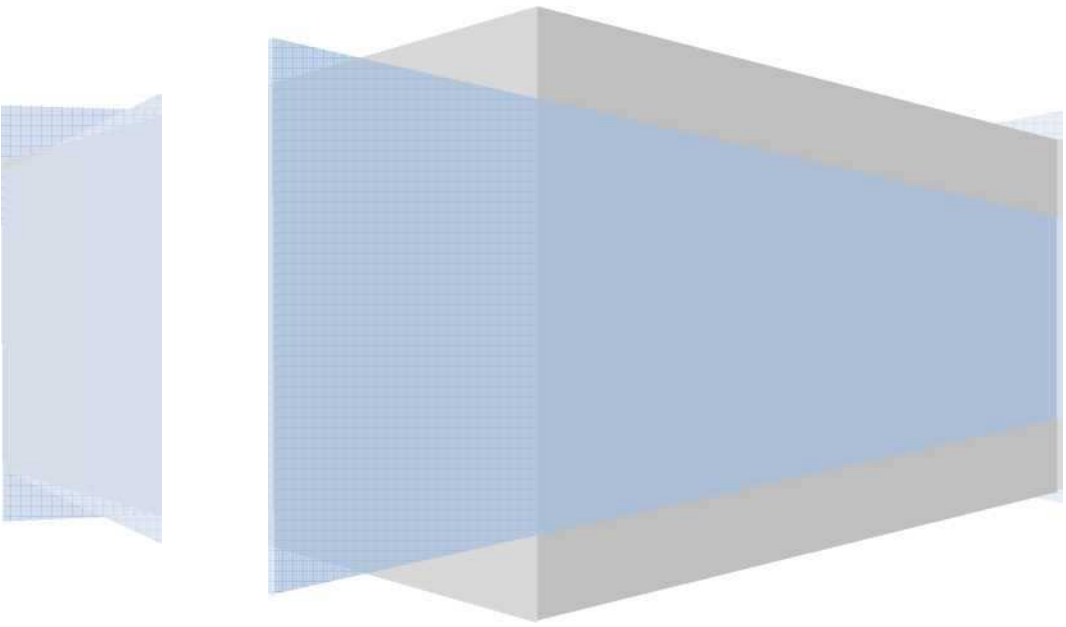
Finally, Affordable Full-Function ERP for the Small and Mid-Size Manufacturer

Enterprise Resource Planning (ERP) is an enterprise-wide information system that facilitates the flow of information and coordinates all resources and activities within the organization.



An Executive Whitepaper Presented by Fourth Generation Software, makers of

Affordable, Adaptable ERP Software

Highlights:

- **ERP solutions are effective for reducing costs through improving efficiencies and decision-making.**
- **The obstacles preventing small and mid-size firms from effectively implementing ERP have largely been eliminated.**
- **Smaller firms should be wary of implementing ERP solutions that compel them to change their processes to accommodate the software - this can result in a loss of competitive advantage.**
- **Fitrix provides a "game-changing" ERP solution at a price point that gives small to midsize firms an avenue to differentiate and meet their customers' needs.**
- **Innovative business leaders that are looking for new approaches to gain and maintain strategic advantage should closely examine the Fitrix ERP solution.**

Why ERP?

ERP solutions, an accepted and widely embraced tool used mostly by larger firms to realize cost savings and improve operations, are thought by some to be too complex and expensive for the SMB. That's no longer the case. Innovative approaches to developing and implementing ERP systems now make it an effective strategic weapon for the little guy - and in some cases, allows the little guy to compete effectively with its much larger competitor.

Until now, most SMBs have struggled to squeeze the information they need for their operations out of a tangle of inadequate tools - for the most part consisting of stand-alone spreadsheets, accounting systems, desktop applications, and a patchwork of homegrown applications. These tools lack the horsepower, breadth, and necessary integration to provide the insight managers need to transform their businesses.

Lacking an ERP solution, firms, especially manufacturers, find themselves struggling to compete and grow using applications that are functionally deficient, obsolete, and isolated from other applications and data. These shortcomings manifest themselves in many ways that adversely affect the organization. These include:

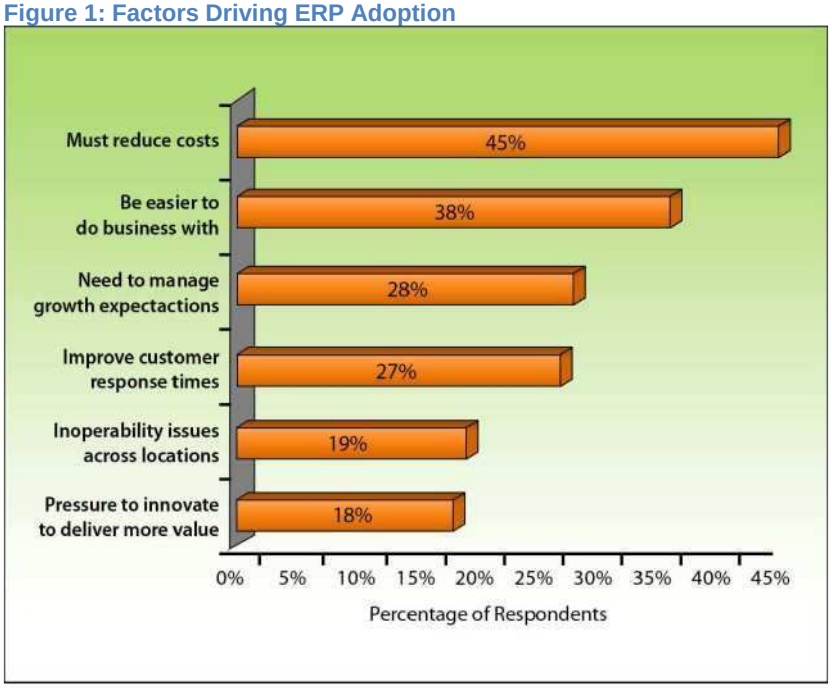
- Inaccurate forecasts that play havoc with inventory levels
- Insight into innovative design engineering is clouded
- Order tracking from acceptance through fulfillment is cumbersome - or non-existent
- The revenue cycle is obscured
- Capacity is underutilized - or overstrained

- Cost overruns and missed deadlines taint customer relations.

The SMB sector, which has on average seen greater growth rates than its larger counterparts, is suffering the consequences of a disconnect between what they have in their legacy systems and what they need to compete effectively in a sometimes brutal and increasingly global environment. A tool that provides insights into how to squeeze more efficiency out of the organization is invaluable.

ERP is perceived as having the most direct impact on reducing costs. When asked in a survey conducted by the Aberdeen Group of SMBs what factors drove them to implement an ERP solution, nearly half cited the need to reduce costs to improve operating margins. Improving customer service was the second most cited reason. The distribution of responses to this survey appears below in Figure 1.

Figure 1: Factors Driving ERP Adoption

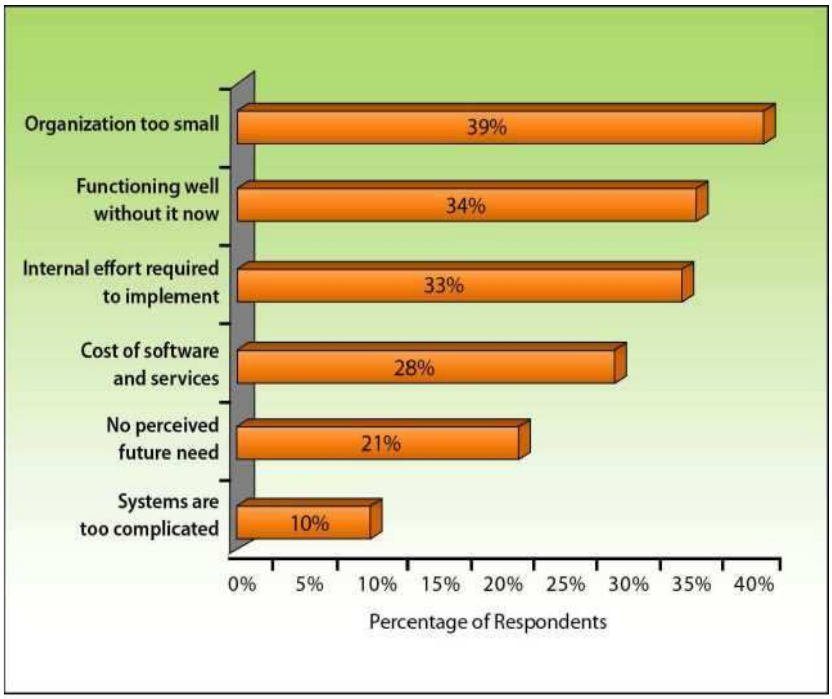


Source: Aberdeen Group survey, August 2010

A survey conducted during much the same period by AMR Research confirms these findings.
Fifty percent of their respondents named cost reduction and improved efficiencies among their top two priorities.

Even with several compelling issues driving SMBs to acquire ERP solutions, fewer than one in three have done so. If it's such a magic elixir why such low adoption rates? Figure 2 provides the reasons cited by respondents in the Aberdeen Group survey.

Figure 2: Reasons for Not Acquiring ERP



Source: Aberdeen Group survey, August 2010

Innovation has made many of these reasons invalid. Solutions designed to fit their specific needs now allow smaller organizations to leverage the power of these systems to attain the same benefits that larger firms enjoy. New approaches to structuring system architectures have greatly simplified implementation and use - and powerful solutions are now much more affordable to acquire and maintain.

The Many Flavors of ERP

ERP solutions evolved from applications focused on materials requirements and resource planning and computer integrated manufacturing. The Enterprise Resource Planning term came about when software developers were searching for a name that would more aptly describe these broader systems. These new solutions provided functionality that encompassed other applications in addition to manufacturing.

ERP is an enterprise-wide information system that facilitates the flow of information and coordinates all resources and activities within the organization. The system assists in managing the connections to outside stakeholders as well as enhancing performance management. It

uses a centralized database and usually relies on a common computing platform. It provides a unified, consistent, uniform environment.

Functions typically supported by the system include manufacturing, inventory, shipping, logistics, distribution, invoicing, and accounting. Some solutions now embed customer relationship management functionality. A wide variety of business activities including sales, marketing, billing, production, inventory management, human resource management, and quality depend on these systems.

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There are plenty of inexpensive software offerings that call themselves ERP solutions that are not “full-function” ERP. There are dozens of add-ons to accounting packages such as QuickBooks™ or Sage Peachtree® software. A number of these run on an Access™ database, lack true ERP functionality and features, and are not scalable. Comparing these packages to a full-function ERP solution is like comparing a wheelbarrow to a front-end loader.

The Benefits of “Full-Function” ERP

Competitive advantages arise to firms that can contain costs so that increased revenues translate into higher profits. A well-constructed and implemented ERP solution should reduce costs and increase productivity through improved operations. Standardizing business processes, which is required for the successful implementation of ERP, lays the groundwork for attaining improved efficiencies. An effective implementation of an ERP solution optimizes the use of capital equipment and manpower. This in turn increases the importance of other ERP capabilities such as scheduling and resource planning.

The consolidation of data resulting from ERP use creates many organizational benefits:

- No need to synchronize changes between systems.
- Consolidates applications and brings more control to cross-functional processes for manufacturing, finance, human resources, marketing, and sales.
- Provides a real-time, enterprise-wide view of the business for faster and more effective decision-making.

- Shortens production lead times and delivery times.
- Helps build a common vision throughout the enterprise.
- Consolidates multiple permissions and security procedures into a single framework, which reduces the risk of losing sensitive data.

The benefits of ERP have been proven by a number of studies. The Aberdeen Group found the following quantifiable benefits from best-in-class ERP implementations:

Even the firms characterized as laggards realized significant benefits from their ERP implementations.

- 22% reduction in operating costs,
- 20% reduction in administrative costs,
- 17% inventory reductions (for manufacturing and distributing),
- 19% improvements in complete and on-time delivery,
- 17% improvements in schedule compliance (for manufacturing and distributing).

The study also found that best-in-class implementations combined strategy, organizational capabilities, and technology to:

- Standardize and accelerate both back-office and customer-facing functions,
- Offer real-time visibility throughout the quote to cash cycle,
- Use exception reports to respond proactively to head-off potential problems.

Other study findings bear out the positive effect on company performance including the following averages:

- 2.9 days to close a month,
- 34 days sales outstanding,
- 95% complete and on-time delivery,
- 17% growth in operating margins over the past two years.

- 7% reduction in operating costs,
- 4% reduction in administrative costs,
- 9% reduction in inventory (for manufacturing and distributing),
- 11% improvement in internal schedule compliance (for manufacturing and distributing),
- 6% improvement in complete and on-time delivery.

As the study points out, single percentage savings might not sound all that impressive, but for every million dollars in operating costs, a 7% savings amounts to $70,000.

The “hard,” quantifiable benefits realized in reduced operating and administrative costs, inventory reductions, improved production and delivery schedules, and increased operating margins make a compelling case for ERP in such an intensely competitive, global marketplace.

One Size Does NOT Fit All

While there are some common characteristics among firms that get the most value from their ERP solutions, there is no one “right” approach for small to medium-sized businesses in implementing a solution. There are many issues to think about when considering ERP systems.

There are dozens of applications that provide a wide range of capabilities. ERP solutions are modular in construction usually containing anywhere from 18 to 24 integrated modules. The earlier cited Aberdeen Group study found that better performance of the solution correlates with more modules deployed but that in general, SMBs used slightly fewer modules than large enterprises. The trick is to take greater advantage of those modules deployed.

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Most of the widely recognized names in ERP software have integrated what they deem “best practices” into their solutions. These “best practices” are built around what the vendor believes to be the most efficient and effective way to perform a business practice. While some “best practices” may be a good fit for your organization, being locked into all of a software vendor's “best practices” is probably not. Firms looking to implement ERP systems are frequently required

to adapt their organization to accommodate the software's processes rather than adapting the ERP solution to the firm's processes. This reliance on the vendor to map out their perception of how a business should operate poses special challenges to the small to mid-size firm:

- It can add a level of complexity that smaller firms don't have the resources to address.
- These systems usually require significant customization to fit the smaller firm - configuration and often programming that often exceeds either in magnitude, complexity, or both, the capabilities of in-house staffs.
- In many instances, the revamping of business processes to fit standardization required by ERP can result in a loss of competitive advantage.

Thinking about specific business goals that would result from an ERP acquisition in conjunction with a realistic assessment of the capabilities and bandwidth of the in-house IT staff can help clarify the best approach to selecting, implementing, and maintaining the system. Just remember - one size does not fit all.

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In many ways choosing an ERP solution is analogous to buying a new suit of clothes: you want to start with one that comes as close as possible to fitting you off the rack, but ultimately some tailoring here and there is almost always needed. When you put it on, you don't want it to look or feel funny or uncomfortable, and you don't want to have to go on a diet or bulk up for it to fit.

What Makes An ERP Solution “Full-Function”?

Just as ERP software packages vary by the size of the company they fit, they also vary by the range of functionality that they offer. If your SMB requires a comprehensive ERP solution as many today do, take the time to learn the differences between a “full-function" ERP solution and less capable solutions. You need to be able to tell one from the other, since there are numerous solutions that appear to be complete ERP solutions but aren't. The differences between “full- function" ERP solution and less functional ones typically lie in four key areas:

- Depth and breadth of solution functionality,
- Seamless integration of modules,
- Scalability of the solution and underlying technologies,

- Enterprise-level IT architecture capability support.

Depth and breadth of ERP solution functionality is fairly straight-forward to measure - a well-researched and thought out ERP Request For Information (RFI) or “feature checklist” that accurately represents the company's specific needs will typically assist the ERP buyer in assessing the relative functional strength of the solution they are evaluating. Keep in mind that lots of “modules” does not mean lots of features overall if the “modules” are very simplistic and aren't very “deep” functionally, or if they aren't designed for your type of business. Make sure your checklist is not just a cursory one - it should really get into details where needed, especially in the areas that are most critical to your business.

Additionally, the presence or absence of certain ERP modules - especially for certain types of manufacturing companies like assemble-to-order manufacturers with complex, highly configurable items - is often a tell-tale sign of whether the ERP solution is full-function or not. For example, Fitrix ERP's manufacturing module family includes a sophisticated Product Configurator, a powerful module for configuring and quoting mass-customizable products which is not often found in less capable ERP software solutions.

Seamless integration of modules can have a big impact on your ability to access the advantages intended for your ERP solution. Wikipedia defines the following characteristics of ERP software (as Typical):

1. An integrated system that operates in real time, without relying on periodic updates,
2. A common database that supports all applications,
3. A consistent look and feel throughout each module,
4. Installation of the system without elaborate application/data integration by the Information Technology (IT) department.

A seamless ERP system is one which is designed and built as an integrated group of modules using a common database, user interface, and technologies. The best ERP systems are the ones that are designed with this in mind from the start. An ERP system that is assembled by stitching together many diverse products and technologies will lose many of the intended Benefits. ERP modules should not only share a common database but also common data so that all data is entered and stored only once and shared by all modules. With ERP systems that require “interfacing" of data between modules, access to real-time data that crosses modules is diminished (some data may not be accessible for hours or even days), and in the worst cases the same data may even need to be entered twice requiring extra effort and the opportunity for data discrepancies. Without a common database and common data, powerful data query and data mining capabilities are lost. Without a seamless system users may have unnecessary restrictions such as having to wait for someone else to complete their work and run an interface before they can complete an operation. A user interface that is consistent across all modules greatly reduces the training time and improves the ability of the users to intuitively learn the full power of the system as they use it. ERP systems that use different user interfaces for different modules can be frustrating, cumbersome to use and data entry mistakes are generally higher.

Systems that are stitched together from different sources are also more difficult and costly to install and support and typically require a larger support staff that must master multiple technologies and complex interfaces.

The **scalability** of the solution and its underlying technologies is the second key differentiator in determining whether the ERP system you are evaluating is full-function or not. Robust ERP solutions differ from less capable ones by supporting three types of scalability:

- Functional scalability,
- Concurrent user scalability,
- Transactional scalability.

Functional scalability refers to the ability of the software to support different levels of business process complexity within the software applications themselves, allowing “room to grow" from a functionality perspective. An example of this is “batch support” within Fitrix ERP. Like numerous applications in Fitrix, sales order entry can be configured via a simple setting to allow users that have proper access to enter and process transactions through the system without batch controls which larger companies often utilize. Yet when more control is required, “batch support” can be enabled, giving individual order entry users their own batches which can be controlled separately. This latter control is very helpful in business environments with many people entering orders, but can be onerous in smaller shops where there are just one or two people entering orders.

Concurrent users and transactional scalability are the measures of how many users and transactions the system is designed to support while maintaining high performance characteristics. If you require “full-function" ERP, make sure the ERP solution you choose can easily and reliably support the number of users and the transactional volumes that will be required of it throughout its planned life-cycle, including being able to handle anticipated seasonal/cyclical business spikes and long term growth. One key aspect of scalability is the data storage mechanism underlying the software. Having a high-performance, highly-scalable On Line Transaction Processing SQL (Structured Query Language) database at the heart of the ERP software solution you select is a key requirement for both concurrent user and transactional scalability. Solutions built on workstation-oriented data storage technologies like the Microsoft® Access™ database or on legacy or entry-level database technologies do not have near the concurrent user or transactional scalability of the more “industrial-strength” SQL technologies.

The last key factor that differentiates full-function ERP solutions from less capable ones is the system's ability to support advanced **enterprise-level IT architecture capabilities** that ensure high reliability and overall business continuity. For example, the ERP solution should utilize a proven technology architecture that supports one or more viable Disaster Recovery (DR) schemes. The more sophisticated breed of ERP solutions can support “high availability” options that ensure that each transaction processed in the system is “replicated” over a redundant system architecture consisting of both hardware and software technologies, so that if a system failure were to occur there is little or no loss of data integrity and business continuity is preserved. Competition among technology providers like database vendors has lowered the cost for the SMB to implement

advanced IT architectural capabilities like these, and “full-function” ERP systems take advantage of these capabilities.

A Word or Two About Services

Traditionally, two significant obstacles to implementing ERP solutions for the small to mid-size company have been the cost of services and the length of time required to implement the solution. In many instances, the cost of licensing the software was dwarfed by the cost of services. It is not uncommon for larger firms to spend five times or more the cost of the software on services. Smaller firms with fewer sites can easily spend twice the cost of the software license on services. Additionally, the time required from vendor selection to system implementation can run from several months - to several years depending on the size of the firm, the complexity of its requirements, and the scope of the change the firm will have to undertake. It's no wonder that small to mid-size firms have been slower to adopt ERP solutions.

Implementation costs fall into a number of categories including planning, training, data migration, and testing - but the bulk of the costs entail application configuration and customization. Even though most vendors have tried to reduce the need for customization through the use of configuration tools - changing out-of-the-box functionality is still often required, and can be challenging. Most smaller firms do not have the staff or skills needed to customize an ERP application - therefore they must rely on the ERP vendor or a third-party service provider. Either option increases costs and implementation time frames.

Many implementations rely on the software provider's valued-added resellers (VARs), 3rd party systems integrators and consulting firms for ERP implementation services. The problem with this model is that the firm used to handle the implementation has little or no incentive to complete the project quickly. Their compensation is usually based on an hourly rate with minimal or no margins from the ERP software licenses, so the longer the project - the greater their revenues. The more complex the solution, the more services required and the longer the assignment.

How the Fitrix Approach Fits the SMB’s Needs

The Fitrix ERP solution from Fourth Generation Software is a full-function ERP solution targeted to SMB business leaders who are looking for a tool that can offer them a strategic advantage at an affordable price point. Most other ERP solutions targeted to the small to mid-sized firm are from larger ERP players who have lowered their solution's costs by limiting functionality and/or scalability, so as not to “cannibalize" the sales of their solutions to their larger-company ERP buyers, or from smaller ERP suppliers offering less than “full-function" solutions. With twenty one feature-packed modules including financial/accounting, distribution, manufacturing and CRM all running on a world-class SQL database, Fitrix

offers the functionality and scalability usually only found in the products of more high-end “enterprise" ERP solutions, but is designed for the needs of SMB firms.

Scaling is important for SMBs, both upward and downward. The SMB needs a scalable system that can grow with their business, but the system needs to operate efficiently on a smaller scale as well while the business is small. An ERP system designed for use by a Fortune 1000 company can't scale down in a way that is appropriate to the SMB. Fitrix ERP is designed for the SMB customer but it and its underlying technology can (and does) support hundreds or even thousands of concurrent users.

Fitrix ERP: Full-Function Yet Affordable ERP

Even though they recognize the efficiencies and other benefits they could gain, the cost of acquiring and implementing an ERP suite has been a huge barrier for the small to mid-size business. Trying to find a lower priced alternative meant too large a trade-off in features and functionality. The high initial purchase, implementation and long term costs of ERP have kept many SMBs from leveraging the numerous benefits of ERP that larger firms have long enjoyed, but not anymore.

Fitrix offers an integrated ERP suite with the features and functionality found in solutions costing many times as much.

Finally, there's an affordable “full-function” ERP solution that's designed for the small to mid-size manufacturer - Fitrix ERP by Fourth Generation Software. Fitrix meets the needs of the small to mid-size business ERP customer with a novel approach to ERP software and services that's unique in today's market:

- Three “full-function” ERP software bundles to choose from with nine to twenty-one feature-rich software modules, designed to fit different business needs.
- A very scalable and reliable software application architecture and underlying technologies, including a truly world-class OLTP SQL relational database at no additional charge.
- An advanced application toolkit and full application source code available that allows for complete tailoring of any and all software applications to meet virtually any ERP business requirement.
- Multiple affordable Disaster Recovery (DR) options including High Availability Database Replication and off-site system redundancy.
- A full range of “a la carte” implementation services to support ERP deployments for customers ranging from very self-sufficient to those needing a complete turnkey solution.
- Fitrix can be run in the Cloud (we host it) or on premise (you host it).

Through innovative design and the use of flexible, reliable and highly scalable technologies, Fitrix offers an integrated ERP suite with the features and functionality found in solutions costing much more.

It's Not Just About Acquisition/Implementation Cost - Think *Total Cost of Ownership*

In this context, the total cost of ownership (TCO) looks at the lifetime costs of acquiring, operating, and modifying an ERP system. In general, TCO affords managers insight into both the direct and indirect costs of various choices. It highlights the difference in the price of something and its long-term costs. An offer that looks appealing because of low entry costs or a seemingly low monthly fee might in fact be significantly more expensive over time than other alternatives.

Finally, there is an ERP solution that offers the functionality and flexibility of systems costing thousands of dollars more per user. One that is aligned with both the needs - and the budgets of the small to mid-size manufacturer. The Fitrix ERP solution combines robust functionality with a flexible, scalable architecture to deliver "full-function" ERP value at a price point other vendors can't approach. At last, leading small and mid-size manufacturers have a cost effective tool to help them gain and maintain a strategic advantage.

To find out more about how small to mid-size manufacturers can benefit from the Fitrix ERP solution, please visit www.fitrix.com, email support@fitrix.com or call toll-free 1-800-374-6157 or 1 -770-432-7623 outside the US and Canada.