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Provider Perspectives on Emerging Technologies:

Insights from Commonwealth's Interviews with Leading Financial Service Providers

The emergence of new technologies profoundly shapes economic prospects and behaviors throughout society. When financial service providers implement new technologies, design decisions can have a major impact on who has access to these tools and whose financial needs they serve. New technologies that are designed without the needs and wants of people living on low and moderate incomes (LMI) can end up exacerbating economic inequalities by focusing on benefits to the already privileged.

Commonwealth's [Emerging Tech for All](#) (ETA) initiative aims to ensure that as the next generation of emerging technologies develops, the needs, wants, and aspirations of people living on LMI are understood and integrated into the design process. We are shedding light on these perspectives by partnering with financial service providers, fintechs, and platform providers who implement emerging technologies to research these needs.

Earlier in 2023, Commonwealth kicked off the second phase of this research with a series of 16 interviews with industry experts and executives at major banks and investing platforms to better understand current priorities and perceptions around emerging technologies and serving customers living on LMI. This brief summarizes some of the insights that emerged from these interviews and highlights areas of opportunity at the intersection of emerging tech and inclusive design.



Key Findings

- Emerging technologies may provide an opportunity to support growing interest from providers in building products to support people living on low to moderate incomes and communities of color. Though we see more provider interest and action, more work is needed to ensure these efforts are effectively prioritized in product strategy, design, and roadmaps.
- Applications of consumer-facing artificial intelligence (AI) are at the forefront of providers' thinking on emerging technologies, with a particular focus on chatbots, recommendation engines, and financial automation.
- Generative AI, such as ChatGPT, is widely recognized as a potential game-changer for financial services, but providers are cautious about implementation and considering internal applications as a starting point.
- Some interest in the potential of blockchain remains, but use cases for retail banking remain unclear.
- There is an opportunity to make a business case for using emerging technologies to support the financial security of people living on LMI, but more data on the benefits to providers is needed.

Designing Financial Offerings for People Living on LMI Remains Rare

Our interviews with financial service providers showed that efforts to address the needs and financial health of households living on LMI were more likely to focus on offerings that could benefit everyone, including the LMI segment.

Although efforts exist to support hiring of lower-income applicants through diversity, equity, and inclusion (DEI) initiatives, as well as philanthropic support for nonprofits focusing on people living on LMI, there is still much work to do to incorporate the perspectives of people living on LMI into the design process for product offerings. Commonwealth's research and work, and that of others, indicates that many providers share these aims. Many interviewees also expressed support for designing products to better serve customers living on lower incomes, but also shared this was not an organizational priority, with more of a focus on meeting the needs of all customers. This reaffirms the motivation for Commonwealth's Emerging Tech for All initiative, which recognizes that emerging technologies provide a key opportunity to shift financial industry actors toward incorporating the needs of these populations into their design process.

When asked about how emerging technologies could benefit customers living on LMI, most providers focused on financial education and access. While these are two important potential benefits, Commonwealth's research aims to explore additional ways that these technologies can concretely impact the financial health of households living on LMI, including building relationships of trust, saving time through automation and action-oriented chatbot support, and assisting with financially significant processes that may fall outside of traditional financial services such as navigating public benefits and medical systems.

There Is Strong Interest in AI Tools for Conversation, Recommendation, and Automation

During our interviews we asked financial service providers about the emerging technologies they were most interested in exploring for consumer finance, and gathered their perspectives on several specific technologies. Throughout these conversations, AI emerged as the highest-interest emerging technology. Provider interest in consumer-facing applications of AI can be grouped into three main categories: conversational AI, recommendation engines, and automated finance.



CONVERSATIONAL AI

Financial Chatbots

Over the last decade, chatbots have become more and more common across online banking, shopping, investing, and other platforms. However, many of these chatbots rely on pre-programmed response trees and function more as directories for commonly asked questions than as agents able to adapt their responses to customer needs. Commonwealth's [earlier research](#) indicates that customers are often skeptical of the ability of these basic chatbots to effectively assist them. Key examples of opportunities for chatbots to support more robust relationship banking for households living on LMI include variable communication styles that can build trust in and comfort with financial institutions, as well as supporting a more holistic engagement with the range of financial services and opportunities that are available through integrating chatbot interactions into action-oriented financial tools.



RECOMMENDATION ENGINES

Recommendation engines are software algorithms that analyze data on user behavior and preferences to make personalized recommendations for products or services. In a financial context, recommendation engines can provide customers living on LMI with tailored guidance to support financial health, including personalized advice and product recommendations based on customers' financial data.

In our interviews, financial service providers showed a strong interest in this form of personalized recommendation and many were already implementing systems of this type for product recommendations on their organizations' apps and websites; for example, identifying relevant loan products that people qualified for or products that other customers with similar profiles were already using. Some providers we talked with also focused on recommending next best actions in addition to identifying relevant products based on customers' financial characteristics. Further technological advances are expected to increase the effectiveness of these recommendations, but user trust in algorithmic recommendations from financial service providers remains a key barrier.



AUTOMATED FINANCE

Financial automation provides a key opportunity to save time and improve financial habits by automating processes such as investing, saving, and budgeting. Improving technology continues to expand the possibilities of automated finance, going beyond basic actions like automatically saving a set amount from each paycheck to adaptive savings that can automatically adjust allocations based on income, spending flows, and customer goals. Automated finance is a major force in retail investing in the form of robo-advising, which allows customers to indicate their values, risk tolerance, and other parameters while an algorithm creates and manages an appropriate investing portfolio for them.

During our interviews with providers, many indicated that they already had or were interested in implementing various forms of financial automation. However, for most, the idea of more advanced automation that could adapt in real time to financial data was seen as novel and had not yet been implemented. While there are significant opportunities for more advanced automation to support the financial health for households living on LMI, as with the other technologies discussed, trust remains a significant barrier—particularly so with automation which goes one step further to actually initiate financial transactions rather than just make recommendations.

Looking Ahead

GENERATIVE AI

Recent advancements in natural language processing and large language models have produced a new generation of generative AI products (e.g., ChatGPT) that can vastly expand the capabilities of chatbots in consumer finance. In our interviews, financial service providers showed the strongest interest in using generative AI chatbots to better serve customers. While traditional chatbots guide customers through a set of pre-written answers, generative AI opens the possibility of genuine dialogue that can respond to the nuances of their financial and life circumstances. In this way, generative AI can support customer relationships and financial decision-making in ways that normally require human agents, and which are out of reach of traditional chatbots. This nuance also facilitates the kind of trust that may make customers living on LMI feel more comfortable discussing and receiving support for financial hardships they are facing. In some cases, seeking assistance from a generative chatbot may be preferable to a human agent because people know they will not be judged for the challenges they are facing.

However, due to the novelty of this more advanced technology, financial services providers have generally not yet rolled out consumer-facing generative AI products, in part due to uncertainty about how to ensure the reliability of generated responses. This represents a key opportunity to work with providers early in the development of the next generation of consumer-facing AI to ensure that opportunities are considered for these technologies to support the financial health of customers living on LMI.

BLOCKCHAIN

Blockchain technology remains on the radar for many financial providers who see potential benefits, primarily in internal applications. However, there remains a lack of clarity around what form these benefits might take or how blockchain might fit into broader organizational systems. Recent high-profile organizational failures and a cooling market in the cryptocurrency industry have lessened the enthusiasm for blockchain that peaked in recent years.

Research Must Build a Case for Inclusive AI Design

Even though interviewees see many headwinds such as awareness, education, cost, complexity, and resistance to change when it comes to implementing emerging tech, they are excited about the ability for emerging tech to be:

- Personalized (going beyond segmentation and truly personalizing the experience, education, and advice at the consumer level);
- Omnichannel (seamless transition and experience across access points); and
- Holistic (account aggregation or “open banking” to bring a more complete financial picture of a consumer).

Interviewees were generally sympathetic to the goal of designing emerging technologies for households living on LMI, but given that most major financial players do not already consider this an organizational priority, it will take a concerted effort to build the evidence base and make the business case for these efforts. From a business perspective, interviewees cited a higher acquisition cost and lower profitability for customers living on LMI as barriers to prioritizing them in emerging tech design decisions. However, we see significant potential for design guidance around things like building trust that can facilitate the ability of conversational AI and other emerging tech to support financial health for this segment without major cost increases. Relatively little research exists on this topic today, so some interviewees cited the need for larger scale studies to build the kind of evidence that they could use to make the case for this kind of design internally.

Commonwealth’s Emerging Tech for All initiative aims to rise to this challenge by producing impactful research that both demonstrates how emerging technologies can support the financial health of households living on LMI and makes the business case for more actively designing for this underserved consumer segment.

Conclusion

Financial service providers are excited about the possibilities of AI tools in retail banking, but understanding how best to implement these tools and how to ensure they are implemented in ways that support the financial health of people living on LMI requires further research. Through our continuing Emerging Tech for All work, Commonwealth aims to provide this research along with [actionable guidance for organizations implementing these tools](#). If you are interested in partnering with Commonwealth to ensure that emerging technologies in finance are designed to benefit everyone, please reach out to info@buildcommonwealth.org.



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