

The Modern CDFI

Abstract

Community Development Financial Institutions (CDFIs) represent a pivotal moment in America's financial history, marking the intersection between systemic inequality and innovative banking solutions. This paper delves into the evolution and impact of CDFIs, highlighting their role in addressing the financial challenges faced by low-income Americans, rural communities, and underserved populations.

By tracing the origins of CDFI initiatives to the 18th century and detailing key milestones in their development, including the rise of public-private support for credit unions, community banks, and the broader birth of Community Development Banks, this study emphasizes the significance of these financial institutions in modernizing the American banking system.

CDFIs stand at the forefront of contemporary efforts to democratize access to capital and financial services in America. Established in response to systemic gaps in banking accessibility, they provide essential banking services for communities underserved by traditional banking institutions. This paper aims to explore the origins, development, and impact of CDFIs within the American financial landscape, highlighting their potential to reshape the nation's economic and social fabric.

The evolution and expansion of CDFIs are rooted in historical and socio-economic contexts, reflecting broader societal shifts in values, priorities, and policies. This paper draws from theories of financial inclusion, innovation deserts, wealth disparities, generational change, and digital financial services to contextualize the role and impact of CDFIs within these dynamics.

This study employs a narrative-based approach, tracing key milestones in the development of CDFIs since their inception. The paper draws upon historical data, contemporary research, and case studies to provide a comprehensive understanding of CDFI initiatives. Where applicable, policy documents, academic journal articles, and media reports are cited to support analyses and interpretations.

Historical section 1 explores the beginning stages of CDFIs, tracing their roots back to Franklin's early lending programs in the 18th century and examining key developments that led to the modern era of financial inclusion. This chapter outlines how subsequent efforts, such as Freedman's Bank during the Civil War and public-private initiatives supporting credit unions and community banks in the following centuries, laid foundational principles for contemporary CDFI practices.

Historical section 2 delves into government support mechanisms that have shaped the development and impact of CDFIs. This analysis includes a review of the Office of Economic Opportunity's role in the 1960s and 1970s.

Historical section 3 examines current challenges faced by CDFIs, including regulatory hurdles, limited access to capital markets, and competition from larger financial institutions. This chapter also explores emerging opportunities for growth, such as rural business development initiatives and digital transformation.

In addition to the broader analysis, this study includes case studies of prominent CDFI organizations, offering insights into their strategies, successes, and challenges in serving underserved communities. These include ShoreBank and its innovative model for community development banking, Southern Development Bank's pioneering work in rural economic development, and Good Faith Microfinance's efforts in micro-lending.

The historical literature review portion of the paper concludes by synthesizing findings from the preceding chapters to underscore CDFIs' critical role in addressing systemic inequalities within America's financial landscape. By fostering financial inclusion, supporting small businesses, and promoting community resilience, CDFIs represent an indispensable asset in modernizing the nation's economic and social systems.

Before presenting Nubly, the modern startup poised to revolutionize the CDFI industry, the paper offers recommendations for policymakers and practitioners, emphasizing the need for continued investment in CDFI infrastructure, regulatory reforms to encourage innovation, and strategic partnerships with traditional financial institutions. This analysis underscores the urgent need for a new banking paradigm that prioritizes inclusion, technological advancement, and forward-looking strategies to address America's most pressing financial challenges.

The paper concludes with a detail of Nubly, its vision and high level roadmap of its proposed execution stages.

A History of CDFIs

Franklin and The 18th Century

Benjamin Franklin is considered by the Ford Foundation to be America's first social investor. He was an early proponent of philanthropy at five percent, a concept that gained popularity in the nineteenth century. Franklin so deeply cared for young artisans without means, believing in providing loans—based on character references and guarantees—rather than grants, regardless of need, at a rate of 5% [pg. 4, Rosenthal].

On June 23, 1789, Franklin proposed lending programs designed to serve a broad community while avoiding overextension by providing borrowers with sufficient, but not excessive, capital. He established loan maximums and minimums, adjusting them proportionally based on applicant volume. This plan was implemented in Boston and Philadelphia, forming the beginning of impact investing and peer-to-peer lending

systems that provided access to capital for those in need. Franklin stipulated that once the loan fund exceeded £100,000, funds would be invested by managers in public works benefiting city inhabitants, leaving £30,000 for continued loan operations.[pg. 5 Rosenthal]



Benjamin Franklin

Franklin's revolving loan fund also demonstrates early infrastructure/development investing, reflecting concern for urban infrastructure and the general public. According to Walter Isaacson's biography of Franklin, the original bequest to Boston grew to roughly \$400,000 USD, funding a trade school now the Benjamin Franklin Institute of Technology and other initiatives. However, Boston eventually transformed the fund into a savings company serving the city's wealthy, unlike Philadelphia which more closely followed Franklin's intent to aid the poor, resulting in a lower return of \$172,000 over the same period. A century later, the Philadelphia funds established the Franklin Institute, Philadelphia's Science Museum, an additional loan fund for tradesmen, and provided mortgages for housing. [pgs. 5, 6 Rosenthal]

The 19th century

A Dark Entrance to the Wealth Gap

In the first iterations of the American financial system, slavery denied Americans born of African descent a choice to participate and accumulate capital as other citizens. Mutual savings comprised of members making regular payments into a common treasury was the only option available for many, who were seen as property or not of the privileged class. These savings structures and behaviors date back to 1693, but caught prominence in Philadelphia with the founding of the first black insurance company in 1810. After failed attempts around the country in 1859, African Americans established the Savings Fund and Land Association in California. [pg.6 Rosenthal] Despite these efforts, only a microscopic portion of the nation's black citizens were able to accumulate capital systematically.

The capital of African Americans would gain access to the formal financial system in 1864 as the Civil War prompted the federal government to explore developing banking

institutions for newly emancipated Union soldiers who's earnings from their war efforts deserved inclusion in America's banking system.

Abolitionist minister John W. Alvord led a group of 20 philanthropists and businesspeople in New York to form the initial plans for a new bank for recently emancipated black union soldiers across the country. [pg. 6 Rosenthal] At the time, black soldiers flushed with cash from service had no access to safely save or accumulate capital in the nation's financial system. Senator Charles Sumner of Massachusetts would play a pivotal role in the advancement of the banking venture by sponsoring "An Act to Incorporate the Freedman's Savings and Trust Company". On March 3, 1865, Freedman's Bank was founded to "receive deposits from former slaves". [preface, Edwards] As President, Abraham Lincoln signed Freedman's Savings and Trust Company into law, and the United States Congress chartered the new privately held institution, granting The Federal Government the authority to examine Freedman's books. [pg. 6,7 Rosenthal]

The day-to-day management was overseen by a fifty-member all-white male board of trustees, while the deposit base was modeled after early mutual savings structures. Although the depositors were predominantly black, across the nation's bank branches, white employees comprised the majority of staff. [pg. 7 Rosenthal]

Many people were drawn to join the newly Federal Government-chartered bank due to their association with Abraham Lincoln and the prospect of financial opportunities for recently emancipated slaves. These individuals, often lacking basic literacy skills, were enticed by promises of prosperity fueled by optimism, fervor, and propaganda. The belief in safety and the access to a path for wealth accumulation led Freedman's deposit base to skyrocket to \$12.6 million (\$303 million today) from 1865 to 1871 [pg. 6 Edwards]. The bank's branches would stretch across the Union from Richmond, Charleston,



Freedman's Bank

Savannah to Houston, totaling a reported 30 branches in 17 states and amassing a deposit base of \$57 million (\$1.51 billion today) from over 100k in accounts by 1874 [pg.7 Rosenthal, pg. 7 Edwards]. African Americans had used Freedman's Bank to produce the stable economic foundation to build future generational wealth, while displaying the economic power and productivity of the newly freed population. According to Edwards, "Freed people had made Freedman's Bank one of the most successful financial institutions of the 19th century", although those fortunes would soon take a turn for the worst.

Avarice, The Transfer of Wealth

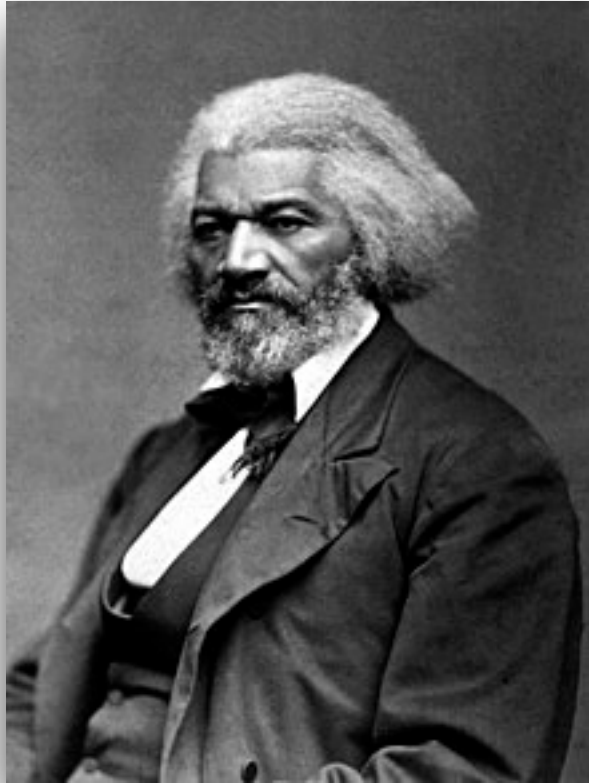
Despite being initially chartered for the purposes of savings, in 1870 with approval from congress Freedman's Bank began to operate as a commercial bank. Even though the depositors of the bank were predominantly black, the bank trustees only loaned capital to white men for speculative ventures, many real estate related. [pg. 7 Rosenthal] Many loans were given to individuals in and around Washington, D.C., who were connected to trust members and Congress due to their social connection and location.

Economists Claire Celerier and Purnoor Tak highlight that African Americans made up 90% of Freedman's deposit base but represented only 5% of its loan recipients. Even more astonishing, the economists show that despite the DC branch accounting for only 11% of Freedman's Banks total deposit intake, the branch issued 90% of all loans in comparison with other branches. [pg. 10 Edwards]

Rosenthal notes that "White managers often misused funds, including borrowing from the bank and not repaying". In their marketing content, the bank administration sold the message of self-reliance through saving, thrift via accessible banking to the poor and common class people, these efforts were supposed to enable the freed people not to rely on government support in their climb out of slavery. [pg. 7 Edwards] Behind closed doors, the bank's trustees did not fulfill their fiduciary responsibilities, led by then famed banker Henry D. Cooke. The ultimate corruption compromised the bank's fundamental purpose as Lincoln may have seen it. [pg. 9 Edwards] The result was disastrous and when coupled with the broader banking Panic of 1873, Freedman's fate was sealed as the death knell of a liquidity crises set in. [pg. 7 Rosenthal]

In March 1874, The Freedman's Bank was in terrible state and a shell of its pre-commercial bank self. The trustees knowing of the impending collapse convinced an unbeknownst newly recruited President Fredrick Douglass to take the helm of the prestigious bank. According to Douglass as described by Rosenthal, "I could not help reflecting on the contrast between Frederick the slave boy... and Frederick -- president of a bank counting its assets by millions". [pg. 7 Rosenthal] Although those sentiments would shift for Douglass as reality would set in as he later says, "The more I observed and learned the more my confidence diminished". The discoveries of dishonesty and theft by the bank's administration led Douglass to contribute his own personal capital to save the bank. As Douglass accepted the reality of the bank he said, "I was, in six

weeks after my election as president of this bank, convinced that its no longer a safe custodian of the hard earned money of my confiding people". [pg. 8 Rosenthal]



Frederick Douglass

On June 20, 1874, Congress heeded Frederick Douglass's testimony and passed an act to close the bank, which had a significant impact on African American households, churches, private businesses, and community infrastructure that represented the depositors. Many people believe that June 20 marked the beginning of a multi-generational mistrust in the American financial system, as it essentially eliminated generational mobility for some families into the present day. [pg. 5 Edwards] The bank closed its branches on July 2, 1874; it still had a staggering \$2.9 million (\$77 million today) remaining deposits. Half of the depositors eventually received roughly 3/5ths of the value of their accounts, while the other half of the depositors were left with nothing. By 1909, depositors still had an outstanding balance of \$1.3 million (\$40.1 million today). [pg. 9 Edwards, pg. 9 Rosenthal]

The 20th Century

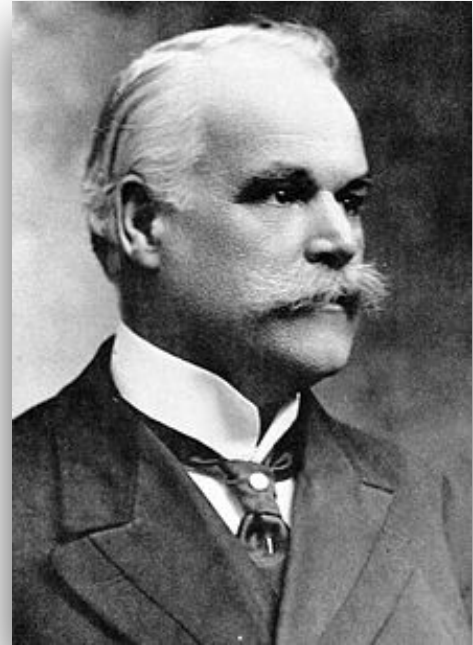
A Global Birth for Working Class Banking

Around the world, there have been global inspirations for how to bring access to capital and accumulation for the working class. From the English cooperative movement, village banks in India, to Susu's in the Caribbean and African countries.

According to Rosenthal, the principles of cooperativism that would morph into the present-day credit unions; have roots in England by weavers who, in 1844, formed the first cooperative store. Across Europe, these principles began to reach prominence by the 1840s in urban and rural areas alike. He cites the existence of 183 "people's banks" in Germany with a total of 18,000 members by 1859. This movement would inspire in 1866 a cooperative bank in Milan, Italy, which by 1909 was one of its country's largest banks with 25,000 members and a deposit value of \$32 million. [pgs.11-12 Rosenthal]

The influences from Germany to Quebec would reach the United States in forms of research, but few institutions would be born in the early 20th century.

In fact, the greatest influence on what would become the credit union push in the United States would occur on December 1900 when Alphonse Desjardins would, together with a small group of partners, found the constitution and bylaws for La Caisse Populaire de Levis in Quebec, to combat usury and help promote economic independence. According to Rosenthal, their structuring held for "each member to purchase at least one share for \$5, which could be paid on an installment basis of 10 cents weekly, plus entrance fee". Acquiring membership share afforded each member one vote each, and the credit committee was comprised of volunteer work. The early economic impact of La Caisse proved that poor people could be uplifted in financial literacy and the power of capital access and accumulation. [pg.12 Rosenthal]



Alphonse Desjardins

On April 6th, 1909, St. Mary's Bank would be chartered via a special act of the New Hampshire legislature, while nine days later, on April 15th, 1909, the state of Massachusetts passed a credit union law by partnership of then banking commissioner Pierre Jay and Desjardins.

The Beginning of Public Private Support of Credit Unions

Although this model of banking the common man was starting, it would catch mass appeal from businessmen and philanthropic funders like Edward A. Filene. A major proponent of a cooperative and employee empowerment ownership style, Filene prioritized employees' benefits, and offered relative to the times luxury at work amenities. By 1907, he'd visited world leaders and studied cooperative movements that were empowering farmers, rural population, and the working class globally. Those ideas would be shared with likes of Woodrow Wilson to various Massachusetts finance types, leading Filene and Desjardins to influence the forming of the Massachusetts Credit Union (MCU) in January 1914. This would make a major catalyst in the spread of the credit union across the nation. [pg. 13 Rosenthal]

The founding of MCU would kick off a relationship between philanthropic capital sources and what would become CDFIs to this day. From Julius Rosenwald of the Sears Roebuck to Russell Sage Foundation interest in philanthropic capital began to gain traction by 1907 - 1920 as the Credit Union National Extension Bureau and

Filene's Twentieth Century Fund would launch and began scaling their efforts. According to Rosenthal, Filene believes, "that credit unions and cooperatives would blunt the tendency of the impoverished working class towards socialism and later, fascism". [pg. 15 Rosenthal]

The Great Depression, War and Banking the Poor

The Great Depression devastated the American financial system. Credit unions suffered a similar fate as many were dissolved although according to Rosenthal, "few credit union members lost their deposits". The current state of the economy didn't stop the formation of working peoples capital. By 1935 there existed 3,600 credit unions by 1938, 6,219. [pg. 16 Rosenthal]

The depression is quoted as the period by which more minority-owned credit union expansion and North Carolina served as the "epicenter of developing rural credit unions and other cooperatives". North Carolina as a state had 3 black credit unions in 1936 by 1948 there were 98. [pg. 17 Rosenthal]

A similar fate would be had from The Great Depression to World War II as many small and less performant credit unions would be liquidated. Sentiments of mission drift were high throughout the forties along with a growing concern about the growing economic inequality. By 1954, Credit Union National Association (CUNA) president H.B. Yates states, "One of the greatest dangers to democracy is the unequal distribution of wealth. The great chasm between the rich and the poor among individuals as well as nations causes distrust, dissatisfaction, and trouble". According to Rosenthal he further states "The credit union movement helps to permanently solve this problem of unequal distribution by enabling man to help himself and permanently improve his condition" [pg.18 Rosenthal].

Through the fifties banking for the common man was ripe with challenges from lack of capital, exclusion based on race, and usurious credit schemes, however this did not stop efforts to increase access and financial health across America. The CDFIs of then whether mutual savings, credit unions or banks were all in search of ways to bring banking to the average joe, the rural parts of the country, and minorities all around.

The Sixties, Johnson and the War on Poverty

The dream of Franklin, Douglass to Feline would enter the sixties with a lot of support not just from the growing influence of philanthropic capital but strong support from the working class and poor from the executive branch via Lyndon B. Johnson's War on Poverty and the one term experiment of the Office of Economic Opportunity (OEO). The OEO established community action agencies by which the federal government was able to deliver services to lower income American rural and urban alike. [pg. 21 Rosenthal]

On January 4, 1964 Johnson declared "unconditional war on poverty" would create the biggest boon for the working class and minorities, where the newly established OEO would be the main agency by which Johnson's efforts would be measured. The funding network from the OEO empowered community action programs in local political jurisdictions even at the opposition of local Democratic mayors as their impact were

designed to alienate municipal government and mayorships held no control. According to Rosenthal the community action programs were, "independent power bases for the poor" and demonstrated Johnson's seriousness in giving a voice to the working class and minorities in Washington.



Pres. Johnson's War on Poverty

Based on mounting opposition from his own party by September 18th, 1965, Johnson abandoned any elements of his strategy that could be interpreted as organizing the poor politically.

The initial strategy struggle would in turn bolster the credit union movement which was happening mostly at a state level at this time. According to Rosenthal unlike the OEO's initiatives, credit unions and other forms of cooperative support to working people were not in opposition of municipal power. By 1960 there were 23,671 credit unions. These became the hub of access as every day Americans were

adopting the solution in exchange of mediums like door to door payday lenders and product salesmen with opaque and at time usurious credit terms. [pgs. 18,24 Rosenthal] By 1963, the Bureau of Federal Credit Unions detailed that over 400 credit unions were "predominantly serving low-income people". [pg. 25 Rosenthal]

The Broad Government Approach and the Failures of Operational Support

By December 31, 1969, the OEO sponsored credit unions "total support was \$3.2 million, of which \$1.1 million went for technical assistance, consultants, and other expenses." [pg. 30 Rosenthal] Towards the end of the OEO's height, many funding projects lived year to year as they were subject to annual appropriations by Congress. [pg. 30 Rosenthal] Those political funding conditions made supporting credit unions and other projects a challenge as long startup costs and ramp up periods needed more patient forms of capital.

Rosenthal further points out how crucial these lessons would become for future government support of CDFIs. He notes, "When the CDFI activists of the 1990s later pressed for federal funding, they emphatically rejected a model that would provide

operating funds. Rather, they demanded equity investments." The lesson of political volatility would go on to exacerbate the challenges associated with top-down support of CDFIs.

Nixon, Private Capital, Foundations and A New Way Forward

By fall 1968, there were 672 credit unions in recognized impoverished areas. According to Rosenthal, 106 OEO-sponsored credit unions had cumulatively made \$14.2 million in loans, but these efforts were ripe with short-comings. The OEO became the main political target of then Republican Presidential candidate Richard Nixon.

To compound the writing on the wall for the OEO, by March 31, Lyndon Johnson announced that he would not seek re-election. [pg. 31 Rosenthal]

On June 17, 1971, The Government Accounting Office (GAO) would profess the shortcomings of Johnson's top-down OEO credit union efforts. Their congressional reports explained the nature of high operating deficits and what they classified as "little pathways to self-sustainability." However, the GAO also highlighted favorable aspects of the OEO efforts, stating "delinquency was not a major problem and that relatively few loans had been written off as uncollectible". This would result in additional effort to boost deposits and lending capacity on October 19, 1970, as the Federal Credit Union Act was amended to provide deposit insurance for state and federal credit unions. The GAO noted, "Low-income credit unions had demand for loans in amounts which exceeded the available deposits", suggesting that providing deposit insurance would help increase trust among consumers and allow new deposits to flow in to meet demand. [pgs. 31,33 Rosenthal]

Despite these efforts, the election of Richard Nixon meant the elimination of the Office of Economic Opportunity. Donald Rumsfeld, who had been opposed to the OEO and Johnson's efforts, became its next head.

As federal government involvement in CDFI initiatives from credit unions, cooperatives and banks faded into the background, private capital began to step up as a means to continue specific efforts. From the Gray Areas Initiative to Community Development Corporations (CDCs), private actors like the Ford Foundation were increasingly becoming more involved in local community development efforts.

The initial iterations of Grey Areas were not "focused on physical, economic or empowerment objectives, but focused on human-services, education and workforce training strategies". Over time, these projects in concert with local municipalities and local institutions began to redefine delivery of much-needed services to the working class and minorities in select large cities as well as the state of North Carolina. [pg. 36 Rosenthal] The Ford Foundation's earliest involvement with deeper community development efforts was supported by the support for ACTION-Pittsburgh, one of the foremost examples of an early CDC.

By McGeorge Bundy's tenure as President of the Foundation, increasing attention was given to CDCs. [pg. 37 Rosenthal]

CDCs had various models; some were primarily grassroots in nature, while others were large corporate and federal interests coming together in the form of public-private partnerships. The most famed example is the Bedford-Stuyvesant Restoration Corporation.

By 1966, Robert Kennedy, then Senator from New York, put together a plan for the CDC that focused on four pillars: employment, education, housing, and "sense of community". In a Senate committee testimony, Kennedy stated, "The heart of the program should be the creation of Community Development Corporations, which would carry out the work of construction, the hiring and training of workers, the provisions of services, and encouragement of associated enterprises." The leadership structure included then NYC Mayor John Lindsay, Jacob Javits Senator from New York, Andre Meyer of Lazard Freres, and IBM chairman Thomas Watson Jr., among other figures from industry, finance, and politics. These efforts displayed bipartisan efforts to announce the formation of a new CDC.



Senator Kennedy Bed-Stuy
Restoration Corporation

Not without its internal politics and nature of tensions based on its structure, it was clear that the Bedford-Stuyvesant Restoration Corporation was a prototype for other cities and deserved national backing. [pg. 39 Rosenthal] By June 1967, Senators Kennedy and Javits secured national backing from the Economic Opportunity Act, which would go on to help CDCs spawn across the country but overwhelmingly support Senator Kennedy's project.

Over its tenure, the Bedford-Stuyvesant CDC achieved success ranging from IBM sponsored manufacturing plants to internal efforts leading to a \$100 million mortgage pool via partnership with 85 banks. They also implemented summer youth workforce and home restoration programs. [pg. 39 Rosenthal] The efforts of early CDCs provided promise for what was possible, but more private funding would be necessary for the most scalable outcomes.

By the beginning of the 1970s, the private capital from various sources across America began to investigate ways to progress the CDC movement. The biggest breakthrough

until the birth of the Community Development Bank came by way of Program-Related Investments (PRIs) from foundations. PRIs would evolve into the earliest forms of patient capital that underscored many funding solutions needed for scaling up fully private solutions to the problems of banking the working class, rural poor, and minorities.

The ability of foundations to provide capital via a PRI meant that funding "...could be structured with a provision for repayment, and it could be made to a for-profit entity whose business advanced an exempt or charitable activity or goal." [pg. 41 Rosenthal] This was a monumental step towards empowering private companies to tackle some of America's economic problems for profit with patient capital at its back. The future had arrived for the community development banks, which we would come to think of as present-day CDFIs.

Private Capital and the Birth of Community Development Banks

Entrepreneurs looking for various ways to do good and bring access to capital to communities in need turned to an unlikely structure, banks. Many of the builders from this generation were frustrated by the inability to find a bank to service the communities in ways they saw desperately needed. Most without formal banking backgrounds and others with working class experience before their tenure in banking, provided new perspectives to build out bold and audacious banks driven by mission. Shortly after 1970 many commenced to form the banks they couldn't find.

By 1973, as private capital was discovering new ways to bolster government attempts to help lower income citizens, the road was paved for the first community/commercial banks that would focus on the working class, low-income and poverty alleviation. A push kicked off to bring the bastions of capitalism, banks, to find their way into communities. Unlike the previous decades, according to Taub, "Having a bank rather than a credit union also had important tactical justifications". It was common belief that the bank structure would easily attract more investors based on its tried and true nature. This in turn seemed to be a better path towards sustainability as equity capital could alleviate some of the struggles from previous attempts in the 50s and 60s. Taub further states, "a bank has important symbolic value. It stands for economic stability and fiduciary responsibility, both in the community and outside". [pg. 20 Taub]

The Illinois Neighborhood Development Corporation (INDC) a Bank Holding Company, would evolve into ShoreBank the first community development bank. By the early 2000s it would go on to have global reach from the South Side of Chicago to Poland. Its structure would do more to spur private capital to fight poverty globally. ShoreBanks would spawn the likes of Bangladesh's Grameen Bank and its Nobel Prize winner Muhammad Yunus, now Chief Advisor to the interim Government of Bangladesh along the way.

The INDC's structure was far away from the retail/commercial banks of its time. Designed by a well-rounded management team whose experience spanned banking,

education, advocacy and corporate, the bank holding company began as a very exotic experiment in the age-old maturity transformation business. Taub explains the business structure of the holding company as, "a peculiar hybrid company in the private sector, incorporating both profit-seeking and not-for-profit elements while committed to generating economic development in what had been a deteriorating neighborhood, South Shore, on Chicago's black South Side". It's initial shareholders came from the likes of foundations, religious institutions and wealthy individuals focused on better outcomes for America's cities. [pg. 3 Taub] This would unlike previous attempts of the OEO, Grey Areas and Credit Unions provided serious patient capital to pursue a unique multi-pronged approach to working class banking, community development and poverty alleviation.



Muhammad Yunus & Ron Grzywinski

ShoreBank's initial INDC structure included the Southshore Bank, City Lands Corporation, The Neighborhood Institute, and the Neighborhood Fund. All were privately held subsidiaries with the exception of The Neighborhood Institute which served as a tax-exempt affiliate funded through foundation grants and government projects. The tasks of each subsidiary and affiliate range from the primary source of credit to managing community relations, social and economic development projects, to small business lending and real estate rehabilitation. Each attacking the urban problem set from the unique advantages of their respective structure types. As a whole they created a bank holding company unlike before.

By the mid 1980's ShoreBank was bringing in record profits, however its beginning could not have easily projected such success. Its board of directors and advisors of each subsidiary represent people from all walks of life, black, white, wealthy, working class, highly education and only formal education types. This gave the institution different views of the problems it was solving.

One theme consistent across the stories on banking the working class, was the ability and costs to service smaller loans rather than larger development deposits as the way to best serve this market segment. Many of the first and current forms of CDFIs have all started and some maintained smaller retail banking operations in exchange for robust small enterprise lending, real estate related community development and public infrastructure lending.

By 1985 The Neighborhood Institute (TNI) had successfully rehabilitated many multifamily buildings and helped spur equity co-ops. The City Lands subsidiary had come to enjoy profitability for four years, with "hundreds of units in multiple buildings either in construction or in the works". [pg. 99 Rosenthal]



ShoreBank

ShoreBank's success was undeniable, such that the only question that remained was could this be replicated beyond the South Side of Chicago? This question would be answered by the formation of Southern Development Bank spearheaded by ShoreBank executives in conjunction with Arkansas politicians, Philanthropists from Clinton

to the Waltons. Southern Development Bank would test the ShoreBank model not in the urban environment but the rural environment in the heart of America. Limited on banking experience, but a proven model and advisory, "Southern began its life much better capitalized than South Shore Bank had been". Unlike ShoreBank, Southern wouldn't have \$2 million in debt to work off in its first 10 years.

By May 1988, with the help of Rob Walton, Southern closed on a bank in Arkadelphia, with a previous ownership excited about its mission. "Elk Horn Bank and Trust Company became the heart of Southern Development Bancorp." [pg. 101 Rosenthal] Like ShoreBank's structure as bank holding company, Southern had a bank, venture fund, Opportunity Lands Corporation and a non-profit in Arkansas Enterprise Group (AEG). AEG was inspired by Grameen Bank via a ShoreBank introduction, Southern would also found the Good Faith Fund which focused on microlending in rural Arkansas. Despite early mishaps, Southern would take a future course of growth by acquisition.

From its mission-based Development Deposits program, launched in 1982 to its online savings account ShoreBank Direct, launched in 2007, the bank holding company would stand the test of time. According to Wikipedia, the "bank's financial performance historically matched or exceeded that of its peer banks. However, the bank faced significant losses in 2009, and as of May 2010, was seeking \$200 million in additional capital from major investors and the U.S. government. The bank's losses were related to the recession, though it was not engaged in subprime lending". [ShoreBank - Wikipedia 6, 7, 8]

According to Wikipedia, "ShoreBank Corporation was the first bank holding company to combine commercial banking, real estate development, nonprofit loan funds, and international advisory services aimed at community development." The wiki pages go

on to state, "in August 2010, the bank faced possible insolvency and risked having its deposits taken over by the Federal Deposit Insurance Corporation, which insured its deposits." [ShoreBank - Wikipedia 9] On August 20, 2010, the bank was declared insolvent, closed by regulators and most of its assets were acquired by Urban Partnership Bank" [ShoreBank - Wikipedia 10]

ShoreBank's legacy now serves as the lessons of the past and blueprint for a modern artificial intelligence future. Its story and the story of other community development banks are the testimony of the ultimate manifestation of private capital solving hard problems when enabled. Despite its great financial crisis' demise, its example will power the next generation of development banks, built on top of its lessons, failures and successes.

The Urgent Need for a New Banking Model in America

The Cost of Living Crisis for the Working Class and Bottom 20%

The economic reality for millions of American workers has become increasingly unsustainable. Of the 94.8 million people in the workforce, over 61% hold jobs classified as essential work. These workers, spanning from grocery store clerks to factory employees and farm laborers, form the backbone of the economy but struggle to keep pace with rising costs of living. Nearly half of all front-line jobs pay \$30,000 or less, and 85% pay \$50,000 or less, leaving many families financially vulnerable.

The Federal Reserve Bank of Chicago reports that the average American household spends approximately \$61,334 per year on essential and discretionary expenses. Housing is the largest cost, accounting for 34.9% of expenditures, with a median home price of \$273,992 and average rent for a two-bedroom apartment at \$1,154 per month. Additional financial burdens include transportation (\$9,826 per year), healthcare (\$5,177 per year), and food (\$7,317 per year). The median household income, however, stands at just \$67,521, while the personal income for individuals is \$35,805. For a family of four, the living wage is estimated at \$68,808 annually [Statista].

For the bottom 20% of earners, these figures highlight an unsustainable financial landscape where basic necessities consume nearly all available income. As costs continue to rise, many Americans are left with little opportunity to save or invest for the future, perpetuating cycles of economic instability.

The Financial Divide: Innovation Deserts and the Rural Workforce

Disparities in financial access and innovation extend beyond urban centers to rural America, where economic development remains constrained by systemic barriers. The shift to a knowledge-based economy transformed the US geography, with metropolitan areas becoming hubs for innovation and growth. The cost of moving people remained

high, so these areas, already rich in people and ideas, continued to attract workers and firms. Rural America lost its competitive advantage, and metropolitan areas built infrastructure to retain their edge. The knowledge economy sparked rapid innovation, driven by advances in computing and the internet, leading to new digital services, platforms, and tools that transformed industries and created new "innovation industries" focused on research and development.

[CORI/RISI]

According to a recent study by the Federal Housing Finance Agency (FHFA), rural Americans tend to have lower incomes on average "with certain high-needs rural regions and populations constituting areas of persistent poverty", lower levels of educational attainment with "a larger share of individuals whose highest level of education is a high school diploma". [FHFA, McKinsey]

Despite these challenges, rural Americans have a higher rate of home ownership, with 81.6% of households owning their homes, compared to 64% in urban areas, although the homes tend to have lower values. [Congress] Rural communities are also more vulnerable to economic downturns due to their reliance on a narrow range of industries. The Federal Housing Finance Agency (FHFA) reports that 39.5% of rural households earn less than \$50,000 annually, and rural areas have a lower percentage of prime working-age individuals (44.6% vs. 49.7% in urban areas). [FHFA]

Rural areas face unique challenges in accessing financial services. Smaller labor markets make it difficult for organizations to find and hire skilled staff, while borrower qualification challenges are exacerbated by staffing issues. Additionally, rural areas have historically faced underinvestment, leading to a lack of funders and insufficient operational funding, which can make it difficult for Community Development Financial Institutions (CDFIs) to retain staff. Technology is also a significant challenge, with many rural credit unions citing concerns about cybersecurity and a lack of access to broadband for their clients. These challenges are compounded by issues such as bank branch closures and inadequate access to reliable transportation, which can limit access to financial services. Overall, these challenges highlight the need for targeted support and investment in rural areas to improve access to financial services. [Fed Communities]

Rural workers, particularly those in frontline and essential jobs, are disproportionately affected by these limitations. Many are employed in industries that do not offer benefits such as health insurance, retirement plans, or financial tools essential for economic stability. Without access to financial literacy programs, credit-building opportunities, and banking solutions tailored to their needs, these communities remain financially underserved.

The picture is further compounded by demographic trends: rural areas comprise 71% of the U.S. landmass but only 14% of the population. [McKinsey] Many younger residents migrate to metropolitan areas for better job opportunities, leading to an aging rural population. Rural communities also exhibit lower levels of stock market

participation and retirement account ownership, with most household wealth concentrated in real estate and small businesses rather than financial assets. [EBRI] Policymakers and financial institutions must consider these disparities to craft solutions that promote economic resilience and financial inclusion in rural America.

The Wealth and Retirement Disparity

Economic inequity extends to retirement preparedness and wealth accumulation. The Pew Research Center finds that stock market participation is highly uneven, with 61% of white households owning stocks compared to only 34% of Black households, 29% of Hispanic households, and 22% of other racial and ethnic groups. [Pew Research Center]

Retirement savings reveal a similar pattern. Data from the 2021 Survey of Income and Program Participation (SIPP) shows that Baby Boomers, men, and non-Hispanic white and Asian individuals are most likely to have retirement accounts, while younger generations, women, and minority groups have significantly lower ownership rates. Gen Z, in particular, has the lowest retirement account ownership at just 7.7%. [U.S. Census Bureau]

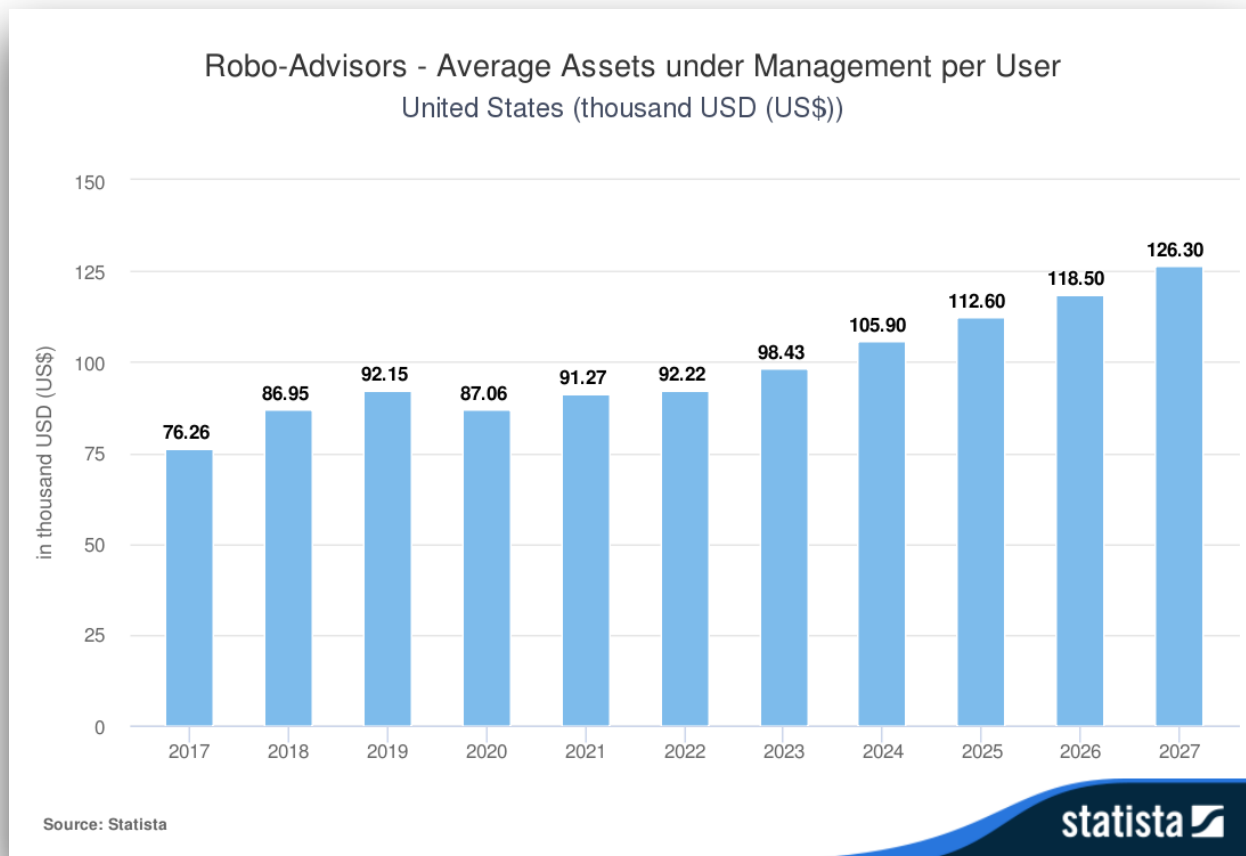
Compounding this issue, the Economic Innovation Group (EIG) reports that 57 million private-sector workers—44% of the workforce—lack access to employer-sponsored retirement plans. Low-income and minority workers are disproportionately affected, making it difficult for them to build long-term financial security. [EIG]

The AARP further emphasizes this crisis, reporting that 49% of working Americans do not have access to employer-provided retirement savings plans. Among affected groups, 63% of low-income workers and 54% of small business employees lack access, along with 53% of Hispanic workers and 52% of Black workers. [AARP]

Without significant intervention, this retirement savings crisis will place unprecedented strain on social safety nets like Social Security and Medicare, exacerbating fiscal challenges for future generations.

The Looming Generational Wealth Transfer and the Rise of Digital Finance

While many workers struggle with financial insecurity, a massive generational wealth transfer is underway. Estimates suggest that between \$84 trillion and \$120 trillion will be passed down over the next 20 years, primarily from Baby Boomers to Gen X, Millennials, and Gen Z. [Merrill Lynch, Cerulli Associates]



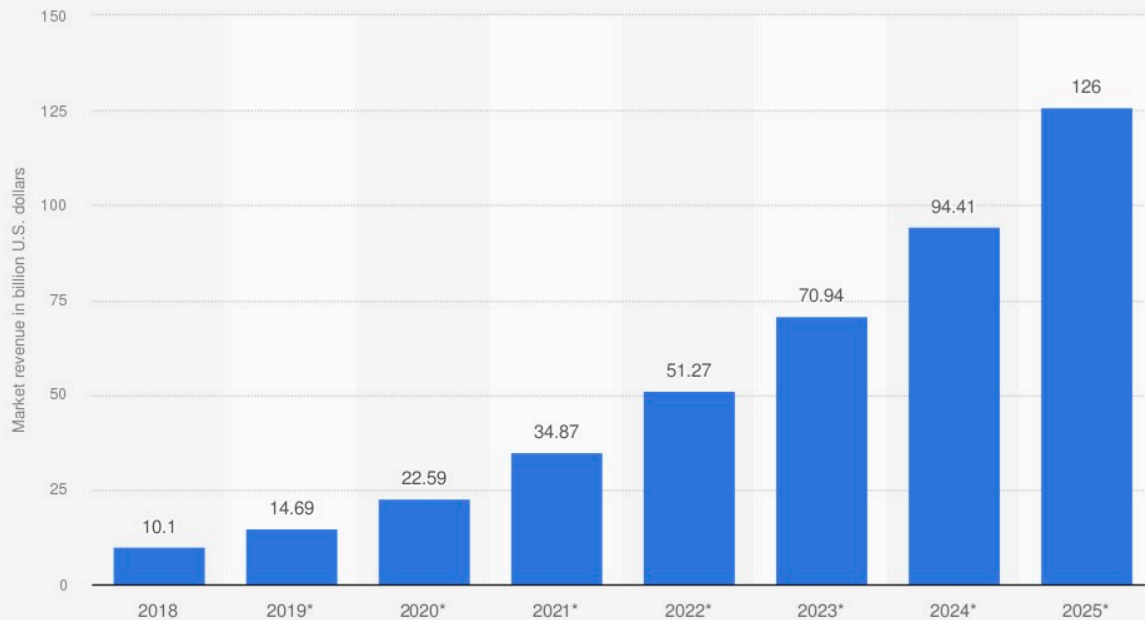
This transfer of assets will fundamentally reshape financial markets and banking preferences. Unlike previous generations, Millennials and Gen Z are digital-first investors, favoring fintech platforms and robo-advisors over traditional banking institutions. Currently, 77% of digital investment users are between the ages of 18-44, and the use of financial apps averages 4.9 minutes per day. [Statista] The robo-advisory industry alone is projected to reach \$3.7 trillion in global assets by 2027, with U.S. users averaging \$126,000 per account—far exceeding global averages. [Statista]

This generational shift demands a banking model that is agile, tech-driven, and accessible to underserved populations. Traditional banks that fail to adapt risk losing relevance as younger generations seek institutions aligned with their digital habits and financial goals.

The Case for a New Bank: Innovation, Inclusion, and Financial Security

The financial challenges facing low-income Americans, rural communities, and underrepresented groups highlight the urgent need for a new banking paradigm. A modern financial institution must prioritize:

Revenues from the artificial intelligence (AI) software market worldwide from 2018 to 2025 (in billion U.S. dollars)



Source:
Omdia
© Statista 2022

Additional Information:
Worldwide; 2018 to 2020

statista

- **Financial Inclusion:** Providing essential banking services to frontline workers, rural populations, and unbanked or underbanked individuals.
- **Retirement Solutions:** Expanding access to employer-sponsored retirement plans, auto-IRAs, and other savings vehicles to close the wealth gap.
- **Digital Accessibility:** Leveraging fintech to offer seamless, user-friendly banking experiences tailored to younger generations and low-income earners.
- **Capital Access for Rural and Minority Communities:** Investing in economic development initiatives that support small businesses, entrepreneurship, and community-based financial growth.

The transformation of America's financial system is not just necessary—it is inevitable. By addressing systemic inequities and embracing innovation, the next generation of financial institutions can build a more inclusive and resilient economy for all.

The Looming Autonomous Future

Within the next 12 to 24 months, AI agents are expected to revolutionize how businesses operate, enabling companies to make strategic moves at a pace and magnitude previously unimaginable. [PwC]

Agentic AI: Business Transformation and The Engine of Autonomous Financial Empowerment

AI is rapidly reshaping the landscape of business operations across all functions, from software development and data-driven decision-making to marketing [Statista - Revenues from the Artificial Intelligence Software Market (2018-2025)]. The latest innovations in machine learning are continuously pushing the boundaries of capability and quality, leading to deep integration within both customer-facing and internal business operations. But the current wave of advancements – particularly in Agentic AI – represents a paradigm shift. This advanced technology surpasses traditional machine learning and robotic process automation (RPA) by integrating multiple large language models that communicate with each other to derive accurate, nuanced responses [1]. Agentic AI is poised to revolutionize the financial services industry by enabling autonomous decision-making, hyper-personalization, and seamless customer experiences.

The two primary applications of AI today – efficiency enhancement and capability expansion – are crucial stepping stones, but Agentic AI unlocks a new dimension: proactive problem solving. This transformation is already evident in the financial sector, a traditionally slow adopter of technological innovations. Forward-thinking fintech firms like Klarna, have recently demonstrated the power of strategic AI investment to improve operational efficiency and customer experience, achieving a 31% year-over-year revenue surge to \$2.2 billion with a 24% increase in operating income. [CX Network] Their AI-powered risk management system exemplifies how this technology can reduce financial losses and enhance overall profitability.

Key Benefits of Agentic AI in Financial Services:

- **Enhanced Customer Experience:** Personalized interactions, tailored financial advice, and real-time support will transform the way customers interact with financial institutions [1]. Imagine an AI agent proactively identifying opportunities to optimize a customer's budget based on their spending patterns, or automatically negotiating lower rates on recurring bills.
- **Improved Operational Efficiency:** Automated processes, such as underwriting and claims processing, will reduce manual workloads and minimize errors [1]. This allows for faster loan approvals, quicker claim settlements, and reduced administrative costs – benefits that can be passed onto customers.

- **Increased Innovation:** Agentic AI will unlock new revenue streams through AI-driven insights, predictive analytics, and innovative product offerings [1]. This could include personalized investment portfolios tailored to individual risk tolerance and financial goals, or dynamic pricing models for insurance products based on real-time data.
- **Enhanced Risk Management:** Real-time fraud detection, compliance monitoring, and risk mitigation will safeguard customer assets and sensitive information [1]. Agentic AI can analyze vast datasets to identify suspicious activity and prevent fraudulent transactions before they occur.

Addressing Critical Financial Challenges with Autonomous Intelligence

As AI continues to evolve, it presents an unprecedented opportunity to address critical financial challenges, particularly for working-class Americans. Disparities in wealth and retirement security are widening, and traditional banking models are demonstrably failing to meet the needs of those most affected. [Urban Institute] AI-driven financial solutions, embedded banking, and automated financial planning tools have the potential to create more accessible financial systems. By leveraging Agentic AI, we can develop personalized financial strategies, automate savings programs, optimize credit access, and ultimately modernize banking experiences while promoting genuine financial access, expansion of markets, development of strong communities and households alike. [PwC]

Looking ahead, AI's role in finance is poised to expand even further, influencing risk assessment, fraud detection, and compliance automation. The continuous improvement of AI-driven models will redefine the competitive landscape, allowing innovative fintechs and forward-thinking traditional banks alike to harness new efficiencies and capabilities. Those who embrace AI-powered transformation early – particularly those focused on serving underserved communities – will likely emerge as leaders in the evolving financial ecosystem.

A Call for a New Banking Paradigm: The Modern CDFI Powered by Agentic AI

A modern financial institution must emerge—one that prioritizes inclusion, innovation, and adaptability. This isn't simply about updating existing systems; it's about building something fundamentally new – a next-generation Community Development Financial Institution (CDFI) powered by the transformative potential of Agentic AI.

Such an institution must:

1. **Offer Affordable Banking Solutions:** Fee-free accounts, no-minimum-balance requirements, and affordable credit options tailored to low-income and gig workers.

Agentic AI can personalize these offerings based on individual financial circumstances, ensuring accessibility for all.

2. **Expand Digital and Financial Access:** Fintech-driven solutions for underserved areas, including rural communities and unbanked populations. Autonomous agents can provide remote financial guidance and support, bridging the gap in access to traditional banking services.
3. **Enhance Retirement and Wealth-Building Tools:** Automated savings programs, employer-sponsored plans for gig workers, and investment platforms accessible to all income levels. Agentic AI can personalize these tools based on individual risk tolerance and long-term financial goals.
4. **Leverage AI and Digital Transformation:** AI-driven financial planning, seamless integration with digital wallets, and enhanced mobile banking experiences to meet the expectations of younger generations. Autonomous agents can provide proactive financial education and support through intuitive digital interfaces.
5. **Address Systemic Inequality:** Partner with community development financial institutions (CDFIs) and impact-driven organizations to bridge the racial wealth gap. Agentic AI can identify and address biases in lending practices, aligned with the Community Reinvestment Act of 1977, ensuring equitable access to capital for all communities.

The data paints a stark picture: America's financial system is failing to serve its most vulnerable populations. Essential workers, rural communities, and minority groups face systemic barriers to financial security, while the country's retirement and investment infrastructure remains outdated and inaccessible to many. In addition, the next generations will demand a financial system that aligns with their needs and values.

The opportunity to redefine banking for the future is here—and the time to act is now. A new era of community development financial institutions (CDFIs) will emerge, leveraging algorithms and agentic technology to address systemic inequalities and promote financial inclusion on a larger scale. [Federal Reserve Bank of New York] These modern CDFIs are equipped with advanced analytics tools and AI-driven risk assessment models, enabling them to offer more tailored financial products and services to underserved communities. [Urban Institute]

Agentic AI: Revolutionizing Financial Services – But With Caution

While Agentic AI offers immense potential, it's crucial to acknowledge the challenges and risks [1]: Labour market disruption may necessitate reskilling initiatives; human oversight is essential for accountability and sound judgment; privacy and cybersecurity must be paramount; and updated regulatory frameworks are needed to ensure ethical

standards. Market volatility could also increase with widespread adoption of autonomous trading systems.

However, the potential benefits – particularly in advancing financial inclusion in underserved communities – are too significant to ignore. Agentic AI can empower individuals with personalized financial guidance, access to credit, and opportunities for wealth building. But this requires addressing challenges such as market concentration and establishing clear governance frameworks to ensure equitable access to these technologies.

The opportunity to redefine banking for the future is here—and the time to act is now. We are committed to building a financial system that serves all Americans, powered by the transformative potential of Agentic AI and guided by a deep commitment to social impact. This isn't just about innovation; it's about creating a more equitable and prosperous future for all.

Nubly: From Fintech to Modern CDFI - Reimagining Finance for a Thriving America

The American Dream, once synonymous with opportunity and upward mobility, feels increasingly out of reach for millions. A widening chasm of economic disparity has left vast segments of the population – particularly non-salaried workers, essential personnel, and those approaching or in retirement without adequate benefits – struggling to achieve financial security. These are the individuals who keep our nation running, yet they often lack access to the same financial tools and opportunities enjoyed by more affluent communities. Nubly is born from a deep conviction that this disparity isn't just an economic issue; it's a fundamental moral failing. Everyone deserves a pathway to financial health, and we are on the cusp of building a new kind of financial institution – a modern Community Development Financial Institution (CDFI) powered by the revolutionary potential of Agentic AI – to make that vision a reality.

Introducing Nubly: Beyond Banking, Towards Financial Empowerment

Nubly isn't simply another bank or fintech app. It's a holistic ecosystem designed to empower financially healthy households and spur sustainable economic growth in the communities that need it most. We are focused on serving the bottom 20% of earners in the United States – those often overlooked by traditional financial institutions, and increasingly vulnerable in an evolving economy characterized by gig work, precarious employment, and inadequate retirement savings. Our approach is rooted in understanding their unique challenges: inconsistent income streams, limited access to credit, a lack of financial literacy resources, and a general distrust of established financial systems.

Target Market: Serving Those Left Behind

Nubly's primary target market includes:

- **Non-Salaried & Non-Benefited Workers:** Individuals employed in contingent, contract, or freelance roles who lack traditional employee benefits like health insurance and retirement plans.
- **Essential & Gig Economy Workers:** The backbone of our economy – delivery drivers, healthcare aides, grocery store employees – often facing financial instability despite their essential contributions.
- **Low-to-Moderate Income Individuals & Families:** Households struggling to make ends meet and lacking access to affordable financial services.
- **Minority-Owned Businesses:** Entrepreneurs from underrepresented communities who face systemic barriers to capital and opportunity.
- **Remote and Rural Communities:** Households in non-urban areas that have between 5,000 to 10,000 people that may not have access to a bank or credit union in their town.
- **Community Organizations and Non-Profits:** Partnering with local groups already embedded in the community.

Beyond Fintech: The Rise of Autonomous Finance & A New CDFI Paradigm

This isn't simply about incremental improvements in existing fintech solutions. It's about fundamentally reimagining how financial services are delivered, leveraging the power of human and private capital, along with autonomous agents to create an ecosystem designed to empower financially healthy households and drive sustainable economic growth in underserved communities across the nation. We stand at the precipice of a transformative shift, where AI moves beyond automation and prediction to genuine agency – enabling proactive, personalized support previously unimaginable.

We are focused on serving the bottom 20% of earners in the United States – those often overlooked by traditional financial institutions, and increasingly vulnerable in an evolving economy characterized by gig work, precarious employment, and inadequate retirement savings. Our approach is rooted in understanding their unique challenges: inconsistent income streams, limited access to credit, a lack of accessible financial literacy resources, and a pervasive distrust of established systems.

We envision a nation where every community thrives through equitable access to financial services. This isn't about charity; it's about unlocking potential. It's about recognizing the inherent value in these communities and providing them with the tools they need to build wealth, create jobs, and revitalize their neighborhoods. This is more than just a business plan; it's a commitment to social impact through private capital, driven by a belief that financial inclusion and expansion of access to markets is fundamental to a stronger, more productive country for all Americans.

The Nubly Journey: A Phased Approach to Transformation

Our journey from fintech startup to fully-fledged modern CDFI will unfold in five strategic phases, each building upon the last and designed to minimize risk while maximizing impact.

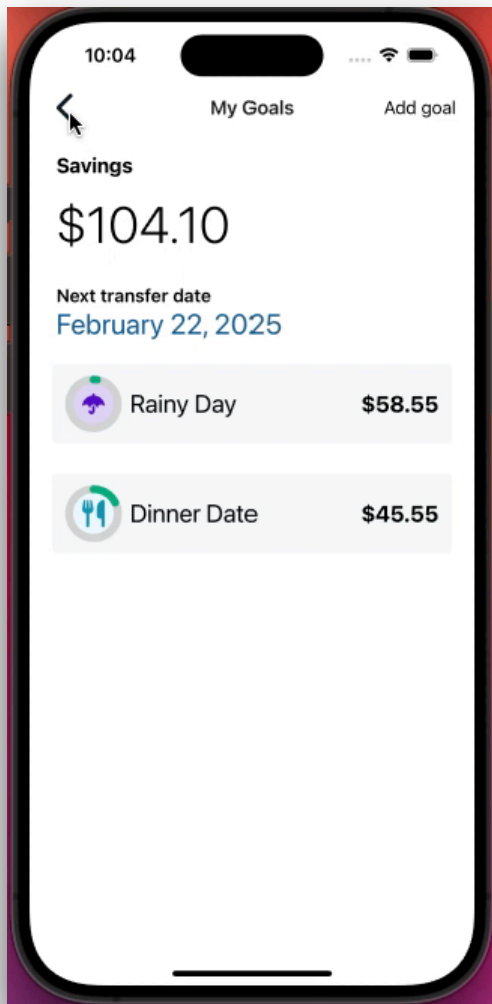
Stage 1: Fintech Foundation – Proving the Model (0-18 Months)

We begin as a nimble fintech company, launching a user-friendly mobile application offering core financial services, powered by our underlying financial engine Cadence, with a focus on generating non-interest income. This initial phase is crucial for several reasons. It allows us to rapidly acquire users, gather valuable data about their needs and behaviors, and refine our product offerings based on real-world feedback. This stage will lay the groundwork for integrating Agentic AI in subsequent phases.

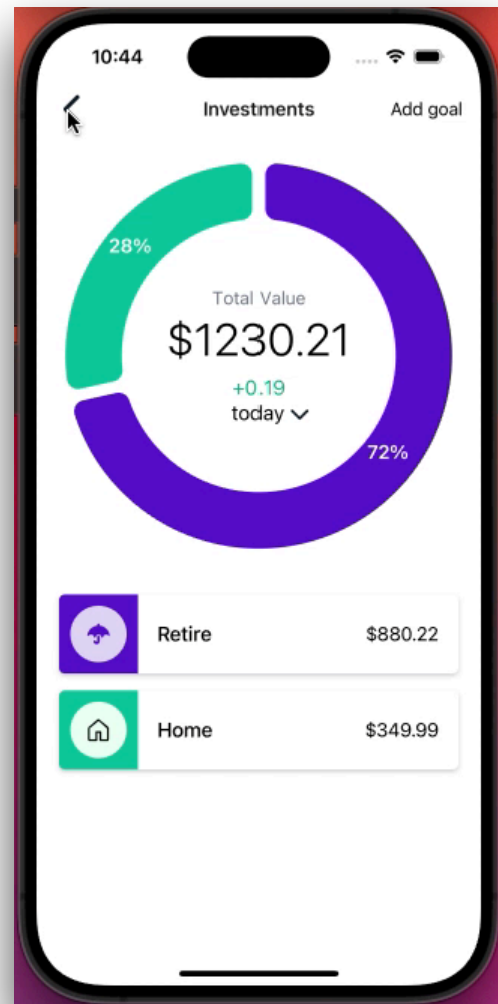
The earliest versions of Nubly app features:

- **Goal-Based Savings:** Users can define financial goals (e.g., down payment on a home, emergency fund, retirement) and receive personalized guidance to achieve them. Our levels of personalization will evolve in their capabilities of AI-driven recommendations as data accumulates.
- **Goal-Based Robo-Advisory Services:** Leveraging machine learning, third part adapters, and proprietary algorithms, we'll offer low-cost investment managed accounts and portfolio management tailored to individual risk tolerance and financial objectives. This is particularly important for those who lack access to traditional wealth management services. We will begin with our proprietary Cadence platform for robo-advisory and over time expand to partnerships on our platforms as transition towards full proprietary Agentic AI solution later in our lifecycle.
- **Financial Literacy Resources:** Interactive modules, articles, and tools will empower users with the knowledge they need to make informed financial decisions. We'll utilize Conversational AI to personalize these resources based on user needs and learning styles, paving the way for more sophisticated Agentic AI tutors, advisor and personal banker.

- **Personal Financial Management** Seamlessly integrated budgeting, behavioral nudges and analyses of everyday transactions.
- **Identity Management Services:** Digital and physical security products to verify, protect and authorize a users identity.



Nubly Savings



Nubly Investments

This initial phase isn't just about building a product; it's about demonstrating our ability to attract deposits, generate revenue through non-interest income (robo-advisory fees, premium app features), and build a loyal user base – all critical factors that will appeal to potential bank partners in the next stage. Crucially, this phase allows us to prove we can operate efficiently and responsibly, minimizing funding costs for any future banking entity.

Stage 2: Strategic Partnership & Capital Injection (18-36 Months)

Having established a solid fintech foundation, we will actively seek a strategic partnership with an existing bank – ideally one that shares our commitment to community development but may lack the technological infrastructure, future operational capacity or focus on this specific target market. This isn't about just acquiring a charter; it's about forging a synergistic relationship where Nubly's technology and expertise complement the bank's existing capital base, triage its current operations and evolve regulatory framework to meet current and future requirements.

The partnership will involve a capital injection into the joint venture with the target bank / partner, enabling us to establish a legally distinct entity that combines the best of both worlds: Nubly's innovative fintech platform and the bank's established banking charter. We envision a progressive ownership transfer of 100% control of the JV in-line with any additions regulatory requirements as Nubly's achieves its strategic milestones, per the established strategic partnership. This approach minimizes regulatory hurdles and allows us to scale rapidly while maintaining financial stability.

In partnership with the target banks existing management and Nubly governance structures we aim to limit the turbulence of transition, reward the exiting ownership team and ensure our mission-driven focus remains central.

Stage 3: Fintech Middleware Migration & Initial AI Integration (36-48 Months)

This phase focuses on seamlessly integrating the partner bank's existing systems with Nubly's fintech platform, Cadence. We will leverage middleware providers – specialized software that facilitates communication between different applications and entities – to ensure a smooth and efficient transition. This is a critical step in streamlining operations, reducing costs, and enhancing the user experience. Our initial goal of this stage is to create a unified banking environment where customers can access all of Nubly's services through a single, intuitive interface.

Crucially, this phase will see the initial deployment of Agentic AI across key areas:

- **Personalized Financial Advice:** Moving beyond our initial conversational AI capabilities, we'll introduce agents capable of understanding individual financial situations and providing tailored advice across all new product lines across budgeting, saving, credit use and now debt management.
- **Automated Customer Support:** Implementing fine-tuned chatbots that can handle a wider range of customer inquiries and resolve issues more efficiently.

- **Enhanced Fraud Detection:** Utilizing open and proprietary algorithms to analyze transaction data in real-time and identify potentially fraudulent activity with greater accuracy.

Stage 4: Agentic Core Banking Platform Development (48-60 Months)

While middleware provides an initial solution, we recognize that true innovation requires a purpose-built core banking platform. We expand the capabilities of Cadence allowing us to evolve into a modern, agentic core banking system – one that is intelligent, adaptable, and capable of supporting both our direct consumer offerings and the main stay of our community development banking strategy, “Banking as a Service” (BaaS) opportunities for other mission aligned fintech companies or CDFI organizations.

Our highest ambitions for the platform at this stage could be key features:

- **AI-Powered Personalization:** The system will analyze user data to provide highly personalized financial advice, product recommendations, and risk assessments. Agentic AI will proactively identify opportunities to optimize a customer’s financial health based on their individual circumstances.
- **Real-Time Data Analytics:** Robust reporting tools will enable us to track key performance indicators (KPIs), identify emerging trends, and make data-driven decisions. Agentic AI will automate the analysis of this data, providing actionable insights in real-time.
- **Scalability & Security:** The platform will be built on a secure, scalable infrastructure capable of handling rapid growth and evolving regulatory requirements. We will leverage advanced security protocols and AI-powered threat detection to protect customer data.
- **Autonomous Financial Agents:** The core banking system will feature fully autonomous agents capable of managing user finances based on pre-defined goals and risk tolerance. These agents will be able to execute transactions, make investment decisions, and provide proactive financial guidance without human intervention.

This investment in core banking technology is essential for long-term sustainability and competitive advantage. It allows us to control our own destiny and innovate at a faster pace than relying solely on third-party solutions.

Stage 5: Feature Release & White Label Solutions (60+ Months)

With the modern agentic core banking platform in place, we will unleash the full potential of Nubly’s capabilities, releasing new features and expanding our product

offerings. This includes our premier development banking goal, launching a white-label lending solution – allowing other community development organizations or fintech companies to fully leverage our technology and expertise to serve their own target markets, local and specific to their needs.

We will also focus on:

- **Expanding Wealth Management Services:** Offering comprehensive estate planning, trust services, and retirement accounts tailored to the needs of low-to-moderate income individuals. Agentic AI will provide personalized investment advice and portfolio management services.
- **Developing Community Development Deposits, Lending, Grants & Investments:** Directly seeking development deposits and investing in local businesses, infrastructure projects, and non-profit organizations that are driving positive change in underserved communities. We will utilize AI to identify promising investment opportunities and track the impact of our investments.

Rebuilding America from the Ground Up: Nubly and a New Vision for Community Wealth

For decades, communities across America have been underserved by traditional financial institutions, stifling economic growth and limiting opportunity. Nubly believes it's time for a different approach – one rooted in the groundbreaking legacy of ShoreBank, but reimaged for the 21st century. We're not just building a bank; we're cultivating engines of local prosperity, empowering residents to build wealth and revitalize their neighborhoods from within.

Nubly is designed to capture and circulate capital *within* the communities it serves. Like ShoreBank before us, we believe in patient, holistic investment – but with a crucial addition: cutting-edge technology. We see a powerful synergy between initiatives like Opportunity Zones and Community Development Financial Institutions (CDFIs), and Nubly is positioned to bridge these forces, amplifying their impact through strategic partnerships with CDFIs, banks focused on CRA compliance, and Opportunity Zone investors.

Our core innovation ambitions rest on Agentic AI – an autonomous system that allows us to provide proactive, personalized financial support at scale. This moves beyond the limitations of traditional brick-and-mortar banking, reaching underserved populations where they are. We can analyze individual needs with unprecedented efficiency, offering tailored solutions whether a resident is seeking a small business loan in a rural area or affordable housing financing in a bustling city.

We're focusing on two critical areas often overlooked by larger institutions: small enterprise and community development lending. By leveraging fintech partnerships and automated decisioning, we can streamline access to capital for entrepreneurs and developers committed to building and maintaining thriving local economies.

But Nubly goes beyond simply providing loans. We're dedicated to fostering stronger households and long-term financial health through accessible investment & wealth management tools – including low-cost robo-advisory services – and comprehensive financial literacy resources delivered via online conversational agents, workshops, and educational content. We envision a future where every household has the knowledge and tools to budget effectively, save for the future, build lasting wealth and generational mobility.

This is made possible by an evolving ecosystem of developer platforms and strategic partnerships that allow us to integrate innovative solutions quickly and efficiently – fostering collaboration and addressing long-standing challenges with fresh perspectives.

Nubly isn't about charity; it's about recognizing inherent value, putting private capital to work and unlocking potential. We believe a stronger, more financially engaged America is within reach, and we project significant economic impact across multiple scenarios: from establishing ourselves as a niche player (\$10-\$20 million in revenue) to becoming an industry leader with \$200 - \$500 million in annual revenue. Our most ambitious goal – reaching \$1-3 billion annually – hinges on expanding our core banking services, offering fintech & API solutions, and deepening our commitment to community development.

Ultimately, Nubly is building a future where every neighborhood thrives through equitable access to financial services. We're committed to lowering debt to GDP by empowering more Americans to participate fully in the economy, creating jobs, and fostering sustainable growth. This isn't just a business plan; it's a commitment to social impact driven by the belief that financial inclusion is fundamental to a stronger, more productive country for all.

Embracing The Cutting Edge of Autonomous Finance and Impact: Navigating the Future Challenges of and with AI

Nubly isn't simply adopting Artificial Intelligence; we're building our future *around* it. We believe Agentic AI – autonomous, proactive agents capable of understanding and responding to individual needs – will redefine banking as we know it. To truly harness this potential and future-proof our organization, a ground up strategic approach is essential.

This isn't about replacing human interaction; it's about augmenting it with intelligence to solve big and true problems at scale. Over time we envision a seamless blend of personalized service and automated efficiency, allowing us to reach underserved

communities in ways previously unimaginable. This requires a fundamental transformation in approach, but strict regulatory cohesion across every aspect of our operations.

Building the Foundation: A Digitally Driven Core

Our journey begins with accelerating digital transformation. This means embracing cloud native computing, the latest in zero-trust security, robust data analytics, and open API / MCP integrations – creating a flexible, interconnected infrastructure capable of supporting advanced AI applications. We're willing and actively forging strategic partnerships with leading fintech innovators, AI startups, and legacy organizations to leverage their specialized expertise and accelerate our progress.

Safeguarding the Future: Risk, Security & Trust

As we embrace this new technology capabilities and iterate towards new offerings, safeguarding our customers is paramount. We understand the importance of investing heavily in intelligent risk management and compliance monitoring to protect our stakeholders, assets and sensitive information. Equally crucial and always evolving will be bolstering cybersecurity defenses against increasingly sophisticated, AI-powered threats.

However, technological prowess isn't enough. Building trust requires transparency. We are committed to understandable policies and explainable algorithms – ensuring customers relate to *how* decisions are made and maintaining open communication about the role of AI, our products and markets in their financial lives.

Empowering Our Team: The Human Element in Autonomous Finance

The rise of autonomous finance will continuously demand new and evolving skillsets. We aim to create a culture of iteration and exploration bolstered by investing in comprehensive upskilling and reskilling programs to equip our employees and community members with the knowledge they need to thrive in this evolving landscape. Inspiring, granting and attracting top AI talent is equally critical, requiring us to compete with leading tech companies by fostering an innovative, challenging and rewarding work environment.

We are also committed to building diverse and inclusive AI development teams – recognizing that a variety of perspectives is essential for mitigating bias and ensuring preparedness for multi-dimensional challenges and outcomes.

Investing in Tomorrow: A Culture of Innovation & Responsible Growth

Our commitment extends beyond immediate implementation. We're prioritizing investment in ongoing AI, consumer behavior, economic research, policy and development, fostering a broader culture of experimentation, learning, and continuous improvement. This includes establishing robust governance and ethics frameworks to ensure responsible data collection, research, development and deployment – guided by principles of fairness, accountability, and transparency.

Data quality is the bedrock of effective AI, policy and product decisions. We are committed to rigorous data management practices, ensuring accuracy, reliability, and accessibility. Through strategic partnerships with community development organizations and fintech innovators, we'll continue to refine our approach and unlock new opportunities for positive impact.

Beyond Finance: Building a Foundation of Trust & Lasting Impact

Nubly isn't simply building a bank or fintech platform – we're fostering a movement and marshalling private capital towards a more prosperous America. This commitment demands a foundation built on unwavering trust, rigorous accountability, and a dedication to measurable impact.

To guide our journey, Nubly shall be overseen by three key bodies: regulators, a Corporate Board of Directors responsible for overall strategy and performance, and a multidisciplinary Strategic Advisory Board comprised of leading experts in law, policy, technology, portfolio management, compliance, and – crucially – community development. This diverse expertise ensures we remain grounded in both financial innovation, our shareholders *and* the needs of the communities we serve.

We believe transparency is paramount. Nubly pledges to regularly publish comprehensive impact reports detailing our progress towards achieving our mission. These reports will go beyond simple metrics, offering a clear picture of how we're aiming to deliver positive change – including the number of households served, the total capital deployed in underserved communities, and demonstrable improvements in financial health, such as increases in average credit scores among Nubly users. We will aim to track economic activity at granular level focusing by zip code or segmenting by average FICO score to understand our impact, alongside job creation and overall economic productivity growth.

This isn't about numbers alone; it's about the stories behind them. It's about empowering individuals with the tools they need to achieve financial well-being, unlocking their potential, revitalizing and building lasting positive change in communities across the nation.

Nubly is more than reimagining finance – we are rebuilding hope, one community at a time. We believe that equitable access to financial services isn't just good business; it's fundamental to a stronger, more productive country for all Americans.

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