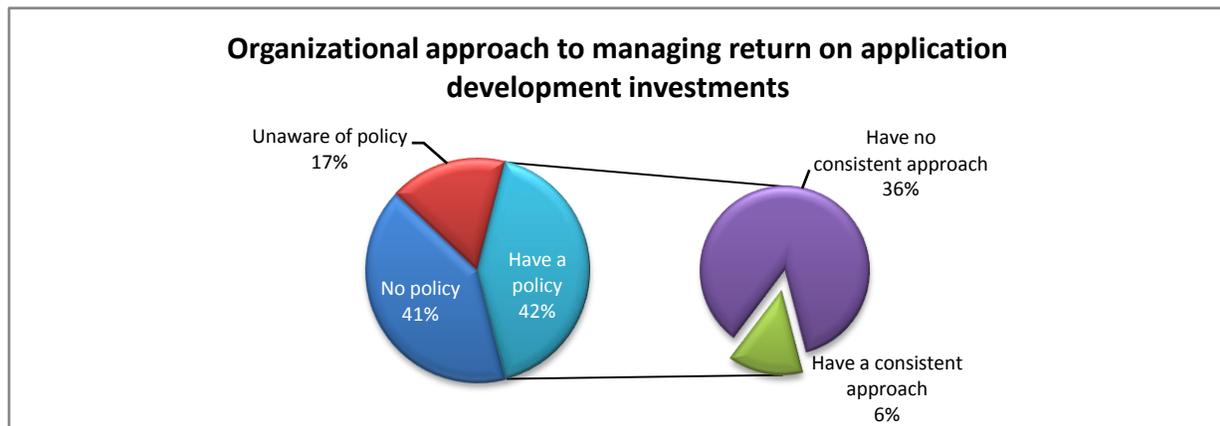# SURVEY: Best Practices in Maximizing Application Return on Investment

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In December, 2008, 300 organizations across 21 industry segments and 33 countries responded to a survey designed to assess the extent to which they measure the business impact and the financial return on investment (ROI) of the applications they develop.

The following paper presents survey results and suggests practical steps that organizations can take to ensure effective and competitive returns on application development investments.

What you need to know

Organizational approach to managing return on application development investments

Unaware of policy 17%
Have no consistent approach 36%
No policy 41%
Have a policy 42%
Have a consistent approach 6%

Most organizations do not calculate or measure the return on investment of the applications they develop.
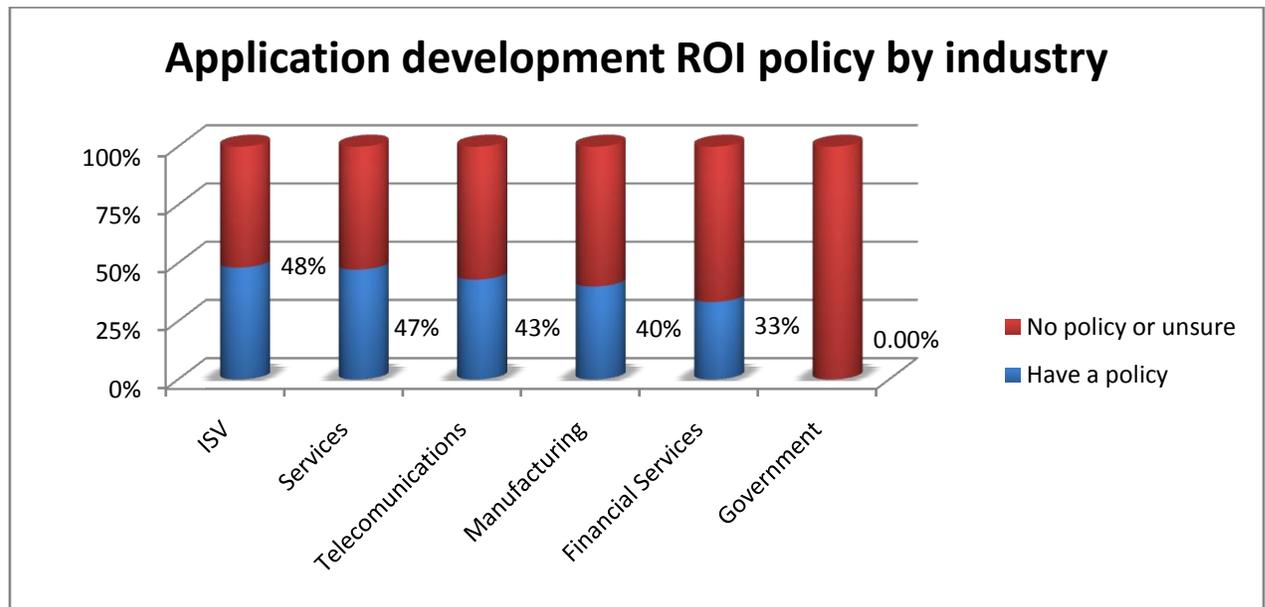
- Only 42% of respondents reported that their organizations calculate ROI on the applications they develop.
- Only 6% of respondents reported that their organizations apply a well-defined set of metrics and success criteria to ensure a consistent approach to calculating application ROI.

In spite of business practices to the contrary, there is a strong consensus that organizations would benefit from measuring application ROI.

- Only 8% of respondents indicated that their organization would not benefit from measuring application ROI.
- Of the 42% of respondents that indicated that their organizations do measure application ROI, only 13% felt that their approach did not need to be improved.

The two factors that contribute most to application ROI deficiencies are the lack of standardization and quality runtime data.

- 29% of respondents identify lack of consistent tools and methodologies and incomplete data as the greatest obstacles to effective application ROI management.

Application development ROI policy by industry

Legend:
- No policy or unsure (red)
- Have a policy (blue)

Values shown: ISV 48%, Services 47%, Telecomunications 43%, Manufacturing 40%, Financial Services 33%, Government 0.00%

Application ROI management is a cross industry requirement.

Of the 11 industry segment groups with 5 or more companies responding[1],

- Independent Software Vendors (ISVs) were the most likely to apply some degree of application ROI management process, reporting 48%.
- The industry with the lowest response rate was Government with 0% of those responding indicating any practice of application ROI measurement.

Steps you can take now

As this survey clearly indicates, few IT organizations have an objective view into the investments they are making in applications they develop or in the adoption and business impact that follows.

In principle, applications deliver productivity or efficiency gains; but they also pose operational, financial, regulatory and reputational risk. Balancing these factors is what sits at the heart of calculating and managing to an application return on investment.

Applications utilize development time; absorb capacity on the network; impose loads on servers and storage; and consume management time and developer/IT staff time to operate, maintain, and support.

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[1] Overall, 21 industry groups were represented amongst the 300 respondents, but only 11 of these groups had 5 or more respondents.

For many organizations, there is also an IT audit overhead as well. Measuring (and minimizing) these factors are one half of the application ROI management exercise.

Capturing increased revenue, improving operational and individual productivity, reducing risk and lowering costs combine to increase business value.

As the survey indicated, improving application use data collection within a consistent framework is the best first step to better manage and improve application ROI.

According to Gartner, Inc. "CIOs and IT management teams should start to demand and expect each application to have some key use indicators defined that enable business activity to be monitored and regularly reported to support management prioritization initiatives," as written in "Application Strategies Need Hard Data on Business Use, 20 May 2008, Andy Kyte.

Application use data does not demonstrate business value, but without this *runtime intelligence*, it is often impossible to assess business value. There are many ways in which runtime intelligence can serve development and IT management teams as well as business managers. For example:

Runtime intelligence can identify applications and software services with:

Portfolio Management

- Zero use as prime candidates for rapid retirement
- Low and falling use as candidates for accelerated evaluation
- Patchy geographic or departmental use for candidates to broaden use across the organization
- Increasing use to feed into capacity and infrastructure planning
- A high number of interrupted sessions as candidates for enhanced user training or redesign

Runtime intelligence **that includes session and environmental data** can identify:

IT Governance & Product Management

- Applications and software services that are being executed after IT policies or customer agreements dictate, e.g. applications with vulnerabilities, beta releases, obsolete processes, and product evaluations
- Older versions of OS, framework and other technology stack components that are still in use under key applications as potential obstacles to IT modernization efforts or deprecation of product platform support
- Applications that exhibit instability only under specific circumstances such as available memory, running under specific runtime environments or even on specific desktops or user IDs.

Runtime intelligence *that integrates application and web service feature usage with business and operational outcomes* such as sales results, employee productivity or operational efficiency can:

ISV SKU Profit & Application ROI

- Correlate new feature and SKU investments with market share and revenue
- Correlate application development and support expense with business results.
- Drive and document adoption and profile end-user behavior for regulatory and operational compliance.
- Monitor reuse of key SOA components across development groups and business operations.
- Substantiate productivity and expense improvements from IT modernization initiatives.

Taking Control of Your Application Investments

Attention to detail is required to operate an efficient and profitable business.

If you run a hotel, then you need to analyze room utilization, conference and event booking and dining and entertainment expenses and revenue. If you have a vending machine portfolio across multiple locations, then you need to monitor and analyze the number of games played, maintenance costs and space rental fees to identify the most profitable games and locations. These businesses measure and monitor these things because they are essential drivers of their success.

In today's competitive environment and unforgiving economic climate, organizations that invest in applications must exhibit the same discipline, control and attention to detail. Combining accurate and timely application runtime intelligence with an adherence to the following three principles should provide a consistent and effective approach to application ROI investment management.

1) Invest in developing meaningful and consistent metrics:

   Identify a small number of applications to develop application ROI best practices. These applications should be both material to the organization's business and require ongoing development and IT resources to sustain.

2) Tie application development and adoption metrics to development, support and maintenance investment strategies:

   These metrics must translate into smarter application portfolio management decision making and development resource utilization.

3) Incorporate application investment management into broader business performance management initiative and processes:

   Success can only be assured when application asset management is fully integrated into operational and business performance management.

For more information on PreEmptive Solutions Runtime Intelligence™ Services and to improve your organization's application development ROI, visit www.preemptive.com.