

Measuring success



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President

Margrith Lutschg Emmenegger

Head of Information & Administration

Silvio Mifsud, Senior Vice-President

FBS Managing Director

Gilbert Coleiro

2006 Group Net Operating Income

USD 21.94 million

Employees: 121

ROI Study Highlights

- 300 % ROI over five years
- 28% IRR over five years
- \$386K Initial Investment
- Payback within 29 months
- \$1.2 Million Net Savings over five years

Business Benefits

- Scalable, reliable, high-performance IT infrastructure
- Space savings and reduced energy consumption
- Scalability to meet future growth needs

Study Scope

- HP EVA 3000
- HP BladeSystems BL20p G3
- HP BL460c Blade Servers
- HP StorageWorks Business Copy 3.0
- HP Rapid Deployment Packs 2.1
- HP Systems Insight Manager 5.0
- VMware ESX 2.5

FIMBank P.L.C. enables growth in new business areas with HP Blade Servers and virtualization – realizes a 300% ROI

Executive Summary

The FIMBank Group is a global provider of trade related financial services. Established in 1994, FIMBank has steadily grown its trade finance operations, now spanning four continents. Supported by a world-class regulatory environment and a strategic hub position through its head office in Malta, FIMBank has built a formidable reputation for its ability to unlock niche emerging markets and deliver underprovided trade finance products. FIMBank's strategy is to further strengthen its global presence and enhance the range of products it offers, namely: factoring, forfaiting, structured commodity finance, and supporting services.

FIM Business Solutions Ltd (FBS) is a business systems provider and technology management services firm. Established in 2005 as a fully owned subsidiary of the FIMBank Group, FBS is an offshoot of the FIMBank IT management team and was setup primarily to service the FIMBank Group as well as international FIMBank joint venture companies.

In 2004, FIMBank anticipated an obstacle to the growth it had enjoyed for eight years. Its IT landscape, characterized by older servers with directly attached storage, was no longer able to meet the growing needs of the business. With data storage capacity unevenly utilized and difficult to manage, server performance suffered. Batched processing was taking a significant amount of time and often fraught with problems, which in turn led to impasses in the backup procedures. Given those circumstances, the IT department anticipated issues related to coping with increasing demands.

Furthermore, FIMBank faced constraints particular to Malta which compounded the issues: steep shipping charges on all imported goods, extremely high real estate costs and expensive energy resources. It was clear that any new solution would need to be more compact and more energy-efficient than the previous environment. At the same time, FIMBank wanted to leverage their current IT's infrastructure while investing to gain the flexibility and agility required to adapt to fast-hanging business demands.

FIMBank's objectives for the IT upgrade included: a seamless and painless move to new servers, a substantial consolidation of the IT infrastructure, optimization of data storage and physical space through virtualization, automation of manual processes, flexibility and resiliency. A good match on all counts, the high quality and reliability of cutting-edge HP technologies, coupled with the availability of competent and experienced local implementation partners, made HP an obvious choice for the project.

With the new HP Blade Servers, FIMBank has transformed its data center to one that is flexible, highly innovative and able to provide the necessary capacity for future growth while achieving critical savings in energy and space costs, and operating costs, resulting in an impressive 300% ROI in 5 years.



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“To create a scalable infrastructure, HP BladeSystem was the next logical step for us after the Storageworks EVA 3000.”

Gilbert Coleiro
Managing Director FBS

Goals

- Upgrade, consolidate and standardize IT infrastructure
- Improve power & cooling usage in data centre
- Consolidate and virtualize where possible
- Optimize set-up time and allocation of resources for factoring
- Automate processes where possible
- Better utilize human resources

Challenges

- Maximizing use of physical space
- Optimizing storage capacity and usage
- Reducing heat emissions and managing power requirements
- Migrating the infrastructure to new servers to take advantage of virtualization
- Re-allocation and optimization of storage resources
- Procurement of hardware and technical expertise in Malta

FIMBank Business Challenge—business growth, hampered by older technologies, spurs technological innovation

FIM Business Solutions (FBS) manages the IT services for the FIMBank Group and for an expanding pool of global joint ventures. In 2004, the in-house Business Solutions team realized the need for a technology infrastructure model that would give the bank increased flexibility, agility and resiliency to accommodate and support exploding business growth, especially from the new factoring and forfaiting lines.

At that time, FIMBank’s IT environment was made up of several servers with directly attached storage (DAS). As is typical in many IT landscapes, some of these servers were running at full volume, while others were not, resulting in uneven capacity utilization and an inability to manage the load. This limited flexibility took its toll on the server performance and made administration difficult. Overnight batched processing – a manual effort normally requiring four hours per night – could take all night when problems arose. This, in turn cut into the window of opportunity for backups. The backup routine itself was sequential and utilized more than its fair share of network bandwidth. Furthermore, the Windows infrastructure was spread over several physical servers. The IT team was also unable to easily increase capacity to accommodate increasing demands.

So far, this story could almost be anybody’s. But because Malta is a very densely populated island country in the Mediterranean Sea, it presents some additional boundary conditions for its businesses. First, physical space on Malta is at an absolute premium, especially in Sliema, where FIMBank’s head office is situated. Secondly, all goods not produced directly in Malta must be shipped in, causing not only long delivery times but adding 20% (or more) to the normal, non-Malta price tag. Thirdly, due to the year-round warm climate, cooling can become a serious issue in Malta. Furthermore, energy resources are expensive, as Malta’s electricity production relies almost exclusively on imports of ever more costly fossil fuels.

Some of FIMBank’s business impetus to increase the efficiency and efficacy of their data centre stemmed directly from these factors. In fact, by 2004 the situation at FIMBank had reached a critical stage, as data storage required to support new business growth could not be added, due to space limitations. Therefore, a solution which would not only limit the real estate required for housing servers but would also reduce cooling needs and energy consumption, would be even more crucial on Malta than elsewhere. In addition, a solution that could help the bank buffer its resource requirements through built-in scalability – eliminating the need to “stock up” on hardware just to have it on hand in anticipation of vaguely defined needs – would be very valuable indeed.

A technologically forward-thinking company, FIMBank was eager to adopt an innovative solution to its IT issues but was cautious about taking undue risks. So, FBS team developed a three-phase plan to achieve a complete but low-risk restructuring of the IT environment. This plan involved the support of local technology providers and extensive testing of the new technology. Having clear objectives for the upgrade would ensure a seamless and painless move to the new servers, achieve a substantial consolidation of the IT infrastructure, optimize the use of data storage and physical space and provide remote management and proactive monitoring capabilities.



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“Optimization of physical space was an important driver.”

Gilbert Coleiro
Managing Director FBS

“When it comes to our IT investments, we get enormous support from our executive management.”

Silvio Mifsud
Senior VP
Head of
Information & Administration

Selection Criteria

FIMBank chose the HP Solution based on its ability to offer:

- Painless migration from old servers to HP Storageworks EVA and HP Blade System services
- Virtualization with VMware that allows timely accommodation of new demands without additional hardware purchase
- Scalability, reliability and high performance of HP quality products
- Automation, which has resulted in an agile IT structure that can respond quickly and efficiently to business drivers
- Control of operating costs, through reduced cooling and space consumption
- Support with a proven track record through local HP partners

The high quality and reliability of cutting-edge HP technologies, coupled with the availability of competent and experienced local implementation partners, made HP an obvious choice for the project.

The phased approach began in 2004 with installation of the HP Storageworks EVA 3000 and migration of the existing production data. At this point, FIMBank’s goals were to: consolidate data storage, improve input-output performance, automate the overnight batch processes and improve the flexibility and growth of existing servers, as well as to enable the deployment of ancillary reporting and MIS systems.

Towards the end of 2005, rigorous testing began on the combination of the Storageworks EVA 3000 with HP BladeSystems and VMware for virtualization. At this stage, FIMBank wanted to create a new 24X7 data centre in order to support new factoring joint ventures through an ASP model. The goals now were to produce an extremely flexible, scalable, highly available infrastructure to enable speedy time-to-market for new joint ventures – with a low initial financial outlay.

When this initial application of virtualisation proved very successful, the FIMBank’s Business Solution (FBS) team saw many additional opportunities for virtualization throughout the business. They began deploying HP Blades Systems servers and VMware in other areas, leading to further server consolidation, increased flexibility and agility, and improved utilization of hardware and physical space.

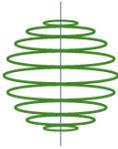
The new HP infrastructure was proven capable of reliably meeting FIMBank’s volatile business demands, exploding growth and environmental needs. Data centre efficiencies have been improved through reduced power consumption, heat emissions and physical clutter, all while providing superior functionality.

Throughout the process, HP and its implementation partners have played key roles in helping FIMBank to pursue its strategy of business growth by providing the hardware, architecture, tools and knowledge necessary to upgrade its IT infrastructure and capacity.

Business Benefits—cutting-edge HP infrastructure reduces time to market for new business ventures, increases efficiency and performance at lower cost

In implementing the HP solution, FIMBank has now achieved a its growth strategy with the ability to expand its core business and pursue its new factoring and forfaiting business. This was made possible by its ability to easily evolve its IT infrastructure through virtualization and automation. For example, with the new environment the FBS team was able to set up a new joint venture office in three days with two people. Previously it would have taken six to eight weeks, and required many more dedicated resources.

With the HP tools, FBS can now centrally and proactively manage servers and monitor storage usage enhancing availability and contributing to improved productivity. By eliminating the batch processor and other manual/sequential procedures, FBS has been able to more effectively utilize its IT staff, resulting not only in increased productivity but also higher employee satisfaction.



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“The HP BladeSystem engineering is fantastic and a major advantage for easily connecting to other infrastructure services.”

Gilbert Coleiro
Managing Director FBS

Technology Benefits

- Decreased the number of physical servers through virtualization and server consolidation—HP BL25p
- Centralized and improved allocation and utilization of storage
- HP allows for better space provision
- Automation greatly streamlined processes
- Flexible, agile, and resilient network
- High system availability
- Decreased time it takes to build a server
- Scalability

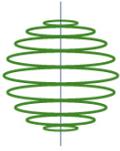
FIMBank’s new HP infrastructure has produced tangible and substantial economic gains through reduced energy and cooling consumption. This is due in part to a reduction in the number of physical servers required to provide the same or greater functionality (a blade can accommodate up to 30 virtual servers, depending on resource requirements). Another significant contributing factor is the higher energy efficiency of HP BladeSystems technology. Taking into consideration, the Malta up-charge for new hardware acquisitions (+ 20% or more), avoidance of future purchases dramatically increases the potential of that economic benefit.

FIMBank has also been recognized as a trend-setting technological innovator in Malta and has reduced its carbon footprint – a good example of the “green effect” energy-saving innovation using less power and less space.

Technology Benefits—flexibility and standards

Through the upgrade of its IT environment to HP BladeSystem technology, the FBS team has been able to achieve significant improvements in the data centre:

- The number of physical servers has been consolidated through virtualization. Not only does this mean that the data centre footprint will not need to increase, but significant extra server capacity for growth is already foreseen without needing to add any more hardware. (Currently, FBS accommodates 5 -6 virtual servers per physical server due to compute-intensive processing requirements).
- Virtualization has also enabled FBS to respond more efficiently to changing business demands. The use of VMware with HP BladeSystems servers allows the FBS team to build and deploy servers 19 times faster than before.
- FIMBank’s previous ~15GB of direct attached storage were poorly utilized. Through centralization and improved allocation with the HP Storageworks EVA 3000, storage capacity is much better allocated and utilized.
- Automation has greatly streamlined IT processes and work flows, resulting in a flexible, agile and resilient network. With automation, the batch processes have been sped up from four hours to less than one (50 minutes). This freed up a part-time dedicated resource for other tasks.
- Backup to disks provides faster, more reliable file backup and recovery options and improved overall resiliency.
- When necessary, automated recovery now takes only 10 minutes, as compared to two hours previously, further ensuring high system availability and increased productivity. FBS can now proactively manage its network, rather than reacting to failures.



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“We Invested time and money but now the infrastructure is ‘in place’ that will allow future Joint Ventures to grow.”

Silvio Mifsud
Senior VP
Head of IT and Administration

Investment Benefits

- Increased efficiency and decreased time to build a JV system from 6-8 weeks to 3 days with fewer dedicated resources and associated costs on location
- Greater productivity
- Automated recovery is down from 2 hours to 10 minutes
- HP’s IT Consolidation and virtualization allow FBS to have up to 30 servers per physical server
- Consolidation and Virtualization provide energy and space savings

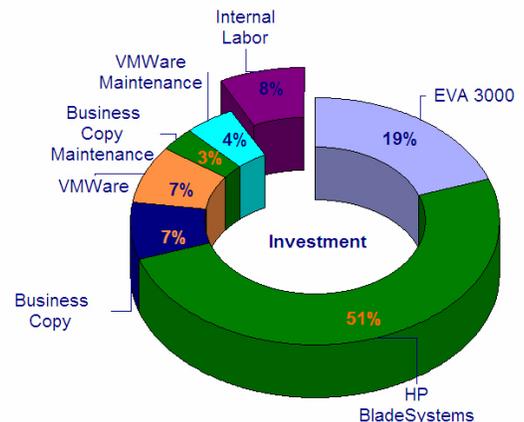
Built-in Value of HP Investment – saving time and money

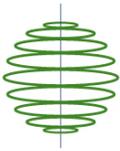
Thoughtware Worldwide’s analysis showed that the HP tools produce economic benefits primarily around the more efficient and effective use of resources – whether those are human, capital, physical-space or energy resources:

- Time and effort savings in setting up systems to support a new joint venture
- Cost savings through reduced cooling and power consumption
- Space savings through virtualization and server consolidation
- Deferment or avoidance of additional equipment purchase through virtualization and server consolidation
- Productivity gains through central and proactive management of servers and storage
- Productivity gains through replacement of manual batch processes with automated processes, which are also more robust
- Reliability and business continuity through faster automated recovery

Quantifying the HP investment

- The purchase, delivery and installation of the HP Storageworks EVA 3000, BladeSystems servers and associated hardware components account for 70% of the overall investment
- HP Business Copy and VMware software, plus corresponding software support contracts, make up another 22% of the investment
- An additional ~6% of the investment was provided through internal labor resources





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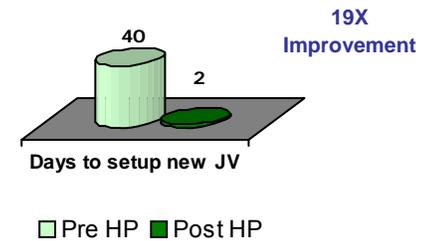
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Operational Benefits—consolidation and virtualization ensure business agility and efficient use of all resources

Hewlett Packard's virtualization, consolidation and energy-saving innovation have provided FIMBank with a first class infrastructure that is the backbone of its growing factoring business. Working within this new IT environment, FIMBank's IT staff can respond quickly to meet new demands while ensuring uninterrupted support for "business as usual".

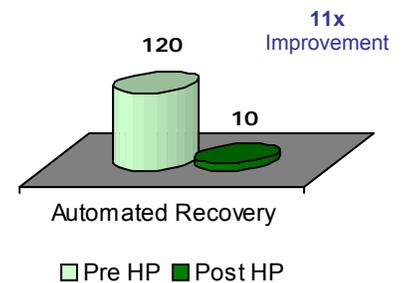
Operational Gain

The time required to build a joint venture system has decreased from 6-8 weeks (40 days) to three days, while requiring fewer dedicated resources and lower associated costs.



Business Continuity Assurance

When data recovery is necessary, the effort has been reduced from two hours to just 10 minutes through automation, resulting in higher system availability. Furthermore, with HP's write-to-disk technologies – which provide faster, more reliable backup options – recovery of data has improved greatly.



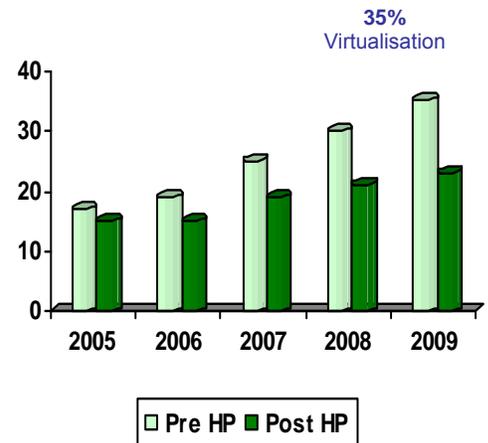
Operational Benefits

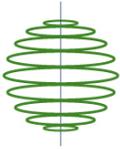
- Efficient use of storage with HP EVA
- Automation has increased data processing and work flow exponentially
- VMware with HP Blade Servers allows FIM to build and provide servers much faster
- Backup to disk provides faster, more reliable file backup and recovery options
- Improved overall resiliency
- High system availability and recovery when necessary
- HP BL20p allows for more efficient server consolidation
- Proactive management of the network, rather than reactive to failures

Efficiency Gain

Due to the consolidation and virtualization possible with the HP technologies. FIMBank can provide up to 30 virtual servers per Blade; this provides further energy and space savings and avoidance of additional hardware purchase costs. FIMBank currently has 5-6 virtual servers per physical server.

With the HP Storageworks EVA 3000, storage space is also better provisioned/utilized.





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“Thanks to blades, we have achieved an improved time-to-market that allows us to settle in a new market with factoring services much quicker.”

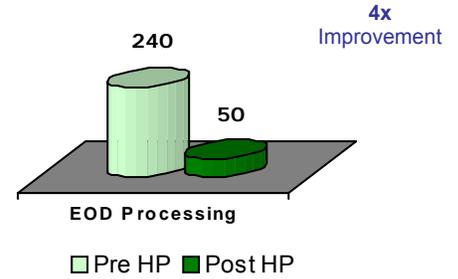
Silvio Mifsud
Senior VP
Head of Information & Administration

Business Benefits

- Achieved a functional growth strategy
- Ability to expand its core business through virtualization and automation both in-house and globally
- More efficient use of human resources
- More efficient energy consumption and subsequent reduced cost of cooling
- Established a means to attract and retain new talent
- Recognition as a trend-setting technological innovator

Productivity Gain

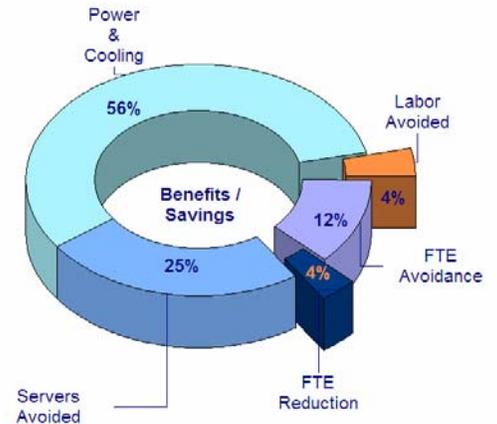
The FBS team has seen increased productivity. Automation of batched processes has reduced the time and effort required to perform data processing and has improved work flows tremendously: for example, new end of day processing takes 50 minutes, as compared to four hours previously.

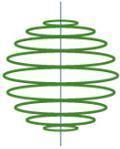


Benefits Achieved from FIMBank’s Investment

With HP Storageworks EVA 3000 and HP BladeSystems servers forming the backbone of its IT infrastructure, FIMBank is now able to focus on its core business and growing its new revenue streams.

- **Energy cost savings:** HP Blade System servers require less cooling, making them substantially more energy efficient.
- **Investment protection:** Virtualization and the resulting avoidance of additional equipment purchases not only present immediate savings but also increase the energy (and space) savings in future – all while ensuring FIMBank’s ability to meet new business demands.
- **Increased productivity:** with the new HP / VMware combination, automated batch processing, backup and system recovery procedures take a fraction of the time required previously, freeing up IT staff for other tasks and avoiding additional headcount costs.





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FINANCIAL MEASUREMENT EXPLAINED

ROI (Return on Investment)

- Quantifies how much profit or cost savings will be achieved as a result of the investment
- Discount any future costs/benefits by the Weighted Average Cost of Capital (WACC)
- WACC is an average cost of capital using a combination of equity and debt borrowing
- Demonstrates the overall value of an investment; e.g., is breakeven achieved (100%) or is positive value achieved (101%+; investment plus value)

WACC (Weighted Average Cost of Capital)

$$WACC = E/V \times Re + D/V \times Rd \times (1-Tc)$$

- Re= Cost of Equity
- Rd= Cost of Debt
- E =The market value of the firm's equity
- D =The market value of the firm's debt
- V =E + D
- E/V =Percentage of financing: equity
- D/V =Percentage of financing: debt
- Tc=The corporate tax rate

IRR (Internal Rate of Return)

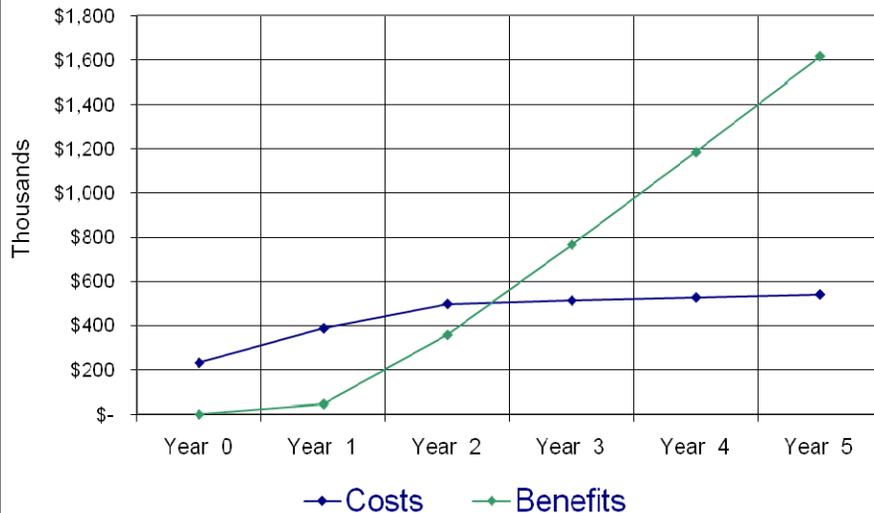
- Discounted cash flow measure of valuation and investing. IRR is the true interest yield of an investment
- Net benefits restated as an interest rate
- IRR demonstrates how quickly an investment generates positive net benefits

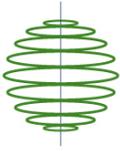
Summary of FIMBank's Return on Investment (ROI)

In HP BladeSystems servers with virtualization, FBS has found a solution that enabled its data centre expansion within the physical space and energy use constraints while simultaneously providing capabilities for future growth. The reliability and flexibility of the new IT landscape will provide the FIMBank Group with the agility it needs to pursue its growth strategy as it saves exponentially on overall support costs.

As this study, which was completed in November 2007, show the HP solution has delivered an ROI of 300% over five years and an internal rate of return (IRR) of 28%, confirming the quality and value of the investment. As illustrated in the chart below, the benefits of the HP solution well exceeded expenditures, reaching breakeven in 29 months.

Break Even Analysis





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About the Value Measurement Series

This study is one of a series of investigations into the business value companies have derived from their investment in HP Solutions. It is intended to serve business executives and managers who are evaluating HP business technology to optimize business outcomes.

This case study was commissioned by HP, and is based on original research and analysis conducted by Thoughtware Worldwide, LLC., an independent research and information services firm. Thoughtware Worldwide's research included on-site interviews with members of FIMBANK's management team and reviews of company financial and planning documents.

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For more information about this study, please visit www.ThoughtwareWorldwide.com or contact your local HP office

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FIMBank Has the Opportunity to Harvest Additional Value

Future Opportunities

During the course of the Thoughtware Worldwide study, the FBS team identified a number of additional areas where it could maximize the benefits realized from its HP investment. Leveraging its highly successful HP partnership, FIMBank Group has the opportunity to harvest additional value by:

- Further standardization and virtualization, especially in light of future global joint ventures, factoring and forfaiting
- The use of VMware's Virtual Desktop Infrastructure (VDI), which provides desktop functionality without the standard PC and can be managed through centralized support and at a much lower cost for hardware
- Increasing automation through the use of evolving tools
- Pooling of CPU and memory with future VMware releases
- Utilizing the new HP Consolidation Client Infrastructure or blade client for future desktop additions
- Installing HP Storage Essentials Storage Resource Management software to get up-to-the minute data on server utilization, capacity and performance, disk space provisioning and backup reporting, among other things.

Summary

Hewlett Packard's BladeSystem and StoraWorks EVA technologies, coupled with virtualization through VMware, are helping FIMBank to realize its business growth strategy of developing new revenue streams with significantly reduced time-to-market and IT start-up costs. Together, these innovative and energy saving technologies provide the scalability, flexibility and high resiliency that FIMBank requires to support its business while cutting and containing operating costs.