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Build It or Buy It? Deciding How to Automate Your Help Desk

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Introduction

If you're a help desk manager you have probably made your share of mistakes, and since you're a human being you have learned from them and moved on. This is almost always true unless it is your responsibility to decide if it is better to purchase help desk software or develop it in-house. If this task has landed on your desk, you have one chance and only one chance to get it right. Developing software in-house involves a long-term commitment of time and money from developers that already have too much to do and not enough time to do it. If you decide to purchase software, you enter into a business relationship with a vendor and can spend thousands of dollars.

Given the choice between purchasing help desk software and developing it in-house, you are better off purchasing it from a reputable vendor. Developing help desk software in-house *can* work, but *only* under a *unique* set of circumstances that most organizations don't often possess. If you have a choice, do your homework, find the best software company you can, and purchase what you need. Look for a software manufacturer like Magic Solutions that is financially stable and has many years of experience developing software. This white paper will explore the advantages of purchasing help desk management software instead of developing it in-house.

At first glance, developing help desk software in-house may make sense. The developers are only a few feet away, there is an ease of communication that results from propinquity, they understand the product(s) being supported, they understand the customers and they may have more time to devote to the development effort because you are the primary customer. Best of all, you can determine the design and features of your product in an afternoon or two of meetings, turn the results over to the developers and wait for the final product. Not! We'll discuss why this scenario is unrealistic, unworkable, and unimaginative later on.

Whichever choice you make, *you have one opportunity to get it right* unless you enjoy committing time, money, resources and your personal and professional image to a failed effort.

What are You Looking For? And Other Questions You Should Ask Yourself

The Decision to Change: The Case of Acme Management Solutions

Acme Management Solutions (AMS) is an IT outsourcing company located in a suburb of Cleveland, OH. It has over 2,000 employees and does everything from providing mainframe processing of medical insurance claims, to help desk services, to software development for over 100 different customers worldwide. The current help desk software that Acme uses has been in place for over five years and is available to ALL of AMS's customers, both external and internal. The help desk alone opens over 1,000 cases 24/7, with an additional 300 cases opened by customers via e-mail. When the original version was purchased, it was not the enterprise version or a CRM solution, even though it is now used as such. AMS has continued to purchase licenses as it needs them, but the manufacturer has notified them that this application will be discontinued and support will be terminated as of the end of the year.



The product's database has become corrupted; the knowledge base system is so slow that the help desk has stopped using it altogether and now relies upon three-ring binders for problem resolution and research. Two full time staff members of the help desk maintain a vast library of binders on problems and solutions. The system also runs so slowly that the help desk staff regularly record problems on paper and then enter them into the system at the end of their shift. This takes approximately one hour per day. The help desk staff hate the system, the customers hate the system, and the administrator hates the system. AMS has decided it needs to change to a more advanced product, in order to ensure customer satisfaction.

The VP of Data Services & Customer Service Kimberly McDonald is faced with the responsibility of either choosing an existing, off-the-shelf product or having the software development department create a custom product. Cost, time, and the availability of resources are all factors in the selection.

Ms. McDonald begins the process by identifying what it is that the help desk needs in a new system. It's not an extensive list, just a starting point, but she puts it in a matrix nonetheless. (See chart). After reviewing the list, she meets with the VP of Development and requests that the list be reviewed and an estimate of time and cost be made; her colleague complies. She then begins searching for a commercial software package. Working alone, this process takes several weeks and Ms. McDonald returns to the development department to ask if some of the more sophisticated features she has discovered can be incorporated into her original request. Her colleague in development explains that they can be incorporated, but it will add to the expense, the development time and require more than one developer.

After gathering all of this information Ms. McDonald realizes two things: First, the entire process took much longer than she thought it would. Second, the entire concept of developing the project in-house has taken on a life of its own. Having gathered enough information she constructs a review document to assess the status of the entire project.



The document contained the following information and posed the following questions:

Acme Tools Evaluation Matrix			Vendor:		
<i>Rank on a scale of 1 to 4</i>			Minimum	Maximum	Actual
Factor	Importance		Performance	Performance	Performance
Vendor Stability					
Financial performance					
Stability					
References					
Product line					
Reputation					
Compatability					
With corporate standards					
With other installed systems					
With vendor's vision of product future					
Product Functionality					
Hardware platform					
Hardware requirements					
Documentation					
Quality of support					
Training					
Performance					
Scalability (for future growth)					
Ease of use					
Degree of customization required					
Average transaction time					
Detailed specification by product					
Problem management					
Problem description: summary, detail activity					
Clear problem history that is easy to access					
Problem classification levels					
Query & diagnostic features					
Common/prior problem lookup					
Key word searches					
Symptom related lookup					
Assignments, referrals, & escalation					
Automatic escalation via e-mail					
Cost					
Initial license					
Installation					
Training					
Support					
Maintenance					
Upgrade					



Help Desk Software Project Review

Purpose: Determine the requirements that the help desk and our user community need in a help desk management software application.

Determine if it is better to purchase this software or to construct it in-house.

Questions Raised To Date:

- What metrics will be measured? Customer SAT, Call Resolution, SLA?
- What are our requirements for this product?
- Have all stakeholders been asked what requirements they need in the product?
- Whose requirements are more important; the help desk staff or the end-user's?
- What is the difference in cost between developing software in-house and purchasing it from a vendor?
- What is the difference in implementation time between a purchased product and one developed in-house?
- What is the difference in obtaining product updates between an in-house product and a purchased product?
- What is the difference in memory & network bandwidth requirements between an in-house product and a purchased product?
- What is the difference in product administration time between an in-house product and a purchased product?

In reviewing her questions and the work she has put into the project so far, Ms. McDonald has reached the following conclusion:

The number of questions that need to be answered, the complexity of the project, and the commitment of time indicate that the project should be turned over to a team of two to six people that can thoroughly study the issue and make recommendations.

What Do You Get With A Purchased Product?

The short answer is, a lot. Help desk software vendors spend millions of dollars and months of effort in determining what features go into their products. In addition, their sales, marketing, and technical support staffs have an intimate knowledge of help desk operations, trends, and requirements. Here are the Top Ten Reasons You Should Purchase a Help Desk Software Package:

Reason Ten: The product already exists and you won't have to spend time, money and political capital negotiating with a development executive to liberate already scarce resources.

Reason Nine: The vendor you choose has an understanding of how help desks work and what they need in a software package. Developers don't always have this understanding and explaining it to them can take time, and time is money.

Reason Eight: Almost every help desk software package in the world can be purchased in modules. You can add and delete modules based upon your business needs and budget.

Reason Seven: Help desk software packages can be easily customized to meet your support operation's unique needs. You won't get this capability in an in-house product without a great deal of extra work and time.



Reason Six: The product you purchase will have voluminous documentation that is both technical and end-user oriented. It may even have CBT disks available and will certainly have on-site as well as off-site training programs available to train your staff. An in-house product will rarely have such documentation.

Reason Five: The documentation and training will be at least three times better with a purchased product than it will be with an in-house product. You will not have to compete with the internal documentation and training staff that get paid to serve paying customers.

Reason Four: You will have access to patches, updates, user groups, updated documentation, and technical support when the product is released and when you need it.

Reason Three: No matter how good the training, and no matter how great the documentation, sooner or later you will need to call the vendor's technical support. This need usually arises at the worst possible time and inevitably involves a customer. Developers are busy people and you have to ask yourself if the in-house developers will be available when you need them. Most vendors have help desks that are open 24/7 and are literally waiting for your call.

Reason Two: Updates. A purchased product is continually updated, debugged and readied for your immediate use. With an in-house product your staff will usually be debugging the update after it is installed. This is not fair to your staff, your customers, or your boss.

Reason One: You can purchase, train on and implement a purchased product in a fraction of the time it takes to design, code, document, train on and implement an in-house product. A software development project can easily take on a life of its own and by developing an in-house product you are competing with paying customers. Unless you work for one of those unique companies mentioned earlier and unless your help desk can command the resources it needs, when it needs them, the chances are that in-house development will be prohibitively costly, time consuming, frustrating to train on and difficult to implement.

The Value of Technical Support

One of the most important, least understood and poorly appreciated aspects of purchasing a help desk software package is the wealth of technical support that you get when you buy from a vendor. If you choose wisely you will have a vendor with good technical support that is accessible 24/7 via phone, fax, e-mail and chat. Part of the criteria you use to select your software should be a thorough reference check that includes not only product reliability, but technical support as well. Whatever product you purchase, remember to consider the quality of the vendor's technical support; you'll need it sooner or later so plan for the inevitability of its use. Keep in mind that the vendor's support department will have one hundred times the experience with their product than you and your staff will have, and all of that information will be sitting patiently in a knowledge base system just waiting to be accessed. Whereas, the developer that wrote a particular portion of your proprietary software may, literally, be out to lunch or no longer available when you need them. Make sure you get the answers to the following questions:

- Are technical problems solved in real time or will you have to wait for a return phone call or e-mail?
Is support via online chat available?
- If you have to call, what is the average wait time on the phone?
- Can technical support be accessed 24/7?



- Is the vendor's knowledge base system available via the Web?
- Does the vendor hold user group meetings for its customers?
- How many of these services will you be able to avail yourself to if you develop help desk software in-house?

The Joy of Additional Services and Product Upgrades

There's an old saying about plans, that says "The plan goes out the window as soon as you implement it," or words to that effect. The point is that, if you're developing in-house help desk software, once you've sent your list of requirements to the developers, something will change. "Requirements Creep" is as old as Grace Hopper and will be around forever. Something about the fast pace of business, everyone's hatred of meetings, and simple human nature frequently prevents groups of people from thinking of everything that they should think of, before it's too late. One of the other advantages of purchasing a help desk software product from an established vendor is that they have people who's job is to talk to customers, consultants, hackers, and managers and discover all of the things we would forget if we developed the help desk software ourselves. They can take the time, spend the money, develop the prototypes and find volunteers to beta test it, *before* it gets to you and your staff. This capability, wealth of resources, and more time benefits the final customer. Sure, you're paying for it in the final price, but since you're getting a better product, it's worth it in the final analysis.

What Do You Get If You Build It Yourself?

Retail Data Services (RDS) is a software company in a suburb of Northeast Ohio with 500 employees, 200 of them in the support department alone. They make point-of-sale software (POS) that is used worldwide. The support department provides service and support on a 24/7 basis and handles over 1,000 phone calls and e-mails each day.

Ten years ago RDS had a 21-year-old boy-genius develop help desk software for its then six person help desk. It allowed for the logging of problems and it also had a separate text search KBS function and a robust reporting capability. When it was developed, the call volume was approximately 150 calls per day with operating hours of 8:00 A.M. to 11:00 P.M. The problem tracking system and the knowledge base system—"Help Desk Helper"—has been updated exactly once since 1993. The KBS system is so slow and so corrupted that it returns an average of 50 "hits" for each query. The help desk staff needs separate computers with older operating systems to run the application because it has not been updated to support the newer version now standard within the company.

Four help desk managers in ten years have been able to secure exactly one update since 1993. Each time the issue of updating the system has been raised, plans have been formulated, but they never make it to the development department. It hasn't been for the lack of good intentions; it's been a lack of time and resources. One vice-president stated clearly in a meeting, "The help desk costs money and doesn't contribute to the bottom line. We're not going to spend thousands of dollars of development time at the expense of paying customers." This vice-president's statement indicates with horrifying clarity the single biggest reason not to develop software for your help desk in-house. It will rarely, if ever, get updated. Simple maintenance on the product will also become a challenge. No one planned for this situation to develop, but in the fast paced world of customer service, technical support, and software development it routinely becomes a reality.



Addressing the “It Won’t Happen Here Syndrome”

The author can imagine development managers, support executives and project managers across the entire world shouting that the above story is simply a contrivance to make a point. In point of fact, the above story is true and the point valid. Yes, there are exceptions, but let’s be honest, they are rare. If you think the author is wrong, try this exercise to address the “It Won’t Happen Here Syndrome.”

As part of the process of designing and listing your requirements for the help desk software that you want to develop in-house, include a request and a service level agreement with the following components:

- A dedicated project manager for the help desk software product who reports to both his boss and the help desk manager.
- A line item in the development department’s budget for developing, maintaining and updating the product.
- A routine maintenance schedule for the product after it has been developed.
- A dedicated programmer that will work with a senior help desk staff member to provide technical support for the product.
- A yearly schedule of updates for the product.
- A process that allows you and your staff to recommend changes, additions and deletions to the product after it has been released.
- A written plan for QA testing and beta testing.
- Release notes for the product that assist in its administration and in its use.
- Training and documentation on the product for the entire help desk staff that is executed *before* the product is released.

Take this list with you when you meet with your development and senior IT managers. Explain that the importance of developing, maintaining and using the help desk software is critical for the company, your customers and the customer service it provides. If your colleagues are not willing to make this investment to produce a powerful help desk application and there really is no middle ground in this situation, then you must decide to purchase a help desk software package from a reputable vendor. If you don’t, you will be inviting trouble, pain, and frustration.

About the Author

Bob Last is a former help desk manager, software support manager, writer and consultant with over fifteen years experience in technical support.



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