

IT BUDGET PLANNING

A GUIDE FOR SMALL AND MEDIUM BUSINESSES

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Executive Summary

The development of an annual IT budget is as much of a reality in a business owner's life as taxes. Like taxes, the process is straightforward and simple. Right? Wrong. There is nothing simple about taxes beyond the simple fact that you have to pay them. IT budgeting is much the same: simple in concept, yet challenging in execution without proper guidance. And, similar to if you miscalculate your taxes, if you get your IT budget wrong the costs to your business can be substantial, resulting in unanticipated expense, reduced productivity, and reduced ability to grow.

Although IT budgeting can be complicated, if done correctly, IT budgeting can help your business prevent costly budget overruns, plan more effectively for future business growth and maximize your IT infrastructure investments.

Unfortunately, for most small businesses, IT budgeting is something they know little about. We developed this white paper to demystify IT budget planning for small businesses. The white paper provides basic steps you should follow in order to develop an accurate IT budget, which include:

Basic Steps for IT Budgeting
1. Get a detailed inventory of what you have today.
2. Get a detailed recommendation of infrastructure requirements for what your business will look like in 3 years.
3. Develop a gap analysis, timelining the changes between the two states.
4. Add timing and specific item cost data from the gap analysis and obtain cost estimates for each work item.
5. Capture all available historical and appropriate industry data.
6. Fill in the gaps.
7. Validate against financial goals.
8. Work, rework, and update as real data comes in.

It also outlines detailed and practical approaches to each of these steps, and offers guidance about when you should call in experts to assist you in developing an IT budget that is sensible and suits your business needs.

Step 1: Get a detailed inventory of the IT infrastructure you have today

While seemingly a simple step, the challenge here begins with definitions: what are the components of an IT infrastructure? Upon embarking upon this quest, many business owners gird up their courage and adventure to where few go, and fewer return: *the server room*. There they count the boxes, and not being sure if the really skinny ones are computers or something else, count everything as a server just to be sure. Then they count the PCs. Feeling confident now, they think about software, determine that everything seems to be working just fine (thereby entering a zero on the spreadsheet.) Then they total up everything, add a few PCs for employee growth, multiply the basic expenses they have tracked by some factor to capture inflation and 'error' ... and bang! The budget is done. Sound familiar? If you develop your budget this way, just how far off could your numbers be? Unfortunately, the numbers could be disastrously far off because you have not captured your IT infrastructure accurately or provided enough detail. Your IT infrastructure is not just servers, PCs, and software. It's a complex mix that includes routers, servers, load balancers, firewalls, wireless access points, and a myriad of other devices. Each of these have specific uses, life spans, scalability levels, and maintenance costs. Many small businesses find it difficult to conduct an accurate inventory of their IT infrastructure because of this complexity, lack of technical background and turf battles. That's why we recommend that most small businesses turn to an experienced third party to do the assessment and inventory. They will have the tools to do so efficiently and cost effectively, and will be independent of any preconceptions and sensitivities. It is a small engagement, and well worth the costs, whether you have in house IT or not.

Get Your Inventory Count and Set Replacement Cycles

To get started with IT budgeting there are a few things you need to know about your IT systems upfront, including:

Total number of servers, PCs and laptops. Each has a different function and different life span. As a result, each should be budgeted for using a different replacement cycle. For general purposes, we recommend:

- **Servers** – 3 to 6 years depending on quality and power of server.
- **PCs** – 2 to 3 years depending on nature of use. A two year old box is sufficient for general office use. However, it will lag behind for an architect using advanced CAD software, updating annually and requiring more power each year.
- **Laptops** – 2 years and rarely 3 years. Due to wear and tear they do not hold up to sustained use.

Many things can impact these schedules such as changes in technology, changes in productivity needs, and the list goes on.

Part of the budgeting process involves setting these replacement cycles, starting to organize your current equipment into groupings, and planning replacement rollouts. Whenever possible, try to keep PC replacements

grouped into a 6 month window or so. This will help reduce ongoing strain on IT resources, allow for economies of scale in purchasing and rollout, and ensure fairness and productivity balance among employees. Servers can more typically be managed one off, since you have fewer and they last longer.

Document, Inventory and Assess Current Systems, Warrantees, Licenses and Compliance

Next document and identify all your current systems. This should include:

- When they were purchased.
- What the specs are.
- If they are under warranty.
- What applications are running on them.

Once you have documented your current systems, inventory the licensing of those applications. Don't forget about desktop applications and licensing! This can be a huge surprise expense, and if you are audited, the fees for being out of compliance are steep. The only efficient way to capture this data is to use third party inventory software. Today there are many tools that can simply go out to the servers and PCs and generate inventory reports. With a little searching through past payables, you should be able to determine what software is in compliance. If there are any questionable areas, call the vendor and they should be able to clarify licensing for you. Keep in mind that just because you purchased software, it does not automatically mean you are still in compliance, since the terms of the license may be valid for only one type of use. An outside third party can also help you figure this out.

Step 2: Get a detailed recommendation of infrastructure requirements for what your business will look like in 3 years

To complete this step you need your three year business goals and knowledge of key system scaling, upcoming technology, enterprise application limitations, among other things. Once you have a business plan in place, use outside expertise to complete a technology assessment.

In terms of business plans, there are only certain key pieces of data needed to develop an IT plan, and fortunately, these should not be too difficult to assess.

Key Questions to Answer Based on Your Business Plan

1. How many employees will you add and on what time frame (net new employees per quarter for 3 years would be optimal).
2. What will these employees do?
3. Will you be adding facilities?
4. Do you have business continuity needs, or redundancy needs that should be evaluated?

- a. If no, ask yourself what would happen if your core systems were unavailable for one hour, one day, or one week and at what point would severe damage to the business occur?
- 5. Do you have genuine limitations on spending that should be clear up front?
- 6. What types of applications do you foresee adding to your business to enhance productivity?
 - a. ERP (enterprise resource management, typically focused on accounting and finance with add on modules to manage areas like HR, inventory, fixed assets, project accounting, etc).
 - b. CRM (client relationship management, typically providing a 360 degree view of clients and activities, used by the sales force to manage opportunities, marketing to manage campaigns, etc).
 - c. Other industry specific tools?
- 7. What is your preferred approach to applications?
 - a. ASP (application delivered via the web such as Salesforce.com). Expense costs as you go per user, giving flexibility, but often with less custom features and functionality and more long term costs
 - b. Client/Server (application resides onsite or at hosted site). Implemented for your business, often a capital expenditure with ongoing maintenance or licensing fees
- 8. Will the mix of employees change, and if so how?

In this step, using industry best practices and knowledge of systems capabilities and capacities, you are simply doing an imaginary full IT inventory of what you would look like in 3 years based on best assumptions. This can be difficult if you are not an IT professional. Use an independent third party for this step to assess your business technology. It may require skills from several different types of IT professionals, and it requires a deep understanding of best practices and systems capabilities and capacities. You can't develop a good plan unless you have a valid starting point and ending point.

Step 3: Develop a GAP analysis

At this stage you have the critical elements to build a budget. Now you need to use some project management, planning and IT expertise. You have the *'as is'* state identified and the *'will be'* state identified. Now you need to document the gap between the two and chart a path that can be broken into discrete project, support, and capital requirements.

Work from the top down, starting with a basic timeline and high-level work activities. The first step is to identify the differences between the two states. Using your *'as is'* document, identify all changes in the *'will be'* based on three simple categories:

1. Addition (a new piece of equipment or software).
2. Enhancement (to an existing system, such as an upgrade).
3. Expansion (such as adding PC's or licenses based on new hires).

For each of the above, capture detailed information regarding the specific nature of the addition, enhancement, or expansion. For example, if you are expanding from 20 to 40 employees, call out 20 desktop computers, monitors, and appropriate licenses under the expansion category. If an upgrade of the ERP is called out, place it under enhancement.

While you have the core data for this step, you may need help in identifying the difference between a new system or an enhancement, or capturing the full impact of adding employees (what licenses, etc). Use an IT resource to validate this or you risk building a budget on a flawed foundation.

The output of this rather simple step is a document that outlines, at a high level, the fundamental changes to the IT environment as called out in the two documents from step 1 and 2 – a simple GAP analysis.

Step 4: Add timing and specific item cost data to your list from the GAP analysis and obtain cost estimates for each work item

In this critical planning step you must take GAP analysis and assign timing and specific purchase and staffing data based on the business goals called out in your business plan. Part of the assessments in steps 1 and 2 should be a clear understanding of what each system supports, and what requirements drive each change (or addition) in step 2.

Armed with this data, and perhaps some interactive help from your IT expert, you should be able to take each bullet and flesh it out into two columns:

- When will the change occur?
- What is an estimated cost for each type of change or addition?

When planning the 'when', it is important to look over the entire change period. However, at this point the most critical goal is to have accurate data for the immediate year ahead.

When planning for growth based on employees, make sure to capture the following per employee costs:

Employee Cost Data to Capture	
Hardware	PC, laptop, monitor, wireless device, desktop, phone, etc.
Software	Basic Microsoft Office software, user licenses for enterprise applications, special needs?
Support	Factor support as a cost when budgeting. A Gartner study recently showed that the average users in their study made 21 calls to their internal support desk annually. At 30 minutes per call this is \$43.75 of support costs per user per month at a rate of \$50 (fully loaded) per hour. This is a very conservative number to use since it assumes even distribution of calls and labor exactly proportional to workload. Realistically based on coverage spikes etc., a number in the range of \$60 to \$70 per month, per user may be a more realistic target to compute labor costs.

In capturing systems (server, networking equipment) be sure to capture the following costs:

System Cost Data to Capture	
Actual hardware costs	This includes costs for servers, networking equipment, etc.
Warranty costs	This includes warranty costs. Not every system will have a warranty and warranties will vary by system and vendor.
Internal support costs	This includes the workload to internally monitor and maintain systems etc. A conservative approach is to cost each server at \$250 per month to monitor and maintain from an internal standpoint. This works for outsourced support, and is a reasonable number for internal support, though of course your staff comes in full time equivalents, so you must take into account total workload and identify when you may need incremental resources.

For software changes the costs can be more complex and more significant depending on the need. Capture:

Software Cost Data to Capture	
Licensing costs	This generally will require contact with the vendor or historical data. Be sure to understand if it is a one time or annual cost and the type of license that is purchased.
Software maintenance and support costs	These may be mandatory depending on the software application and vendor.
Implementation costs	All software has to be rolled out, and larger systems such as CRM and ERP must be implemented by a professional in the field. The costs typically exceed the licensing costs and may include the roll out as well as the integration between the system and any pre-existing systems.
Other professional services fees	These would include maintenance of existing integrations and updates to integrations or customizations.
Internal support costs	This might include database management, user training, basic user support are all issues you will need to staff for. The more applications, and the more complex the applications, the more extensive and expensive internal support costs will be. See the note on employee costs #3 above for data on these expenses.

Next, evaluate each item to understand which are capital expenses versus operational expenses. Each has differing impacts on your budget. Capital items are generally defined as:

1. Hardware and software acquisition that exceed GAAP (Generally Accepted Accounting Procedure) guidance for cost per unit
 - a. New server and email system.
 - b. New PC's or laptops (if past minimum cost base for capital purchases).
 - c. Desktop productivity software.
2. Projects
 - a. Implementing or upgrading the above types of capital items.
 - b. Development of custom applications such as websites.
 - c. Integration of applications.

For each item that you determine is capital, make sure to budget for it accordingly, and at the expense line, you will only capture the appropriate amortized capital expenses. Consult your financial expert to ensure you are following GAAP.

Also be prepared to talk to vendors, use colleagues and third parties to gather good costing data. If the dollar amounts are not well estimated, your IT plan will fail to produce a usable budget. Capture all of the supporting data, and remember that hidden costs (support, maintenance, etc) are often the largest part of the cost.

Once you have completed this step you are close to having your IT budget. You now have costs outlined at the quarterly level for all significant expenditures required to support your business plan.

Step 5: Capture all available historical and industry data

At this point, you have a budget of sorts, but it exists in a financial vacuum. While it ties to business goals, it must also make sense in the broader context of your business situation. In order to assess if your budget is on target, you need to validate your spend. One of the quickest ways to validate spend is to compare with other data. To do this look at:

1. Your own historical spend data. Realize this may represent a level of under investment you need to break out of to meet your goals. Over time, your own historical data and performance against prior year budgets will be the most important piece of validation available.
2. Data from companies like your own. This can be difficult to find, but often found through executive or industry group memberships, paid data services, or data requests through online groups. While none of these other businesses are exactly like your business, they will help show you trends, identify possible flaws or gaps in your plan, and highlight areas that stand out as over or under budgeted.

Step 6: Fill in the gaps

So far this guide has been very focused on the hard part of budgeting for IT: capturing the larger costs associated with specific technology. However, budgets must not only include the large one-time expenses, they must also capture the routine departmental costs.

To fill in the gaps, first you need to evaluate the staffing costs and make sure that the costs are realistic based on actual employee or outsourced staffing models. You captured some rough dollars above. However, you now have to more accurately forecast how you are going to create coverage for the group. If you have an existing IT staff, you can simply use the current numbers and make sure to capture any expected increases due to a rise in benefit costs and pay increases. As you look at adding employees, equipment, and software, there will come a time when you need to add staff due to total workload or simply due to expertise requirements. It is generally a best practice not to hire full time staff to meet specific skill requirements. These tend to change over time and you will end up carrying more staff than the full time workload requires. You also shouldn't add staff to meet the project needs outlined in the gap analysis, since that too is not a sustainable work load.

Always plan staffing levels to meet a conservative baseline of full time work, and hire to the most commonly used skill set. One simple rule of thumb is to hire one IT employee for each forty employees in the company. From an ongoing utilization standpoint, this will ensure that your employee is fully utilized. However, this will not be sufficient to meet all project needs, peak user needs, or provide a wide breadth of skills to manage the variety of situations your company may encounter. Use part time labor or outsourcing to fill in skill and workload gaps. This will help ensure you are maintaining a lean and flexible approach to building staff.

For budgeting purposes, you can break your staff into a few simple cost buckets:

Entry level helpdesk staff	Entry level helpdesk staff should be budgeted as hourly employees, and depending on your region, the hourly rates can range from \$15 to \$25 per hour. Outsource rates for this would run \$80 to \$135 per hour depending on region and availability.
Mid level network engineers	These are generally salaried/exempt individuals and should be budgeted at approximately \$5,000 to \$6,500 per month, depending on your region. Outsource rates for these folks run \$125 to \$150 per hour depending on region and availability.
Senior staff	Senior staff run significantly higher, and are the least sensible hires in a small business as you will be unable to keep them busy, and unable to provide growth opportunity. Outsource senior skills. Outsourced rates run \$150 and up depending on region and availability.
Note: For budgeting purposes, make sure to estimate for benefits. You can conservatively use a 25% load for benefits for lower pay employees and 22% for higher pay employees to get a close estimate to what actual costs are likely to run. With any outsourcing you won't need to pay benefits, just the hourly rate and expected load.	

Finally, you must account for expenses. The most common and significant expenses to capture are going to be:

- Data lines
- Telephony lines
- Wireless expenses
- Hardware expenses (non-capital)
- Hosting fees (if you have your site or applications hosted)
- Co-Location fees (for offsite server management)
- Meals and entertainment
- Training (it is expensive to maintain well trained IT employees, and a budget of 5% of total salary per person is not unusual)

Use historical data if you have any, or simply set what feels like a reasonable dollar amount. Costs on data and telephony can be captured through a quick phone call to a local provider asking for a quote, for example if you are planning a move from DSL to a T1 in the upcoming cycle. Use the internet as a tool to find pricing as well. The goal of a budget is to be as accurate as possible. In general, if you find two similar prices on internet web sites for a good or service you plan to obtain, it is likely a reasonable number to use for budgeting.

Step 7: Validate against financial goals

Now that you have gathered data, you are just about ready to finalize this process. However, there are still a couple of important questions to consider before finalizing: *Can you afford what you are about to commit to? Do these numbers make sense?*

While IT expenditures can vary widely from business to business, below are some general guidelines to use in evaluating how reasonable your budget is. In general, the smaller the business, the smaller, as a percent of revenue the IT investment will be. It is somewhat natural for small businesses to under invest in infrastructure. Be careful not to under budget though, because if you do not invest strategically you may damage the company's ability to grow.

IT Spending by Company Size	
Number of employees	Average spent on IT*
6-49	\$145,000**
50-99	\$445,000
100-199	\$919,000
200-499	\$4.3 million
<p>*Includes hardware, software and staff **Average is skewed low by companies under 30 employees Source: Forrester Research survey of 492 executives of small to medium-size U.S. businesses</p>	

The numbers for small companies, according to AMI-Partners USA, average at \$12,844 annually on IT for business under 10 employees. Clearly, for smaller businesses, full time IT employees are not in the mix. In general, these

types of budgets allow for simple systems and minimal outsourcing around critical components such as server monitoring, basic system checkups, and responsive services.

What's the bottom line? Make sure your budget works for you. Be wary of over and under spend. If you can't afford an IT staff, or don't chose to manage IT staff, outsource to meet your needs.

Step 8: Work, rework and update as real data comes in

You have completed a budget! It is important to remember that while the creation of a budget is an 'event', budgeting is an ongoing effort. You must continue to measure actual to budget as each month goes by and capture missed data and changes in plans as data comes in. If the budget is inaccurate, fix it! Many companies feel a duty to leave a bad budget in place as a sign of dedication and discipline. They dutifully pressure the team to 'get closer' to the budget. In truth there is no reason to continue to manage a bad budget. Update the budget as you get better data. Save a copy of the original, to help with the process the next year, but make changes as you go, perhaps on a quarterly basis. As your data improves with a few years experience, you should be able to go to a mid-year sync up, and ultimately achieve a budget that is right on target.

About ISOutsource

ISOutsource is the premier IT support services and technology consulting company for small and medium businesses in the Pacific Northwest. ISOutsource helps clients maximize business performance by delivering unparalleled experience, superior customer service, and the highest level of technical expertise all at an affordable price. Clients trust ISOutsource to provide the reliable and responsive IT support service and thoughtful consulting needed to gain the greatest business value from their technology investments. www.isoutsorce.com - 800.240.2821.

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