



Modernizing Your Farm Sales with Mobile Point of Sale Systems

AUTHORS

Chris Wayne, Maria Rojas,
Jack Hornickel





Introduction

Being a successful direct-market farmer is incredibly challenging, requiring expertise in a variety of skill sets: farming, marketing, accounting, distribution, employee management, and business planning. While farmers have a general understanding of their inventory and sales, the lack of detailed data can prevent some farmers from making informed business decisions.

As a farmer, can you accurately describe the size of your average sale? Do you know how much a discount increases gross sales of one of your products? What time of the day/week/year do you make the most gross sales? Which are your most/least profitable products? Point of Sale (POS) is the key to answer many of these critical questions.

What is Point of Sale?

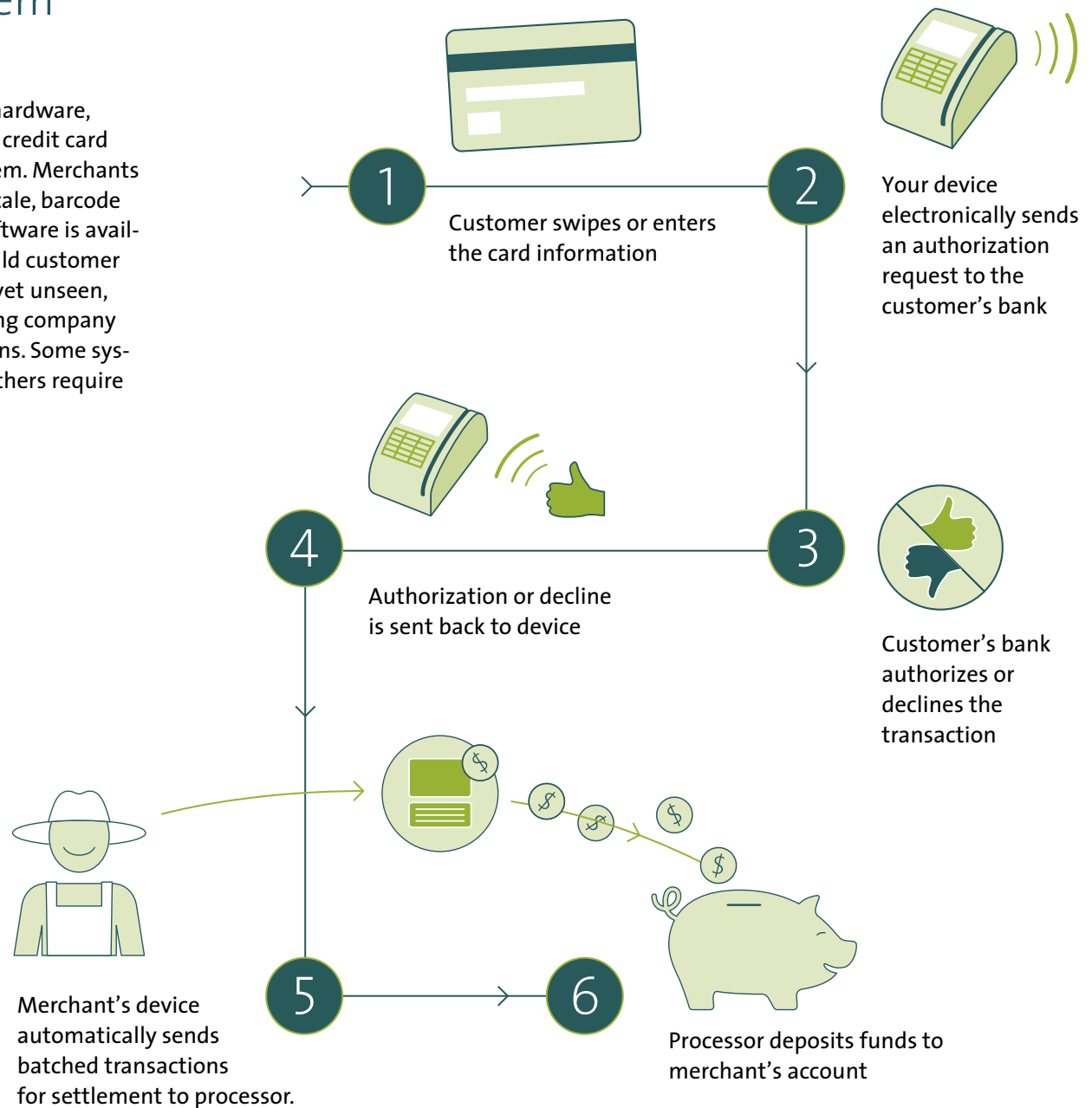
A POS system is a combination of software and hardware that allows retailers to process transactions and simplify day-to-day business operations. Think of point of sale systems as a modern-day cash register, but in addition to ringing up sales, it can gather vital, real-time information, and help you manage other critical parts your business.

Basic set-up of a POS system

A POS system is primarily made up of the physical hardware, which at minimum includes a register screen and a credit card reader. Specific software is required to run the system. Merchants may use additional hardware, such as a cash box, scale, barcode scanner, and receipt printer. Likewise, additional software is available to manage inventory, supervise employees, build customer loyalty, and perform accounting. A very important, yet unseen, element of a POS system is the credit card processing company required to process credit, debit, and EBT transactions. Some systems come with their own credit card processors, others require merchants to choose their own.

Swipe the stripe, dip the chip:

All credit cards are now transitioning to EMV chip technology, which reduces fraud by making it harder for identity thieves to replicate a transaction. While it is not a legal requirement to accept chip cards, merchants assume liability for fraudulent transactions if they do not offer the technology.



What can POS do for my farm business?

A POS system can improve a farm business in a variety of important ways. At its most basic, a POS system allows your farm business to process credit card transactions. This is increasingly becoming a necessity as the economy continues to move towards more cashless currency. At its most complex, a POS system can be a powerful business tool to gather comprehensive marketing information.



Sales Data Reporting:

Sales are the meat and potatoes of farm businesses, yet many producers do not have a detailed understanding of how much, when, and in what quantity their sales occur. POS can help farmers determine which items are bringing them the most profit, which times of the day/week/year are the busiest for their business, and which items are not selling well.

POS can generate the following sales reports:

- Sales data by item, location, customer (individual and/or business), time of day, and employee working the stand
- Gross profits for time, day, week, months, year
- Top selling/worst selling items
- Projected profit reporting
- Sales by type of payment
- Sales activity by day/date range – including returns, discounts, taxes



Get Out What You Put In

Sales reports are only as strong as the completeness of the data that is entered. Therefore, it is critical to report cash, credit/debit, and EBT transactions through your POS software. Otherwise, your sales reports do not provide a full picture of your business. A good POS system can greatly IMPROVE inventory tracking and REDUCE office time!



Sales Data Reporting in Action!

By monitoring sales data, a participating producer determined that cooking greens (kale, collards, chard) did not sell well during the spring and early summer months and were hard to produce with early season flea beetle pressure. Using sales data to feel confident in their decision, the business cut out early season cooking green production and saw a decrease in labor costs. By putting resources towards lettuces, tomatoes, and flower production, they replaced low return crops with profitable crops, reduced labor and production costs and generated additional income.



Customer Management

Being in regular contact with your customers through email and social media marketing is a fantastic way to generate new sales, receive useful customer feedback, and build customer loyalty. POS systems have customer management features that can track repeat customers, generate target marketing campaigns, monitor gift cards, and create customer loyalty programs.

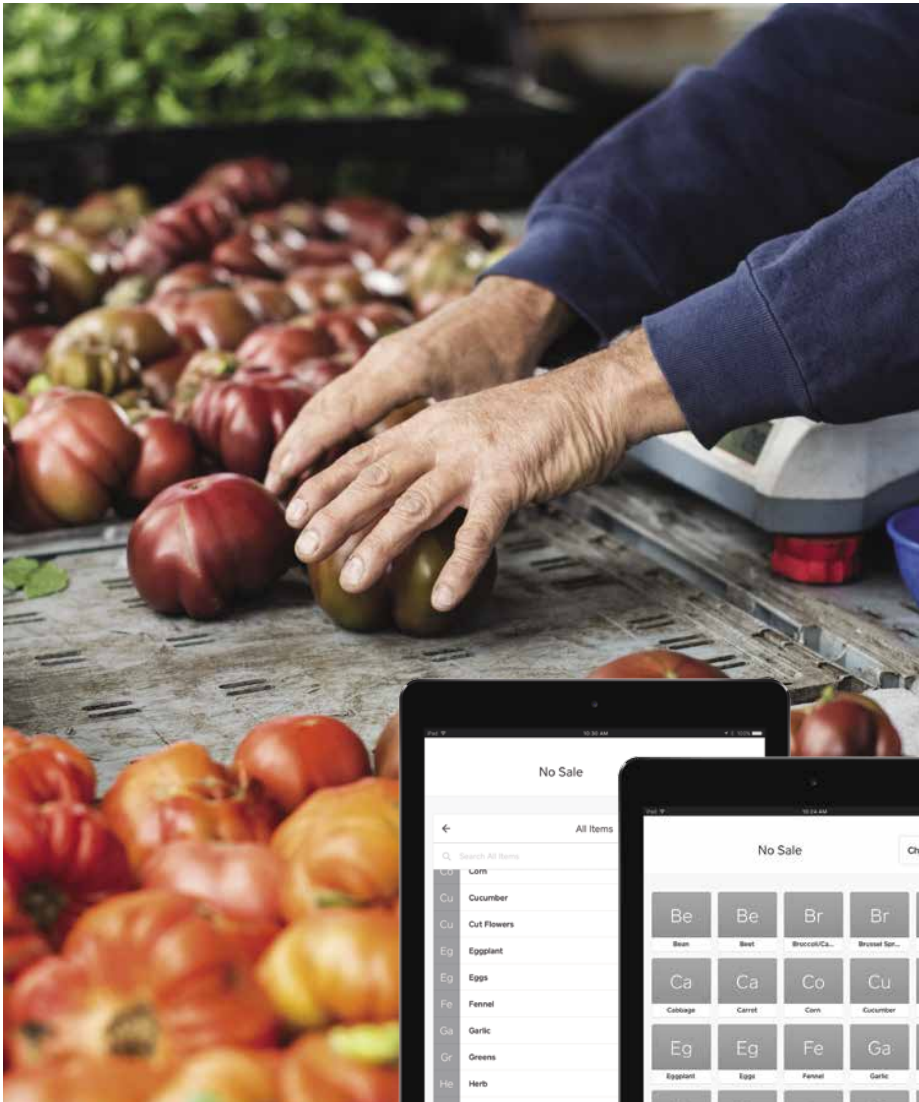
POS can generate the following customer management reports:

- Total sales by customer
- Top customers
- Purchase and return history per customer
- Sortable database of customer profiles
- Customer interaction with social media and newsletters
- Customer feedback (through receipts)



Customer Management in Action!

Many farmers who sell through farmers markets experience slow sales in their first weeks back to market in the spring, as customers become accustomed to shopping at the market again. Using customer management features of POS, farmers can email their entire customer base with a few clicks of a button to alert them that their farm business is coming back to market, with their signature products, ensuring that the market season starts with strong sales.



Inventory Management:

POS can make your on-farm and at-market inventory easier to manage. Farmers can manage large inventories directly from crop plans by importing Excel spreadsheets, including important information such as availability, cost of goods sold (COGS), varieties, etc. Notifications can be created for when items are running low, and inventory can be tied to back-end accounting systems like Quickbooks for seamless record keeping.

POS can generate the following inventory reports:

- Inventory reorder report
- Inventory value report
- Inventory by location
- Real-time inventory tracking report



Inventory Management in Action!

Do you keep paper versions of individual market inventory? POS inventory allows you to generate individual, digital market inventories that automatically subtract as transactions are processed throughout the day. No more reconciling beginning and closing inventory at the end of every market day!



Employee Management

Attentive, professional, and knowledgeable sales employees can make a dramatic difference to your farm's bottom line. Farm owners do not always have the chance to attend markets, which can make it very difficult to determine each employee's individual performance. POS systems can generate the following reports to support employee management:

- Employee time/clock hours
- Shift reports
- Employee till counts
- Sales by employee
- Profitability by employee



Be at Market while on the Farm

For producers who can't physically be at market on a consistent basis, POS provides you with real time information to monitor your farm remotely. Check in on sales, employee performance, and inventory while riding on the tractor! (Just be sure to turn off the tractor first!)



Employee Management in Action!

For producers trying to cut costs, understanding sales by employee can be extremely important. Data review may show that employees are generating the majority of market sales during certain key windows throughout the day, i.e. the breakfast, lunch, or post-work "rush." By bringing on market staff only during these key high sales windows, farmers can limit their market labor costs and increase their bottom line.

POS Systems for Farmers



Hundreds of different Point of Sale systems are available for farmers to choose from, with more systems entering the market every day. **However, very few are a perfect match for diversified farm businesses attending open-air farmers markets.** Given the diverse nature of farm businesses, there is no silver bullet system that works perfectly for all types of farms. Farmers must determine which features of POS are most important to improving their business and then match a system to their needs. Luckily most POS sellers have free trials. Below is a list of primary criteria to consider when making a purchase:

Cost:

Generally, POS costs can be broken up into the following: hardware, monthly software subscription, credit card processing fees, data plans, and additional features and services (such as customer loyalty). These costs vary across different companies and providers.

Front and Back-End Features:

A POS system consists of the front end, or the register components, and the back end, where inventory is added, reports are generated, and the system integrates (or doesn't) with your accounting software. While most POS offer the same front-end features, there is wide variance in back-end features. See next page, Product Comparison, for a review of the core features of concern to farmers.

Ability to Accept Multiple Currencies:

While all POS systems can process cash and debit/credit, most POS systems cannot accept EBT. Many systems, however, do allow merchants to create a separate currency category to record sales from non-traditional currency types (EBT, FMNP, Health Bucks). Processing needs to take place through a third-party.

POS customer service:

Farmers will, inevitably, end up needing to call their POS provider to discuss an issue or concern that has come up. Twenty-four-hour customer service from specialists is vital to getting farms through some of the early POS growing pains.

Ease of setup and use:

Although all POS systems have relatively simple user interfaces, some of them will be more intuitive than others. Some users complain that buttons are too small, or scrolling through multiple product menus takes too long during check out.

Hardware functionality:

Online forums are littered with complaints from users about hardware, specifically card readers. Because POS is a relatively recent technology, many companies are still working out the kinks. Do your research before buying!

Contracts and service terms:

Many POS businesses will reduce upfront costs if you sign longer term contracts, while others will force you to use certain hardware that may not be compatible with your business. Make sure the contract and service terms work for you and your business before committing to an extended contract.

Product Comparison

POS Name	GENERAL OVERVIEW		COST STRUCTURE			FEATURES						CUSTOMER SERVICE
	Pros	Cons	Subscription	Hardware	Processing	Scale Integration	Inventory	Customer Management	EBT	Accounting Software Integration	Invoicing & Purchase Orders	
Square	The most feature-rich mobile processing solution you can find without a monthly fee. Cost is its biggest draw, with a flat rate and inexpensive card readers.	Square cannot currently process decimal weights. It also has inconsistent customer support. Inventory features are basic, but can be supplemented with apps.	Free	\$	\$		✓	✓✓	✗	✓	✓✓	✓
Shopkeep	Developed specifically for small businesses, it has an intuitive interface, simple price structure, and rich features. Great customer service and integration with mailchimp are big pluses.	For producers with multiple markets, Shopkeep can get expensive, because costs do not decrease as more terminals are added. Complaints about menu size and long searches for products.	\$\$	\$\$\$	\$	✗	✓✓	✓✓✓	✗	✓	✗	✓✓✓
Infotouch	One of the few systems that can process EBT, Infotouch has features geared toward farmers markets.	Very high upfront hardware costs for producers, and relatively untested POS.	\$\$	\$\$\$\$	\$	✓	✓	✓✓	✓	✓	✓	✓
Mobile Market Register	An upgrade to the market link POS, MMR creates an EBT-ready POS with all the basic features you would expect from POS.	As a start up, the software is relatively untested and customer service can be hard to come by.	\$	\$	\$	✗	✓	✓	✓	✓	✓	✓
Revel	Suited to larger farm businesses, Revel is highly customizable and can manage multiple locations and up to 500,000 SKU's.	Not as initially user-friendly as other POS systems, Revel takes time to learn.	\$\$	\$\$\$	\$	✓	✓✓	✓✓	✗	✓	✓	✓✓
Clover	A very basic POS on its own, Clover can be supplemented with various free apps. It is sold through partnering merchants, such as banks and business suppliers. Simple interface.	For farmers who need multiple devices, Clover can be very costly up-front. Since being bought by First Data, complaints about customer service have increased dramatically.	Free	\$\$\$\$	Varies depending on merchant	✓	✓	✓	✗	✓	✗	✓
NCR Silver Basic	Easy to use, flexible, and solid built-in customer management features. Can integrate with a scale, and comes from a tested company.	Producers have complained of glitchy hardware, extra hidden costs, and lack of certain advanced features (e.g. creating invoices/PO)	\$\$	\$\$	Varies	✓	✓✓	✓✓✓	✗	✓	✗	✓✓

Farmer Case Study

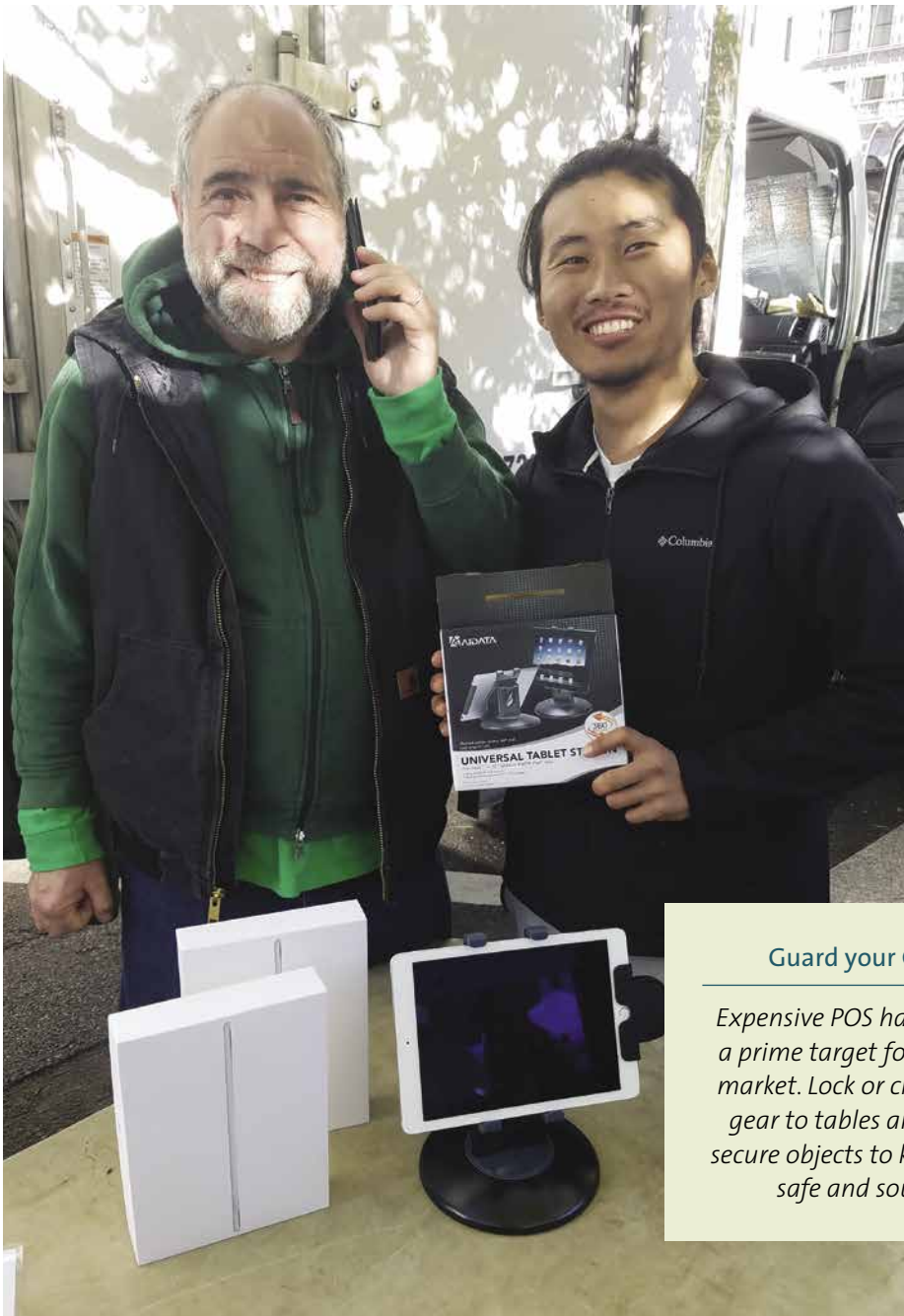
The Set-Up

Zaid Kurdieh, owner and operator of Norwich Meadows Farm, runs a highly organized, yet highly complex, farm. He operates on over 100 acres, has close to 250 varieties of vegetables and fruits, and sells at five farmers markets and through over 20 accounts to NYC-based restaurants.

His initial interest in setting up a POS system was primarily based on his desire to have more data to make good business decisions, to efficiently create invoices for at-market wholesale purchases, and to set up a system that is intuitive and simple to use for his predominately Tibetan staff.

In reviewing his needs, a number of different POS systems were explored. Although Square offered the simplest system, their lack of a direct back-end inventory system and their inability to process decimal weights were deal breakers. In the end, Zaid and FARMroots settled on NCR Silver Basic POS. It met all of Zaid's needs, while providing additional perks like scale integration and the potential to develop in-field, scannable bar codes to track inventory directly from the field.

Beyond the operating components of the system, Zaid also had complex needs for the physical setup of the systems at his stand. The registers needed to be mounted high enough to make them ergonomically feasible for staff standing for 10-12 hours. They needed to be locked to a table to ensure that they wouldn't be stolen. They needed a simple way to flip over to allow for customers to be able to quickly sign their receipts. And they needed to be able to run for up to 15 hours without additional battery support, as A/C power at the market is limited and undependable.



Guard your Gear

Expensive POS hardware is a prime target for theft at market. Lock or chain your gear to tables and other secure objects to keep them safe and sound.

Hot Spots vs Device

Data Plans: If you plan to run multiple devices at each market, you might consider purchasing a wireless hot spot that emits a Wifi signal. This can be picked up by multiple devices, reducing costs for individual device data plans. In a pinch your smart phone call also be turned into a hotspot!



Implementation

As opposed to implementing POS at all his markets right off the bat, Zaid implemented POS at one of his slower markets. This way, if things didn't go seamlessly, the business would not grind to a halt.

Zaid also chose to narrow his products into 45 major pricing categories in his POS system, rather than list all 240 crop varieties. For instance, instead of listing out each of his five varieties of kale, he created one kale category with two different pricing options which are applied depending on the time of day (he does a two for \$4 deal at the end of the day). While limiting his ability to collect individual product information, it was more intuitive for his staff who know his prices better than they know the name of all his products.

Recouping Transaction Fees:

In New York State, farmers can offer a discount for customers using cash, but it is illegal to impose a surcharge for use of a credit card. This law has been challenged in the courts and may change soon. However, you can have a credit card minimum.



Results

Zaid has seen an increase in his ability to analyse product sales through the system, helping him choose which products come to market and which don't. More specifically, he has a better sense of which product categories are selling at which times of year, helping him adjust his planting and production practices to more efficiently meet demand.

One of the major barriers Zaid has faced is that NCR Silver does not allow him to directly create invoices/purchase orders. For him, this really is the Achilles' heel of this system. Zaid chalks this up to "a growing industry" and is confident that system developers will listen to feedback from customers and work alongside them to make POS systems better.

Zaid's future goals include integrating his POS system with his Quickbooks farm accounting so that he has seamless communication between his sales at market and his end-of-day bookkeeping. Zaid would also like to use a mobile bar scanning gun on his harvest crates to track inventory directly leaving the field and going into and out of the cooler and storage. That way, he can do away with physical pick and inventory sheets.

Hands Off My Data:

Data collection can be viewed by some farmers as a business risk. Companies providing POS software to merchants are required to submit a Form 1099K to the IRS for merchants who make at least \$20,000 in sales via 200 credit card transactions.

A project of:



With generous support from:



If you have any questions please email:

farmroots@grownyc.org
