FY20 Q2 Quarterly Report
1 October to 31 December 2019

proximity

Highlights

- We had a good quarter for customer growth across the whole business, adding 65,781 new customers, a 53 percent increase year-on-year. For our irrigation and farm advisory businesses, this was our most successful quarter ever for customer growth. Our target for the financial year is 142,000 new customers across Proximity. Year-to-date, we are at 54 percent of that target.
- The unit economics of delivering our services to farmers improved significantly this quarter, as we have transitioned to two new lower-cost channels: agro-dealers and digital subscribers.
- A key external trend we have observed is a significant and rapid shift out of growing rice due to the lack of irrigation water supplied by government dams in upper Myanmar. This has caused farmers to move to growing other less water-intensive crops such as sesame, chickpeas and horticulture (onions, melons, chili, etc.).
- Our earned revenue exceeded our targets this quarter. Proximity-wide (3 businesses), we covered 73 percent of operating expenses with non-grant revenue – an all-time high.
- We secured 100 percent success rate on our yearly renewals, from all of our key donors who have supported us in previous years.
- Jamie Stevenson joined Proximity Designs to head up Proximity Labs, our R&D team.

Opening Thoughts

Overall, we had a good first half of the fiscal year, with strong progress towards our customer growth targets. We have also made significant advancements in shifting towards lower-cost delivery channels. Engaging with our customers digitally has allowed us to further scale our impact, by reaching a wider audience at a lower cost. This has resulted in better unit economics of promoting our irrigation systems and agronomy practices.

Meanwhile, the agricultural landscape in Myanmar is once again shifting – driven by farm labor migration and climate change. This shift has impacted our rice-related services the most. Demand for our rice seed cleaning service – which was popular over the last four years – is declining, because amid labor shortages it is more expensive for farmers to hire additional labor before planting. Demand for our existing soil testing service, which is currently tailored for rice, also dropped as farmers are forced to exit rice growing for other crops such as sesame, chickpeas and mung beans in response to changing weather conditions. For these non-rice crops, farmers have expressed interest in soil testing, and we are updating our testing service and recommendation model in response.

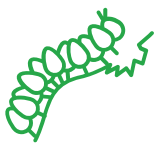
Finally, we are now achieving significant leverage from our donor funds. For example, Proximity Finance started 8 years ago with USD 1m from post-cyclone Nargis relief grants. Today, their portfolio is worth USD 30m. We are in the process of bringing on equity investors, which will enable us to grow the loan portfolio to USD 60m over the next couple of years. The ratio of earned to grant revenue is also trending upwards: this quarter, our operating budget is 70 percent covered by earned revenues across the organization.

The Yetagon Farm Services Platform

Our branded platform of services to small farmers currently consists of the services listed below. We are adjusting these services to adapt to the changing cropping patterns and needs of farmers. For example, we are expanding our services to cover the non-rice crops farmers are shifting to, as our customers are requesting agronomy support and capital for these higher value crops.

IRRIGATION SYSTEMS

SOIL HEALTH TESTING



CROP PROTECTION

SEEDS & PLANTING AND NUTRIENT MANAGEMENT

FARM FINANCE

MECHANIZATION SERVICES

+ Irrigation Systems

We offer a range of micro-irrigation systems under the Yetagon brand. This is a highly seasonal business, with the heaviest sales occurring between October and March, corresponding with the dry season in Myanmar. This quarter was our most successful ever, with sales to 18,326 farming households. This increase is driven by a new product we launched at the beginning of the growing season: the multi-angle mister, a long, 1" diameter plastic tube with small pin-holes to produce a light mist to water row crops. This product is the result of an iterative and responsive design process, driven by farmers' feedback about standardized dripper hole size, pipe quality and adjacent pricing compared to other options available in the market. It has proved particularly popular among onion growers. To date, we have sold micro-irrigation systems to 23,123 growers across all crops, achieving 61 percent of our annual target. Earned revenue from irrigation sales for Q2 totaled USD 472,134, a 64 percent increase year-on-year. Earned revenue during this quarter covered 54 percent of Yetagon Irrigation's expenses.

+ Soil Health Testing

During Q2, our field teams sold soil health tests to 3,132 farmers. Year-to-date, we achieved 77 percent of our targets. As our soil test is currently calibrated for rice growers only, the rapid shift of farmers away from growing rice has resulted in lower-than-expected sales. In response to feedback received from farmers, we are expanding soil tests to include another 10 key crops grown in Myanmar. Earned revenue from soil test sales in Q2 totaled USD 31,460, covering 6 percent of Farm Advisory Services' (FAS) expenses.

+ Crop Protection

We experienced an increase in demand for our crop protection services. In Q2, we provided in-field pest and disease diagnosis services and recommended treatments to 2,822 new farmers. As of December 2019, we served a total 6,603 farmers. The main infestations diagnosed and treated were the brown plant hopper pest, fall armyworm, black stem disease and golden apple snails.

In March 2019, we introduced the sale of trichoderma, a fungus that serves as a bio-pesticide, as an entrypoint to growers of our new focus crop, sesame. Trichoderma is Farm Advisory Services' second revenue generating product, and costs farmers just USD 7 per acre. Because it is not widely available in the market, we are working with Myanmar's Department of Agricultural Research, which produces limited quantities in their labs. It is effective in fighting the crippling black stem disease – a fungal disease in the soil which harms plant growth. It is also known to improve soil quality and crop yield, and is useful for several crops in addition to sesame. As changing climate conditions create greater risks of pests and diseases spreading, products like trichoderma are especially crucial in helping farmers adapt.

+ Seeds & Planting and Nutrient Management

In the area of improving farming practices, we continued to promote effective fertilizer management and rice seed cleaning. In Q2, we added 18,935 new adopters in total – up 126 percent year-on-year, and 144 percent ahead of our targets. The large increase in adoption was driven by the success of our new digital messaging channel, which now accounts for 60 percent of adoption.

While overall customer numbers grew, our rice seed cleaning adoption had a weak quarter, with 2,187 adopters. This is largely due to many farm customers shifting out of growing rice and the rising cost of farm labor, as seasonal workers migrate to Myanmar's urban areas and neighboring countries. Rice cleaning is fairly labor-intensive and farmers are reluctant to invest their time in this practice because of the high opportunity costs. In the Delta, we have started to phase out promoting this service through our field staff – as most farmers in these villages are now familiar with this agronomy technique from successive years of promotion. We will shift towards only promoting this practice through online channels, instead of in-person.

+ Farm Finance

During Q2, we added 21,311 farm loan clients. Our total portfolio stands at 122,000 outstanding loans. Year-to-date we have added 46,595 clients. The total loan portfolio is now MMK 48.9 billion, or about USD 32m. Our average loan size has increased to USD 265. We opened a new branch in Shan State, in Lawksawk – our third in this agro-ecological target zone. Currently, 55 percent of our portfolio is in the Dry Zone and 28 percent in the Delta. The portfolio also reflects the shift of farmers from rice to other more profitable crops. Our PAR30 default rate was low at 0.11 percent in Q2. The net operating profit for Q2 was USD 359,067.

This quarter, we also continued to offer savings accounts that are mandatory for our loan clients, as instructed by the regulator for a set period of time. We hope to eventually have a significant amount of voluntary savings accounts to help fund our operations. We currently offer savings accounts to 112,466 Proximity Finance borrowers.

+ Mechanization Services

Tun Yat, the separate venture we helped to incubate in 2017, delivered 5,000 acres of rice harvesting services this quarter. Tun Yat provides mechanization as a service for smallholder farmers, enabling farmers to benefit from machinery without having to invest large amounts of capital to purchase equipment.

The Multi-channel Farmer

We use four primary channels to market and sell our products and services to farm households: 1) direct field staff, 2) a network of village agents, 3) agro-dealers and 4) mobile/online. Farmers increasingly want to engage with us in both physical and digital ways.

In a significant shift, 60 percent of our micro-irrigation systems are now sold through dealers and 8 percent through agents. This has reduced our sales costs significantly. For our agronomy services, 69 percent of our improved practices advice is now delivered online (58 percent when soil tests are included). The advice delivered via online chatbot results in roughly the same adoption rates as that delivered in-person by field staff – but at a fraction of the cost. Our farm lending is still done primarily via lending groups. For our irrigation and soil test sales, we are moving towards an agent-led selling model. If successful, this has the potential to reduce our selling costs significantly. Over time, we anticipate reducing our direct sales channel for irrigation and halting the expansion of our force of field crop advisors.

Marketing

We relaunched our customer-facing Yetagon (meaning 'waterfall') brand this year, with a big online marketing effort. Our online ads reached 6.5 million people across rural Myanmar in Q2. Over the past 12 months, we reached a total of 15 million rural people with our ads. This is likely to be almost every rural person who had internet access during that period.

In Q2, 68,847 farmers used our chatbot to learn one of our agronomy techniques. For the first time, this included agronomy practices for crops other than rice, such as peanuts and green gram. We conservatively estimate 22,005 farmers fully adopted improved practices on their crops after engaging with our online education efforts. We now have a total of 400,000 online subscribers. Anecdotally, brand awareness is growing rapidly; when traveling across the country and meeting farmers, most have now heard of Yetagon.

Proximity Labs Projects

We continue to explore new products and services, focusing on farm management and micro-irrigation. During Q2, we finished a design exploration of aerial sensors for crop scouting and pest and disease diagnosis. The project produced normalized difference vegetation index (NDVI) crop health maps of rice fields of approximately 5 acres, which farmers showed great interest in. While the technology shows potential, we concluded that current sensor technology is not yet capable of diagnosing plant pests accurately. We also explored the use of drones for crop dusting (i.e. spraying of pesticides on rice).

These trials were also quite promising, but we remain constrained by the lack of highly skilled operators to operate each individual drone.

In micro-irrigation, we made good progress on two new products – a large diameter sprinkler for vegetable crops and a new, improved drip emitter. The products will be sourced from Thailand and China, but we will still design and work with suppliers to produce to our required specifications. Our role is in selecting and offering the best-fit devices for Myanmar's conditions. We are also developing a product that allows farmers to fertilize their crops through their drip irrigation system (so-called "fertigation").

Impact Measurement and Customer Research

This quarter, we conducted a significant survey of our farm finance business and started a survey on the life cycle of our micro-irrigation systems. The farm finance survey involved 516 farm interviews and resulted in several key findings:

- **Increase in farm incomes:** Farmers receiving crop loans showed a positive, median net income year-to-year difference of **USD 247** compared to the control group.
- **Decrease in household debt:** Farmers receiving our crop loans showed a median decrease of **USD 118** in the additional debt taken (excluding the loan from Proximity Finance), compared to the control group.
- **Increase in investments:** Compared to the control group, farmers receiving our crop loans saved less (a median of **USD 138**), and instead invested more (**USD 188**). In particular, farmers who received a USD 400 loan for the second time in 2018 showed a substantial increase in their investments by **USD 913**. Key areas of investment included house renovations, education and farm equipment. This trend can be attributed to the increased net farm income, as well as the increased available cash due to larger loan amounts. There was also increased spending on village ceremonies and donations.

The micro-irrigation study was designed to measure how long farmers use our products. The last time we measured this – about 5 years ago – the life cycle of use was 4 years. The preliminary results of our most recent survey are encouraging. Farmers use our products for at least four years – often much longer. Once farmers use our micro-irrigation systems, they do not return to traditional surface irrigation. Therefore, the introduction of our improved irrigation technologies is having lasting long-term impacts on farming practices, profitability and family incomes.

Data Analytics and Digital Operations

Around 90 percent of our operating data is now fully digitally integrated, including customer data, operational transactions, financials and KPI targets. This data is now available on business intelligence dashboards for managers and frontline team members. We started a data architecture project, including CRM and data warehousing. Proximity Finance has made good progress on their transition to a new Core Banking System this quarter, and will go live starting from early February.

People Operations and Team Development

Our in-house Proximity School now offers courses covering 22 key workplace skills. We deliver these in a unique facility, using adult learning methods that focus on application of skills and feedback. Our top three most popular courses are: How to give an engaging presentation; Sales/Customer engagement; and Business ethics. Our online learning portal is also growing, with 50 staff completing courses online this quarter.

As of 31 December 2019, total staff count stood at 943. Overall, turnover was 4 percent for the quarter, with the most affected category being our field agronomists – most of whom we hire straight out of agricultural institutes in rural areas.

Outlook

As already noted in our last quarterly report, we continue to see our customers gradually moving away from growing rice towards other crops – often for the very first time. This is primarily a result of unusually low levels of monsoon rain in several large dams over the past year, which led the government to impose water usage restrictions on farmers growing rice during the dry season.

We expect demand for our irrigation products to increase further, as farmers look for ways to irrigate non-rice crops efficiently. While there has been a significant decline in prices for rice, as well as corn and watermelon, prices for a number of other crops – such as onions, beans and pulses – increased. Higher crop prices should support greater demand for our micro-irrigation products and farm finance, as these crops typically require bigger capital investment.

Another key trend we continue to monitor closely is growing labor migration from rural areas towards cities or neighboring countries such as Thailand. Labor shortages in rural areas have led to an increase in rural wages, which is starting to negatively affect farmers' decisions to use some of our services. Notably, we are seeing our customers gradually moving away from services which require significant time investment and thus opportunity cost on their side, such as our rice seed cleaning practices.

“I can put my watering cans in a museum now”

U Than Htike, a farmer of 24 years in Kungyangon, along with his wife Daw Khin Nann Htwe, grew okra and jasmine on their 1 acre farm.

Two years ago, they were introduced to Pyae Sone Oo, our irrigation sales representative. During their initial meeting, Pyae Sone Oo Showed them a 2 minute video, demonstrating the ground sprayer in action. U Than and Daw Khin Nann thought about the 400 trips they took each day between the well and their field, carrying their heavy watering cans.

U Than knew it was a risk to purchase a ground sprayer, but he decided to purchase one anyway. “You can’t be afraid to take a risk. I took it.” With the ground sprayer in hand, now watering his crops only takes 20 minutes, with just a switch of a couple valves in his field. This freed up so much of his time, that after two years and significant return on his investment, he decided to triple his plot size and plant additional higher value crops.

U Than’s wife, Daw Khin Nann, used to spend all her time in the field along with 8 other laborers they would hire. Since the introduction of the ground sprayer, she’s started her own sewing business, which makes school uniforms for the youth in their township and beyond. She now owns 4 sewing machines and employs 8 women from her village.

Previously the couple made around USD 2 a day, now they make over 5x that, at USD 4,000 per year. The combined incomes from both businesses are reinvested in the farm, and ultimately they were able to send their son to university in Yangon - something they never would have imagined before.

Financial Results

Proximity Designs

FY20 Q2: July 2019 - December 2019

*in thousands of US Dollars

	YETAGON IRRIGATION	FARM ADVISORY SERVICES	PROXIMITY FINANCE	GENERAL & ADMIN	**TOTAL**
INCOME					
Grant Income	2,777	2,326	100	837	6,039
Earned Income	568	48	4,430	6	5,052
TOTAL INCOME	3,345	2,374	4,530	843	11,092
TOTAL OPERATIONAL EXPENSES	(1,665)	(1,395)	(3,865)	(502)	(7,427)
Total Operational Expenses covered by Earned Income (%)					68%
OPERATING INCOME	1,680	979	665	341	3,665

* In accordance with US GAAP for Not-For-Profits

Please note that Remeasurement Gain or Loss is not included.

1. In nature, Trichoderma fungi are lost due to soil disturbances. Supplementing soil with Trichoderma can restore healthy population levels, prevent disease infection and increase nutrient uptake.
2. Yamin Myo Nyunt from Proximity School provides Change Management Training to Proximity Finance field managers. Managers learn how to develop a change management plan and communicate it to all relevant stakeholders.
3. Our drip irrigation system watering tomato plants.
4. Khin Yee Lwin, an extension officer from our Minbu branch in Magway region, provides advice on crop nutrition and agronomy to a customer.
5. U Shwe Thein, a soil health test customer from Letpadan (Bago region), standing among his rice paddies.