Technology Infrastructure Concepts

POS (Point Of Sale)
PCI Compliance
Cabling & Networks

Best Practice: Hire Technical Support
Skills: networking, database management

Quotes to Get
- Checkstands / Customer Service Desk
- POS System
- Credit Card Processing Service
- Phones (Service + Hardware)
- Wi-fi (Service + Hardware)
- Speakers / PA System / Music
- Alarm system (for temperature monitoring or if otherwise desired)
- **Template: Mod2_2 POS Quote Comparison**
    - Can be used to compare any tech quotes

POS (Point Of Sale)

Checkstands
- Bagger or no bagger? Carry out or no carry out?
- Buy or build
    - If build, make sure you are factoring in all POS equipment that will be mounted on your checkstand
    - Account for both carts and baskets in your design
- Internet
- Cabling for credit card machine, receipt printer, and POS
- Battery backups

Warehouse Data Feed
- Be sure the POS you purchase can integrate with your Warehouse via data feed so you can receive / send the following types of batches
    - Batch = a group of changes you can deploy in your POS with just a couple clicks
- Scans
    - Data sent to your warehouse from your store reporting units sold or certain sale items

- ○ Scan money adds up during each applicable sale cycle and is amalgamated as a statement credit a few weeks later
  - ○ Without receiving the scan money credit, you may or may not make money on the sale item
- TPR (Temporary Price Reduction)
  - ○ Sales coming into your POS
  - ○ New batch starts each week
  - ○ Each week particular sales expire
  - ○ Sales last a few weeks to a few months
- Cost Changes
  - ○ Updating item costs in the Cost Table of your POS
- New Items
  - ○ Creating new items in your POS for items you ordered from the warehouse for the first time
  - ○ If you had already created the new items using the invoice, this batch can be deleted if not needed
- Data changes
  - ○ Size, name, etc. other than UPC change (new UPC = new item usually)
- Discontinued items
  - ○ Items in this batch will no longer be ordered by your warehouse
  - ○ Read to see if you want to scope out any replacement items
- Ad Flier
  - ○ If your store is part of an Ad Group, this batch has the sale info for the sales matching your sale flier
  - ○ All sales begin and end on the same day (unlike TPR's where the end date will vary)

POS (Point of Sale)
- ****Required:** Integration with your Grocery Warehouse
  - ○ Be sure the POS you purchase can integrate with your Warehouse via data feed so you can receive / send the following types of batches
    - ■ Batch = a group of changes you can deploy in your POS with just a couple clicks
- These are items to consider when shopping for your POS. You may not need all of these but it does help to go into those sales calls with a strong idea of what you need for your business plan.
- The functionality you end up selecting to use within your POS will make up your training. Typically training is an all you can eat buffet at the beginning and not so accessible later on. Best to make the most of your initial training by learning any of the following topics you think you'll need.
  - ○ Integration with ecommerce?
  - ○ Back office - scalable to multiple stores?
  - ○ Shop your own hardware and compare to their quote

- Clock in/out - do you want your POS to do this or use a different system?
- Inventory management systems - would require scanning all received product into the inventory system prior to putting it away (i.e. investment of labor)
- Reporting for business needs - what types of financial information/reports is the system capable of out of the box?
- Manned Lanes vs. Self-Check or combination?
- Customer Service Desk - if desired, bonus lane if needed
- Portable Lane - handheld device that could be used to complete a card payment?
- PCI Compliant - this should be a given but never hurts to confirm, especially that the PCI terminology is within the contract you end up signing
- Barcode Scanning + UPC entry
- Scalable items - how many lanes will have a scale to handle scalable items (like produce, bulk anything, etc)?
- Customer display screen where they can watch what the cashier is doing on their order
- Touch screen for employee - highly recommend, keyboard-style POS is A LOT more time consuming and training-intensive
- Loyalty Program Cards and Coupons
- Coupons - in-store special sales, e-coupons, vendor coupons accepted?
- WIC / EBT - optional tenders to include on your Tender Menu. These options will be setup with your credit card processor once your licenses come through
- Discounts - employee discount? Other discounts?
- Signature capture - should be fairly standard with your credit card machine
- Check Verification - a 3rd party (e.g. Telecheck) that verifies the check before you accept it and either clears it or recommends you decline the check.
- Shelf location - functionality needed for online shopping picking tickets
- Age verification - setting an age limit on certain items like alcohol and tobacco
- Generating / printing shelf tags - likely won't be able to generate a bar code to be able to scan/order the item but can serve as temporary or used for DSD items
- Balancing reports - what report to pull when you need to balance the cash registers?
- Export POS to Accounting system like QuickBooks?
- Charge Accounts
    - Interest?
    - Mailing vs emailing statements
    - Receiving payments and applying to the account
- Tax Exempt Status
- Sales Tax Rates
    - Your responsibility to keep them updated
    - Send to your POS vendor when you need your rates updated
- Receipt header and footer
    - Excellent advertising space
- Suspend functionality

- - ■ Pause a transaction in the middle and generate a barcode on the receipt
      ■ Scan the code to resume the transaction
    - ○ Credit Card Processing
      - ■ Choose one familiar with your warehouse - ask them for recommendations
    - ○ Setting your accepted tenders
    - ○ Gift cards vs paper gift certificates
    - ○ Rain checks - do you wish to honor the sale price for a sold out item when it comes back in stock?
    - ○ Training
      - ■ Training for Manager(s) - ideally include at least 2-3 people to soak up as much as you can. In-depth training on the back office systems
      - ■ Training for entire staff - if you're using clock in/out through your POS, every employee will require some level of training. Cashiers and other Managers need further training on how to run the register.

Scales
- ● Hard wired or Wifi
  - ○ Integrate with POS to deploy custom UPCs from POS to scales
    - ■ Without this you add the codes twice (POS and scale)

PCI Compliance

PCI, or Payment Card Industry, is mandated by credit card companies to help ensure the security of credit card transactions in the payments industry.

PCI Compliance Requirements
- ● Physically restrict access to cardholder data - locked cabinet for servers or host at Rackspace
  - ○ Construction requirements (e.g. locked closet, may require temperature control)
- ● Track access to cardholder data with logging
- ● Firewall around cardholder data (enable logging)
- ● Personalize passwords and change quarterly
- ● If cardholder data is stored, must tokenize - ideally, don't store
- ● Encrypt and tokenize transmission of cardholder data
- ● Anti-virus
- ● Hire PCI compliant vendors and developers
- ● Limit access to cardholder data
- ● Unique system login credentials creates traceability (no "cashier" user that everyone uses)
- ● External contractor to test PCI compliance
- ● Create training materials that reflect data security practices

Cabling & Networks
*This section especially requires higher level technical expertise

Rackspace Hosting
- Domain Controller
  - Secondary Domain Controller as backup to PDC at Rackspace (VPN)
- Web Server
- POS / back office database server
- Encrypted static VPN tunnel between store and Rackspace
  - If budget, have 2 (for redundancy)
- Managed switches with VLAN's as needed

Networking equipment
- Example: Ubiquiti

Firewall
- Between store network and VPN tunnel.
- Network traffic segregated enforced and logged
- Redundant firewall

Various Networks

Security System
- Isolated
- Wired or wireless

Phone System
- Isolated
- Decide phone locations
- Which phones receive incoming calls?
- Voicemail message
- Automated answering options

POS
- Separate from all others
- Access to VPN tunnel
- SSID not broadcast
- WPS disabled
- Not WEP
- Complex wi-fi password

Internal Non-POS Computers
- VPN tunnel access

Guests
- No VPN tunnel access
- Segregated traffic from all other networks
- No (or easy/simple) password

Cable drops
- Spools of cable + crimping the ends is cheaper and more customizable than individual cables. Measure the distance of all drops you need to create to know how many feet to order
- POS Lanes
- Credit Card machine
- Scales
- Phones
- Wi-fi Access Points
- Security System
- Security Cameras