

Understanding the Build-or-Buy Decision

Understanding the decisions, costs and payback surrounding a decision to make or buy a customer support system for your organization.



www.goldmine.com/products/heat

Introduction

Many organizations must consider purchasing off-the-shelf customer-support software versus developing a custom application internally. The build-or-buy decision is not unique to the support industry. It is a perennial issue that is occasionally faced by organizations in every business. Perhaps because of the relative newness of support applications, many are internally developed simply because organizations have customarily fulfilled their own application requirements without giving much consideration to the solutions available from other sources.

That is changing as information infrastructures become more standardized. In fact, a Gartner Group study found that 50 percent of enterprises surveyed would build if they could not buy, and 35 percent said that they would build only when it was strategically advantageous to do so. Because of the extensive progress in integration and usability by packaged-application vendors, there is now a wide range of viable choices from which most organizations can choose. The Gartner Group survey concluded that the dominant trend is toward the purchase of software applications.¹

What Do You Want to Do Today?

When deciding whether to build or buy a help desk application, it is essential to determine application requirements and to assess your ability to produce an effective solution, taking into account your organization's available resources, as well as its core competence. Until recently, help desk were widely viewed as a necessary evil; a point at which to handle problems, complaints and other tribulations of everyday business. In that atmosphere, help desk software was expected to provide a reliable method for recording and documenting events.

In stark contrast, today's climate of downsizing and cost cutting is characterized by a burgeoning necessity for support centers to contribute to, even to increase company profitability. This fast-paced, competitive environment has spawned the need for support-interaction products with features that harness the newest technologies to eliminate needless procedures and to streamline a range of business activities. The requirements for a modern support application are far beyond those of simply logging and documenting events.

¹ *Inside Gartner Group*, Document # IGG 073097-04, 30 July 1997.

- Automatic escalation algorithms must integrate with email, paging and telecommunication systems to ensure that the right people do the right things, at the right time.
- Computer-telephony integration helps eliminate redundant or unnecessary data entry and retrieval, while also allowing efficient routing scenarios based on agent skill sets and availability.
- Current knowledge-management technology learns, organizes and retrieves information about past situations, minimizing the need to research the same problem more than once, and giving support technicians a head start on problem resolution.
- Graphical metric displays and powerful report generators help support center managers better monitor and control their processes and apply strategic-planning techniques to support services management.

Don't Overlook the Opportunity Costs

It is possible to build a basic, homegrown call-tracking system based upon an off-the-shelf database-management software, such as MS Access or dBase, Lotus Notes or HTML. However, such a simplistic system will not provide the functionality of a sophisticated, commercial package; nor will it incorporate the flexibility required to address likely changes driven by inevitable future growth and other environmental changes. Furthermore, the more comprehensive and complex the homegrown design becomes, the more dedicated development resources are required; the greater the chances that the project will face delays or failure; and the more difficult future maintenance and adaptations will be.

Even with adequate in-house programming resources, to build a full-featured help desk solution may not be financially practical. According to the Gartner Group, a comparable problem management solution can take five full-time developers a year to build. Furthermore, such projects often end up costing more than planned because of unforeseen technology changes; changing completion criteria during the project; inability of the system to tolerate change during and after implementation; or the requirements simply outgrow the system before it is complete.² In addition to their direct costs, the resources required to develop and maintain a help desk application also bear the opportunity costs of withdrawing those resources from the organization's core effort.

² Gartner Group Research Note, *Strategic Planning*, C. Lusher, 1 October, 1996

On the other hand, when the same application is purchased from outside, both R&D and maintenance costs are distributed across the vendor’s customer base, reducing each customer’s application cost and increasing their return on resources. Using the time frame in the preceding paragraph, five software engineers, each earning \$58K per year³ could spend a year creating an application for their employer. For less than one-third of their salaries, you could purchase a 20-seat license and five years of maintenance from any of the top 38 support-software vendors. (To be sure, some of those 38 products – including GoldMine Software’s award-winning HEAT could be purchased for less than one-sixth the cost of developing a homegrown package⁴) You could spend three times as much to implement your system in one year; or you could implement it today at a fraction of the cost, while also assuring yourself that the vendor will maintain and update the application regularly. Over five years, you would pay dramatically less by simply purchasing commercial software (including additional maintenance agreements, version upgrades, etc.) than to develop and maintain your own internal, full-featured support application. (See Figure 1 below.)

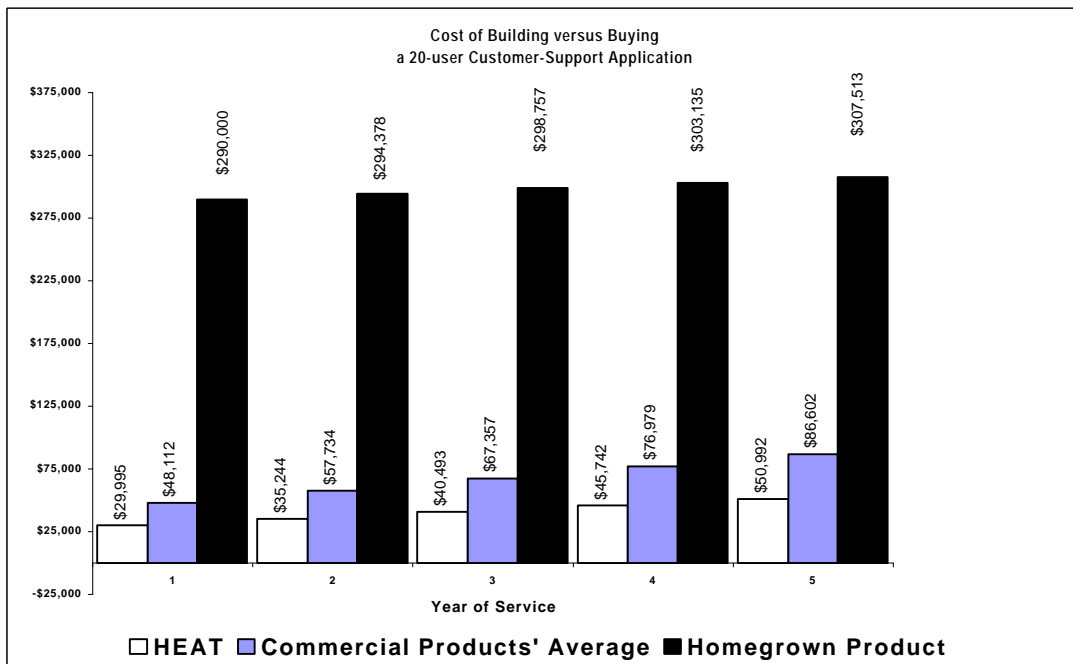


Figure 1: For about a third of the cost of building your own application, you could pay for a full-featured commercial package, including five years of support.

³ Average programmer’s salary, from a survey of 11,000 IT professionals, “Programmers Catch Up,” *Information Week Magazine* May 18, 1998

⁴ Estimated average 20-user license is \$48,112; estimated average maintenance cost is 20% of application price. Raw data taken from the “1998 Guide to Problem Management Software,” *Support Management Magazine*, May/June 1998

Time to Implementation

Beyond the development cycle, implementing a custom-built application will also take time and will involve more than merely installing software. If it is to work in conjunction with existing databases or applications, those linkages must be tested and proven. As with any new system, users will need training. Finally, full implementation will inevitably necessitate some outwardly innocuous process changes that will later prove to cause unforeseen problems.

Most commercial developers cite ease of implementation as a design objective. While some of their applications require vendor or programmer expertise to deploy, many, including HEAT do not. In a recent survey, 34 vendors of support software indicated that it should take a typical customer an average of about 20 days to make their applications operational.⁵ If the customer-support system is strategically important, this time-to-market analogue could have significant impact.

Features and Functionality

A decade ago, there were virtually no software vendors offering customer-management applications. The few such applications that existed were either internally developed or custom-built to accommodate a specific mainframe or minicomputer system. As personal computers and network operating systems began to replace those more rigid platforms, the support milieu became more complex, and the help-desk software business began to develop. Today, there are hundreds of commercially developed support solutions that range from basic, structured packages to extremely complex, adaptable systems that require a programming staff to organize and maintain. To meet most users' needs, some midrange choices, such as HEAT incorporate the majority of features and industry best practices required, while also affording the flexibility to customize the application to meet specific needs, without requiring programmer support.

When Should You Build?

It is generally presumed to be best to purchase an asset if an appropriate product is available from a vendor that specializes in such products. However, there are situations in which building is better. An internally developed application may be preferable when it offers a strategic advantage, when the IT infrastructure prohibits use of a commercial application, or when such applications cannot provide sufficient control over unique processes.

⁵ Raw data taken from the "1998 Guide to Problem Management Software," *Support Management Magazine*, May/June 1998

Another reason to build an application is the absolute necessity imposed by some legacy systems. Outdated, custom-developed or otherwise unique information architectures may prevent consideration of off-the-shelf applications. As interoperability becomes the norm, and more organizations adopt industry standard databases and user applications, this limitation is becoming more unusual.

Finally, some business processes are not easily accommodated by packaged applications. It also may be desirable to maintain control over the process, as well as on the actions of the users who administer them. When this is the case, building a custom-designed application may be the only way to meet specific user needs. As commercial application developers place greater emphasis on customizability and user-specific security administration, these issues become less important.

Even when conditions indicate the need for a custom-built application, other considerations may influence the feasibility of such a solution. Developing and maintaining the application requires substantial programming resources. Even if such resources are available, it is questionable whether the application can be developed and tested in a cost-effective, timely manner. Given the rate of change in information technology today, it is entirely possible that other organizational initiatives may dictate implementation of newer systems that render the new application obsolete before the application-development cycle is complete.

Conclusion

As we said, there are now dozens of commercially developed support applications from which to choose. These applications offer feature sets and functionality ranging from simple, rigidly structured, and easy-to-maintain systems to elaborate, highly adaptable packages requiring considerable expertise to implement and maintain. There are also products that offer a sensible balance between customizability and ease-of-use. Those packages are ideally suited for most typical customer support situations.

Considering the cost and time required to develop, implement and maintain a fully featured homegrown application, in most cases, your best choice is to purchase your customer support application from a vendor that is heavily involved with producing (and continually improving) products which address the needs of the modern support environment.

About GoldMine Software Corporation

GoldMine Software Corporation is a leading developer of help desk and support center software solutions. GoldMine's flagship product, HEAT, has an installed base of more than 3,500 customers and has enjoyed excellent reviews for its flexibility in customization and strength in problem management. HEAT supports all aspects of help desk automation - call tracking, problem resolution and problem management. Four principles guide the evolution of system design: ease of installation and use, total customizability, complementary add-on modules and integrations, and bringing enterprise concepts to a workgroup price/complexity level.

HEAT products are deployed across a broad range of industry segments with an estimated 60,000 end users at more than 4,000 customers worldwide, including industry leaders such as Alltel, Chevron, the FDIC, Mercedes Benz, and U-Haul. GoldMine Software Corporation is based in Colorado Springs and can be reached at (800) 776-7889 or via the Internet at www.goldmine.com.

About HEAT

Award-winning HEAT is a fully customizable, 32-bit, automatic call logging and tracking system. Features include auto escalation, automatic ticket generation, proactive service-level management and open architecture in file- and client-server environments. Manager's Console feature graphically shows overall operational status at a glance. The Answer Wizard feature provides nearly 300 pre-defined, customizable reports. The HEATWeb module gives analysts and clients remote access to essential HEAT system features from any web-enabled workstation.