DIGITIZATION OF THE LOAN APPLICATION PROCESS
A FINANCIAL INCLUSION PILOT PROJECT IN GEORGIA
In July 2019, the Asian Development Bank (ADB) and Finca Bank Georgia (FBG) signed an implementation agreement to conduct a pilot project on the digitization of the loan underwriting process using a tablet-based digital field application (DFA). The pilot formed part of the regional ADB technical assistance project “Strengthening Financial Sector Operations in Asia and the Pacific” and built on previous support from ADB’s Private Sector Operations Department, including development of a credit score card system and provision of tablets for increased field presence. A local service provider was selected to provide FBG with the DFA, enabling digitized loan underwriting for all FBG loan products online and offline.

The expected outcome of the pilot project was improved operational efficiency and increased outreach to underserved market segments.

**Figure 1: Overview Finca Bank Georgia Pilot Project Results Framework**

- **Output**
  - Digitization of the loan underwriting process, especially in the field

- **Intermediate outcome**
  - Operational efficiency
  - Customer cost and convenience

- **Outcome**
  - Increased financial inclusion

*Source: Asian Development Bank.*
The pilot was implemented in four stages, of which the first three were completed in 2019, and the fourth was largely completed by mid-2021.

DFA = digital field application.
2019—Straightforward technical completion of the project

Technical completion of the project proceeded largely in line with plan and by the end of 2019 the DFA had been rolled out and was used in all FBG branches. Integration with the core banking system and several external databases were completed without major technical challenges. The initial plan to have all loan products integrated and in use by the end of 2019 was ambitious and later adjusted to a staged rollout to allow for back-office quality assurance and front office integration of the new processes into its processes and routines.

2020—Several external factors hindering completion

The year 2020 was dominated by two external events: acquisition negotiations with a local microfinance institution and the coronavirus disease (COVID-19) pandemic, which both had consequences for and delayed implementation. Initially, acquisition negotiations put continuation of loan product integration into the DFA on hold due to uncertainties about future portfolio composition. In March 2020, restrictions on business operations were imposed due to COVID-19, affecting outreach and onboarding of new clients. Eventually, due to the pandemic, the acquisition was cancelled. Integration of remaining loan products was further postponed to early 2021 pending possible adjustments in the loan portfolio as a result of changes in corporate strategy.

Early 2021 acquisition negotiations with a different actor started, which put tablet procurement as well as integration of some of the remaining loan products on hold. In July 2021, acquisition of FBG by Credo Bank Georgia was officially announced.¹

2021—Loan product integration completed and clear operational efficiency gains visible

After the successful integration of the first loan product in 2019, remaining loan products were set for a staged roll-out early 2020, however halteded due to external factors, mentioned above. The micro-loan product targeting the agriculture sector was finally integrated in November 2020, and the agri-installments and agri-insurance products in June 2021. With this, approximately 80% of all loans and 75% of the volume was channeled through the DFA and indications pointed clearly to greater operational efficiency as a direct result of the DFA use. Loan processing time and cost were cut to around one-third of the 2019 baseline and the loan officer caseload increased about 70% over the 2019 baseline.

2022—Post-pilot potential for field use and agent integration

The DFA was ready for field use and roll-out to agents from the start. This was however held back due to several factors. Externally, field mobility was affected by COVID-19 and its consequences for business and movement, and, internally, it was affected by difficulties using previously purchased tablets, due to hardware obsolescence and changes in National Bank of Georgia regulations. Procurement of new tablets was planned for early 2021, but was halted by the acquisition negotiations and eventually cancelled. In addition, delayed integration of the agri-installment products resulted in limited use of the DFA during the 2021 agri-season. Since the DFA was not piloted in the field, it is not possible to measure or estimate effects on outreach as a result of the pilot. Nonetheless, potential remains, and it would be interesting to follow-up on what possibilities exist for the DFA to be integrated and used in the Credo Bank environment.

Despite the many challenges, by project end there were clear indications of increased operational efficiency, as a direct result of DFA use. Above all, loan processing time and cost was cut by one-third and loan officer caseload had increased by 70%, compared to baseline. Due to the events explained above, the DFA was however limited to desktop use by loan officers at FBG branches. As a result, the DFA was not piloted in the field or rolled out with agents stationed at agri-stores. By pilot end, it was not yet possible to capture effects on outreach to underserved market segments attributable to DFA use.

In 2021, the service provider was expanding use of the DFA to other financial institutions, in Georgia and in the region, demonstrating the relevance and ease of replicability of the product. It could be valuable to follow up on how the pilot contributed to outreach, and in turn financial inclusion, beyond FBG.

### Key achievements

- Loan processing time and cost cut by 1/3
- Loan officer caseload increased by 70%
- Substantial increase in loan process quality
- Benefits visible immediately
- Replicability for other financial institutions across Asia and the Pacific

### Improved operational efficiency – benefits visible immediately

The intermediate outcome refers to improved operational efficiency at FGB as a direct result of the pilot.

1. **For products integrated into the DFA, loan transaction time and cost was cut by one-third compared to baseline.**

   In addition, loan processing through the DFA improved quality of decision, and was proven highly useful and appreciated by both front and back-office staff. Early 2019, before integration of the digitized loan process and application of the credit score card, the project management team surveyed selected branches and staff on the loan registration, approval, and authorization process. This included loan officers, back office, the branch committee and underwriting, as well as the risk and credit departments. It did not include the loan officer’s time spent in meetings with the customer and onsite customer visits. A follow-up survey was conducted in June 2021, showing clear efficiency gains. For loan products integrated into the DFA, the average time spent on and cost associated with each loan application was cut by one-third. The quality of the process also improved considerably, leaving less space for manual adjustments and human error. FBG estimated that there was room for further efficiency gains as the ratio of automated approvals or rejections continued to increase and the need for support from underwriting and risk departments continued to decrease.

2. **Loan officer case load rose by 70%.**

   Loan officer caseload, measured as average number of loans processed per month per loan officer, increased substantially—by more than 70%. This was mainly due to DFA efficiency gains, along with an increase in the number of agri-installment loans and fast-to-process credit limit loans. In addition, an increase in loan officer attrition rate as a result of the lengthy acquisition process and the pandemic, a smaller number of loan officers were forced to processing an increasing number of loans. Without the DFA it would have been challenging if not impossible for the remaining loan officers to maintain the loan volume and process of an increasing number of loans with a reduced number of loan officers.
3. **Slight decrease in credit back-office staff.**

There was a slight decrease in number of credit back office staff in 2020. Further decreases were foreseen as remaining loan products were integrated into the DFA and the loan approval process was automated for additional, more complex products.

4. **Throughout acquisition negotiations and the many challenges COVID-19 posed, customer satisfaction continued to increase from already high levels.**

In 2021, both the customer satisfaction index and net promoter score increased, indicating that FBG remained a respected player in the field, despite the many external events affecting business.

**Limited effects on outreach—DFA not piloted in the field**

The expected outcome was increased outreach to underserved market segments. This did not materialize within the framework of the pilot.

1. **It is not likely that the DFA had any effects—positive or negative—on FBG outreach or penetration ratios.**

Overall, FBG penetration ratios decreased between 2019 and 2021. The decrease in account customers was largely but not only due to removal of dormant accounts from the system in 2020. The 2020 acquisition negotiations also resulted in a certain loss of customers, as did the temporary hold on onboarding of new loan customers early 2020, due to COVID-19 restrictions. This was followed by an overall downturn in the economy affecting many small and medium-sized enterprises and with it the loan portfolio during the remaining pilot time. In addition, DFA use was limited to its desktop version, and never rolled out on tablets for field use, where the main onboarding of new customers was foreseen to happen.

2. **The pilot project did not result in an increase in the number of agri-stores or agents, and did not have any effect on outreach through agri-dealers or agents.**

The number of agents was reduced in 2020 due to COVID-19 and the expansion of agri-dealers was put on hold. At the same time, the existing tablets, necessary to run the DFA in the field, had become obsolete to the requirements of both FBG and the National Bank of Georgia and would need replacement. Procurement was initiated, only to be halted and eventually cancelled in 2021 due to acquisition negotiations. The agri-installment product was only integrated at the tail end of the 2021 agri-season and the DFA was not rolled out for use by agents. By pilot end in June 2021 the number of agri-dealers remained largely the same, while the number of agents was temporarily reduced, mainly due to COVID-19.

3. **The targeted increase in number of loans was met, both overall and for agri-installments; however, the increase in total portfolio volume was more modest and did not reach the target, especially for agri-installments.**

Between 2019 and 2021, FBG saw a considerable increase in number of loans, exceeding the targets both in general and for agri-installments. This trend differs from the penetration ratio above, as one loan customer might have more than one outstanding loan. Furthermore, the increase in number of loans was not reflected in a similar increase in loan volume, where targets were not met. This was partly due to the economic downturn caused by COVID-19, affecting small and medium-sized enterprises and agribusiness in particular. The high loan officer attrition ratios further complicated expansion of the loan portfolio. However, the downward trend seen in 2019 and 2021 was broken in 2021 when the total loan volume increased considerably.

This shows the range of factors influencing the number and volume of outstanding loans and the care that needs to be taken when attributing both positive and negative changes to financial technology.
Operational Efficiency and Outreach

Strengths, challenges, and lessons

The technical aspects of the project were completed in line with plans by the end of 2019. In 2020 and 2021, FBG struggled with several external events affecting implementation of the last components. By mid-2021, all key loan products, covering 80% of all loans and 75% of loan volume, had been integrated and the pilot successfully proved the efficiency gains of an automated loan approval process. The fact that the DFA was not used in the field or by agents stationed at agri-stores, complicated any efforts to measure effects on outreach as a result of DFA use. Several lessons were learned during implementation that could be of value also for other fintech pilot projects.

Strengths: ownership, collaboration, technical implementation, early benefits, and replicability

Pilot project implementation benefitted from a dedicated core project team, with strong cross-departmental ownership. This contributed to timely implementation of the majority of expected tasks and outputs. Collaboration between partners also worked well, especially between FBG and the local service provider, but also between FBG and the regulator (National Bank of Georgia) and ADB. Working with a local service provider facilitated swift communication and eliminated language barriers.

Technical implementation was fairly straightforward and presented no major hurdles that held implementation back. Integration with both the core banking system and third-party databases were made without major technical challenges. Delays were not caused by technical implementation issues.

An important aspect to highlight is the ease of replicability. By mid-2021, the service provider was expanding the use of the DFA to other financial institutions, not only in Georgia but throughout the region. This further demonstrates the relevance of the pilot and use of a DFA for small financial institutions focusing, for example, on SMEs or agri-loan products, and highlights its potential to contribute to outreach and, in turn, greater financial inclusion at scale. The DFA demonstrated flexibility in terms of adjustments during implementation, and adaptability to other financial institutions’ systems.

Acceptance at branch level benefited from the immediate benefits of the DFA, visible as soon as the first loan product (fast loans) was integrated. Use of DFA for this product contributed to a decrease in manual work and human error, and in loan processing time. It also increased the possibilities for data analysis. Benefits were seen at both the front and back end. Overall, loan process time and cost was cut by one-third for products integrated in the DFA and overall loan officer case load increased by 70%, compared to baseline.

Challenges and lessons: Timeline, processes, hardware, frontline, and external events

Timeline and targets, and external events

The original timeline was ambitious and did not factor in the extensive human resources needed for implementation, nor the adjustments needed at branch level to adapt to the new system. This led to an initial delay in integration of all loan products into the DFA. Postponed integration of agri-stores and agents was also partly a result of human resource constraints within the project team. Delays beyond 2019 were

Strengths

- Dedicated core project team and strong cross-departmental ownership
- Good stakeholder collaboration
- Straightforward technical implementation
- Benefits visible immediately
- Replicability to other FIs in the region
Excerpts from a document discussing operational efficiency and outreach challenges:

**Challenges**

- Ambitious timeline and targets
- Limited process mapping
- Hardware obsolescence
- Limited room to influence external events

Exacerbated by two major external events: acquisition negotiations and the business operation restrictions put in place as a consequence of the global COVID-19 pandemic.

**Lessons:**

The project could have benefited from a somewhat longer implementation period from the start that factored in time for the unexpected—internal/technical and external. That would also have allowed for a staged rollout plan, above all for tasks involving the frontline, such as integration of loan products and agents. The sheer volume of work combined with a need for time to adjust at the branch level led to postponement of most loan product integration after rollout of the DFA to the branches.

Hardware lifespan and obsolescence

The pilot was centered around implementation of a digital field application, with an offline mode as a key feature and increased outreach a key expected outcome. The pilot built on the assumption that the DFA, when used in the field, would be run on tablets provided through a previous ADB project. During implementation it became clear that these tablets had become obsolete and would not provide the necessary features, including size (e.g., for customers’ document review) and options for digital signature of documents. A procurement decision made in late 2020 was put on hold in early 2021 due to the acquisition, and eventually cancelled. The DFA was not piloted or rolled out for field use before project closure.

**Lessons:**

Hardware (and software) lifespan and obsolescence needs to be factored into long-term project plans and budgets. Cost-benefit analysis of different options and scenarios could help flag possible issues earlier, e.g., comparing various expected lifespans of both hardware and software, and comparing investment options with lease/license models and other subscription options. Use of smartphones may be an option, but with limitations in size (complicating document review for clients) and due to data security issues (e.g. connecting with core banking system and running confidential data).

Process mapping

During initial discussions with the service provider shortly after project kick-off, it became clear that more detailed documentation of processes from involved departments (e.g., credit, risk, accounting) than existing was required. The lack of readily available, detailed process mapping made definition of scope and technical requirements more cumbersome for both the core project team and the service provider.

**Lessons:**

The project would have benefited from preparing a detailed process flow from all concerned departments ahead of project launch and onboarding of the service provider.

This was incorporated for similar future exercises by both the FBG team and the service provider.

External factors and strategic management decisions

Two external factors—acquisition negotiations and the COVID-19 pandemic—had direct negative effects on the project, putting implementation largely on hold during much of 2020 and providing limited space for progress during the remainder of pilot implementation. The external factors led to disruptions in business and to changes in top management in 2020, which in turn initiated a revision of the current
business strategy that temporarily put pilot implementation on hold as the product portfolio was revised. The year 2021 was dominated by acquisition negotiations and once confirmed in July 2021, further implementation was halted indefinitely.

**Lessons:** External events and the need to for senior management to adapt in line with these are outside the control of most pilots. Building in time for temporary “pauses” in implementation due to unexpected external events could limit overall disruptions as tasks are pushed forward and piled on top of each other, and with that the risk for an overwhelming workload once implementation resumes. This relates directly to lessons above on timelines and targets.

**Frontline adaptation**

A main reason for the initial delay of integration of all loan products into the DFA was to allow for the frontline, i.e., branches, to test, adapt to, and get used to the new system, after integration of the first loan product (fast loan). This process was lengthier than anticipated, and included further adjustment of back office processes and to the integration with external databases. Once completed, time did not allow for integration of remaining products before the 2019 end-of-year holiday season and due to the external events affecting FBG throughout 2020 and 2021 integration of remaining products remained slow. At the same time, as loan officers started to see the immediate benefits of the DFA, its use was largely embraced and requests for further implementation dominated any hesitations or concerns.

**Lessons:** Including time and support to “change management” in the timeline, in addition to the technical aspects of implementation, could have resulted in a staged rollout from the start and put the spotlight on the tight implementation schedule. A staged rollout of loan products from the start could have ensured that, e.g., the agri loan products were included early, while other less seasonal products, could be integrated later.