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Improving Small Business Lending with Blockchain Technology

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INTRODUCTION

Entrepreneurs and business owners in the United States face many obstacles securing capital to start, operate, and grow their small businesses. As forced shutdowns, limited capacities, and stricter regulations continue to place strain on businesses, business owners are seeking financial assistance at greater rates; however, even during times of economic prosperity, acquiring capital for a business has been fraught with complications. The emerging use of blockchain technology in financial services has the potential to transform small business lending and improve capital access for businesses excluded by conventional lending processes.

ACCESS TO CAPITAL PROBLEM

By and large, small businesses and entrepreneurs in the U.S. do not have the financial resources necessary to thrive or, in some cases, survive without borrowing. Small business loans provide some assistance, but current programs have considerable room to improve. In 2019, only 51% of small businesses reported receiving their requested loan amount while one in 10 received no funding at all.¹

The application process is a significant complication. Applicants spend an average of 20 or more hours on one application and errors are often reported, such as

the omission of important supporting documents or input of the wrong industry classification code.² A reported 47% of small business owners consider obtaining financing to be a difficult or frustrating process, and 37% report that obtaining financing does not feel accessible.³

Even if the application is completed successfully, funding can still be out of reach. Among the most frequent reasons for declined funding are lack of history with the bank, low or nonexistent personal or business credit scores, and insufficient cash in the bank or other collateral.⁴ These barriers are disproportionately stacked against people of color and immigrants, despite immigrant entrepreneurs comprising nearly 25% of businesses in the U.S. and up to 40% of businesses in states that boast large immigrant populations.⁵ Before the onset of the pandemic, 31% of African American, 28% of Asian American and Pacific Islander, and 26% of Latino small business owners did not have a business banking relationship with a bank or credit union.⁶

Consequently, business owners and entrepreneurs must find other sources of funding. In 2016, only 18% of employer businesses used a loan from a financial institution as startup capital or initial acquisition capital.⁷ By contrast, 64% report using personal or family savings.⁸



64%

64% of employer businesses used personal or family savings as startup capital.

The economic impact of the COVID-19 pandemic created a staggering need for financial assistance for businesses, leading to the Paycheck Protection Program (PPP) of March 2020. The goal of the PPP was to provide aid to small businesses of 500 or fewer employees adversely affected by the pandemic.⁹ However, the PPP also served to highlight the cracks in the small business loan system. Some banks prioritized existing customers, and others did not accept applications unless the business had a checking account, a credit card, and a previous loan with that institution.¹⁰ Fraud was also a problem, as exemplified by one Florida business owner who spent his \$4 million PPP loan on a Lamborghini, shopping sprees, and stays at high-end hotels.¹¹

APPLICATION OF BLOCKCHAIN

Businesses and entrepreneurs in the U.S. have already turned to blockchain¹² to address the capital access problem. Private companies, including Figure, SALT, Crypto, and Finclusive, are providing financial services using blockchain and cryptocurrencies.

Blockchain technology can also be implemented to facilitate the application and loan process through the Small Business Administration. Since all the activities on a blockchain platform are visible, SBA lenders can decide credit worthiness without an application process.

If cryptocurrency becomes legal tender, intermediaries such as banks would no longer be necessary. Lenders could provide cryptocurrency loans through blockchain and significantly streamline the lending process.

Some states have already pushed for a legal framework regarding the application of blockchain for business use in transactions and bank accounts. This year, Texas adopted standards for virtual currency in a new law that takes effect September 1, 2021, officially recognizing cryptocurrency in state commercial law.¹³

With blockchain, lenders can decide credit worthiness without an application process.

CHALLENGES

One benefit of blockchain technology for the SBA would be increased transparency. Citizens' trust in the government is among the lowest it has been in the last century.¹⁴ As a decentralized, publicly accessible ledger, blockchain provides much needed transparency.¹⁵ At the same time, the decentralized nature of blockchain makes it harder to regulate and therefore more difficult to harness for public programs like SBA lending.

ENDNOTES

1. "The Capital Report," accessed May 31, 2021, <https://squareup.com/us/en/capital/capital-report-2020>.

2. Colin Krackowsky, "Applying Blockchain to the External Financing Needs of Small Business Owners," Medium, December 6, 2020, <https://medium.com/swlh/applying-blockchain-to-the-external-financing-needs-of-small-business-owners-6fb0e0423ff1>.

3. "The Capital Report," accessed May 31, 2021, <https://squareup.com/us/en/capital/capital-report-2020>.

4. Ibid.

5. Alli Romano, "Starting a Business as an Immigrant." LendingTree, September 18, 2018, <https://www.lendingtree.com/business/starting-a-business-as-an-immigrant/>.

6. "Small Businesses Struggling to Access Capital, Harming Their Financial Recovery | Small Business Majority," February 17, 2021, <https://smallbusinessmajority.org/our-research/access-capital/small-businesses-struggling-access-capital-harming-their-financial-recovery>.

7. Alicia Robb and Arnobio Morelix, "Startup Financing Trends by Race: How Access to Capital Impacts Profitability," *SSRN Electronic Journal*, 2016, <https://doi.org/10.2139/ssrn.2859893>.

8. Ibid.

9. U.S. Small Business Administration, “PPP Data,” accessed June 13, 2021, <https://www.sba.gov/funding-programs/loans/covid-19-relief-options/paycheck-protection-program/ppp-data>.

10. Joyce M. Rosenberg and Ken Sweet, “Small-Business Loans Snarled in Technical, Bureaucratic Problems,” Associated Press via Arkansas Online, April 12, 2020, <https://www.arkansasonline.com/news/2020/apr/12/small-business-loans-snarled-in-technic/>.

11. Jaclyn Peiser, “A Florida Man Received Millions in Coronavirus Aid. He Used It to Buy a Lamborghini, Prosecutors Say,” *Washington Post*, July 28, 2020, <https://www.washingtonpost.com/nation/2020/07/28/florida-ppp-coronavirus-lamborghini/>.

12. David Rodeck and John Schmidt, “What Is Blockchain?” *Forbes Advisor*, June 9, 2021, <https://www.forbes.com/advisor/investing/what-is-blockchain/>.

13. Act of May 31, 2021, 87th Leg., R.S., H.B. 4474 (to be codified at Bus. & Comm. Code Ch. 9 and 12).

14. “Public Trust in Government: 1958–2021,” Pew Research Center–U.S. Politics & Policy (blog), May 17, 2021, <https://www.pewresearch.org/politics/2021/05/17/public-trust-in-government-1958-2021/>.

15. “New Directions for Government | Blockchain Research Institute TM,” February 5, 2021, <http://Strategy,%20Policy,%20and%20Action%20for%20the%20Biden-Harris%20Administration>.

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