SAGE MAS 90 SAGE MAS 200
SAGE MAS 500

Manufacturing

Realizing Enterprise ROI through Sage MAS 90, 200, and 500

September 2005

sage software

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Sage MAS 90, 200, and 500 ROI Study in Manufacturing Companies

TCO is a vital ingredient to any rigorous ROI calculation.

About the Gantry Group, LLC

The Gantry Group is a strategic advisory and custom market intelligence firm. They apply primary market research to help companies cost-effectively accelerate the successful market adoption of their products and services—both online and offline. Gantry Group has helped over 165 client companies drive sales, acquire new customers, increase brand equity, and increase customer lifetime value through our market analysis, marketing testing, and ROI/TCO benchmarking service suites. Gantry Group creates customized market research studies to better understand customers' needs and experiences. They use both qualitative and quantitative techniques, including online and traditional surveys, focus groups, and one-on-one interviews. Gantry Group benchmarks a client company's opportunity and competitive landscape, and their offering's ROI impact on its target market. The result is a quantified value proposition that is crisply differentiated within a receptive market.

Today more than ever, companies are looking for near-term return on investment in this overall budget-constrained climate—and the sooner, the better. Successful solution vendors must now use a much more analytical approach to selling. Customers want assurances that an investment will pay for itself over an acceptable time period—either by increasing the top line, decreasing operating expenses, or both.

The Total Cost of Ownership, or TCO, is a vital ingredient to any rigorous ROI calculation. TCO informs prospects and customers as to the economic benefits an offering brings *after* they subtract the cost of an offering. A TCO calculation requires a vendor to work closely with customers to discover underlying cost drivers that may not be apparent on the surface. A technology product for example, may require new infrastructure investments and the hiring of new skills that its operation may require. New business processes that must be put in place to accommodate a new system may require training and support. The lifetime of some technologies must be factored into TCO to reflect the replacement cost of new units when old ones fail.

The Gantry Group designs custom TCO and ROI studies to help companies communicate factual quantified value propositions to prospects and customers. Based on in-person interviews, Gantry Group first designs custom ROI and TCO calculators to comprehensively profile the *impact* equation of a company's offering. Using such tools, Gantry Group then conducts online and in-person studies to consistently profile ROI/TCO across a carefully selected sample of participating companies. Gantry Group has equipped many product and service firms with credible TCO and ROI models that communicate value in the terms of the business metrics that customers and prospects use to access the performance of their own companies.

Their executive team of experienced business executives combines deep operations experience with proven strategic planning, research methodology, and market intelligence to grapple with the most challenging business goals and problems. Gantry Group works with CEOs, senior marketing and sales executives in technology, financial services, health care, and retail sectors. The company can be reached at 978-371-7557 or www.gantrygroup.com.

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Abstract

Sage Software, a leading provider of business information management solutions, has known for several years that implementation of our Sage MAS 90, Sage MAS 200, or Sage MAS 500 ERP software systems results in significant enhancements in productivity, efficiency and streamlined business processes. The net benefits of the deployment and use of these products in manufacturing businesses has been documented in numerous case studies (www.sagesoftware.com), which illustrate both increased revenues and cost reductions, or even cost eliminations. These benefits significantly over-shadow the investment in the software solution itself and are typically realized in the first year of deployment.

Sage Software engaged the Gantry Group to conduct an objective ROI study to quantify the net business impact of Sage MAS 90, 200, or 500 solutions. Gantry Group has developed definitive ROI tools that address the unique business benefits of software to manufacturers. This white paper explores experiences of Sage MAS 90, 200, and 500 manufacturing customers.

Methodology

By conducting objective interviews with Sage Software manufacturing customers, the Gantry Group developed a realistic, payback-modeling tool that measures the ROI impact that a deployment of Sage MAS 90, 200, or 500 has on key business metrics and cost drivers. Ten manufacturing companies contributed to the development of this quantitative cost/benefit tool.

To ensure that the ROI model is conservative and credible, the Gantry Group identified only tangible costs and benefits that can be directly measured. No estimate-based assumptions of intangible benefits were included in the model. Customer input was thoroughly crosschecked to protect against “double-counting” and inclusion of cost savings that were theoretical but not realized.

However, non-cash benefits were captured and are included as a line item in the ROI Scorecard, although they were not used in the ROI calculation.

Business Benefit

The companies profiled in this case study realized, on average, actual ROI of 8,000 percent over a three-year time period, with payback occurring in less than 17 months. These organizations shared a common set of challenges, which drove the adoption of one of the three Sage Software solutions:

- Inconsistent, questionable data in various business units
- Costly manual data entry into systems
- Duplication of data entry for non-integrated systems
- High inventory overstock
- Lengthy inventory reconciliation and end of month closing
- Inability to scale legacy systems

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- Frequent errors and delays between customer order and customer shipment
- Delays in action and problem resolution

Deployment of Sage MAS 90, 200, or 500 resulted in direct, tangible benefits derived from:

- Seamless data flow due to integration of systems
- Reduction of staff or re-utilization of existing resources
- Improved sales and repeat sales
- Increased transaction volume through the business (increased capacity utilization)
- Reductions in inventory overstocks and increased inventory turns
- Reduction in payments to third-party accounting firms
- Reduction in payments to outsourced IT firms to handle data loss and down time incidents
- Reduced average days outstanding of receivables and shorter collection times
- Decreases in returns, scrap and rework
- Decreases in redundant IT infrastructure

Industry Sector Overview

Manufacturing is an industry sector that cuts across a range of businesses, from food and beverage manufacturers to production of fabricated metal products, assembly of machinery and equipment, and other industries. Manufacturing companies vary dramatically but do have some common operating characteristics. These include:

Businesses are typically faced with a set of common challenges that drive the cost of their business activities.

- **Control of production standards** – every manufacturer has a bill of material and labor operations that, when used together, define the process of converting raw materials into finished goods. Process manufacturing customers utilize a similar process by combining formula or recipe definitions with labor instructions.
- **Maintaining inventories** – inventory asset management is a primary focus of operations. In a highly competitive market, manufacturers are constantly looking to reduce on-hand inventories as well as work in process inventories. Inventory turns are also a concern, as is maintaining accurate costing and pricing for a complete profitability picture.
- **Managing resources** – every manufacturer has resources that must be optimized. Resources may include labor, tools, and machines or work centers. Consequently, it is increasingly important for manufacturers to balance resource availability with material supplies and customer demand.

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- **Real-time decision making** – throughout a given day, customers frequently need immediate access to historical or current data concerning the company's operation. As a result, there is a pressing need for fast generation of reports or online inquiries as well as online views into current or previous production runs, costs, and shipments.

- **Cost analysis** – Most manufacturing customers, especially those in make-to-order and job shop industries, need the capability to analyze profitability by job or work order. Detailed cost analysis should compare actual costs and estimated or standard costs by cost element—material, labor, outside process, administrative, etc.

Customer Challenges

No matter what products are being manufactured, businesses typically face a common set of challenges that drive costs. These include:

- **Inconsistent data** – companies often find it difficult to reconcile inventory data, shipment information, and production information when multiple systems are used for different business processes.

- **Manual data entry** – manual data entry is costly and time consuming for those businesses that have yet to automate their distribution or manufacturing systems.

- **Reports and queries** – companies need accurate information in real time. Companies using antiquated business systems or disjointed systems do not have access to critical business information. Furthermore, many companies do not trust the data they receive in reports and inquiries because it may be outdated. As a result, many companies spend countless hours validating report data and reconciling data across applications.

- **Quality issues** – companies with disparate business systems often scrap or perform rework operations to salvage components. These companies could reduce scrap and the need for rework if they had an integrated business system providing accurate bill of material and routing definitions, and detailed production instructions. Material that is scrapped for a production order is costly and often affects material availability for other production orders requiring the same material. Rework operations affect production schedules for upstream operations or production orders scheduled for the same work center. Consequently, reducing scrap and rework dramatically improves on-time shipments to customers while optimizing both work center and labor resources.

- **Inaccurate schedules** – manufacturers who do not have integrated business systems or those who schedule production using magnetic white boards or spreadsheets often spend a large portion of their day reconciling their schedule with what's actually happening on the shop floor. An integrated, online scheduling application can help companies maximize machine and work center uptime and resource utilization. As a result, shop employees are more efficient and production schedules are

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available to key groups such as customer service, management, and even sales.

- **Inaccurate material plans** – disjointed manufacturing applications often result in poor material plans. Buyers find it difficult, if not impossible to determine what to buy and when to buy it because they do not have visibility into sales forecasts, current production requirements, and accurate on-hand inventories. Consequently, many companies maintain large inventories of raw materials and components to avoid material shortages. An integrated business system can help buyers reduce their on-hand inventories and subsequent carrying costs while further reducing late orders due to stock-outs.

- **Managing growth** – many older business systems were designed for limited transactions and a small number of users. As a company grows, they tend to process more data, store larger data marts of historical information, and have more employees on the system at the same time. Consequently, system performance is often very slow. A slow system affects the productivity of every employee in the organization—from an accounts receivable clerk performing an inquiry on past due accounts to buyers running MRP. As such, many companies lose thousands of dollars annually in employee productivity.

- **Unhappy customers** – disjointed or older business systems may result in delayed shipments to customers, inaccurate billing, significant delays in information for customer requests (such as customer service questions, quotes, etc.), as well as product quality issues. As a result, customers may choose to buy from a competitor who is able to better serve their needs. The inability to fulfill orders accurately and on time coupled with poor customer service results in lost sales opportunities. Lost sales directly affect the bottom line and require companies to focus more time and money on acquiring new accounts.

- **Lack of communication** – companies utilizing stand-alone or manual manufacturing systems do not provide customer service or sales with all of the information they need to serve customers. As a result, customer service and sales has to call production each time that a customer calls in and wants to change order quantities or shipment dates. An integrated manufacturing system will provide customer service with critical production information thus eliminating the need for phone calls, e-mail, or walks to the shop floor for information. Furthermore, shop management can focus on managing their floor instead of spending time answering customer service questions.

Sage MAS 90, 200, and 500 Benefits

The implementation of Sage MAS 90, 200, or 500 can have an immediate effect on many of the challenge areas listed above. Once staff members are trained and the data migration from a prior system has been completed, businesses can begin benefiting right away. Areas of benefit include:

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When software systems are consolidated into a single solution, business processes are interconnected.

- **Integrated data flow** – when software systems are consolidated into a single, integrated solution, business processes are interconnected with data that is reliable and consistent. Data is timely and easily accessible so businesses are able to process more orders and transactions than with previous systems.
- **Staff reductions/optimization** – staff requirements decrease due to increased productivity, the elimination of duplicate data entry and data validation as well as improved processing speed. Companies often move employees into other critical business areas and may even reduce staffing to more manageable and profitable levels.
- **Resource optimization** – labor, machine, and tool resources run at optimal levels with minimal downtime since materials are available, employees are scheduled, and machine and tools availability are in-sync with production plans.
- **Improved job costing/estimating** – an integrated business system provides manufacturers with information to determine which high-volume, high revenue items to run in their product mix. Slow moving and less profitable items can therefore be eliminated. Accurate job costing helps companies prepare more accurate bids, estimates, or quotes for similar order in the future.
- **Stock reductions** – Sage MAS 90, 200, and 500 provide companies with extremely accurate inventory numbers—often as high as 99.9% accuracy. This allows buyers to maintain minimal on-hand raw material inventories reducing safety stock levels, carrying costs and overhead. Accurate inventory numbers also reduce the number of late jobs waiting on material receipts and subsequent late shipments of finished goods to customers. Companies can use these freed cash resources to purchase additional equipment or to expand facilities.
- **Reduced IT expenses** – Sage MAS 90, 200, and 500 are reliable, mature products that are easily administered in-house. As such, the core business system is rock solid for increased uptime. Older systems or those that are pieced together tend to crash more often resulting in hundreds or thousands of lost man-hours in productivity. A reliable business system requires fewer IT personnel and reduced dependency on outside IT resources for system upgrades, database administration, custom reporting, and data recovery.
- **Decreased returns** – Even a small improvement in returns management can result in thousands of dollars in savings for many companies. Improved returns management helps companies identify quality control issues that may have resulted from defective machines or materials, or poor workmanship from shop employees. Furthermore, returns management can identify salvageable products from those that must be scrapped. Integrated returns management ultimately reduces the number of returns, improves customer satisfaction (including increased customer orders), as well as reduced scrap and rework.
- **Reduced IT infrastructure** – Sage MAS 90, 200, and 500 customers will benefit from a single technology infrastructure, including operating

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systems, databases, and other technologies. Companies with multiple products most likely staff additional IT resources to manage each database platform or programming language. Consolidating technology platforms results in significant cost reductions in recurring product support, maintenance, and upgrade fees and costs.

- **Improved communication** – Integrated business management systems like Sage MAS 90, 200, and 500 provide customers with online inquiries and reports to real-time information. This real-time exposure to data eliminates phone calls, e-mail, and face-to-face dialogue for many common business questions such as material availability, customer order changes, bill of material revisions, etc.

Sage MAS 90, 200, and 500 ROI Scorecard

There are key determinants that are common to any company implementing Sage MAS 90, 200, or 500. It should be noted that business metrics used to determine an ROI Scorecard vary somewhat with the particular industry.

This model uses textbook algorithms for measuring ROI and ROI as a percentage for a given time period:

ROI = Total Benefit – Total Investment

ROI (%) = Total Benefit/Total Investment

This model measures ROI over a three-year time period, paying particular attention to the returns realized the first year after Sage MAS 90, 200, or 500 deployment and the cumulative effect after three years.

Payback Period computes the time period required for the enterprise to recoup its software solution investment.

Three-year ROI is calculated by taking the Net Present Value (NPV) of the three-year net cash flows, using a discount rate equal to the 30-year T-Bond rate (3.46%).

Increased accuracy of customer orders can reduce the number of returns.

Mobile Solution ROI Scorecard
In Thousands of Dollars

	Year 1	Year 2	Year 3
Increased Revenues	$___	$___	$___
Cost Savings	$___	$___	$___
Avoided Costs	$___	$___	$___
Total Benefit	$___	$___	$___
Total Investment	$___	$___	$___
ROI ($)	$___	$___	$___
ROI Benefit (%)	___%	___%	___%
Payback Period	_____		
3-Year ROI (NPV)	$___ (___%)		

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Total Benefit

Total Benefits realized by the implementation of the Sage MAS 90, 200, or 500 solution are calculated as follows:

Total Benefit = Increased Revenues + Cost Savings (include avoided costs)

- **Increased revenues** are sales directly attributable to the application implementation and are derived from the following factors:
- **Increased transaction volume** due to the acceleration of the business process.
- Sales dependent upon enhanced reporting capability that would not otherwise have been closed.
- **Higher capacity utilization** resulting from better scheduling and fewer delays, and streamlined business processes.
- **Cost savings** are derived from savings that directly result from the application deployment. In addition to reductions in existing expenditures, the implementation of Sage MAS 90, 200, or 500 also leads to elimination of some costs. Labor reductions that do not result in staff eliminations are not included in the ROI calculations as the affected employees are simply redeployed within the organization (i.e. there is no net increase in cash to the company).

Cost reductions that result directly from the use of the software are numerous and generally not all quantifiable within a given company. Key categories for cost reduction include the following:

- **Reductions in scrap and rework** results in savings in cost of materials and disposal of scrap or rework, as well as impact on other work orders requiring the material, work centers, and labor resources needed for rework.
- **Increase in inventory turns per year** after implementing Sage MAS 90, 200, or 500—resulting in net cash increase to the company because inventory levels are lower. Thus, this decreases carrying costs, produces fewer stock-outs, and provides more money on-hand for business improvements and investments.
- **Elimination of data recovery cost from data loss or corruption** includes the associated labor costs and disruption of daily business activities.
- **Reduction in average days receivables** and a shorter collection cycle, achieved after implementing the accounting applications, gives the company an opportunity to earn interest on money deposited sooner than it would have been before implementation.
- **Increased profitability due to accurate estimating and job costing** can be achieved after the implementation of the various manufacturing

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modules, including the Estimating and Job Cost modules of Sage MAS 90, 200, and 500.

- **Reduction in staff required (or avoidance of the need to hire)** affects both direct and indirect labor costs and is a direct result of the new efficiencies that are created with deployment of the software.
- **Reduction in accounting fees** stems from the decreasing need for accountants to be as closely involved with operational accounting issues. Post implementation in-house staff can handle many of the accounting activities that were previously outsourced.
- **Cost savings from manual or duplicate entries** converts into direct and indirect labor cash savings if these tasks are performed by temporary employees or outsourced. However, this item is not used in the ROI calculation if staff members perform the tasks in question in-house.

Time savings are quantified non-cash benefits derived from reductions in general productivity improvements, efficiency in accounting activities and other components of the workflow resulting from the software deployment. Time savings are very important benefits but as they do not result in measurable cash benefits to the company, they are not included in the ROI calculation. They are, however, captured and entered as a line item on the ROI scorecard. Sources of time savings include:

- **Faster resolution of issues due to visibility,** arising issues are resolved much quicker due to advanced inquiry and reporting capabilities of the software. This effect can also be measured through the more general overall indirect labor time savings from integration and ease of use of the software.
- **Faster closing of accounting periods** and other reporting requirements can be achieved after the implementation of the accounting modules.
- **Faster order processing** can be attained if the distribution modules are implemented.
- **Faster payroll processing** may result after installation of the Payroll module of Sage MAS 90, 200, and 500.
- **Faster inventory reconciliation** can be achieved if the Sage MAS 90, 200, and 500 Inventory Management module is implemented.
- **Decreased time to reconcile bank statements** can follow after the implementation of the Bank Reconciliation or Cash Management modules of Sage MAS 90, 200, and 500.

Total Investment

Total Investment is calculated as follows:

Total Investment = Sage MAS 90, 200, or 500 License Costs + Training/Support Costs + Customization/Implementation Costs + IT Costs

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- **Software license fees** include the initial capital outlay for the software and user licenses.
- **Training and support costs** include the training and support services provided to the company by either Sage Software or the reseller. At times, companies may choose to buy technical support packages from both the reseller and Sage Software. Annual maintenance fees from Sage Software are included to support packages and provide access to the online knowledge base.
- **Customization and implementation costs** include annual fees charged by resellers. The customization fee comprises the cost of customizing the Sage Software solution to fit the unique needs of a given client and range from custom reports to integration or development of separate applications. The fee for implementing the software is usually a one-time installment in Year 1.
- **Additional IT costs** include the costs of any additional servers and hardware, which may also include networking, operating systems, databases, and other IT-related costs. This charge varies greatly from client to client based on their current IT infrastructure. These IT costs are usually charged only in Year 1.

ROI Methodology

Sage Software retained the Gantry Group LLC to develop an ROI Scorecard Tool tailored to the deployment of Sage MAS 90, 200, and 500 in manufacturing companies.

Gantry Group employed a structured methodology to collect quantitative ROI metrics through interviews with companies implementing Sage MAS 90, 200, or 500. The ROI Scorecard focuses on direct and indirect quantitative ROI components; qualitative, intangible components were not modeled due to the possible inaccuracy they might introduce.

The ROI Scorecard is based upon data prior to the Sage MAS 90, 200, or 500 implementation as compared with the same business metrics 12 months, 24 months, and 36 months following deployment. The ROI calculation considers the costs associated with one, discrete deployment within the enterprise. If additional modules were purchased and deployed in the three time periods following initial deployment, costs and benefits associated with follow-on units were not included. Therefore, the ROI calculation has a single “start date” upon which the three future time periods are based.

For each of the three future time periods, the ROI tool calculates ROI as the difference between the investment and benefits for the period. The ROI, expressed as a percentage return, is calculated by dividing the total benefits by the total costs for each of the three time periods. The three-year ROI is calculated by taking the Net Present Value of the three-year net cash flows, using a discount rate equal to the 30-year
T-Bond rate (3.46%).

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ROI Scorecards

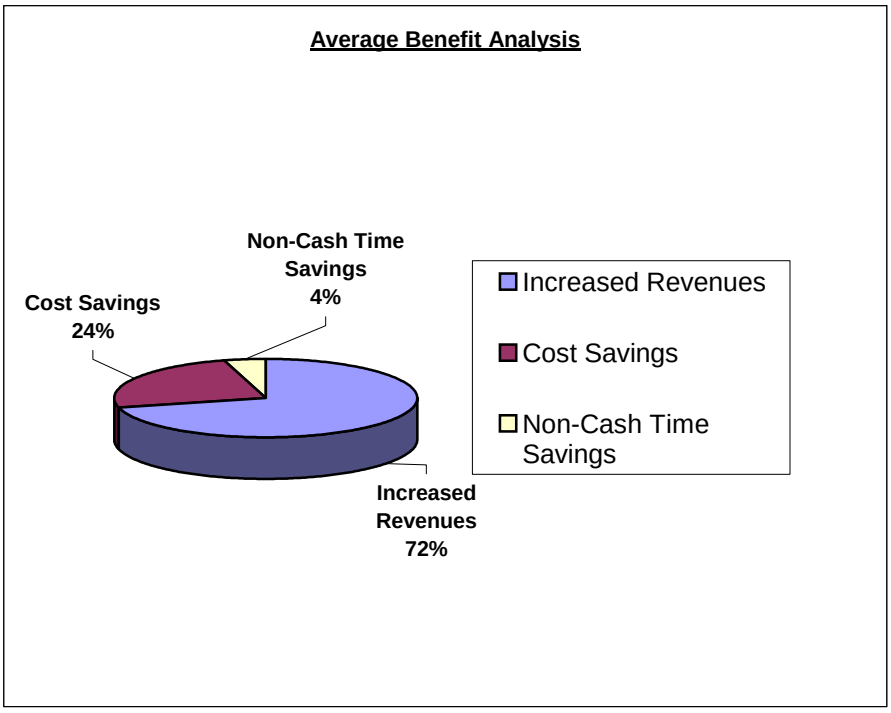
Benefit Analysis

The data collected from the ROI scorecards of the ten respondents gives a clear and relatively consistent picture with regards to the benefits derived from the implementation and utilization of Sage MAS 90, 200, or 500. As it was mentioned above, the study captured the total benefits for the next three years; thus, the average benefit analysis presented below is the average net present value of the derived benefits for the next three years across the ten participating companies.

The bulk of the total benefit of Sage MAS 90, 200, and 500 is realized through cost savings.

The bulk of the total benefit of implementing Sage MAS 90, 200, or 500 is realized through the increase in company revenues. As the graph below indicates, the increased revenues account for an average of 72% of the total benefits. Cost savings comprise an average of 24%. On average, 4% of the total benefit is attributed to the non-cash time saving measures. It is important to note that one interviewed company was able to achieve IT savings after the implementation despite initial IT-related expenses. However, this kind of benefit was an exception, thus was not included in the overall analysis.

Note: While non-cash savings from productivity enhancements is included in the benefits pie chart, that figure is not included in the calculation of the ROI.



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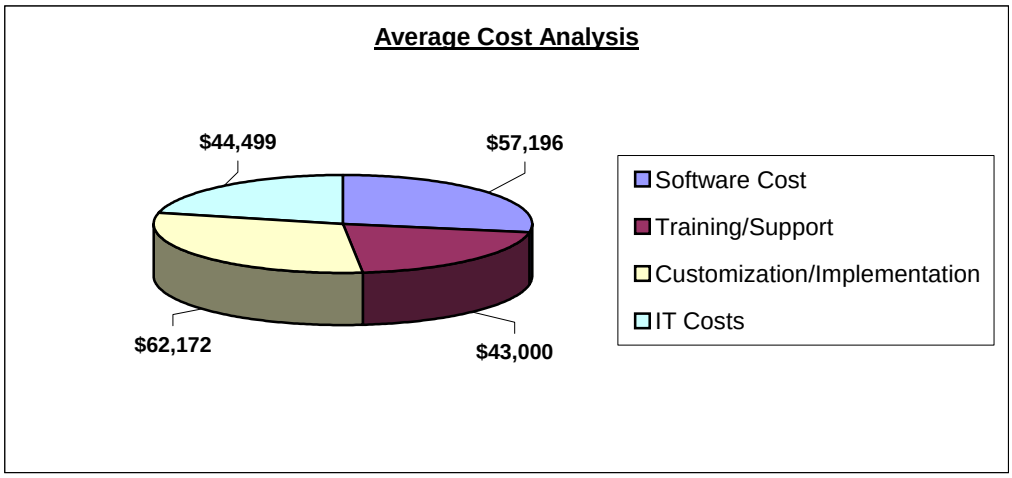
Software cost and implementation costs each account for some 29 percent of total average expenditures.

Cost Analysis

Consistently with Benefit Analysis, the net present value of cost considerations of deployment of Sage MAS 90, 200, or 500 is calculated summarizing the costs to be faced by interviewees over the following three years. After comparing the average costs associated with the purchase and implementation of the software, The Gantry Group discovered that on average Customization/Implementation Costs and Software Cost account for some 58% of total average expenditures, $62,172 and $57,196 respectively. IT and Training/Support costs account for the other $44,449 and $43,000 respectively.



Overall Analysis

The summary of the key findings is presented below. Based on the research data, The Gantry Group found that the greatest increase in revenues occurs in the first year of implementation of the software. On average, the respondents experienced a $582,500 boost to their revenues in Year 1. This increase comprises an average of 9.2% of the total expected revenues of the companies. In Year 2 and Year 3, the companies' revenues rose by an average of $465,600 and $484,005, respectively. Participants of the study experienced the most cost savings (average of $186,367) in Year 3. Respondents saw an average of $166,840 savings in Year 1 and $176,267 in Year 2.

An analysis of the investment required to deploy Sage MAS 90, 200, or 500 shows that the bulk of the costs associated with the implementation occurs in Year 1. This is consistent with the front-loaded investment structure of any enterprise business software. The average total investment in Year 1 was $171,482 across the ten participants of the study. It is important to note that the costs faced by the companies in Year 2 and Year 3 were as little as $22,280 and $19,288.

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In monetary terms, the average Return on Investment for respondents was $577,858 in Year 1, rising to $619,587 in Year 2 and $651,085 in Year 3. Thus, the firms recouped an average of 613% ROI in Year 1, 3,606% ROI in Year 2 and 4,562% in Year 3. While the average payback period is around 17 months, the periods varied greatly based on the individual company in the study. The shortest payback period among the interviewees is less than 1 month, while the longest is 93.9 months. If this outlying value is not considered in the average payback period calculation, the average payback period is 8.3 months. The NPV 3-year ROI based on this study is $1,816,970.

Sage Software ROI Scorecard

Manufacturing ***In thousands of dollars***

Benefits	*Year 1*	*Year 2*	*Year 3*
Increased Revenues	$582.5	$465.6	$484.0
Cost Savings	$166.8	$176.3	$186.4
Total Benefits	$749.3	$641.9	$670.4
Total Investment	$171.5	$22.3	$19.3
ROI ($)	**$577.9**	**$619.6**	**$651.1**
ROI Benefit (%)	**613%**	**3606%**	**4562%**
Payback Period	***17 months***		
3-Yr ROI (NPV)	***$1,816,97***		

Notes

It is important to follow the ROI guidelines described below in order to calculate an accurate ROI analysis. It should be noted that this ROI model is tuned to specific business metrics for manufacturing companies.

- The ROI model discussed in this document is highly quantitative and focuses on actual, tangible business performance metrics. These performance metrics are specific to manufacturing companies implementing Sage MAS 90, 200, and 500 software solutions. Every effort to maintain the integrity of the calculation and rigor of the model has been made to protect against “double counting” of benefits and incomplete assessment of total costs.
- Users of this ROI model should exercise caution when providing data on labor savings. Only those labor savings that actually result in staff reduction should be included in the model.
- Other tangible, but non-measurable business metrics, should also be input with care. In particular, increased inventory turns means that

Other tangible, but non-measurable business metrics should also be input with care.

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materials have less risk associated with sustaining unexpected damage and incurring unknown liability. Unless users can actually track liability data and have quantified risk, these factors—though significant if incurred—should not be included in the ROI calculation.

- When using this model, managers are encouraged to carefully assess each of the ROI components—whether costs, savings, or revenues. In many cases, the business metrics listed in the model will not all be applicable, while a given company may not even measure others.

The software investment section is divided into four cost categories:

- Initial per license software cost
- Training and ongoing support costs
- Custom software development and implementation costs
- Hardware and other infrastructure costs

In this study, The Gantry Group conducted personal phone interviews with representatives from 10 companies that have already deployed Sage MAS 90, 200, or 500. While every company is involved in manufacturing, they represent a wide range of industries. On the next page is a summary of the study participants. Please note that each company is at a different stage of the implementation process.

	Industry (Manufacturing)	Average Revenue	Product Purchased	Number of Licenses	Years of Implementation
1	Soil Amendments	$67.1 M	Sage MAS 500	60	5
2	Foundation Equipment	$29.1 M	Sage MAS 200	15	3
3	Telecommunications Equipment	$18.3 M	Sage MAS 500	15	2
4	Trailer Components	$10.8 M	Sage MAS 200	16	5
5	Electronics	$8.5 M	Sage MAS 90	15	10
6	Printing	$6.6 M	Sage MAS 500	20	1.5
7	Trailers and Hot Tubs	$4.5 M	Sage MAS 90	10	2
8	Recycling and Remanufacturing	$4.1 M	Sage MAS 500	10	2
9	Kitchen and Bath Accessories	$3.8 M	Sage MAS 90	15	1
10	Water Treatment Equipment	$3.0 M	Sage MAS 90	5	2

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