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Publication Date

2023-02-13

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CBDC Field Research Insights: Public Perception and Acceptance of Digital Payment Systems in Indonesia

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By Agus Indiyanto (Universitas Gadjah Mada, Indonesia)

For Vera, 23, a culinary entrepreneur, digital payment options are a necessity, as they are for most Indonesians. These payment instruments provide answers to present-day demands that everything be done easily, practically, and independently. As with the development of e-commerce, people have benefited from the existence of payment instruments that can be operated independently, at any time, to launch transactions, without needing to go to a bank or an ATM.

COVID-related government policies in Indonesia over the last few years limiting people's mobility catalyzed public acceptance of new digital payment methods. And even though these new payment methods still don't allow cross-platform payments, and people still use cash for small things like parking fees, almost all of the participants in our study held positive views of digital payment instruments and stated that they would continue to use them.

Vera's story illustrates some of the benefits of digital payments, while also underscoring some of the remaining challenges to their uptake and use. Vera still has to go to the ATM every day to withdraw money because most of the market traders who supply her culinary business do not use digital payments. While she could shop at a convenience store that uses digital payments, that would cost her more, ultimately being unprofitable for her business. And the inability for users to make cross-platform payments is a hassle—even more so since the money from the digital platform is only transferred the following afternoon. Still, Vera stated that she would continue to rely on digital payments:

"75% of my transactions now use digital. Yes, because it is easy and practical. It is also profitable for business, apart from the fact that we don't bother looking for a change, the digital platform provides a good record for controlling the business."

Vera is an example of the small number of people who have extensive digital literacy. Other members of Indonesian society have not widely adopted digital payment modes, even when they have access to the infrastructure to conduct digital transactions. More and more people have the technology and 4G coverage that would allow them to make transactions digitally, but people are still hesitant to use digital payment tools.

The results of our survey in five provinces in Indonesia reveal three obstacles to the broader adoption of digital payments.





Figure 1. The Real “Mobile” Service

First, there are low levels of digital literacy, so people view the presence of digital payment modes as nothing more than an additional option for payment, and only for specific purchases. This is partly because most people learn about digital payments from advertisements in shops and digital platforms like Gojek, Shopee, and Grab, and so they associate them with discounts, cashback, or free shipping on specific items. This leads people to view of digital payment tools instrumentally: they will only use digital payment tools if there is a discount or some other purchase incentive. It is not surprising, then, that the average balance in digital wallets is generally very small, and more than 90% of respondents mentioned that they only top up their e-wallet when they are going to buy or pay for something and get a discount. The amount of each top-up is below 100,000 rupiahs (53%).

Second, people have experienced problems with digital purchases that have affected public acceptance of digital payment instruments. Almost all participants claimed to have experienced issues in shopping digitally—for example, goods that did not appear as advertised or did not match what was purchased. These problems lead to conflicts that are often not resolved properly. Participants preferred to block the contact numbers of sellers or couriers and just consider the problem solved rather than go through the time-consuming process of lodging a complaint without any guarantee that they would get their money back.

Third, there is an unequal distribution of support infrastructure for digital payments. Some food stalls installed QR codes that they received from banks or service providers that work with them, such as Gojek or Grab. However, these codes turned out to be unusable, and the stalls returned to using cash. When they feel the digital payment system is not profitable, they no longer use it, though they may keep the QR codes attached to their booth.

In addition, the large digital infrastructure gap between cities and villages means people are unable to fully access digital payment services. Some of the participants in this study experienced transaction difficulties due to unstable signals. A participant admitted that he could not sleep one night because his transaction was interrupted by a signal and had not been confirmed, and he was afraid the money would be lost. Other people who used digital payment applications said they couldn't have dinner in certain towns because there was no digital service and it was difficult to find an ATM to withdraw cash.

These three things—low levels of digital literacy, problems with digital purchases, and uneven digital infrastructure—make it difficult for people to fully leave cash and switch to digital money. However, our survey also shows generational differences in viewing and accepting digital payments. Younger participants preferred digital payments, while older participants still found it difficult to leave cash due to habits and feelings of security when they are able to see money in their wallets.

Seeing money means control over money, and this helps people make decisions about how much they can spend in a certain period (until their next payday, etc.). While digital payment service providers have offered new forms of transaction security and ways to resolve transaction problems, many see these procedures as cumbersome and time-consuming, and the language used to explain these procedures is often too technical and difficult to understand. This issue can only be resolved if there is a change in procedures that make them easier for customers to understand.

This work was conducted as an independent 2022 research project on central bank digital currency and financial inclusion, in collaboration with Maiden Labs, the MIT Digital Currency Initiative, and the Institute for Money, Technology & Financial Inclusion, and funded by the Gates Foundation. You may view the context of this study on the [IMTFI blog](#) and details of the new research report release [here](#).

Original blogpost published on the IMTFI Blog on February 13, 2023 can be found here: [CBDC Field Research Insights: Public Perception and Acceptance of Digital Payment Systems in Indonesia](#)

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