Point of Sale Budget Justification Methodology

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The Small Business Depot.

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Introduction

Budgeting for, choosing, and implementing your new point of sale (POS) process is not a trivial exercise. You need a well conceived and well executed plan. Choosing the wrong POS for your business can be a business killer. Choosing the right one can help make your business grow to the next level.

When you make the decision to use POS, you have essentially decided to change the way you do business. POS is not simply another piece of hardware and software. Think of POS as a process, not a system. The POS process effects your transaction flow, your recordkeeping, your employee management, your ordering and receiving process, your accounting – in other words, every facet of your business.

You should approach the decision of when and if to use POS with the care and due diligence it deserves. How you go about deciding says a lot about whether POS will work for you. If you do not have the discipline to undertake a formal decision-making process, you may not have the discipline that POS requires. POS requires disciplined business decisions. It imposes formality onto your business. That's one of its greatest strengths.

Scope

Part of the decision to use POS is a financial one. Can I afford it? Can I afford not to? How long will it take me to get a return on my investment? These are questions you need answers to before you make the final decision. Waiting until after you made your hardware and software purchases may ultimately result in failure.

This guide presents a systematic, forms-based approach to making the budgetary case for POS. It provides a structure for making a sound business-oriented decision. Without a structure, we're too willing to base decisions on irrelevancies like aesthetics or even price.

Using this Guide, you should be able to create a working POS plan. But every case is unique. You should therefore be flexible in applying the steps outlined here in this Guide.

For questions about POS outside the scope of this document, see the companion application guide, *POS for Beginners*. Also available at BarsnStripes.com.

Methodology

This guide presents a 6-step process toward understanding your POS needs, your budgetary requirements, your return on investment and what to expect from your POS solution. The steps are:

Step 1. Understand your business

Step 2. Identify the problem

Step 3. Identify the solutions

Step 4. Understand the benefits

Step 5. Calculate your return on investment

Step 6. Choose a POS vendor.

To assist the process, forms are included in the Appendix of this Guide.

Step 1: Understanding your business

The first step requires you to get a handle on the workings of your business. You may think you know everything about your operation already, but if your business is large enough to benefit from a POS system, you probably don't know as much as you think you do.

POS is a process. It's not just a collection of computers and software programs. A POS will change the way you do your business – hopefully for the better. So you need ask yourself: "Why do I need POS?" If it isn't just to burn up some extra money, you better have in mind a problem you're trying to solve. And that means knowing what works about your operation and what doesn't.

The best way to start is to know how your business works now – without a POS. Once you've gotten a handle on your entire business, then, and only then, can you make intelligent decisions about changing it.

Transaction flow

A good way to understand your business is to "follow the money". On a piece of paper, chart the flow of money as it leaves the customers hand and flows throughout your organization. After all, it's all about cash flow – right? Write down all the steps that comprise a transaction.

- How is a transaction handled?
- Who handles it?
- How are records of the transaction kept?
- Who records them?
- Where are transaction records stored?
- How does a transaction affect your inventory?

Of course there are transactions and there are transactions. Make a list of the various types of transactions. The guys on the loading dock execute a transaction when they receive a shipment from your supplier. The accounts receivable clerk executes a transaction when he posts a payment to a customers account.

- How does that happen?
- Who does it?

Hopefully, by now, you get the picture. Divide your company – on your piece of paper of course– by function or department: sales, marketing, shipping, receiving, accounting, etc. Then, one by one, chart the transactions that occur in each department. Don't forget the transactions that occur between departments either.

Already running into some problems? It's OK to admit you don't know as much as you thought. It might be time play "**Ask the experts**".

Ask the Experts

Of course, that would be your employees. You'll find they know much more about how your company works then you thought. They know the details because they live through them every day. They know the formal procedures that don't get used because they don't really work. They know the actual procedure because they cooked them up themselves. They know the real world. They make it happen. They have lots of knowledge. So use them. Don't just limit your research to senior managers, either. The cashier, the dock worker, the file clerk, all have valuable perspectives.

Here's a free benefit of enlisting the aid of your employees in this first step. You'll find that it boosts employee morale. Workers like the idea of being involved in the planning stage. They'll also buy in to your final solution a lot easier.

Employee requirements

While you're interviewing your "experts", you'll discover that some critical tasks are being done by someone other than who you thought. You may even discover some tasks important to your business you hadn't even thought of. Make a list of who does what. Make a very detailed list. If one of the goals of your POS conversion is to reduce employee costs, you may need to combine some functions, or even eliminate some. You may ask fewer employees to produce the same level and quality of work now being done by your larger workforce. You can't do that if you don't know what needs to be done or who's doing the work now.

Record Keeping

The blood of any organization is the paperwork. Do you know what documents are produced when transactions occur? Make a list of documents produced for each type of transaction your business produces. Decide what documents are critical and what documents you can do without. Your POS solution will most likely create most of your documents for you. But you won't know that unless you have a handle on your document requirements before you select your POS solution.

Legal requirements

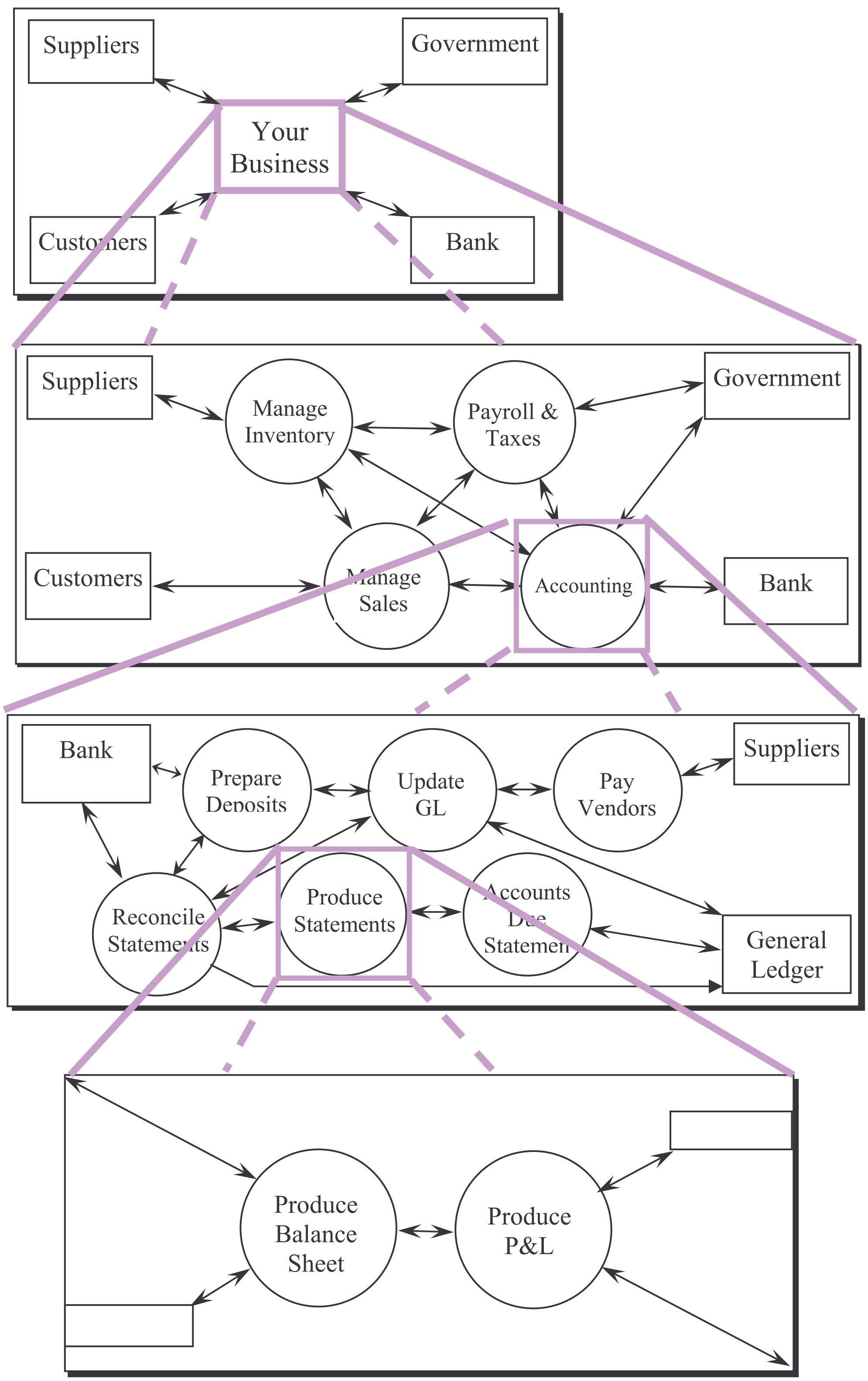
Most businesses produce records which can be described as essential, or even mandatory. Knowing this critical set of documents will be a key decision element in your ultimate choice of POS vendor. A short list of 'essential' documents might include:

- Regulatory documents
- Insurance documents
- OSHA / Employee safety documents
- Tax / Payroll documents
- Warranty documents

Data Flow Documents (DFD's)

Before starting your transaction flow diagrams, you may wish to read up on the art and science of Data Flow Diagramming. Data Flow Diagrams, as their name suggests, illustrate the flow of information within a system. The following illustration is an example of a DFD. The internet is replete with tutorials and reference material on DFD's – how to construct and use them. In addition, there are many software products you can buy that will build them for you. Microsoft Visio can be used to construct DFD's.

Figure 1: Data Flow Diagram



Step 2: Identify the problem

You might ask yourself “Why am I doing this? Why do I need POS?” The answer should be this “Because I have a business problem I’m trying to fix.” If you do not have specific problems in mind then you may be choosing the wrong solution. The POS you choose may be perfect for a problem you don’t have.

Step 2 involves identifying the problem(s) you want to address and solve with your POS. Following is a short list of some of the problems solved by POS.

Process consistency

A problem many small businesses have is lack of operational process consistency. Transactions are done haphazardly or differ by who’s doing them, how busy they are, and a host of other reasons. To transform your business and make it successful you must instill process consistency.

Data entry errors

Errors can be extremely expensive. Mis-marked items, improperly keyed in data or prices, incorrect calculations, misread handwriting, are all typical errors a business faces every day. Estimates for business losses due to all errors are as high as 25% of revenue. A goal of any organization should be to reduce errors and improve quality. A good POS can help eliminate them by using barcoding, automation, and other measures.

Customer and employee theft

Let’s face it. Not everyone is honest. Theft is a real issue for many businesses. A national retail security survey estimates that 2% of a business’s annual sales are lost due to theft, fraud or error. POS offers many avenues to increase business security such as employee check-in and check-out, integrated security cameras, and good reporting.

Table 1: Security losses

Employee theft	46%
Shoplifting	30.6%
Admin errors	17.6%
Vendor fraud	5.8%

Loosing good customers

We’ve all heard the old adage: “It’s harder to gain a new customer than it is to keep an existing one”. Which makes it all the more troublesome when our best customers are deserting us. POS offers you a real opportunity to stop the bleeding through the use of customer retention processes.

Improved access to information

The main reasons you keep records is so you can monitor how your business is doing. To make the right decisions that will make your business successful, you need information – and you need it now. Do you currently have access to all the information you need?

Eliminating paper

Are you swamped by paper? Are your file cabinets bulging at the seams? Do you frequently have trouble putting your hands on that document you need right now? POS systems can help reduce this blizzard of paper by creating and storing electronic records and reports, interfacing with EDI (Electronic Data Interchange) solutions, and using the internet to exchange business information with your suppliers and customers. Your inadequate filing system is a very legitimate problem addressed by POS.

Reduce employee costs

Employee costs are one of your business expenses. To stay competitive, you need to know that you're getting good productivity from your employees.

POS can help reduce overtime costs by automating many time consuming activities: such as report generation, inventory management, tax preparation, accounting, etc.

Errors also effects productivity and employee costs. POS can reduce the frequency and wasted time of repeating tasks due to error, thereby further reducing costs.

Tax issues

Small businesses are often overwhelmed by the requirements imposed by federal, state and local taxing authorities. Best intentions are not always an adequate excuse for not paying on time or the right amount. You may even be losing money by paying more than you need to. Most tax accountants will tell you that those clients that use POS generally remain compliant and save money on taxes at the same time. Even your accountant's fees may be less because your records are in better shape using POS.

Step 3: Needs analysis

Once you've identified the problem(s) you're trying to solve, the next step is to understand how to fix them. Create a Needs Fulfillment document listing your problems and potential solutions. Here's an example:

Table 2: Needs fulfillment example

Problem	Possible fix / Solution
Data entry errors	Barcoding Remote data capture Integration with Suppliers' Data
Customer and employee theft	Employee login/logout Security camera integration Reports by employee Drawer reconciliation report
Losing good customers	Customer loyalty cards House accounts / discounts Reduce transaction time at register Contact Management Direct mail capability Customer Analysis / Demographics Repeat customer tracking
Overstocked on slow items Under stocked on hot items	Inventory management / Warehousing Usage /depletion forecasting Threshold re-ordering Inventory History reports
Too many returns	Improve transaction accuracy Better record keeping Better customer support Warranty tracking Serialized inventory
Losing money	Price / Margin Management Formal Job Costing process Sales Analysis process Bad check flagging

List as many potential solutions for each problem that you can think of. There's usually more than one way to skin a cat. The more possible solutions you can think of increases your chances of finding a POS vendor who has a total solution.

Of course, you will need some idea of what's available out there in the POS marketplace. There are several ways to get this kind of information. One is to use resources like Google to find POS suppliers and become familiar with their capabilities. Another is to hire a POS consultant. Talk to a business aquaintance who is already using POS. The ***Small Business Depot's*** downloadable eBook ***POS for Beginners*** is also a good place to start. (www.barsnstripes.com).

At this point in the process, you should have a list of things you're looking to correct and a list of possible POS capabilities you believe addressess those needs. This list represents your best analysis of your needs based upon a rigorous examination of your present business operation.

The next step is to look at some of the benefits of POS. Some of these benefits directly address the problems you're trying to resolve. However, other POS benefits will affect your business as well and must be taken into account if you are to have a realistic picture of your return on investment.

Step 4: Benefits analysis

In order to calculate your return on investment you need to compare the cost of doing business the way you do it now with the cost of doing business with a POS solution in place. The first part you've done. After working through the first 3 Steps of the POS Justification process as outlined in this Guide, you should have a very good idea of your current situation. You may also have a profit and loss (P&L) Statement which summarizes your cost of doing business. If you don't have one, ask your accountant to generate one for you. If you do your own accounting and use a software product such as *QuickBooks* or *Peachtree Accounting*, you can easily generate one yourself.

The next step is to develop an approximation of what your costs might be after converting to POS. You'll also want to add any potential revenue gains your new POS might generate (More about this later).

We've identified three classifications of benefits derived from POS: *Cost benefits, Revenue benefits*, and *other*.

Cost benefits

There are real cost benefits to using POS. Here is a short list of cost items which can be positively impacted by POS:

Lower consumables costs	paper goods file cabinets folders copiers postage
Lower employee costs	payroll health care loss from theft / error overtime / sick time / vacation time temps / consultants childcare travel expenses
Lower facilities costs (resulting from fewer employees)	furniture (Desks, chairs, etc.) utilities computers vehicles mileage/fuel costs

Revenue benefits

Likewise, there are opportunities for revenue gains from POS. These might include

Productivity gains	Higher process efficiency Increased employee productivity Fewer errors
Improved gross margins	Pricing control features Margin control features Better reporting features
Inventory management	Identify slow and fast turning inventory Realign purchases to produce faster turning inventory
Accounts receivable management	Reduce bad debts Identify of high risk customers Speed up collections and billing improves cash flow

Operation benefits

Some of the benefits derived from POS affect your bottom line only indirectly. But they can have an impact on your decision. Another short list.

Overall business position	Smoother running organization Better credit position for bank loans More complete picture of company's "worth"
Employee morale	Better employee retention Lower employee retraining costs Consistency of work
Customer satisfaction	Improved customer retention Fewer returns / complaints / repeat calls

Intangibles

Been on vacation lately? Or perhaps you don't feel you can be away for even a week without your business spiraling out of control. A smoother, more professional operation based upon a good sound POS can give you a little piece of mind and a bit more free time.   In addition, here are some other benefits:

- Increased employee morale
- Better risk for lending institutions
- Avoidance of tax problems

Step 5: Calculate your ROI

Your goal in Step 5 is to calculate your return on investment (ROI) and your investment payback time.   To do so you will need to quantify cost savings and revenue gains due to POS.

Calculate your cost savings

The first step in calculating your ROI is to calculate the impact a POS will have on your costs. We've examined in previous sections a number of ways a POS can help reduce your business expenses. Now it is time to quantify those savings. Here are a number of useful formulae's for calculating your cost savings.

Savings from inventory reduction

Inventory control features in POS can help you reduce inventory expenses by reducing the amount of slow moving items. Our formulae estimate a 15% reduction is realistic. Here we've used it to pay down the bank loan

Net savings = Inventory($) × 15% × bank loan interest rate%

You could also use all or part of the savings to purchase more faster moving inventory thereby increasing profit. (See Calculate your revenue gains)

Savings from increased security

Security features of most POS products can significantly reduce costs due to theft and fraud. Our formula estimates 2%.

Net savings = Annual sales × 2%

Savings from increased accuracy

POS can help reduce the expense of employee error. Our formula uses 5% as a conservative goal. National averages indicate the savings could be much greater.

Net savings = Annual sales × 5%

Employee Cost Savings

Employee costs such as overtime, employee retention and retraining costs are frequently reduced by using POS.

Here are some areas where employee costs due to turnover can be measured:

- ***Recruiting Costs.*** The cost of advertising (print or otherwise), job fairs, and other promotions to attract qualified employees.
- ***Hiring Costs.*** The cost of the HR staff to process applications and screen prospects, as well as staff time to interview candidates.
- ***Training Costs*****.** The cost of training facilities, trainer time, and student training materials.
- ***Supervision Costs.*** The cost of additional supervisory time to assist new employees come up to speed.

Our formula uses a conservative estimate of 5%.

Net savings = Current Employee costs × 5%

Use your current cost data (payroll, overtime, sick time, health care, recruting, etc) for the calculation.

Calculate your revenue gains

POS will also have a positive impact on your revenue. This step quantifies those gains using national averages.

Gains from better margin analysis

A POS helps you increase margins on your sales by giving you better costing data and providing tools to help you make better pricing decisions. A realistic goal is a 4% improvement.

Revenue gain = Annual sales × 4%

Gains from better inventory control

POS Inventory management will allow you to have a smaller, leaner, and faster turning stock. You can increase profit by shifting your inventory toward faster moving items. Here, we've used 10% as a realistic target for reallocation of slower moving items to faster moving items. A typical value for inventory turns is 2.5.

Note: Inventory turns (turnover) is an important factor in this equation and care should be taken in computing it correctly. Turnover is the number of times you sell your average investment in inventory each year. Turnover is calculated with the following formula:

$$\frac{\text{Cost of Goods Sold from Stock Sales during the Past 12 Months}}{\text{Average Inventory Investment during the Past 12 Months}}$$

For example, if a company has total annual sales (at cost) of $8,000,000 and its average inventory value is $2,000,000, its inventory turnover is four turns per year (8,000,000 ÷ $2,000,000). When calculating Cost of Goods, do not include items that do not spend significant time in your inventory such as drop ships from your supplier directly to your customer, or special order items. Only include cost of goods sold of items delivered to customers.

Revenue gain = Inventory($) × 10% × # of inventory turns / year

A POS system will allow you manage your accounts receivable (A/R) more effectively. A POS can send statements automatically and even apply service charges and late fees. A POS can help ensure timely collection thereby increasing revenue.

Net revenue = Outstanding A/R($) × 10%

Calculate your ROI

Now that you've calculated your cost savings and revenue gains, you can estimate your return on investment. Your return on investment is simply your cost savings plus your revenue gains minus your cost of POS.

ROI = Net cost savings + net revenue gains – POS cost

Of course this is just an estimate. The influence of POS on your business will depend on these and a lot of other factors. But if you do your homework and choose your POS vendor wisely there is a very good possibility that your POS will provide a handsome return on your investment.

Step 6: Choosing a solution

Once you've determined that POS is justified, and you have determined what problems you need fixing, only then should you go about the task of selecting a vendor and acquiring POS products. **Step 6** presents a methodology for choosing a POS vendor.

Methodology

Choosing a vendor can be a very daunting experience. There are literally thousands of vendors in the POS industry – some very large and some small niche companies. How does one go about finding the best possible solution?

Fortunately, in the era of the internet, the task is much more manageable than it once was. The internet offers tremendous advantages in finding and evaluating POS vendors. These advantages are:

- Using search engines to find POS vendors
- Using Email to contact and solicit information form vendors
- Downloadable demonstration / evaluation software

This Guide also includes various forms you can use to formalize your selection process. These forms are in the Appendix.

Create a master list

Using the internet and any other resources you have, create a master list of POS vendors. (See POS for Beginners: An Application Guide from Bars & Stripes). An internet search engine is an ideal research tool for finding vendors. A sample Google search might look like this (Note '|' can be read as 'OR'):

(POS | "point of sale") software (pizza | pizzeria | "fast food") (restaurant | deli | café)

This search produced about 40,000 matches on Google. Of course not all were unique POS vendors but one can easily tailor a search to produce usable results. You might want to include search terms that reflect the kind of business you have (e.g. Retail, gifts, delicatessen, cinema, book store, auto sound, day care center, etc.)

Create your master list as a file on your computer. Make sure you include contact information, especially an email address and phone or fax number.

Needs Fulfillment

From Step 3, you should have a needs fulfillment document. This is simply a listing of features that address the problems you wish to solve with POS. If you've done your homework, this list represents the features you'd like in your ideal POS solution.

Figure 2: Needs fulfillment document

Needs Fulfillment Document

Problem	Possible fix / Solution
Data entry errors	Barcoding Remote data capture Integration with Suppliers' Data
Customer and employee theft	Employee login/logout Security camera integration Reports by employee Drawer reconciliation report
Losing good customers	Customer loyalty cards House accounts / discounts Reduce transaction time at register Contact Management Direct mail capability Customer Analysis / Demographics Repeat customer tracking
Overstocked on slow items Under stocked on hot items	Inventory management / Warehousin

Needs Analysis

The next step is to parse this list into three categories: Features that are essential or required, features that would be useful, and finally, those features that might be used but offer only limited usefulness. The result of this analysis is a 'must have' list with which you can cull down your large list of POS vendors, to a more manageable 'short list'.

Figure 3: Needs analysis document

Needs Analysis Document

Solution ↓	Required	Useful	Not required
Bad check flagging	1		
Barcoding	1		
Better customer support	1		
Better record keeping	1		
Contact Management		1	
Customer Analysis / Demographics		1	
Customer loyalty cards		1	
Direct mail capability	1		
Drawer reconciliation report	1		
Employee login/logout	1		
Formal Job Costing process			
House accounts / discounts			
Improve transaction acc			

Creating a Short list

Once you have your master POS vendor list and your "must have" features list you're ready for your initial vendor contact.

The best way to make this initial contact is via email *RFI* or *Request for Information*. Create a form email you will send to every vendor on your master list. This email should list your "must have" features. You might also list the top 3 or 4 problem areas you are trying to solve with POS. A vendor may have a solution you haven't thought of for one of your problems.

Also include in your email your time frame and words that tell the potential vendor that your project has been funded and that you are the decision maker. This usually guarantees that you will get a response.

Finally, ask for the names and contact information for three of their customers. Tell them you intend to contact these customers to get an assessment of their POS product. Any reputable POS vendor will be able to provide this information. If they won't provide this information, scratch them off your list.

Vendor selection

You may have to send your emails two or three times. If you haven't heard back within a few days and after three attempts it's a safe bet that the vendor doesn't have a solution for you, or they're too busy to return your email. Either way, scratch them off your list.

After you've collected responses from your POS vendors, complete the Vendor Selection Forms in the Appendix.

There are two Vendor Selection Forms. One lists features offered by the vendor, and the second list vendor qualities. The second list is somewhat subjective but gives you an opportunity to rank vendors who equally support the features you need.

Vendor Selection (features)

The first vendor selection form (features) is simply a yes no check list. Numerically, give the vendor a 1 if they support a feature, and 0 if they don't. Total the columns to rank the vendors.

Vendor Selection (qualities)

This form lets you consider other parameters in ranking your potential supplier. Some suggested qualities to consider are:

- Size of the vendor (Annual gross sales or install base)
- Longevity (How long have they been in business)
- Stability of the software (Beta software may be bug ridden)

- Customer support (24/7 or paid contracts or whenever)
- On-line support ticket tracking
- Warranty
- Price

Finally, don't forget to contact customers of POS vendors you are evaluating. They may give you more insight into working with a particular vendor.

How much should you spend?

How much should you budget for your POS solution? A general rule of thumb is that you should be prepared to invest 2% of your annual sales for the purchase, installation and staff training for a computerized point of sale system.
You should also budget approximately 1% of your annual sales each year for maintenance and on-going expenses and training.   If you've done your homework, however, a POS will more than pay for itself.

POS Budget = Annual sales × 2%   first year

POS Budget = Annual sales × 1%   following years

Conclusion

The temptation is to jump to the vendor selection step without laying the necessary groundwork.   Its also tempting to pick the POS software with the prettiest screens and the largest cache of features.   Both temptations should be avoided.   POS is a process, not a hardware or software product. The hardware and software are but pieces of the overall puzzle. Your best guarantee of success is to lay the proper foundation. Understand your business. Know what problems you are trying to solve and resist the urge to take shortcuts.

Appendix

Needs Fulfillment Form

Table 3: Needs fulfillment Form

Problem	Possible fix / Feature

Need Analysis Form

Table 4: Needs Analysis Form

Features ↓	Required	Useful	Not required

Vendor Selection Form

Table 5: Vendor Selection Form

1 for yes, 0 for no

Features ↓ Vendors →	**A**	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**
Scores ->										

Table 6: Vendor Selection Form (2)

Score 1, 2 or 3

Qualities 🡇 Vendors 🡆	A	B	C

Customer Interview Form

Table 7: Customer Interview Form

Vendor:	**Customer->**	**A**	**B**	**C**
Overall Satisfaction	10 = totally satisfied 0 = very dissatisfied			
Would choose again	10 = absolutely 0 = never			
Value to your business	10 = invaluable 0 = useless			
Customer support	10 = great 0 = useless			
Product stability	10 = rock solid 0 = moving target			
Ease of use	10 = No brainer 0 = Huh?			
Will grow with my business	10 = easily 0 = start over			
Ease of maintenance	10 = very easy 0 = impossible			
Takes interest in your business	10 = most definitely 0 = not at all			
	Score ➔			

Customer A: ____

Customer B: ____

Customer C: ____