HP Integrity Servers

Offering the Best Return on Your IT Investment (RoIT)

Executive summary

IT investment decisions are today made on the basis of more than 'hot technology". CIOs and CFOs are looking to make an immediate impact on the performance of their business by reducing costs, increasing revenues and profits, and boosting shareholder return. Longer-term, strategic investments are aimed at entering new markets, delivering new products and services, and creating competitive differentiation. Going beyond the concepts of TCO and ROI, HP has adopted a term to encapsulate all the financial implications of an IT investment. We call it "Return on IT" (or RoIT). RoIT applies to every aspect of an IT investment, and includes many short-term benefits such as cost-reduction and improved return on investment, as well as longer-term advantages such as the ability to build an Adaptive Enterprise which can rapidly respond to market change.

The flexibility of your IT infrastructure and your ability to bring IT solutions quickly to bear on new business initiatives are fundamental tenets of success in today's dynamic world. HP Integrity Servers provide a breakthrough combination of IT adaptability, performance and value for money, heralding a new era in enterprise computing. There are three new and unique advantages of Integrity Servers. Each has a significant impact on RoIT:

- **Integrity Servers have overtaken all RISC-based systems in terms of performance and price/performance.** The entire server family is based on the latest Intel ® Itanium ® 2 microprocessors. This new generation of chip technology is widely regarded by industry analysts, vendors and customers as the successor to RISC-based architectures.
- **HP Integrity Servers offer the lowest TCO in their class.** HP has focused its R&D resources to innovate 'beyond' the chip, resulting in a server family which offers the most comprehensive performance, reliability, availability, security and manageability.
- **Integrity Servers improve asset utilization and enhance the agility of your organization.** The world's first, true multi-operating system platform supports Linux, UNIX and Windows ® Server 2003. Each server can run any of these operating systems, and the mid-range and high-end servers can run all three simultaneously in a partitioned environment.

HP defines RoIT to mean reduced total cost of ownership, enhanced return on investment, reduction of business risk and the ability to build an Adaptive Enterprise. In terms of reduced TCO, the highest levels of performance mean that customers can run the largest workloads at the lowest price per transaction; workloads can be consolidated onto fewer servers, saving millions of dollars in operational costs; common hardware can be deployed and re-deployed to run Linux, UNIX and Windows applications; high-performing, racked configurations mean reductions in environmental costs, and so on.

In terms of improving Return on Investment, Integrity Servers can be deployed quickly and non-disruptively into your current IT infrastructure. Many current HP 9000 servers can be upgraded in-box to Integrity Servers, thereby protecting your current investments and increasing asset life. All the key ISV business and middleware applications are available in versions specially tuned and certified for Itanium 2, and HP and Intel also offer the ability to run your current applications without change in compatibility mode, virtually eliminating any software migration costs. Integrity Servers offer industry-leading high-availability, manageability and virtualization software to ensure that you are able to run your workloads at high-levels of server utilization, with lower risk and with the minimum of operational overhead.

Integrity Servers help reduce risk and help build a highly flexible IT infrastructure in support of your Adaptive Enterprise. Customers such as Wells Fargo Bank, Delaware North Companies (a leading US-based food service organization), BMW, Raymond James Financial Services and Reuters have all reported an increased ability to react quickly to business change and in their ability to improve revenues, profits and customer satisfaction. This unique combination of reduced TCO, improved ROI, and adaptive capabilities is the reason that Integrity Servers provide the best overall RoIT.

What do we mean by best "RoIT"?

Recognizing the importance of squeezing every ounce of value from their IT investments, organizations are focusing heavily on completing detailed financial evaluations prior to embarking on major IT projects. This is especially important when, according to industry analysts, as many as 40% of all IT initiatives fail to deliver on their objectives. Many enterprises are adding to the financial responsibilities of the CIO. Some financial institutions, including Merrill Lynch, have even gone so far as to create a new executive position – the CFO of IT, responsible for managing multi-million dollar budgets which are carefully invested in the projects that deliver the highest business returns.

Organizations may use one, several, or even a combination of internal techniques for evaluating IT investments:

- Total Cost of Ownership (TCO)
- Return on Investment (ROI)
- Net Present Value (NPV)
- Internal Rate of Return (IRR)
- Equity Value Analysis (EVA)

Whatever the evaluation technique, the primary objective is to identify the IT solutions and infrastructure vendors which deliver the best business value in an environment where IT budgets are probably flat or declining. There is a compelling need to do more with less, yet to deliver real business return and added value through strategic IT initiatives.

In the past, organizations have often had to compromise when it came to IT investment decisions – to trade off innovation for lower price; to accept less functionality in order to maintain simplicity; to reduce risk by focusing on stability, thereby sacrificing business agility; to cut costs and face almost inevitable reductions in customer satisfaction. HP believes that the Integrity Server family represents a new era in enterprise computing, by removing the need for such compromises. Integrity Servers deliver the lowest total cost of ownership, yet offer the highest levels of flexibility and performance, providing the best return on your IT investment.

HP recognizes that customers need to balance a number of factors in making such important decisions: the need to reduce acquisition and operational costs quickly to impact your bottom line; the need to reduce risk; the need to improve time to market (hence quick deployment of IT solutions); the need to optimize the utilization of assets; the need to reduce operational costs. We have therefore adopted a term to encapsulate all the financial implications of your IT investment. We call it "Return on IT" (or RoIT). Best RoIT means the best business return on your IT investment, and RoIT is a crucial factor in building a dynamic and agile organization. RoIT applies to every aspect of an IT investment, and when we consider server products, RoIT should encapsulate many short-term benefits such as cost-reduction and improved return on investment, as well as longer-term advantages such as the ability to build an Adaptive Enterprise which can rapidly respond to market change.

RoIT defined

- **Reduced TCO.** Manifestly reducing the hard costs of deploying, maintaining and operating your servers in comparison to other vendors' offerings. In other words, providing the best functionality for the lowest overall cost over time.
- **Enhanced ROI.** Simple and fast integration with your existing IT infrastructure, better utilization of your assets, extending asset life, faster time to production. In other words, providing the best business return for dollar invested.
- **Building an Adaptive Enterprise**. A choice of applications and middleware mean faster time-to-market. Less system downtime, improved disaster recovery and enhanced security protection mean reduced business risk and better customer service. In words, enabling your organization to react more quickly to change.

"While a traditional ROI analysis looks at return (direct benefits) on an investment (cost), such tools ignore two categories of analysis that must be evaluated in order to ensure sound business decisions – flexibility, which encompasses the options for future investments created by the infrastructure, and risk, which evaluates and quantifies the impact of uncertainty on our estimates of benefit and costs."

"Return on Investment Methodology for Evaluating e-Business Infrastructure" – Giga Planning Assumption RPA-092001-00020

A new era in enterprise computing

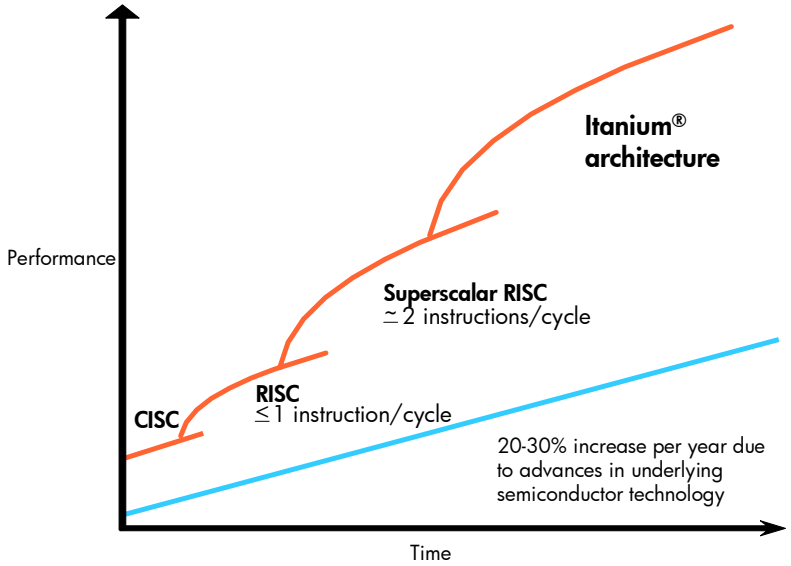
"A new era in enterprise computing" is a bold claim. How and why do HP's Integrity Servers represent a "new era", and how can customers deploy these servers to their financial advantage?

The Integrity Server family spans the complete spectrum of your enterprise application processing needs: from entry-level 2-way web-servers, to 64-way heavy-duty database engines. There are three new and unique advantages of Integrity Servers. Each has a significant impact on RoIT:

1. **The Integrity Server family is based on Intel's latest Itanium ® 2 microprocessors**. Itanium is regarded by industry analysts, server vendors and customers as the next generation of high-performance microprocessor technology, and the natural successor to RISC architectures. HP Integrity Servers combine this new architecture with a broad range of operating systems and servers and a best-in-class ecosystem (choice of applications, manageability, high availability, services and support) to provide unique value.

   Over time, successive generations of microprocessors have delivered increasing levels of performance at ever-reducing cost, and microprocessor architectures have typically had a natural life of 15-20 years. Recognizing that RISC was nearing the limits of its capabilities, HP and Intel have co-developed an entirely new microprocessor architecture called EPIC, or Explicitly Parallel Instruction Computing. Today, Intel's IA-64® architecture and Itanium 2 microprocessors are based on EPIC, which has already replaced RISC in terms of performance and price, and is in the early stages of its 15-20 year lifecycle. According to many industry analysts, Itanium 2 based-systems are already recognized as the industry leaders in high-performance transaction processing, large database applications and technical computing applications. Gartner Group, in a recent Gartner FirstTake[1], comments that "New offerings from Intel and Microsoft let HP lift the speed of a high-end system by more than 50%. This result marks a turning point for all three companies and challenges many (previously-held server) assumptions".

Figure 1: Intel's Itanium ® architecture has superseded RISC in scalability and performance



[1] Benchmark Shows HP's New Offerings Change the Server Landscape - Gartner FirstTake FT-19-9407(04/03)

IA-64 and Itanium 2 are also supersets of Intel's IA-32 ® architecture and Xeon ® microprocessors, and there are many commonalities of design and fabrication across Intel Itanium 2 and Xeon technologies. This means that customers can benefit from huge economies of scale in terms of R&D and manufacturing costs. This amortization of costs is one of the key reasons for the attractive pricing of both IA-32 and IA-64 based servers. Such 'industry-standard' servers also offer customers access to a wide variety of common networking, storage and computing appliances, which further lower total cost of ownership.

2. **Focused server innovation**. Building on Itanium 2 microprocessors, HP has designed and built many system-level elements into the Integrity Server package to offer the highest levels of scalability, reliability, manageability and flexibility. Based on over 30 years of experience in designing complex server architectures, HP has added its own innovation to the mix: the chipset and memory subsystems, the I/O and backplane and the increased reliability and redundancy of server components. HP intends to enhance Integrity Servers with future Itanium 2 microprocessors, such as Montecito, by means of simple in-box upgrades, which contrasts with other vendors' plans to provide multiple 'forklift" upgrades (i.e. box-swaps). Compared to RISC-based servers from other vendors, Integrity Servers offer the highest levels of performance and best 5 year cost of ownership. In a recent benchmark[2], an HP Integrity Superdome Server demonstrated the world's highest level of transaction processing performance, beating an IBM p690 by over 27,000 transactions per minute; at a 15% lower 5-year TCO.
3. **The world's first, true multi-operating system platform - offering unprecedented levels of IT flexibility and helping to build an Adaptive Enterprise.** Integrity Servers are the industry's first, true, multi-operating system server. Each server can today run HP-UX, Linux or Windows (OpenVMS in 2004). Several mid-range and high-end Integrity Servers, including the Superdome, can actually run multiple operating systems at the same time by utilizing partitioning technology. This is a critical advantage in terms of both RoIT and business agility, since customers can deploy common hardware to run many different workloads across HP-UX 11i v2 (UNIX), Linux and Windows, and can actually drive higher levels of utilization by re-deploying servers to run different operating environments on a dynamic basis. HP's multi-operating system strategy ensures our customers can adapt to ongoing changes as they occur instead of being locked in to a single operating environment, thereby tightening the link between business and IT. Every business decision triggers a series of IT events. HP Integrity Servers enable IT executives to react quickly to such events by deploying the most appropriate solution irrespective of scale, operating system or application.

"We are excited about the availability of Integrity Superdome Servers because they will give us enhanced manageability and scalability. In addition, Integrity Superdomes will allow us to create a dynamic IT environment that fits with our evolving needs, reduces risk and complexity and delivers a better return on our information technology investment."

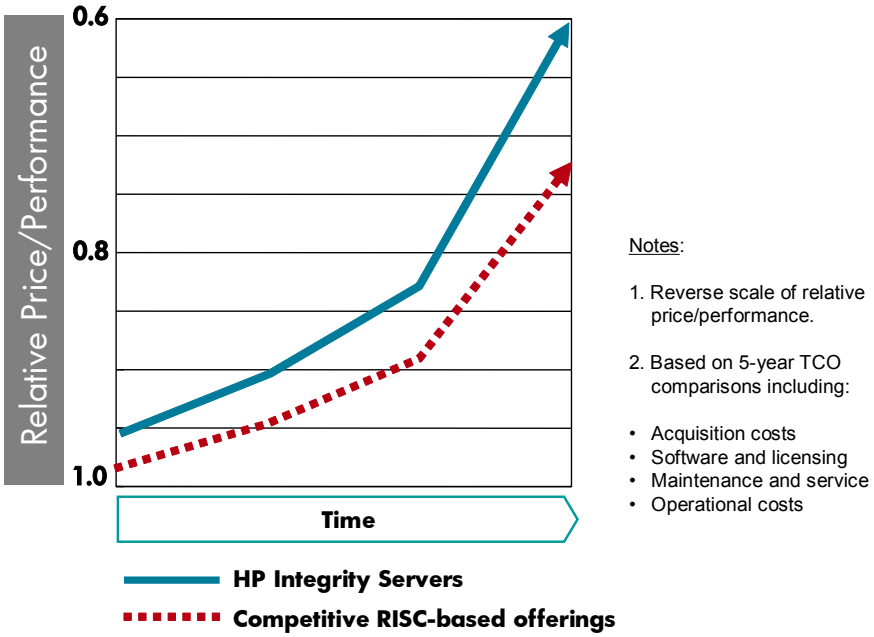
David E. Meacham, Director of IT, Delaware North Companies. Delaware North is a leading American provider of food and beverage concession services.

[2] http://www.tpc.org/tpcc/results/tpcc_perf_results.asp (results as of May 2003)

Integrity Servers reduce total cost of ownership

There are many aspects to consider in Total Cost of Ownership, or TCO. Most organizations would include items such as server, network and storage price, price/performance, operating systems licenses, database and applications, deployment and support costs, staffing, education, as well as floor-space and environmental costs. Indeed the Transaction Processing Council, or TPC, includes many, but not all, of these factors in the price/performance elements of its many server benchmark tests, so industry standard benchmarks often provide a good starting point for comparing TCO across several server vendors.

FIGURE 2: Over time HP Integrity Servers will provide better performance at a lower TCO relative to competitive RISC-based servers.



Taking each of these TCO aspects in turn, it's easy to see why HP Integrity Servers offer a reduced total cost of ownership, especially when compared to RISC-based systems from other vendors. For high-end Windows 2003 applications, Integrity Servers can boast an industry-first by supporting the consolidation of multiple large-scale Windows SQL databases onto a single environment. Let's take a look at some of the key areas of reduced TCO:

1. **Attractive pricing and price performance**. HP Integrity Servers are based on industry-standard Intel Itanium 2 microprocessors. As a leading player in the industry, Intel is able to spread its R&D and fabrication costs across very high chip production volumes. This economy of scale, together with rapidly increasing levels of performance, tends to drive down raw microprocessor prices over time. Capitalizing on Intel's success, HP no longer needs to invest in expensive chip design and production facilities, and is able to focus on server innovation "beyond the chip" – for example chipset, I/O, backplane design and breakthroughs in virtualization and management solutions. This results in extremely powerful, reliable and secure servers, which are priced very attractively and offer best-in-class price/performance and adaptive capabilities.

Leading server performance means that workloads on Linux, UNIX and Windows can be run more efficiently at lower cost, and results in many business benefits, such as handling peaks in your web-transactions, supporting very large databases or improving your R&D and product time-to-market.

"We are fortunate enough to be using HP Integrity Servers, which offer superior performance and unmatched scalability, giving us the ability to handle a massive database and data warehouse solution. At the same time, because we are dealing with technology based on industry standards, we can achieve exceptional performance while lowering our total cost of ownership."

Tim Eitel, CIO, Raymond James Financial. Founded in 1962, Raymond James Financial is now one of the largest financial services firms in the United States.

2. **Server consolidation**. Customers are able to run larger workloads on fewer servers, which rapidly impacts and reduces server, support, administration and environmental costs. Continental Airlines is an HP customer which has already realized significant savings through IT consolidation. According to Dan Morales, Managing Director of Financial Systems, the consolidation cost savings were huge. "We had a one-time cost saving of more than a couple of million dollars and a recurring savings of over a million dollars per year." In part, Continental's consolidation project and the need to reduce TCO were driven by the dramatic reduction in passenger-miles and revenues following the events of 9/11. Consolidation also offers the opportunity to reduce support and ongoing maintenance costs, too, since support pricing is typically optimized in organizations which operate fewer, larger data centers. HP Integrity Servers are highly appropriate candidates for consolidation projects since they can support larger workloads per server, as well as running multiple different workloads across server partitions. According to IDC in a recent white paper[3], "IDC believes that the option to run multiple operating systems on a common platform is consistent with the larger trend toward server consolidation".
3. **HP Integrity Servers can run multiple operating systems**. Integrity Servers support HP-UX, Linux, Windows Server 2003, (and OpenVMS in 2004), which means that individual systems can be deployed and re-deployed to run workloads based on any of these operating environments. This gives customers the unique opportunity to purchase common hardware, which can be deployed on demand to service peaks in transaction volumes, whatever the operating system needed. It may also mean that customers need to purchase fewer servers in total, owing to the increased flexibility offered by the Integrity product line. Samsung, a leading vendor of electronic and IT devices, has purchased HP Integrity Servers to help consolidate its Linux and HP-UX environments, and a major HP telecommunications customer intends to run HP-UX, Linux and Windows applications on a single Integrity Superdome. Reduced cost, re-purposing hardware thereby extending asset life, and reduced administrative overhead are the key benefits realized by these customers.

[3] Platforms for a New Millennium: HP's Transition to Servers Based on Itanium Processors – 2003.

Case Study

Reuters, the leading global provider of news, financial information and technology solutions, recently undertook an initiative to determine the optimal platform upon which to run a new trading and negotiation engine. This new generic solution promises to improve Reuters' operational efficiencies and increase competitive advantages by bringing new products to market faster and lowering the overall cost structure. Reuters compared the TCO of a 4-processor HP Itanium 2-based server with a competitor's comparable 8-processor RISC-based system. The results? Four times the performance. Half the number of processors. One third of the costs.

4. **Reduced environmental costs**. Many Integrity Servers can be deployed in racked configurations, so performance density is optimized. This is especially important in ISPs, NSPs and telecommunications customers, but it also has significant advantages where organizations are running out of data center floor-space, or where such space is extremely expensive. Downtown London, central Tokyo or New York City are locations of particular note. Improved performance density also means the opportunity to reduce other environmental costs such as power and cooling. In a recent study[4], HP showed how Integrity Servers cost 25% less than comparable IBM servers and 37% less than comparable Sun systems when considering environmental factors such as floor-space, power and cooling over 3 years.
5. **Optimized software, management and operations costs**. Software, management and people-costs are often the most significant budgetary items in any TCO analysis. HP Integrity Servers play a huge role in optimizing your administrative staff and their skills. Firstly, HP Integrity Servers support the latest versions of Linux, UNIX and Windows, which means that your current investments in IT administration can easily be leveraged, not to mention the skills your administrators have developed in specific environments, databases and middleware solutions. Integrity Servers represent no disruption to your infrastructure: the deployment, configuration, management and high-availability sub-systems are often the ones that are already established in your current IT environment. Fewer, more powerful servers mean reduced administrative and management overhead and better IT productivity, not to mention the opportunity to reduce the number and cost of software licenses. HP's automated, intelligent management, virtualization solutions and high-availability tools have all been enabled on Integrity Servers, which means higher server utilization and fewer operational errors or system failures. Integrity Servers also support the complete portfolio of OpenView solutions. These advantages, in turn, mean higher utilization of your assets and less business risk resulting from application downtime.

In summary, HP Integrity Servers offer built-in adaptive capabilities and the opportunity for significant reductions in total cost of ownership, starting with attractive pricing and price/performance, and encompassing potential savings in software, support and environmental costs. Since Integrity Servers can be deployed without major disruption in your current IT infrastructure, customers can realize added savings through server consolidation and improved IT administrator productivity.

[4] Total Cost of Ownership for Integrity Superdome, available at hp.com - June 2003.

Integrity Servers offer better ROI

While TCO is often used as a tool for comparing potential server acquisitions across multiple vendors in order to optimize 3- or 5-year ownership costs, ROI is more often used to determine the feasibility of an IT project in comparison with other possible capital expenditures. HP Integrity Servers can make a substantial contribution to delivering a faster Return on Investment.

1. **Speedy deployment and fast time-to-production**. HP Services is able to offer a wide variety of planning and design services to ensure that Integrity Servers are deployed quickly into your existing IT infrastructure. These consulting services may include assistance in migration to a new version of your database, web-services middleware and business applications, or support to help you implement existing custom-developed code. Faster deployment of servers means faster time to implementation which should result in quicker realization of business benefits.
2. **Protection of investment**. If you are an HP customer today, then some of your current HP 9000 Servers, including the rx2600, rx5670 (2- and 4-way servers) and Superdome (2- to 64-way data center server) can be upgraded 'in-box' to become Integrity Servers. Integrity Servers will also support future generations of Intel's Itanium 2 microprocessors. By means of in-box upgrades, customers can extend server asset life and continue to benefit from the highest levels of server performance and flexibility. These are significant examples of investment protection and infrastructure flexibility.

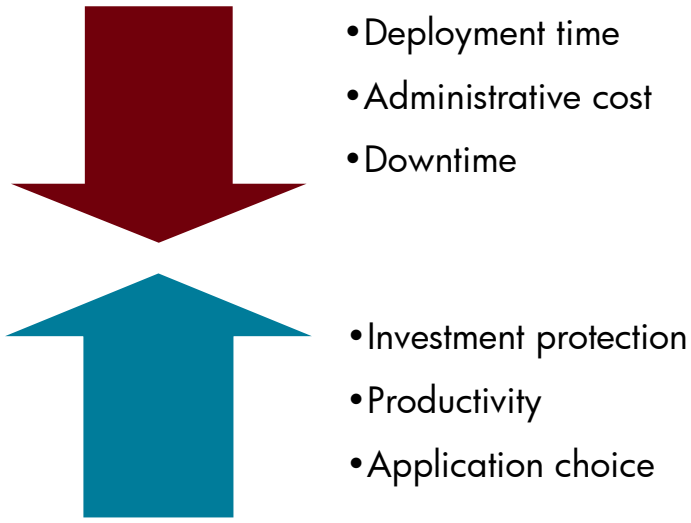
"JetBlue's IT infrastructure is almost exclusively HP and includes a number of mission-critical Windows applications for everything from reservations to flight operations and JetBlue.com, where we obtain 70% of our revenues. We're planning to move these applications to HP Integrity Servers. It is far less expensive and less complicated to scale up using one exceptionally powerful server, versus scaling out using numerous smaller servers. The combination of Integrity Servers and 64-bit Windows delivers unprecedented horsepower, flexibility and value, and is changing the face of the technology industry as we know it, as well as bringing exceptional cost and efficiency benefits to JetBlue."

Jeff Cohen, CIO, JetBlue Airways. JetBlue is a leading low-fare, low-cost passenger airline founded in February 2000.

3. **Availability of business applications and infrastructure solutions**. Availability of business applications and middleware is key to Return on Investment, since most new IT initiatives today are at least based on packaged software from Independent Software Vendors (ISVs). In this sphere, Integrity Servers offer customers the best of both worlds: ISVs have developed, tuned and tested the most recent versions of their solutions specifically for Itanium 2 and Integrity Servers. According to Jay Dorenkamp, VP of Server Technology at Lawson, a leading provider of enterprise-wide, client/server business application solutions, "Initial testing with HP-UX 11i V2 on Itanium has demonstrated extreme compatibility with our current HP-UX environment. We are enthusiastically looking forward to offering our joint customers this leadership solution".

In addition to these 'native' applications, HP has also developed a compatibility mode, which allows customers to run their current PA-RISC-based applications with no change and with no significant impact on performance. Intel has developed a similar solution for IA-32 applications. Many customers will appreciate this option, since a mixed approach to application deployment, with no forced migration, may be the most appropriate way to achieve the quickest ROI.

Figure 3: The financial and non-financial benefits of increased ROI



4. **Utility Computing, Grid Computing and Resource Virtualization**. Utility computing, grid computing and resource virtualization have rapidly become very important concepts in today's architectural discussions. These new architectures offer the prospect of vastly increased server utilization, by allowing organizations to tap in to unused server cycles, and by providing support for virtualization technologies which promise to drive server utilization rates to much higher levels. HP Integrity Servers already offer many aspects of utility computing: instant Capacity on Demand (iCOD and Temporary iCOD), Pay Per Use and other innovative server pricing schemes, not to mention partitioning and workload management systems which help to prioritize applications and improve response times to meet service level objectives. By implementing Integrity Servers with such utility pricing, customers can immediately tie cost to real server usage. This has a dramatic impact in terms of ROI, since organizations may often avoid up-front capital expenditures and replace them with on-going operational costs, thereby reducing the ROI timescale substantially. HP intends to support Integrity Servers in its ground-breaking Utility Data Center and Grid programs, which means that customers can reap even greater rewards as they build an Adaptive Enterprise.

   In addition to utility pricing, HP also offers a variety of attractive transition programs, purchase, leasing and other financing options though HP Financial Services. For example, to help you transition from existing technologies HP Financial Services offers sale, lease-back and asset recovery services. To make your investment in new technology as cost-effective as possible, HP offers investment protection financing, deferred payment programs, and many other customized financial offerings to help optimize your ROI and tie costs to utilization, revenue or profit generation.

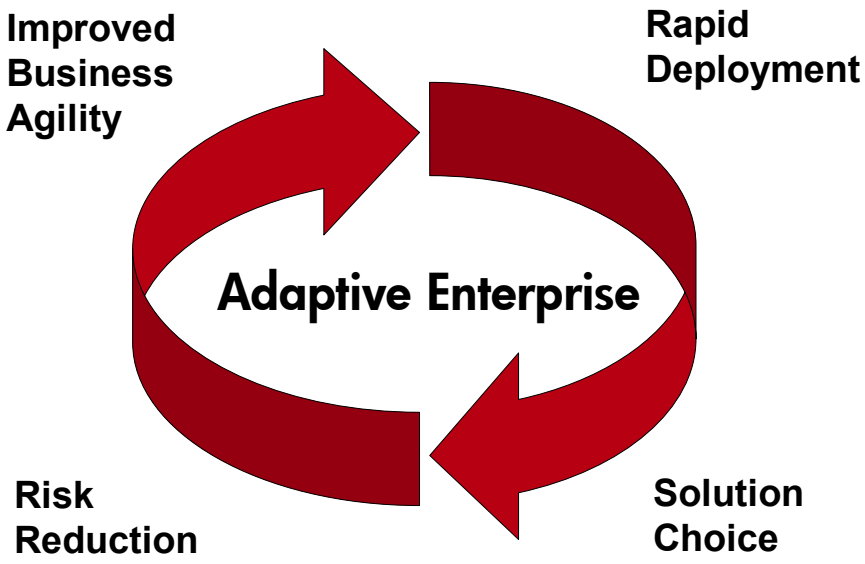
Integrity Servers help build an Adaptive Enterprise

We've focused so far on reduced TCO and improved ROI, yet there is a final, very important element to the concept of RoIT – that of helping organizations reduce business risk and react quickly to change by building a flexible and agile IT infrastructure. In other words, how do you ensure that the servers you deploy are the best choice to support your existing business systems, can provide a firm basis for new business initiatives, and help build an Adaptive Enterprise?

1. **Reduction of Risk**. As well as smooth deployment, high levels of performance, availability of applications, service and support, Integrity Servers are protected by HP's leading high availability clustering and failover systems. Many industry analysts have positioned HP as a leader in high availability and disaster recovery, and it is critical that our customers have confidence in deploying Integrity Servers for their most mission-critical applications. We have already seen how financial services company, Raymond James, plans to implement Integrity Servers in the highly-demanding world of investment and finance, and how JetBlue is using HP servers for on-line reservations systems – where just a minute of downtime, can result in tens of thousands of dollars in lost revenue.

   Many customers are speeding their deployment of IT systems to support new business initiatives by visiting one of the many HP/Intel solutions centers. Here customer IT professionals can develop and test new applications using the latest Integrity Servers. One financial customer was able to simulate the impact of a new web-based financial application on its current infrastructure. Using multiple Integrity rx2600 web-servers, running Linux, the customer was able to show that a carefully-configured HP solution could more than cope with the additional network-edge workload without causing degradation in the back-end database servers. The result? A new financial service for Small/Medium Business clients which is already generating millions of dollars in new revenues.
2. **Key Services Providers and Systems Integrators offer solutions based on Integrity Servers**. A key element in risk-reduction and business flexibility is the ability to deploy servers as part of an integrated, cross-functional solution. Integrity Servers are rapidly becoming "infrastructure of choice" for applications such as SAP and many others based on the Oracle database. Leading Systems Integrators, such as CGE&Y, are developing consulting practices to help customers deploy integrated solutions. One HP customer, VTG-LEHNKERING, an early user of Itanium 2 – based servers, is already seeing substantial business benefit from SAP. According to Roman Mielinski, IT Director, VTG-LEHNKERING AG, "HP systems based on Itanium ® 2 are the basis for the next generation of industry servers. We see in our projects that large software applications are already reaching the limits of traditional server architectures. That applies especially for SAP products and the larger databases. Our HP solution has also given VTG-LEHNKERING an edge over the competition, and we're excited about the extended competitive applications." VTG-LEHNKERING is a leading specialized logistics company in Europe.
3. **Improvements in business agility and ability to react to change.** Many customers have seen significant improvements in their ability to react to change and improve their competitive position as a result of deploying HP servers based on Itanium 2. For example, Electra Sweden AB, a major electronics retailer, has experienced higher levels of customer satisfaction, more accurate billing and improved in-store service. Wells Fargo Bank, another HP customer, has been using HP servers based on Itanium 2 for over a year, and is planning wide deployment of Integrity Servers across many customer-facing divisions of its banking and investment businesses. Wells Fargo is a diversified financial services company with $312 billion in assets.

Figure 4: Building the foundation for an Adaptive Enterprise



In summary, HP believes that risk reduction and helping to build an Adaptive Enterprise are key factors in server RoIT. Our customers are planning to run many of their most mission-critical applications on Integrity Servers, at a reduced cost and with higher levels of availability. In many cases, organizations have been able to deploy IT services on Integrity Servers in support of new business initiatives which are already delivering increased revenues and profits and higher levels of customer service. This unique combination of reduced TCO, improved ROI, and adaptive capabilities is the reason that Integrity Servers provide the best overall Return on IT.

"We have already experienced phenomenal improvements in performance from HP's Itanium 2 based servers, which have an impact on our ability to react to customer needs and hence improve our customer service. For example, when a customer in one of our 135 stores asks about a certain product, the store will be able to access information much more quickly, letting the customer know immediately about the latest model, its availability, and even what colors are in stock."

Ola Schwarz, IT Manager, Electra Sweden AB. Electra Sweden AB supplies domestic consumer electric products such as radios, TVs, videos, mobile phones and digital TVs throughout Sweden.

For more information

Contact any of our worldwide sales offices or HP Channel Partners (in the U.S. call 1-800-637-7740) or visit our HP Integrity Server Web site at http://www.hp.com/go/Integrity