



MDE Enterprises, Inc.

Practical IT Manager Perspectives

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How much staff do I need?

Many IT managers are asking for a quick fix, a "road map" of what to do to manage their organization. One of the questions often asked is, "How many people should I staff in my organization?" It would be great if there was an easy formula you could apply to determine the number of resources you need in an IT organization to support your business, such as:

- Number of programmers per business application
- Number of desktop support resources per "x" number of users
- Number of Help Desk resources per number of support calls per month

Unfortunately, none of these measurements or other criteria you could come up with will be effective barometers for giving you exactly what you need to quantify the number, or even type of staff you need to support your business.

More to this question than meets the eye

Young managers are often promoted from a senior technical position such as senior programmer, project manager, or network administrator. In the technical world, issues are usually more concrete and the "logical" answers are there to help you manage the technology.

For instance, understanding disk space needs and utilization, the effect of additional bandwidth in your remote connections, the average lines of code a programmer can generate, etc. are measurements that can be valuable in gauging the capacity requirements for these areas.

In management, business dynamics are often more subjective and the answers are not always straightforward. You simply can't arbitrarily choose a number and be confident that you have the appropriate level of staff to support the business. The odds are high that you will either have too much staff or too little.

Managers often look for industry statistics to give them the answer. Again, the statistics only give you an idea and a point of reference; they may have no relevance for your particular company's situation.

What should be your underlying objective?

A CIO or IT manager has a financial responsibility to the company. Senior management wants to minimize the cost of IT, just as they do in any department. There is one guideline you need to understand and follow:

***You should spend the least amount possible, , ,
 , , , but sufficient enough to support the business.***

That's right, every manager should try to minimize the cost of running their department, but you also have a responsibility to provide an appropriate level of support needed to run the company efficiently. Granted, this is a fine line to manage by, , , but that's why we call the role "manager".

So, what's the answer?

To get to the right answer requires some work. To arrive at an appropriate number of staff for *your organization* and *your company*, you can follow a simple process.

An example

Two companies can look very much alike on the surface. They can be in exactly the same industry, have the same amount of revenue, and even have a similar client base to support. At first glance, you might think that their IT needs are also similar (**Table A**).

Table A - Company examples overview

	Revenue	Number of clients
Company A	\$200 million	450
Company B	\$200 million	400

Upon closer inspection, you will find that the two companies are very different and have totally different dynamics that require very different focuses in IT to support their business needs (**Table B**).

Table B - Company examples technology support perspective

	Percentage of automation	Number of data centers	Number of supported primary business applications	IT expense as percentage of revenue
Company A	70%	1	5	2.5%
Company B	15%	4	26	7.5%

In fact, one company is moving more than twice the speed as the other company. With the automation in Company A, there is considerably less manual effort which improves productivity and profitability. In addition, Company A's IT department is only supporting one suite of business applications from one computer center which allows the company to spend considerably less for IT as a percentage of revenue.

In Company B's situation, the revenue is the same as Company A at \$200 million, and they even have fewer clients to achieve this level of revenue. However, because Company B grew through acquisition, there are four data centers and multiple sets of business applications that the IT Department must support. Company B has not consolidated any of its operation and the result is a much higher IT expense as a percentage of revenue.

Staffing IT for the two companies is very different. In Company A's case, IT initiatives are needed to fine-tune the operation, and the company is well positioned to start some truly strategic initiatives without spending more.

Company B has considerably more challenges. The company's bottom line is much weaker than Company A's due to the lack of automation in the operational units and the fact that it has to support multiple platforms and data center locations. If everything else were equal, Company B has at least five percent less in profitability due to the increased spending requirement for IT. Because of the difference in automation, profitability for Company B is probably a good bit less than for Company A. This spells "lots of opportunity" for Company B, , , but with a cost.

What's the point?

The point of this example is that every situation is truly unique, even if the business numbers (revenue, number of clients, etc.) and industry requirements are the same. To determine how many staff members you need in your organization, first determine what the business need is and what the constraints are.

You can do anything given the time, money, and resource. The challenge is that most companies can't afford an open checkbook. Even if money is no problem, your company can't absorb the amount of change that could be implemented by an "all-out" technology initiative campaign.

So, the trick is to quantify the specific issues you need to address to meet the company's most pressing challenges. These issues should define the projects you need to implement. Once you know what you need to work on, then and only then, should you try to determine the appropriate level of staff necessary to get the job done. "Appropriate level of staff" implies quantity of resources, type of skill, and level of skill needed to accomplish your mission.

Understanding business needs means you have a true appreciation for the dynamics of your IT responsibility. For example, if you manage a Programming Support organization, you need to know how large the programming request backlog is and how much programming capacity you have. You will also need to know if you have the business application expertise available to address current and future needs of the company.

A staffing plan looks at the current and projected project and support needs, compares it to existing staff available to address those needs, and identifies any gaps that exist and that must be filled, either by hiring or by contracting external resources.

If we take the Programming Support organization and apply it to our two example companies, we have different programming staffing needs. Company A will want to do more automation projects, provide support to existing business applications, and maybe develop a new application or two.

In contrast, Company B needs programmers to help consolidate the acquired company business applications and to aggressively develop more automation for the company while supporting the multiple sets of business applications that exist. Company B needs several more programmers than Company A although the size of their business is about the same (**Table C**).

Table C - Programming activity requirement

Business requirement	Company A	Company B
Business application suites	1	4
Assimilation project teams	0	1
Automation projects	1	3
Other projects	?	?

Programming support requirements

The needs of each company dictate the programming support staff needed to support its individual business requirements. Because Company A is much further along, it requires fewer programmers to support its business than does Company B.

Company B has many more applications to support, in several data centers. More technology requires more support, , , it is that simple. Company B also has significant work to standardize the business applications of its company, something Company A has already completed.

The simplest process is to assess the needs of the company, quantify the projects you will need to implement to address those needs, and itemize the staff in both numbers and skill required to accomplish your objectives. When you go about quantifying the specific projects for both companies, you quickly see that Company B has significantly more work and projects to do. Company A simply needs to support its existing technologies and execute any special projects that come up.

Infrastructure

Four data centers versus one tells you right away that this requires more infrastructure people to support. In addition, twenty-six versus five mission critical business applications suggests there are many more servers to support. Because Company B grew through acquisition, it also suggests the technologies in this company are probably of all types, colors, and shapes, , , i.e., requires a lot more support and different types of technical knowledge to support it.

Bottom line is that Company B is a much more complex environment and requires significantly more infrastructure support resources.

To get at the number of support resources, you have to assess the situation, quantify the project work, and determine what's required for the day to day support. You define the staff requirements from this assessment. It doesn't do any good to try to determine how many people and what kind of people unless you go through an exercise to quantify exactly what you need to do. This quantified work defines the resource necessary to do the job.

Once you know what type of resource and how many resources are needed, then you can determine whether it is better to staff the resource or outsource some of the resources.

You can use a similar approach when looking at Help Desk and other parts of the IT organization. Follow a 3-step process:

1. Assess the need.
2. Quantify the work to be done.
3. Determine the specific skill and number of resources to accomplish the work.
4. Decide on whether to staff internally or to outsource.

Staffing is a little bit of a subjective process, but when you use these steps you can make it more objective. As long as you balance business need with cost, you should be on solid ground.

Lastly, whenever you develop a plan, it is important to discuss it with your senior management team. When they agree with your findings and recommendations, you can guarantee you will be on solid ground.

Mike Sisco is founder of MDE Enterprises, Inc. a manager training company focused on "helping IT managers of the world achieve more success".
More information available at www.mde.net.