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Informed Consumers Improve Financial Service Utilization

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Arifu's mission is to provide information and opportunities for all. Arifu Insights informs Arifu's business strategy, content, product development, as well as an agenda for future partnerships to drive our mission.

This edition of Arifu Insights showcases our commercial value proposition for the financial services sector. The cases presented here will show how knowledge generation for consumers at a mass scale creates financial returns for financial service providers. Importantly, these cases also show how this commercial value ties back to impact on consumers through informed decision making and improved financial behaviour. In effect, this brief makes the case for why financial institutions should invest in digital consumer education programs.

# Arifu's Impact

Below are some of the results we have observed across projects highlighting a strong demand for knowledge through Arifu's platform, impact on Learners of Arifu, and commercial returns experienced by partners.

#### **Demand for Arifu**

Net Promoter Score overall and 78% in 2020 (60 Decibels).

People on average looking at Arifu content within a household (Arifu).

#### Value for Learners

Increase in the value of loan payments by small businesses (Arifu)

Increase in savings among women (World Bank).

#### Value for Partners

among merchants (Arifu).

accounts (Arifu, Busara).

The outcome measures given above provide a snapshot of the full database of results available at Arifu. To learn more visit our Impact Dashboard and Key Insights documents that showcase our results in more depth.

# Arifu's Commercial Value Proposition

With 72% of our Learners living off of <\$5.5 per day carrying underserved demand for knowledge and skills, we see a significant commercial value proposition for firms looking to increase their customer segment reach.

#### **Enhancing Loan Portfolio:**



At a cost of \$2-\$5 per year per Learner, we have observed a causal increase in borrowing of \$45 over the same period. This was paired with higher repayment rates (10%) and repayment values (24%). That is the equivalent of a fifteen fold increase in working capital based on investment.

#### **Improved Savings:**



Engagement with Arifu has also shown to increase both the Arifu Learners' savings value and the frequency of savings in several case studies. In a case study in partnership with Vodacom M-Pawa, Arifu Learners increased their savings value 8 times while the saving frequency increased 4 times.

#### **Predictive Analytics:**



Learning on Arifu is associated with higher incomes. This showcases the potential of Arifu's engagement data as a viable predictor or add-on to existing data sources for creditscoring. Learning on Arifu is measured as associated with \$84 higher revenues for farmers.









# Arifu's Commercial Value: Improved Financial Service Utilization



Financial inclusion is tightly linked to inclusive economic growth. Financial services utilization is often limited by insufficient knowledge of financial services partly due to inaccessible language and complicated fineprint. Consequently, households, particularly low-income ones, are often hesitant to take on a financial service, even if it may be a good solution to their needs. More so, a fear of scams or unmanageable losses further limits financial service utilization. Arifu's Financial Education, Business Education, and product-specific educational content tackles this problem head-on for our financial partners and their customers.

The following case studies show how engagement with Arifu results in value for both our commercial partners and Learners.

#### Case Study 1: Impact of Arifu's Content on Borrowing Behavior







In partnership with Kenya Commercial Bank and the Mastercard Center for Inclusive Growth, Arifu digitally delivered Financial and Business Education training along with training on the use of a loan product 'Jaza Duka' to over six thousand merchants across Kenya. Below are the results on the impact of Arifu's Financial Education and 'Jaza Duka' product content. These results are derived from comparable groups of Arifu Learners and Non-learners based on historical transaction behaviours.









the Value of **Payments** 

For a cost between \$2-5 per Learner over two years, this is a significant financial return on investment. We saw a net increase in borrowing of approximately \$4 per month per Learner over the span of the year studied. With higher payment incidence and payment values alongside, this meant a significant increase in the working capital for Kenya Commercial Bank.



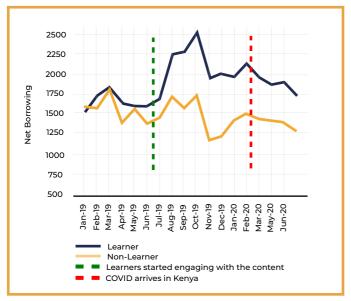
### Methodology

This study looked at data from January 2019 through June 2020 and included the first three months of COVID-19 in Kenya. To identify causal effects, we matched Non-learners with Arifu Learners on historical transaction behaviour and measured the average change in trends over time after engagement with Arifu.

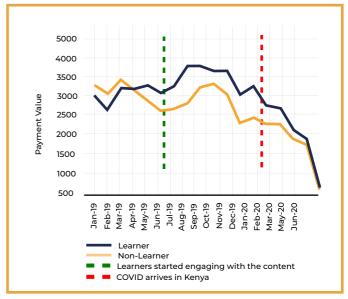








Net borrowing trends of Learner (blue) and Non-learners (orange) before Arifu, after Arifu, and after COVID.-19.



Payment value trends of Learners (blue) and Non-learners (orange) before Arifu, after Arifu, and after COVID.-19.

This project shows strong commercial value before and during COVID-19 for a large bank. In addition, it shows improved payment behavior indicating better utilization of a lending product by customers who used the Arifu platform.

Case Study 2 will speak to the impact of our digital content on these merchants during COVID-19.

#### Case Study 2: Impact of Arifu's Financial Resilience training on merchant profits



Berkeley





According to a nationally implemented survey done by the World Bank between June and August 2020, 93% of businesses experienced a decline in sales compared to the same period of the previous year as a result of the COVID-19 pandemic.

In response to this, Arifu, Mastercard Center for Inclusive Growth, Kenya Commercial Bank, and researchers from UC Berkeley offered and evaluated the impact of debt relief and Arifu's digital training on merchants across Kenya. For this intervention, Arifu rapidly designed content on Financial Resiliency, an evidencebased module to help merchants navigate business stresses caused by COVID-19. The interventions were deployed in November and December of 2020.

A 1500 merchant midline survey was implemented in March-April 2021 whereas a medium term endline survey was implemented in July-August 2021. The measurements showed that an additional month of credit relief or Arifu's Financial Resilience training offset risks caused by COVID-19 and improved business performance over different time periods with a differential cost of delivery.



Digitally delivered Financial Resilience training for an additional month reduced the impact of COVID-19 and improved business performance during the midline survey.



Providing credit relief earlier showed considerable improvements in business performance and daily revenues during the endline.

# Methodology

This case study involved a randomized controlled trial with lagged interventions. In effect, the research team measured the difference in profitability of merchants comparing those who got exposed to an intervention type for a month longer than those who got lower exposure to the same intervention.

As such, the results from this study are conservative in nature as all merchants in the study received both training and credit relief, hence making it difficult to ascertain the impact of training

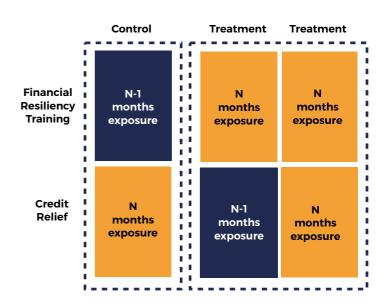






Arifu's digitally delivered trainings can significantly impact outcomes for small business owners. Pairing these trainings with additional interventions can likely have multiplicative effects. There are several takeaways from these case studies, some of which are:

- ♣ Digitally delivered trainings can improve commercial outcomes for financial institutions with potentially significant return on investment especially during business as usual times.
- Importantly, merchants accessing digital tools like Arifu can over time learn from additional trainings as and when needed, strengthening their own agency.
- Timing and availability of interventions can have significantly different impacts over different periods of time. These interventions can strengthen the agency for decision-makers like merchants to navigate problems as they see them.



Design of the Randomized Controlled Trial.

The following case studies will share additional instances where we have seen how digitally delivered trainings can consistently create market value for financial institutions.

#### Case Study 3: Impact of Arifu's Financial Education content on Farmers in Tanzania











Arifu's Financial Education and product content have shown to offer solutions in Tanzania as well. Arifu, in partnership with Vodacom M-Pawa and Commercial Bank of Africa, offered Financial Education on savings, borrowing and M-Pawa products to rural farmers in Tanzania. Below are the results from an analysis of the Learners transactional data on M-Pawa:









The study found that Arifu Learners borrowed more, have lower outstanding amounts, and make payments sooner. Comparing Learner transactions before and after interaction with Arifu showed that Learners took larger loans by TZS 1,017 and made larger loan repayments after interacting with Arifu.

"Through interaction with the platform, I re-looked at my monthly expenditure and I am now able to differentiate between 'wants' and 'needs'. Surprisingly, even the monies that I initially thought to be small can easily grow into big savings."

**Anonymous Arifu Learner** 







### Case Study 4: Impact of Arifu's Financial Education on Women in Tanzania







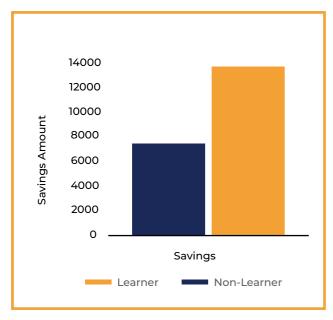


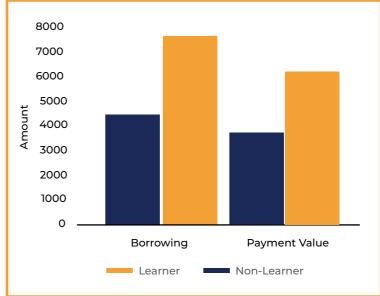
Arifu partnered with Technoserve to offer Financial Education and a tool to set saving goals to 5,242 females small business owners in Tanzania. Arifu's training was part of a blended program that also included in-person training.

Results from comparing Arifu's Learners to Non-learners are below.









Impact of Arifu's content on improved financial services utilization comparing Learners to non-Learners.

These results show that Arifu's Financial Education provides value for our Learners though improved financial behaviour. The Learners saved more and adapted better borrowing behaviour with higher loan repayment values and frequencies. Commercial value is therefore derived for financial institutions which significantly increases their working capital from the higher savings, and more frequent and higher loan repayments.

Across multiple studies in Kenya and Tanzania, we have seen how improved knowledge can enhance the capabilities of Learners and growth of commercial partners which we argue makes a strong case for investing in digital education for all.

"Instructions on savings have helped me create daily, weekly, and monthly targets that I have to save in my bank account. With this plan, I have always managed to meet all my targets. I have even accessed loans twice from the bank which I used to expand my electronics business."

Anonymous Arifu Learner (Tanzania)





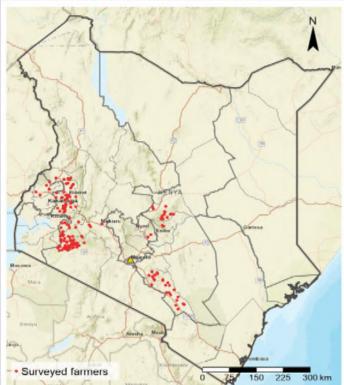


# Increasing Economic Inclusion: Alternative Credit-Scoring

While significant strides were being made towards increasing economic inclusion and improving incomes, it is no surprise that COVID-19 is in itself going to disproportionately affect the livelihoods of middle to low income households. This risks reverting decades of progress in reducing poverty.

In parallel, more than 70% of women in Africa are financially excluded by having consistently lower access to finance than men. Arifu recognizes this as a major global issue that might not be solved by only providing access to financial education.





Lower financial literacy, lack of collateral, and limited credit histories are some of the main factors that might prevent vulnerable populations, like women, youth, lower-income, or dispersed communities, from accessing finance. Arifu sees an opportunity to respond to this issue by not only providing various forms of financial or other education through our multiple channels, but by also building an alternative credit score based on attained knowledge and skills. Financial institutions can use the alternative credit scores to more fairly assess segments that are often financially excluded due to their perceived 'high risk'.

A study done in collaboration with researchers from World Bank and Harvard University revealed that Arifu's aggregate Knowledge Scores (a measure of a Learner's learning) is predictive of revenue and profit.

The study found that increase in Knowledge Score is predictive of higher revenues (\$84) and profits (\$17). This makes the Knowledge Score a signal for creditworthiness and for understanding customer socioeconomic backgrounds for better product targeting.

Read more about the study here.

Locations of surveyed farmers marked with red dots.

Arifu's platform can therefore be adapted as a tool that not only effectively assesses the creditworthiness of Learners through Knowledge Scores, but also one that actually improves their creditworthiness through the Financial Education content that has been shown to improve financial behaviour.













# Arifu's Value-proposition

Arifu's impact in financial services is consistent with the global evidence base. Our review of the literature shows that innovative modes of financial education delivery, like those involving edutainment, conversational interfaces, rule of thumb advice, and behavioral cues, can be particularly successful in improving financial behavior as well as financial outcomes.

The results across various studies also show that well-designed learner-focused digital training is an effective effort for economic relief during tough economic environments and can be taken up by stakeholders from the private or public sector to complement traditional measures like cash or credit relief.



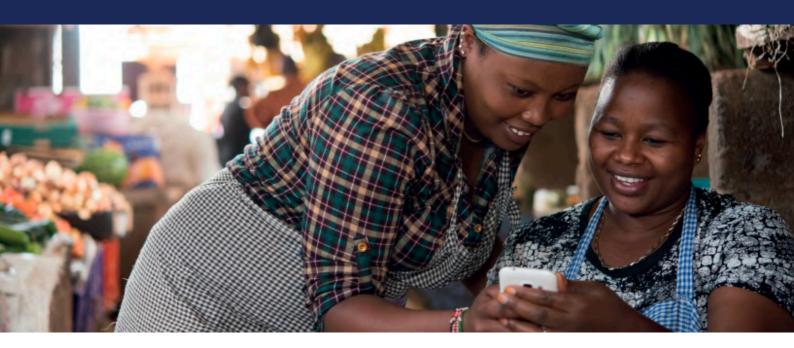
Because of Arifu's digitally delivered approach, the cost of providing flexibly available, easy-to-access, and free trainings for a vast numbers of households can cost as low as \$2 per Learner. This results in a considerable return on investment for firms all while increasing consumer education, confidence, and incomes.

Lastly, our data systems can further enable expansion of market access for firms, consequently improving financial inclusion for excluded individuals. Moreover, our research methodologies can adaptively measure results for our partners to allow for rapid course correction in product strategy as well as communication of successes to different stakeholders.

# Call for Partnerships

Arifu aims to expand its reach and impact on Learners by increasing the depth of breadth of our content. In order to achieve this, we are seeking partnerships with innovative public and private sector partners to improve financial education for all.

Financial institutions, public sector institutions, multilaterals, and other stakeholders with an interest in increasing financial services utilization and inclusion can reach out to us at info@arifu.com to discuss how Arifu's digital content can be adapted and deployed for your audiences.











### Acknowledgements

The Arifu team are grateful to the organizations that have believed in our mission and partnered with us in the various projects mentioned in this brief. These include Mastercard Center for Inclusive Growth, Kenya Commercial Bank, researchers of UC Berkeley, Vodacom M-Pawa, Technoserve, Commercial Bank of Africa, and researchers from The World Bank and Harvard University.

Arifu team are also grateful to the great minds that helped us refine our ideas and effectively communicate them in the form of this brief. These include, but are not limited to, Albert Wasike of Safaricom, Collins Marita of Mercycorps, Hafsah Jumare of Coamana, Louis Graham of Busara, Nancy Kairo of African venture Philanthropy Alliance, Tamilore Oni of Google.org, and Venu Aggarwal of 60 Decibels.





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Interactive Voice Response (IVR)



Facebook

# References

While the reports and papers below are the ones utilized for this edition of Arifu Knowledge, our teams scan through a large number of global research papers to identify useful insights to inform our operations. All Arifu reports listed below are available upon request.

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