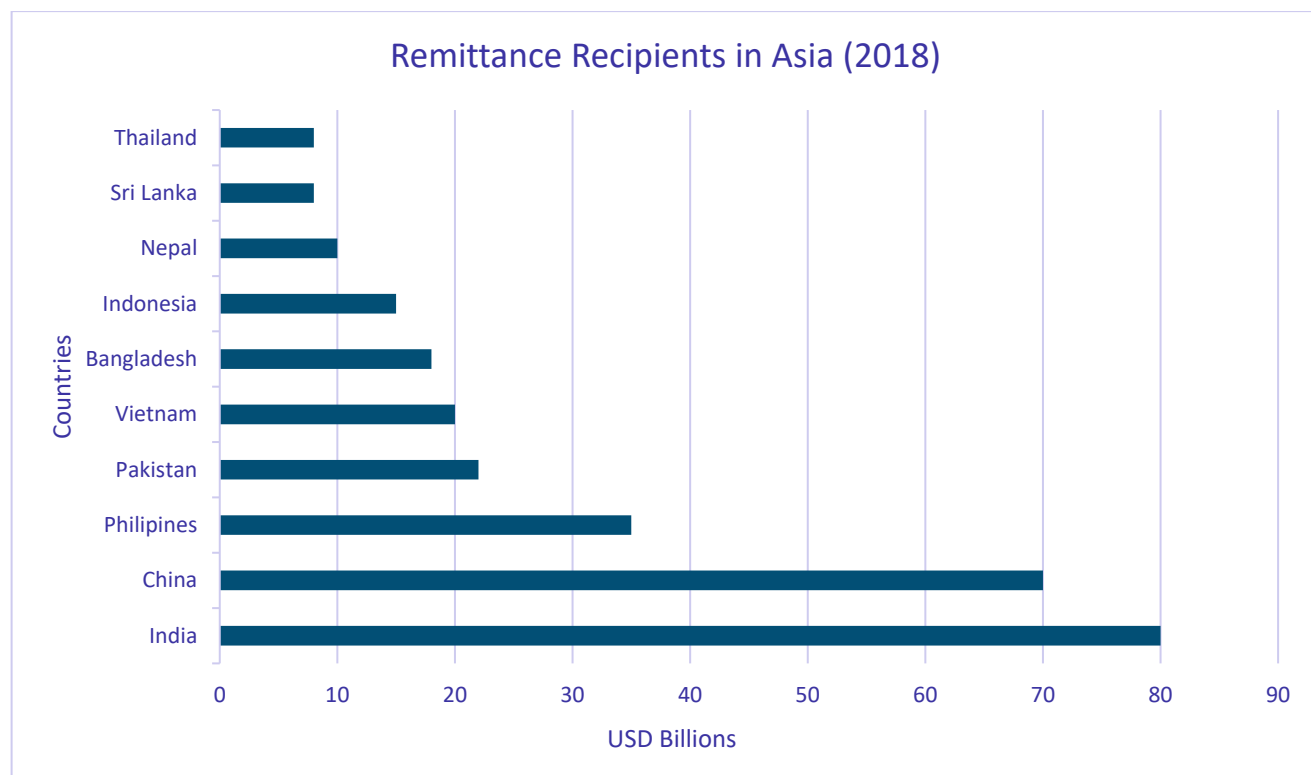
²⁴ Raphael Bostic, et al., *Shifting the Focus: Digital Payments and the Path to Financial Inclusion*, Federal Reserve Bank of Atlanta, 2020, 21-1 (September 2020): 8-9, 16.

²⁵ Nils Clotteau and Bsrat Measho, *Global Panorama of Postal Financial Inclusion, 2016* (Universal Postal Union, 2016), 19.

²⁶ Erik Feyen, Jon Frost, and Harish Natarajan, *Digital money: Implications for emerging market and developing economies*, 16 January 2020, VoxEU, Center for Economic Policy and Research: voxeu.org/article/digital-money-implications-emerging-market-and-developing-economies; Office of the Inspector General, United States Postal Service, *Providing Non-Bank Financial Services for the Underserved* (RARC-WP-14-007), 27 January 2014, 20-21.

²⁷ Mark J. Scher, *Postal Savings and the Provision of Financial Services: Policy Issues and Asian Experiences in the Use of the Postal Infrastructure for Savings Mobilization*, DESA Discussion Paper No. 22, United Nations, December 2001, 27.

of 6.8 percent, stemming from currency conversion costs and service charges.²⁸ Divitia will offer people and businesses worldwide a secure, fast, and inexpensive way to send money to friends, family, employees, and other businesses anytime, anywhere. Users will have the ability to make an almost instantaneous transfer of funds at an extremely competitive cost via their accounts. They will also be able to receive such funds in the same manner. All transactions are authorized and recorded in real time, using secure two-factor authentication.



Source: Ma. Concepcion G. Latoja, "Remittances to Asia in 2018: Sources and Costs," *ARIC Blog*, 3 February 2020: aric.adb.org/blog/remittances-to-asia-in-2018-sources-and-costs.

As it is intended to serve the underbanked and unbanked, Divitia will also enable users to perform basic financial transactions without visiting a bank branch or going through a formal bank onboarding process. Users will be able to pay bills (utilities, rent, loans, etc.), shop online (buy goods and services and pay with a Divitia account), purchase mobile airtime (PIN-less, top-up, prepaid SIM cards, etc.), transfer money to any bank account, or obtain a prepaid VISA/MasterCard (with funds directly drawn from a Divitia account).

The Divitia Network rests on the Vemanti USD (USDV), a 1:1 USD-backed stablecoin, which will enable the functioning of the system. Vemanti chose to issue its own convertible virtual currency as stablecoins (a cryptocurrency) have become recognized as the key component to any system that seeks

²⁸ "How Digital Dollar Stablecoins Can Help Bring More Consumers into the Financial System," Blockchain Association: theblockchainassociation.org/how-digital-dollar-stablecoins-can-help-bring-more-consumers-into-the-financial-system.

to expand financial inclusion.²⁹ Stablecoins, working on a blockchain, allow for lower transaction costs and can work from apps on smartphones, avoiding the need for bank accounts. Also, the USDV, being a stablecoin, maintains a stable value in transactions around the world and can be used for payments, foreign remittances, decentralized finance, centralized finance, blockchain finance, and more.

Using the Vemanti stablecoin, Divitia will be a global digital marketplace where businesses and consumers can converge to conduct transactions and settle with USDV. It is designed to be a comprehensive commerce and payments service that works across all blockchain-based networks and is available to every user with a Divitia account. There will be multiple merchant categories, different location-based fulfillment options, an integrated POS and loyalty program, and more. Each merchant will have a virtual storefront and can update their online catalogs via online portals. Consumers will have access to catalogs and listings from different merchants. They can order vouchers for major stores, buy products, purchase entertainment tickets, and etc. For example, a Divitia customer in the US can purchase and pay for a refrigerator at a major appliances store in Vietnam and have it delivered to their relatives there. This minimizes the costs and time involved in sending cash, and they can rest assured the money is spent on the right item.

Benefits to merchants include removing cash from the transaction process, increasing customer loyalty (the merchant's shop is always in a customer's pocket), providing different shopping options (cart or one-off purchases of products and services), and facilitating direct integration with a POS and loyalty system.

Benefits to consumers include removing the need for cash (fill a shopping cart using one application on the phone), providing merchant choices (just like a shopping mall on the phone with a wide range of merchants to choose from and with new ones added all the time), giving easy payment choices (pay directly with USDV or use loyalty points), and accessing an intuitive menu-driven structure for making orders and payments.

A Divitia account will also allow users to safely store their wealth. And, given the technology and processes used by Divitia, user balances will be as secure and stable in value as in a traditional bank account, including FDIC insurance on fiat deposits. Alternate, separate savings accounts that can accept micro deposits as well as the equivalent of Certificates of Deposit, among other investment capabilities, will also be available in the future.³⁰ The accumulation of wealth will allow users to plan for future expenses and to have a reserve in case of emergencies or lean periods.³¹ This means that

²⁹ For more on stablecoins and the USDV see the section, "Vemanti USD (USDV)," below.

³⁰ There is a long tradition of "penny" accounts that allow for saving small amounts of money. Rowland Hamilton, "Thrift in Great Britain," *The Economic Journal*, 2, 6 (June 1892): 291.

³¹ Claire Greene, Fumiko Hayashi, and Joanna Stavins, "Delivering Benefits of Faster Payments to the Underserved," *Consumer & Community Context*, Board of Governors of the Federal Reserve System, 2, 1 (August 2020): 2-8; Raphael Bostic, et al., *Shifting the Focus: Digital Payments and the Path to Financial Inclusion*, Federal Reserve Bank of Atlanta, 2020, 21-1 (September 2020): 11-12.

users can forgo payday loans and other undesirable borrowing alternatives to meet cash flow problems.³²

A traditional alternative or supplement to savings is participation in thrift funds (also known as clubs or guilds) and loan clubs. Thrift funds arose in the nineteenth century and allowed for saving small amounts toward a specific purpose, like a vacation or celebration, outside of a bank.³³ Such thrift funds did not pay interest. For example, there were “sharing-out clubs” wherein members paid in a like amount on a regular basis for a year. At the end of the year, the total fund was then divided equally among the members. Such funds are still popular, including on M-Pesa,³⁴ and would be a part of Divitia as a way to enable budgeting and micro saving.

Alternatively, there were funds or clubs that paid interest. For example, “building societies” were established for funding the building or purchase of houses. Members would pay into the common fund, which would be loaned out to members at interest with mortgages as security. Members would receive a dividend of the profits from the enterprise. Today, we have loan clubs, especially in Asia. While not focused on a common purpose like thrift funds, *hui* in Chinese or *kye* in Korean, are clubs wherein members pay in a set amount on a regular basis and can borrow the accumulated pot at interest. Other members and the organizer of the club receive the benefit of this interest plus the ability to borrow the pot when it is their turn.³⁵ Appealing to the Southeast Asian market, Divitia would provide a technologically streamlined platform for running such a loan club.

Another way to safeguard assets and plan for the future is through the purchase of insurance. Largely unavailable to the financially underserved, insurance can help guard against the loss of real or personal property, provide support in illness or death of a breadwinner, or secure the necessary provisions for starting and running a business.³⁶ In the agricultural sector, insurance is becoming more important because of climate change and increasing climate variability. Crop insurance protects the farmer from loss or reduction in yield and crop prices.³⁷ Traditionally, the provision of insurance among the

³² Office of the Inspector General, United States Postal Service, *Providing Non-Bank Financial Services for the Underserved* (RARC-WP-14-007), 27 January 2014, 4.

³³ Rowland Hamilton, “Thrift in Great Britain,” *The Economic Journal*, 2, 6 (June 1892): 292, 295, 298.

³⁴ The “Lipa na M-PESA Short Term Paybill” is akin to a fund with added crowdfunding: www.safaricom.co.ke/personal//m-pesa/lipa-na-m-pesa/lipa-na-m-pesa-short-term-paybill.

³⁵ Mark Arak, “Pooled Cash of Loan Clubs Key to Asian Immigrant Entrepreneurs,” *Los Angeles Times*, 30 October 1988: latimes.com/archives/la-xpm-1988-10-30-me-891-story.html; Wikipedia, “Hui” informal loan club, *Wikipedia*, [en.wikipedia.org/w/index.php?title=Hui_\(informal_loan_club\)&oldid=998144998](http://en.wikipedia.org/w/index.php?title=Hui_(informal_loan_club)&oldid=998144998).

³⁶ Guiherme Suedekum, *Advancing Financial Inclusion through Access to Insurance: The Role of Postal Networks* (Universal Postal Union, 2016), 8, 26.

³⁷ Guiherme Suedekum, *Advancing Financial Inclusion through Access to Insurance: The Role of Postal Networks* (Universal Postal Union, 2016), 12.

financially underserved was done on a micro level through weekly payments of a small premium.³⁸ This will be an option on Divitia. Plus, users will be able to shop around for various forms of insurance just as the fully banked currently do. Again, Divitia wants to empower everyone to build wealth.

But, building wealth also requires the opportunity to make investments and take out loans, which allow for strategic purchases, business building, and education. Historically, investing has been a problem for the unbanked and underbanked simply because they usually do not have the excess income to put aside and often there is a sizeable, minimum amount that must be invested. For over 100 years, postal banks have addressed this problem by allowing for micro investments. Amounts as low as a few cents could be set aside for investment in special government securities.³⁹ As we have seen, Ant group applied this principle in its Yu'e Bao fund that automatically moved an account holders' spare change into a mutual fund. Indeed, in the digital world, the financially underserved will have many investment opportunities, no matter the size of their contribution, as they now have access to a global market for their funds. Further, Divitia will allow those in the developed world to invest in a high-return emerging economy while those in emerging markets can access sophisticated investment instruments in a developed economy such as stocks, bonds, mutual funds, hedge funds, ETFs, derivatives, real estate investment funds, and more, presenting them with opportunities previously unknown or unobtainable.

Loans also often need to be made on a micro level. Traditionally, such loans have been made by either pawnshop operators or by payday loan brokers at high levels of interest.⁴⁰ Divitia will make many of these loans unnecessary for users as they will now have accounts in which they can accumulate and store wealth for use in income squeezes. However, Divitia will still make such micro loans available to consumers and businesses. These loans will be short term, and minimal amounts may be borrowed. Such loans are especially needed in agricultural areas where farmers need to finance the crop cycle.⁴¹ Basically, each Divitia user in good standing will have a line of credit attached to their account. Still, more substantial loans will be available from approved providers to allow users to buy homes and finance major purchases or an education. Businesses will be able to start up, buy inventory, expand, and meet cash flow problems. Divitia plans to serve them all.

³⁸ Rowland Hamilton, "Thrift in Great Britain," *The Economic Journal*, 2, 6 (June 1892): 299.

³⁹ Rowland Hamilton, "Thrift in Great Britain," *The Economic Journal*, 2, 6 (June 1892): 291; *Postal Savings System*, United States Postal Service, July 2008: about.usps.com/who-we-are/postal-history/postal-savings-system.rtf; Lynn Heidelbaugh, "Postal Savings System," Smithsonian National Postal Museum: postalmuseum.si.edu/collections/object-spotlight/postal-savings-system.

⁴⁰ Office of the Inspector General, United States Postal Service, *Providing Non-Bank Financial Services for the Underserved* (RARC-WP-14-007), 27 January 2014, 12-14.

⁴¹ Mark J. Scher, *Postal Savings and the Provision of Financial Services: Policy Issues and Asian Experiences in the Use of the Postal Infrastructure for Savings Mobilization*, DESA Discussion Paper No. 22, United Nations, December 2001, 25-26.

To join and benefit from Divitia a user will only need an internet-connected device, most likely that will be a smartphone. Such devices are becoming increasingly ubiquitous. Of the 1.7 billion unbanked adults worldwide, two-thirds of them own a mobile phone of some sort.⁴² This is the primary device used in cash-in/cash-out networks like M-Pesa. And, smartphone penetration and use are especially high in Southeast Asia.⁴³

With their phones, a user will establish an account with Divitia either directly with the network or through a local agency, representing Divitia. Everyone will need to pass an authentication process, plus Know-Your-Customer (KYC) and Anti-Money Laundering (AML) checks, before an account can be established. A government-issued photo identification and some proof of address will be required. Other documents might be required, depending on the level of services sought or local requirements. Registration could occur online or in-person through a local authorized agent of Divitia. No minimum balance would be required to open a Divitia account. Once approved, users would be assigned an individual multi-token digital wallet linked to their phone number and can access Divitia either through its agency's gateway or directly through the Divitia mobile app.

With a Divitia account, users could accept payments into their accounts and use their funds throughout the network. And, using a cash-in/cash-out network (via a Divitia local representative), they could convert their cash into digital form and vice versa, moving money in and out of the network as desired.

After opening the Divitia app and logging in, a user would see four major sections: "Accounts," "Services," "Shop," and "User Information." "User Information" would allow access to the user's profile (account ID, password, email, transaction history, two-factor authentication, biometric settings, and etc.) and information about locations within Divitia (local agents, stores, and etc.) as well as FAQs. "Accounts" would provide access to balances and other information on savings, loans, insurance, thrift funds, and other accounts held by the user. This would also be the location where the user could move funds within the network and cash in or cash out of the network. "Services" would be the area in which a user could search for particular financial services under individual tabs. These tabs would include such items as "Make a Payment," "Send/Receive Money," "Join a Fund," "Get a Loan," and "Buy Insurance." "Shop" would provide access to an online shopping platform for consumer goods, following an Amazon-like marketplace model. Shopping and financial services would be provided by Divitia and/or approved providers.

To illustrate better Divitia functionality, let us look at some use cases:

⁴² Stephen Stonberg, "Cryptocurrencies are democratizing the financial world. Here's how," World Economic Forum, 22 January 2021: www.weforum.org/agenda/2021/01/cryptocurrencies-are-democratising-the-financial-world-heres-how/; Office of the Inspector General, United States Postal Service, *Providing Non-Bank Financial Services for the Underserved* (RARC-WP-14-007), 27 January 2014, 19.

⁴³ Florian Hoppe, Aadarsh Bajjal, Thomas Olsen, and Usman Akhtar, *Fulfilling Southeast Asia's Digital Financial Services Promise*, Bain & Company, 30 October 2019: 2.

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- A Divitia user is shopping and wants to pay the bill from his or her Divitia account. The user opens the Divitia app on his or her phone and goes to “Make a Payment” under the “Services” tab. The user can then key in the amount to send to the merchant or, if the merchant is using a Divitia-compliant POS device, the user can automatically pay the amount via a QR code. And, if the user’s account does not contain sufficient funds to cover the bill, Divitia will automatically lend the user the difference through his or her line of credit attached to the Divitia account.
 - A Divitia user wants money for a wedding. Going to the Divitia app, he or she can search for “wedding” under “Get a Loan”. Search results pop up on a page, pointing the user to various options. He or she can then choose to join a thrift fund or a loan club, or visit the lenders on Divitia providing loans for weddings and other such needs. If the user decides to join a loan club and registers for it, he or she will need to designate a sum to be deposited automatically into the pool, according to its rules. Once joined, the user will be able to check the balance on a regular basis or withdraw funds as they become available by going to “Accounts.”
 - A Divitia user wants to buy insurance for his or her business. The user logs in to his or her account and toggles from the personal Divitia account to the business Divitia account. Then, the user goes into “Services” and hits the “Buy Insurance” tab. In the search box, he or she types “general.” A list of insurance providers then appears, perhaps ranked by customer satisfaction. The user only wants to look at providers of general business insurance with a four-star rating or better. After some study of the quoted premiums, the user selects one and sets up a monthly payment from his or her Divitia account.
 - A Divitia user is traveling or working abroad and needs to send money home. Instead of opening a local bank account or visiting a nearby money transfer service, the user simply opens his or her Divitia app and goes to “Send/Receive Money” under the “Services” tab. The user then enters the email address or the telephone number of the recipient and the amount to send from his or her Divitia account. The user then presses “Send Money,” and the money is transferred. The recipient does not need a bank account or Internet connection to receive funds. Both sender and receiver are sent an automated notification via text message confirming the transaction. The process would be even simpler if the recipient also had a Divitia account. Then, the transaction is a simple transfer between accounts.

For all these use cases, user convenience and choice are paramount. Further use cases could be considered, like investing. But, all would offer multiple options at multiple price points and the ability for the user to make the best choice with ease from his or her phone. Divitia is constructed to be a unique and differentiated marketplace that encompasses remittance, banking, payments, and commerce services into one, comprehensive and integrated ecosystem for underbanked businesses and consumers worldwide.

6. VEMANTI USD (USDV)

Divitia is made possible by technical innovation built around a proprietary stablecoin. A stablecoin facilitates the provision of digital services for the financially underserved because it lowers transaction costs, maintains a constant value, and has applications across the world of digital finance.

What is a stablecoin? A stablecoin is a cryptographically signed digital token that exists on a blockchain.⁴⁴ It is designed to maintain a stable price or value in relation to some referential asset, usually the United States Dollar (USD). Some stablecoins seek to achieve this through the use of algorithms that automatically adjust their supply to changes in demand. However, the majority of stablecoins act as utility tokens that represent a unit of a physical or virtual asset or collection of assets. As such, the stablecoin is pegged to that unit, again usually the United States Dollar, and is considered “backed” or ultimately convertible into a unit of the referenced asset. Thus, we often talk of stablecoins being pegged to the United States Dollar on a one-to-one basis.⁴⁵

A stablecoin is not the same as e-money, which is simply a fiat currency represented in a digital form. E-money or electronic money refers to a private, electronic version of cash that is commonly used on pre-paid cards and payment services like M-Pesa, PayPal, or WeChat Pay.⁴⁶ E-money does not exist on a blockchain; its use is limited to the private, centralized ledger in which it was created. The issuer controls the actual funds, not the user. It is simply a digital credit note and cannot be readily redeemed back into the underlying currency that it represents. E-money is at risk if the issuer fails to hold the underlying asset or simply goes out of business.

Also, e-money does not seek to maintain a stable value and is not pegged to a relatively stable specific asset or set of assets, such as the USD. E-money is a direct representation of the local currency in which it is denominated and fluctuates with the value of that currency. Thus, in Kenya, one’s M-Pesa account is denominated in Kenyan Shillings and follows their value, not United States Dollars. And, those e-Kenyan Shillings cannot be directly converted into United States Dollars, but only Kenyan Shillings.

⁴⁴ A good introduction to blockchain or distributed ledger technology can be found in William Magnuson, *Blockchain Democracy: Technology, Law, and the Rule of the Crowd* (Cambridge: Cambridge University Press, 2020), 41-60.

⁴⁵ There is a vast array of literature on stablecoins. For some background, see Dirk Bullmann, Jonas Klemm, and Andrea Pinna, *In Search for Stability in Crypto-Assets: Are Stablecoins the Solution?* European Central Bank, Occasional Paper Series No. 230, August 2019; G7 Working Group on Stablecoins, *Investigating the Impact of Global Stablecoins*, Bank for International Settlements, October 2019; Anastasia Melachrinou and Christian Pfister, *Stablecoins: A Brave New World?* Working Paper WP 757, Banque De France, March 2020.

⁴⁶ Janine Firpo, “E-Money – Mobile Money – Mobile Banking – What’s the Difference?” *Private Sector Development Blog*, 21 January 2009, World Bank: blogs.worldbank.org/psd/e-money-mobile-money-mobile-banking-what-s-the-difference.

As can be seen, stablecoins share some attributes with e-money. While access to e-money sometimes requires a bank account, mobile money forms of e-money, like M-Pesa, do not. Such forms of e-money allow for low-cost transactions and access to digital services. But, there are many who cannot join a mobile money network simply because none exist in their area or they are seeking a better alternative, one that preserves the purchasing power of their money or provides more services. For this multitude, stablecoins are the pathway to financial inclusion. A stablecoin network does not require bank accounts and transaction costs are minimal. Plus, it has other advantages as well.

In terms of cost, a stablecoin network can meet or exceed the low costs of a mobile e-money platform. While both save the costs involved in bank accounts, stablecoins employ blockchain technology. The use of a decentralized ledger removes the steps and intermediaries usually involved in making, verifying, and finalizing a transaction.⁴⁷ This results in lower costs per transaction than with mobile e-money.⁴⁸ A reduction that is especially important to those with the lowest incomes who are typically financially underserved.⁴⁹

The implications of lower transaction costs are significant for both individuals and businesses. Low-cost payments facilitate financial inclusion by lowering the cost of entry into the world of digital financial services. A stablecoin network using phone apps can provide more services at a lower cost than mobile e-money networks. These savings are particularly noticeable in cross-border payments. Operating on blockchain payment rails,⁵⁰ stablecoins remove many of the frictions (intermediaries and foreign exchange) involved in such payments. This makes remittances cheaper for individuals and expands the trading opportunities of businesses, especially small and micro ones.⁵¹

⁴⁷ Christian Catalini and Jai Massari, "Stablecoins and the Future of Money," *Harvard Business Review*, 10 August 2021: hbr.org/2021/08/stablecoins-and-the-future-of-money; Christian Catalini and Joshua S. Gans, "Some Simple Economics of the Blockchain," *Communications of the ACM*, 63, 7 (July 2020): 80-90; Don Tapscott and Alex Tapscott, *Blockchain Revolution* (New York: Portfolio/Penguin, 2018), 185-88.

⁴⁸ Katherine Foster, et al, "Digital currencies and CBDC impacts on least developed countries (LDCs)," Technical Paper 1.2, *Dialogue on Global Digital Finance Governance*, United Nations Development Program (2021), 10; Jonathan Ponciano, "Sen. Warren Says Crypto Could Solve Big Banks' 'Enormous Failure' Of Not Serving Millions Of Low-Income Americans," *Forbes*, 28 July 2021: www.forbes.com/sites/jonathanponciano/2021/07/28/sen-warren-says-crypto-could-solve-big-banks-enormous-failure-of-not-serving-millions-of-low-income-americans/?sh=60a9622c19ad.

⁴⁹ Katherine Foster, et al, "Digital currencies and CBDC impacts on least developed countries (LDCs)," Technical Paper 1.2, *Dialogue on Global Digital Finance Governance*, United Nations Development Program (2021), 10.

⁵⁰ The use of blockchain rails for remittances, avoiding exchange fees, explains the high adoption of cryptocurrencies, like stablecoins, in Asia and Latin America. Sam Bourgi, "Vietnam leads crypto adoption in Finder's 27-country survey," *Cointelegraph*, 14 August 2021: cointelegraph.com/news/vietnam-leads-crypto-adoption-in-finder-s-27-country-survey.

⁵¹ John Liu and Peter Lyons, "This Digital Currency Could Build a More Sustainable Global Economy," World Economic Forum, 26 November 2019: www.weforum.org/agenda/2019/11/digital-currency-economy-sustainable/; F. Christopher Calabria, *Could the Poor Bank on Stablecoins? Discussion Prompts for Innovators, Regulators, and Consumers* (July 2020), 5; Katherine Foster, et al, "Digital currencies and CBDC impacts on least developed countries (LDCs)," Technical Paper 1.2, *Dialogue on Global Digital Finance Governance*, United Nations Development Program (2021), 10.

Another advantage of a stablecoin network over a mobile e-money network is that stablecoins are designed to maintain their value over time, often being pegged to the USD which is the world's top reserve currency. Meanwhile, mobile e-money is denominated in a local currency, which could depreciate in value due to inflation or be volatile in price. In such a situation, a user of digital financial services would want to hold their savings in a stablecoin in order to maintain its purchasing power.⁵² There have been many occasions in emerging economies where people's savings were greatly reduced because of fluctuations in the value of their country's currency.⁵³

So, stablecoins provide a lower-cost, inflation-resistant alternative to the e-money found on mobile money platforms. However, stablecoins can provide further benefits over mobile e-money, and this arises from their status as a cryptocurrency. We have already seen how, as a token on a blockchain, stablecoins allow for low transaction costs. Yet, this technology also provides speed in transactions.⁵⁴ Real time settlement of payments can occur on a stablecoin network. So, cross-border transactions that might have taken hours or days to settle can do so almost instantly.

And, stablecoins can be transmitted anywhere without a currency exchange taking place. Whereas a cross-border payment of a fiat currency would require a conversion from the sending currency into the receiving currency, a stablecoin can be sent or received around the world. This can be done repeatedly until the stablecoin is finally converted back into a fiat currency.

A stablecoin can also be used in various applications in the worlds of cryptocurrency and decentralized finance (DeFi), centralized finance (cryptocurrency exchanges or CeFi), blockchain finance, and more. For example, stablecoin holders could borrow against their coins or lend them to earn interest, participate in arbitrage, or even purchase tokenized assets (especially those that are fractionalized), allowing them to start investing in stocks or property with small amounts of money.⁵⁵

⁵² F. Christopher Calabria, *Could the Poor Bank on Stablecoins? Discussion Prompts for Innovators, Regulators, and Consumers* (July 2020), 5; Stephen Stonberg, "Cryptocurrencies are democratizing the financial world. Here's how," World Economic Forum, 22 January 2021: www.weforum.org/agenda/2021/01/cryptocurrencies-are-democratising-the-financial-world-heres-how/.

⁵³ Jane Thomason, "Stablecoin adoption and the future of financial inclusion," *Cointelegraph*, 19 August 2021: cointelegraph.com/news/stablecoin-adoption-and-the-future-of-financial-inclusion; Stephen Stonberg, "Cryptocurrencies are democratizing the financial world. Here's how," World Economic Forum, 22 January 2021: www.weforum.org/agenda/2021/01/cryptocurrencies-are-democratising-the-financial-world-heres-how/.

⁵⁴ Don Tapscott and Alex Tapscott, *Blockchain Revolution* (New York: Portfolio/Penguin, 2018), 59.

⁵⁵ Alexander Lipton, et al, "11. Stablecoins, Digital Currency, and the Future of Money," *Building the New Economy*, 30 April 2020: doi.org/10.21428/ba67f642.0499afe0; Franklin Noll, "Could NFTs challenge bitcoin's store-of-value promise?" *New Money Review*, 4 May 2021: newmoneyreview.com/index.php/2021/05/04/could-nfts-challenge-bitcoins-store-of-value-promise/; Stephen Stonberg, "Cryptocurrencies are democratizing the financial world. Here's how," World Economic

To take advantage of all the benefits of a stablecoin—lower costs, constant value, and access to digital finance—Divitia uses its own special stablecoin, the Vemanti USD (USDV). We can get an overview of the properties of Vemanti’s “stablecoin arrangement” by looking at the coin, the transfer system, and the services infrastructure.⁵⁶

The USDV stablecoin is operated by Vemanti Digital, Ltd. (Vemanti Digital), a wholly-owned subsidiary of the Vemanti Group, based in the British Virgin Islands. It is built on the Ethereum blockchain, following the ERC-20 standard. The stabilization mechanism of the USDV is a pegging to the United States Dollar on a one-to-one (1:1) basis, at all times. Thus, the value of the USDV stablecoin is always equal to that of the Dollar. This peg is established and maintained by the holding of reserves in United States Dollars equal to the total issuance of USDV. Unlike other stablecoins, this is an all-cash reserve. Without the need to sell securities in order to redeem USDV, there is no delay in redemption.

USDV are issued and redeemed according to the following guidelines. Following any specific regulatory guidelines, USDV can be exchanged for USD anytime for a small fee. The minimum amount that can be transacted will be 100 USDV with a maximum based on the amount of USDV a user has.

The transfer system of a stablecoin arrangement refers to how the coins are moved to and from the minter of the coin. Such a system involves custodians and the movement of coins through exchange and transfers. In the case of the USDV, there are two major custodians handling the movement of the stablecoin—one for international markets and one for the United States’ market.

The primary custodian and administrator for USDV is First Digital Trust, Ltd. (FDT), an independent licensed trust company headquartered in Hong Kong, which is regulated by the Hong Kong Securities and Futures Commission (SFC). This entity is akin to the United States Securities and Exchange Commission (SEC). It is anticipated that all USDV tokens will be minted through FDT by Vemanti Digital and its authorized users. To mint USDV from FDT, a Vemanti-authorized user account must be established, involving the proper Know-Your-Customer (KYC) and Anti-Money Laundering (AML) checks. United States-based users will not be allowed to register with FDT. Once onboarded, each FDT user account has two digital wallets: one for USD and one for USDV. New USDV tokens are automatically minted and deposited into the user’s USDV wallet when USD funds are deposited. USDV

Forum, 22 January 2021: www.weforum.org/agenda/2021/01/cryptocurrencies-are-democratising-the-financial-world-heres-how/.

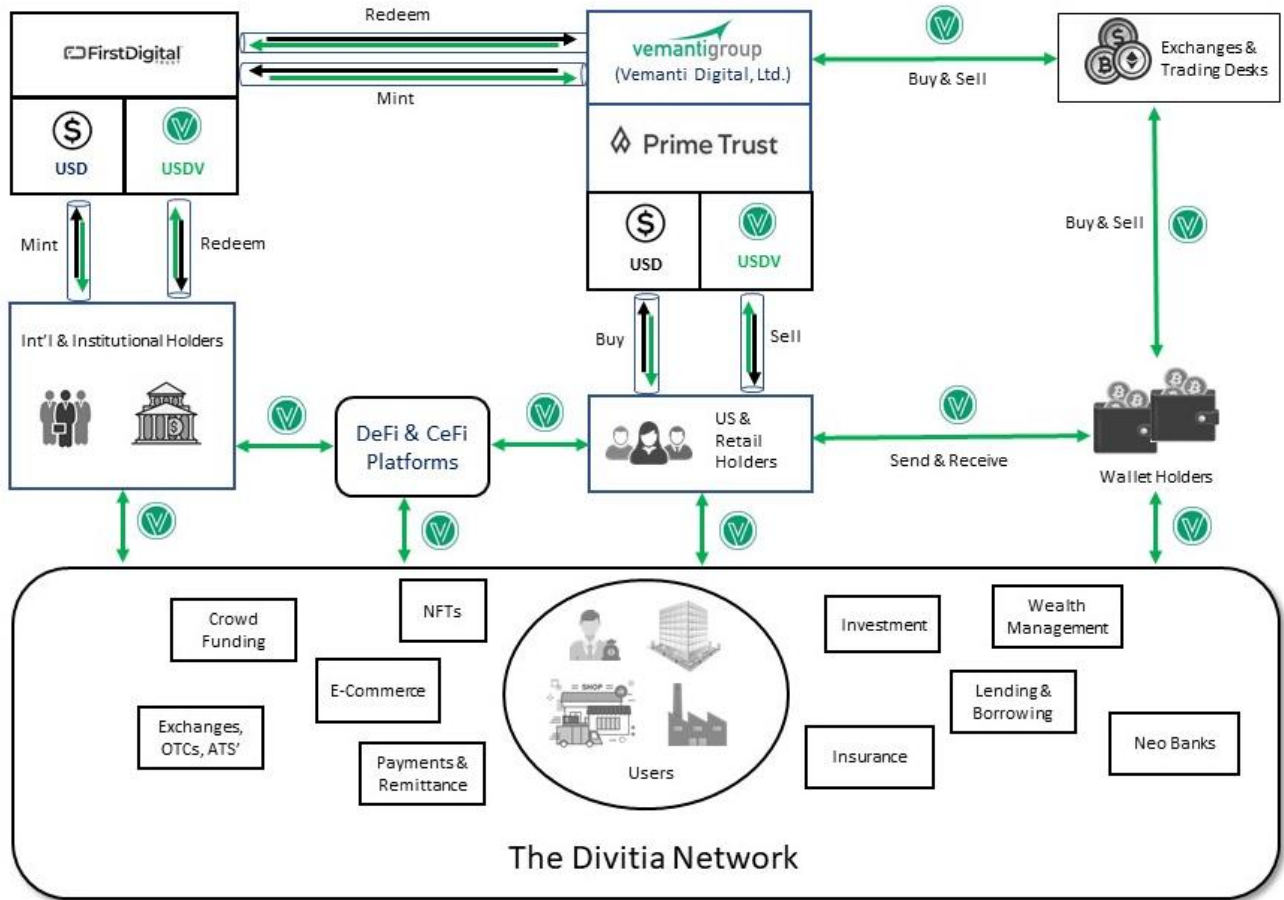
⁵⁶ For more on “stablecoin arrangements” and ways to assess stablecoins and their infrastructures, see President’s Working Group on Financial Markets, *Statement on Key Regulatory and Supervisory Issues Relevant to Certain Stablecoins*, 23 December 2020: home.treasury.gov/system/files/136/PWG-Stablecoin-Statement-12-23-2020-CLEAN.pdf; Alejandro Garcia, Bena Lands, and Dennis Yanchus, *Stablecoin Assessment Framework*, Bank of Canada Staff Discussion Paper 2021-6 (8 April 2021).

can also be redeemed for United States Dollars through FDT. Its reserves always are kept in United States Dollars on a one-to-one (1:1) basis with FDT. Minting and redeeming of USDV through FDT is primarily reserved for institutional and strategic account holders. However, retail users can also access FDT but only with special authorization from Vemanti Digital.

In the United States, USDV is custodied by Prime Trust, LLC. (Prime Trust), a Nevada-chartered trust company that is regulated by the State of Nevada and registered with the Financial Crimes Enforcement Network (FinCEN), a bureau of the United States Department of the Treasury, as a licensed Money Services Business (MSB). As a state-chartered trust, its fiat deposits are fully FDIC-insured. Anyone seeking to purchase USDV through Prime Trust will first have to pass the required KYC and AML checks to have a user account established. Users from over 150 countries can sign up with Prime Trust, not just from the US. Fiat deposits made in foreign currencies will be converted to USD. Once fully registered, a user can then purchase USDV tokens from Vemanti Digital or another seller and/or liquidity provider with available USD funds in their Prime Trust account. USDV token holders are also allowed to transact (i.e., buy, sell, send, and receive) directly among themselves on Prime Trust or with any ERC-20 wallet holder. They will also be able to redeem their USDV tokens for USD with Vemanti Digital or simply sell their USDV tokens to another user. Purchasing, selling, and redeeming of USDV through Prime Trust is intended for retail account holders.

Transactional movements of USDV tokens between FDT and Prime Trust are secured and managed by Fireblocks, Inc. (Fireblocks), an enterprise-grade digital asset transfer and settlement platform that employs MPC - CMP (Multi-Party Computation protocol) wallet technology.

As we have seen, exchange operations of USDV are performed through FDT or Prime Trust, depending on the location of the USDV holder. These entities transfer USD funds to and from Vemanti Digital, and other authorized users, in exchange for USDV stablecoins either for issuance or redemption. These tokens are then delivered to or received from the public. The purchase and redemption of USDV by the public from FDT or Prime Trust will occur through various applications and devices that allow for the movement of ERC-20 tokens. While USDV was established initially on Ethereum, it will later be available on other blockchain networks, becoming blockchain agnostic.



In terms of the services infrastructure, the USDV is meant to act as a utility token, facilitating the holder's use of financial services conducted by Vemanti or an approved service provider. USDV is not designed to be used in everyday retail payments outside the Divitia network. Although some users may choose to use the Vemanti stablecoin for retail payments, it is not intended or designed to challenge or replace local, official currencies, including Central Bank Digital Currencies (CBDCs).

Instead, each user will have a multi-token wallet that will allow for management of USDV and other major digital assets, such as Bitcoin (BTC), Ethereum (ETH), and Litecoin (LTC), as part of the Divitia network. Through this wallet and other applications, holders of USDV will be able to participate in staking through DeFi and CeFi platforms as well as other investment opportunities, including through traditional investment channels or proprietary lending platforms. Vemanti will generate revenue from income not only from providing these financial services but also from providing the rails for approved service providers to participate in the Divitia network. Transaction fees will be collected for those applications and also from redemption of USDV.

The USDV stablecoin will also carry a technological leap that will enable the least-connected to access digital services. It can be analogized in the form of a cryptobanknote. A cryptobanknote is a hybrid banknote that bears the public and private keys to access a cryptocurrency account. A hybrid banknote

is a physical banknote that can transfer value over an electronic network. It is denominated and has all the physical properties of a traditional banknote, allowing it to pass hand to hand. However, when the need arises, the user can access a digital network and transfer the denominated value off the hybrid banknote.⁵⁷ USDV cryptobanknotes will use blockchain technology and Divitia's software infrastructure will provide full interaction of each USDV banknote with its own crypto wallet.

Designed to work offline, USDV cryptobanknotes will solve the problem of using the digital USDV stablecoin for people without mobile devices, without the Internet, without a stable cellular connection, as well as with an underdeveloped Wi-Fi network or in remote areas with power outages. USDV cryptobanknotes will reach not only the unbanked but also the unconnected. Such a cryptobanknote will make the USDV stablecoin available to people who depend on cash for their daily use but will provide them with the opportunity to make electronic transactions in Divitia payment system as needed.

However, the USDV stablecoin was also designed to meet requirements beyond blockchain token specifications, exchange operations, hybrid banknotes, and etc. It was designed to instill confidence, both in the user and the regulator. For the user, especially the financially underserved who may be less technically-minded, it is important that they can trust the USDV to maintain its value, be readily redeemable, and enduring.⁵⁸

As we have seen, the entities in the USDV stablecoin arrangement are regulated by various agencies, which renders it trustless and transparent. Unlike other stablecoin issuers that self-report on their financial strength and reserves on occasion, leaving an investor or user wondering about the validity of their coins,⁵⁹ Vemanti is SEC regulated and has FDIC insurance on its fiat deposits. This means that there is regular, independent verification of the financial condition and reserves of Vemanti as a stablecoin issuer as well as independent insurance on the fiat deposits backing USDV.

Being SEC regulated, Vemanti must regularly file documents such as quarterly and annual reports (i.e., Form 10-Q and Form 10-K), which contain all of its financial statements, including its Balance Sheet and Income Statement. All such SEC filings are readily available to the public. Further, these reports are independently verified by auditors following Public Company Accounting Oversight Board (PCAOB) guidelines. The PCAOB is a nonprofit entity established by the US Congress to oversee

⁵⁷ Franklin Noll, "Hybrid Banknotes Can Bridge Cash and Crypto," CoinDesk, 12 May 2021: www.coindesk.com/business/2021/05/12/hybrid-banknotes-can-bridge-cash-and-crypto/.

⁵⁸ Christopher F. Calabria, "Could the Poor Bank on Stablecoins? Discussion Prompts for Innovators, Regulators, and Consumers," *FinDev Gateway* (July 2020): 10.

⁵⁹ Bitfinex'ed, "Circle USDC: Be better than Tether. Don't talk about transparency, show transparency," *Medium*, 6 July 2021: bitfinexed.medium.com/circle-usdc-be-better-than-tether-dont-talk-about-transparency-show-transparency-63c37b6614a3.

the audits of public companies in order to protect investors and further the public interest. It is tasked with the responsibility of ensuring that audits are independent, clear, and accurate. PCAOB guidelines are approved with oversight authority by the SEC. This all means that at any time, anyone may view the precise status and composition of the USDV reserves and the financial wellbeing of the stablecoin's issuer with complete transparency and disclosure.

Additionally, USD reserves in the United States are held in an institution monitored by state regulators, the US Treasury Financial Crimes Enforcement Network (FinCEN), and the Federal Deposit Insurance Corporation (FDIC). This multi-agency, independent oversight not only provides transparency on the state of the reserves, but it also insures against their loss in the event of a catastrophe.

The overlapping layers of security and oversight provided by a multitude of agencies plus the regular, audited financial reports, set the USDV stablecoin apart from all others. Such a state of transparency and regulation is found nowhere else in the cryptocurrency world. These controls plus the management of the all-cash reserves ensure the price stability and redeemability of USDV. All these factors also work to support the durability of the USDV over time as they seek to meet existing and evolving regulations regarding stablecoins.

As stablecoins are relatively new in the financial and monetary worlds, regulations regarding them are constantly developing. This makes it hard to create a stablecoin arrangement that has durability. To date, Vemanti has met or exceeded existing regulations regarding stablecoins. No other USD-denominated stablecoin is currently known to be fully under the monitoring of the US Securities and Exchange Commission (SEC) with 100 percent cash backing and FDIC-insured reserves. However, can USDV meet future regulations? Of course, this is impossible to fully know, but we can see how the USDV stablecoin compares with proposed regulations. If it meets such criteria, USDV should prove enduring.

In December 2020, the President's Working Group on Financial Markets released its *Statement on Key Regulatory and Supervisory Issues Relevant to Certain Stablecoins*.⁶⁰ This document represents the pinnacle of current United States Government thought on the future regulation of stablecoins.

⁶⁰ President's Working Group on Financial Markets, *Statement on Key Regulatory and Supervisory Issues Relevant to Certain Stablecoins*, 23 December 2020: home.treasury.gov/system/files/136/PWG-Stablecoin-Statement-12-23-2020-CLEAN.pdf More on regulation can be found in Christian Catalini and Jai Massari, "Stablecoins and the Future of Money," *Harvard Business Review*, 10 August 2021: hbr.org/2021/08/stablecoins-and-the-future-of-money; Christopher F. Calabria, "Could the Poor Bank on Stablecoins? Discussion Prompts for Innovators, Regulators, and Consumers," *FinDev Gateway* (July 2020): 6-7.

However, it addresses a stablecoin that is “primarily used for retail payments” at “a significant scale.”⁶¹ USDV is designed, on the contrary, to be used largely in its own ecosystem and focused on financial services. And, although some users of USDV may choose to use the stablecoin for retail payments, it is not intended or designed to challenge or replace the United States Dollar or any future US CBDC. The same applies to any locality in which the USDV stablecoin operates. It is intended to co-exist with, not displace, any official currencies, including CBDCs. The USDV dual-custodian framework also has the flexibility to adjust to changes in regulations involving any existing or new Central Bank currencies inside or outside the United States.

Thus, given the structural nature of USDV, the President’s Working Group’s guidelines are far more rigorous than would be required of the USDV. The President’s Working Group lays out key principles for a stablecoin. Here we will look at the three major ones.

- The major concern is financial stability of the reserves. The statement comments that United States Dollar backed “stablecoin arrangements should hold high-quality US Dollar denominated assets; hold these assets at US-regulated entities; utilize multiple custodians; and secure investments with high-quality obligors.”⁶² USDV meets or exceeds all these criteria, holding their dollar-denominated reserves in cash in multiple regulated entities.
- Next, the President’s Working Group wants to protect the stablecoin holder. It urges transparency, holding reserves in “a bankruptcy-remote manner,” and allowing for exchanges “in a timely manner, for the underlying fiat currency 1:1 net of fees.”⁶³ With Securities and Exchange Commission-directed auditing, FDIC-insured reserves, and multiple channels for exchanges, Vemanti holds to the core principle of protecting the USDV holders. Cash reserves also allow for expeditious redemptions.
- Of great importance is “market integrity” or meeting Anti-Money Laundering/Combating the Financing of Terrorism (AML/CFT). The statement spells out that “stablecoin arrangements must conduct identification and risk assessment of customers, monitoring of transactional activity, [and the] maintenance and provision of records to authorized parties...for AML/CFT

⁶¹ President’s Working Group on Financial Markets, *Statement on Key Regulatory and Supervisory Issues Relevant to Certain Stablecoins*, 23 December 2020, 2: home.treasury.gov/system/files/136/PWG-Stablecoin-Statement-12-23-2020-CLEAN.pdf.

⁶² President’s Working Group on Financial Markets, *Statement on Key Regulatory and Supervisory Issues Relevant to Certain Stablecoins*, 23 December 2020, 2: home.treasury.gov/system/files/136/PWG-Stablecoin-Statement-12-23-2020-CLEAN.pdf.

⁶³ President’s Working Group on Financial Markets, *Statement on Key Regulatory and Supervisory Issues Relevant to Certain Stablecoins*, 23 December 2020, 2-3: home.treasury.gov/system/files/136/PWG-Stablecoin-Statement-12-23-2020-CLEAN.pdf.

purposes.”⁶⁴ For USDV, such measures are conducted by both FDT and Prime Trust, which maintain rigorous KYC and AML checks and reporting.

In sum, through its stablecoin arrangement, involving insured, high-quality US Dollar-denominated reserves, highly-regulated exchanges, and multiple exchange channels, USDV is a stablecoin that instills trust and meets or exceeds the regulatory demands of the present and future.

⁶⁴ President’s Working Group on Financial Markets, *Statement on Key Regulatory and Supervisory Issues Relevant to Certain Stablecoins*, 23 December 2020, 3: home.treasury.gov/system/files/136/PWG-Stablecoin-Statement-12-23-2020-CLEAN.pdf.

7. CONCLUSION

As we have seen, the market for financial services among the underserved and emerging economies is huge and growing, especially in Southeast Asia and Latin America. The total revenue potential is in trillions of dollars. Worldwide, the number of unbanked individuals alone numbers around 1.7 billion, being concentrated in China, India, Africa, Southeast Asia, and Latin America. The number of underbanked, with limited access to financial services, is even larger. These groups, taken together as the financially underserved, can also be found in the United States and other developed countries. These people desperately want financial services, especially digital services that let them access the growing world of online payments, commerce, and investment.

To provide such financial inclusion, Vemanti has designed Divitia, a digital financial ecosystem that builds upon the models introduced by the likes of Amazon, Uber, M-Pesa, Ant Group, and postal banks. Divitia will provide a myriad of services to anyone, anywhere with an internet-enabled device, like a smartphone. It will allow access to digital financial services such as saving, insurance, investment, lending, payments, and remittance, all the services needed to accumulate wealth, start businesses, and more, even at the micro level. With a Divitia account, a user will be able to explore a vast menu of financial services provided by Vemanti or an authorized provider and be able to use them with a tap or a click.

All this is made possible through the use of Vemanti USD (USDV), a proprietary 1:1 USD-backed stablecoin, that will enable the functioning of the system. Vemanti chose to issue its own stablecoin because stablecoins have become recognized as the key component to any system that seeks to expand financial inclusion. Stablecoins, working on a blockchain, allow for lower transaction costs and can work from apps on smartphones, avoiding the need for bank accounts. This form of cryptocurrency also allows for its use in decentralized finance, centralized finance, blockchain finance, and more.

The USDV stablecoin is unique as it was built to be compliant with all present, proposed, and projected regulations. In part, this is done through the use of entities that are FDIC insured, SEC regulated, or subject to regular audits. Regulated, insured, and transparent, the USDV has trust built into it and thus into the entire Vemanti system. This is particularly important as regulators around the world are beginning to focus on cryptocurrency, including stablecoins.⁶⁵ No doubt many cryptocurrencies and stablecoin issuers will fail to meet the calls for transparency,⁶⁶ adherence to AML/KYC rules,⁶⁷ insurance

⁶⁵ Rahul Nambiapurath, "US Treasury Concerned About Stablecoins, Readying Regulation," *Be In Crypto*, 17 September 2021: beincrypto.com/us-treasury-concerned-stablecoins-readying-regulation.

⁶⁶ Andrew Singer, "Stablecoins under scrutiny: USDT stands by 'commercial paper' tether," *Cointelegraph*, 2 July 2021: cointelegraph.com/news/stablecoins-under-scrutiny-usdt-stands-by-commercial-paper-tether.

⁶⁷ Alexander C. Drylewski, et al., "As Blockchain Technology and Cryptocurrency Mature, So Do Their Regulation and Enforcement," *Skadden's 2021 Insights*, 26 January 2021: www.skadden.com/en/insights/publications/2021/01/2021-

of reserves,⁶⁸ and the like. However, anticipating these developments, Vemanti already has in place transparency through SEC reporting, AML/KYC adherence through its USDV issuers, and insurance through FDIC insured deposits. Vemanti is also looking to meet further challenges that may arise from CBDCs and new stablecoin regulations.

Divitia aims to build wealth for its users. By providing financial inclusion, Vemanti will give access to useful and affordable financial products and services to anyone, anywhere who want to safeguard their assets through savings and insurance, build wealth by making investments and taking out loans, and make payments through online purchases or remittances to distant businesses or family members.

The global demand for such services has never been fully estimated. But, the scale of possible income for a company providing digital financial services, like Vemanti, can be seen by looking at a few numbers. In the United States alone, the market, in 2014, was estimated at \$89 billion. More recently, in 2020, the Japan Post Bank generated \$2.5 billion in revenue. And, the future market for Southeast Asia has been estimated at creating between \$38 and \$60 billion in revenue. With USDV at its core, Divitia is designed to tap into these markets by meeting consumer demand among the financially underserved and to benefit from the provision of this financial inclusion through revenue-generating fees and investments.

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⁶⁸ Richard Satran, "U.S. regulator's approval of stablecoin payments provides regulatory building block, compliance challenge," *Reuters Financial Regulatory Forum*, 14 January 2021: www.reuters.com/article/bc-finreg-stablecoin-approval/u-s-regulators-approval-of-stablecoin-payments-provides-regulatory-building-block-compliance-challenge-idUSKBN29I2XZ.

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