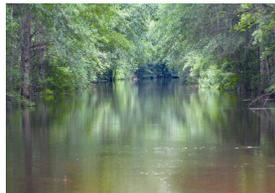




Business Case for LIMS Implementations/Upgrades



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Laboratory & Engineer Process Services
Washington Savannah River Company
DOE Complex Wide LIMS User Group Meeting

October 18, 2006

Business Case for LIMS Implementations/Upgrades

- **Benefits**
- **Costs**
- **Cost Benefit Analysis -
Return on Investments (ROI)**



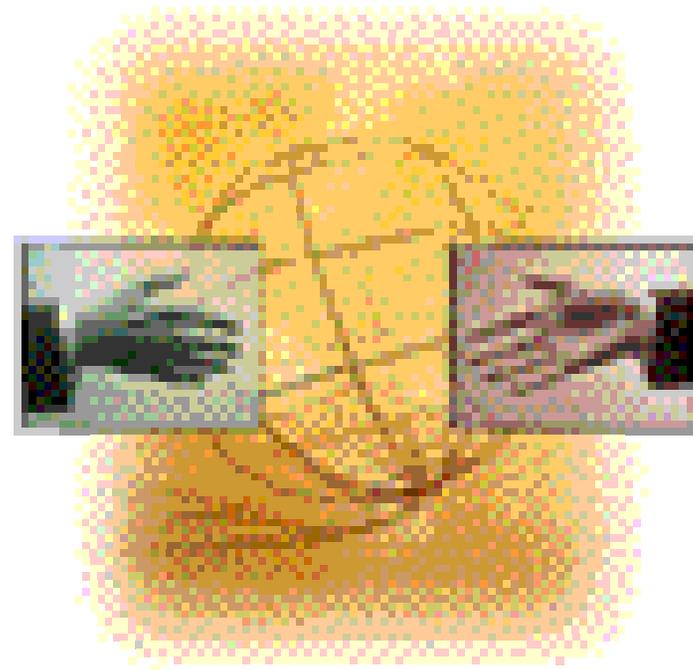
Defining the benefits

- **The Team**
- **Laboratory processes and practices**
- **Benefits**
 - **Hard saving**
 - **Soft saving**



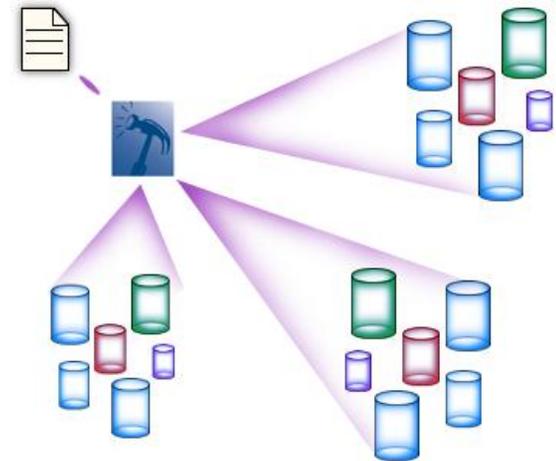
The Team

- **Efficiently completed as a team**
- **Members from all areas of the organization**
 - **Laboratory Management**
 - **IT Professional**
 - **Lab Personnel**
 - **Finances Department**



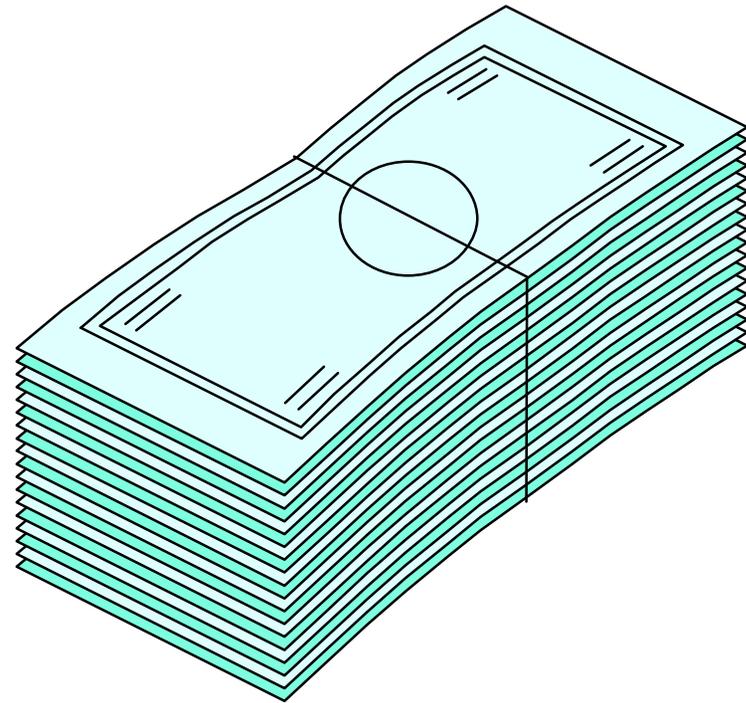
Laboratory Processes and Practices

- Creative look at the processes and practices.
- Identify manual processes and practices to be automated
- Streamline automated processes
- Workflow of the Laboratory



Hard Saving

- **Internal**
 - Hardware
 - Labor Support Cost
 - License Fees
- **External**
 - Scheduling/Planning
 - Integration with other business systems
- **Possible Additional Revenue**
 - New Contracts
 - New Capabilities



Soft Saving

- **Operating efficiency**
- **Customer Satisfaction**
- **Competitiveness**
- **Quality**
- **Security**
- **Compliance**



Defining the Cost

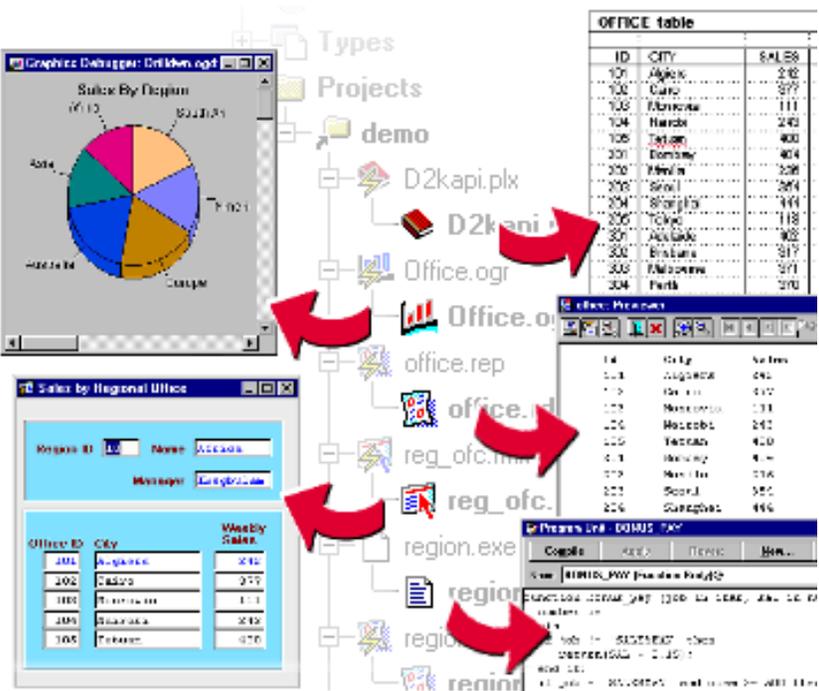
- Implementation
- Hardware
- IT Support
- Maintenance
- Training

A blank check form with a light blue background and a dark blue border. The form contains the following fields and text:

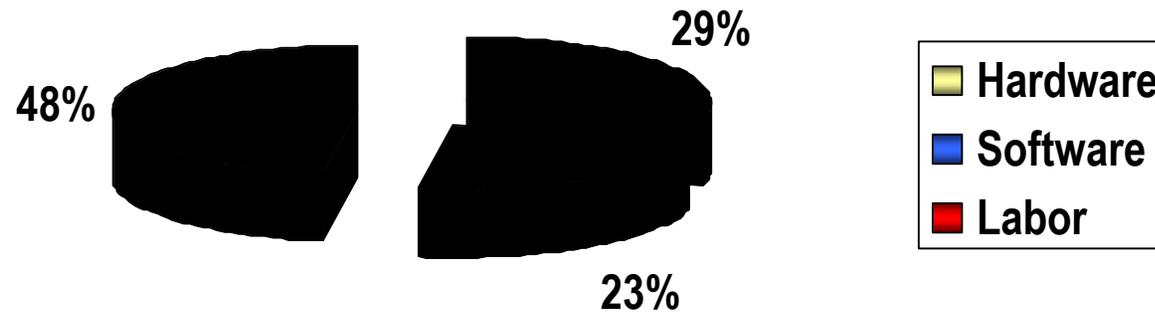
- Top right corner: "2048"
- Below "2048": "DATE _____"
- Left side: "PAY TO THE ORDER OF _____"
- Right side: "\$ _____"
- Below the amount field: "DOLLARS"
- Bottom edge: A series of numbers and symbols, likely a MICR line, including "100 200 55 770 11 994076 121".

Cost Benefit Analysis

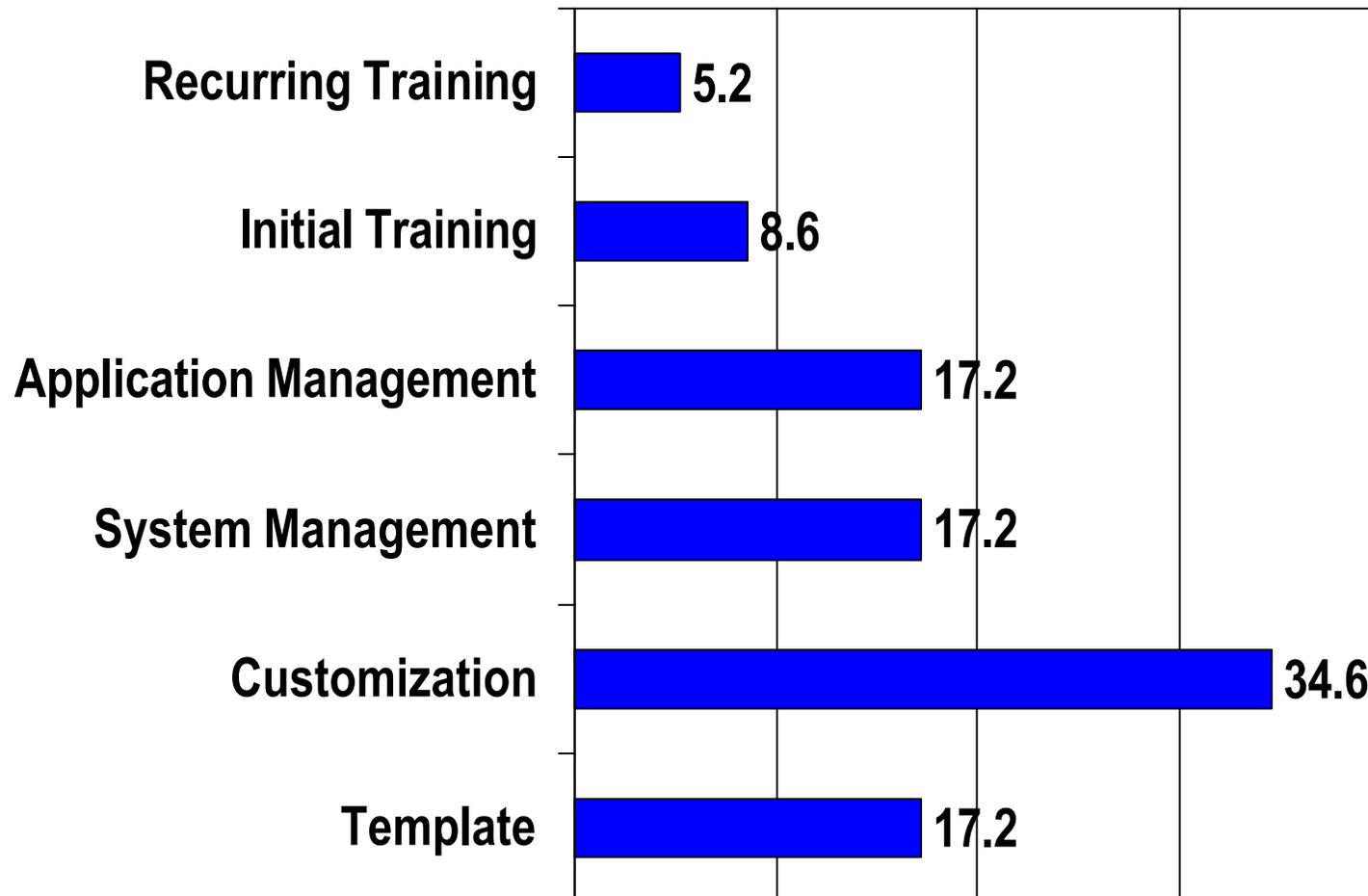
- Investment
- Payback Period
- Total Cost Ownership



Investment Cost Breakdown

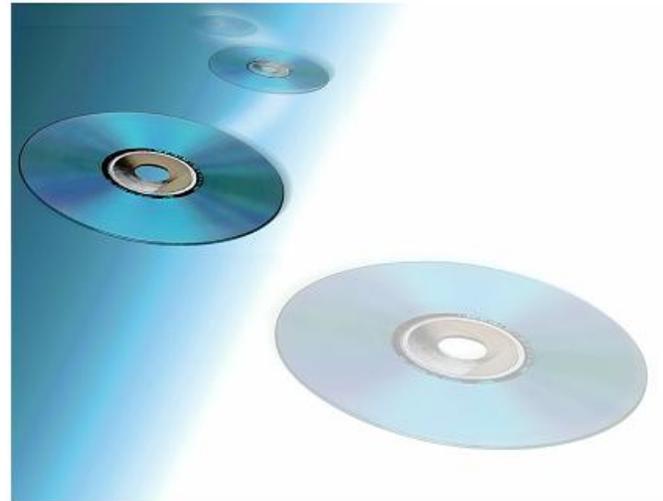


Labor Cost Breakdown



Standard LIMS Strategy

- Reduction in costs
 - Hardware
 - Software
- Increased IT productivity
 - Support
 - Upgrades
 - Administration
- Enhanced user productivity
 - Training
 - Reduce Downtime



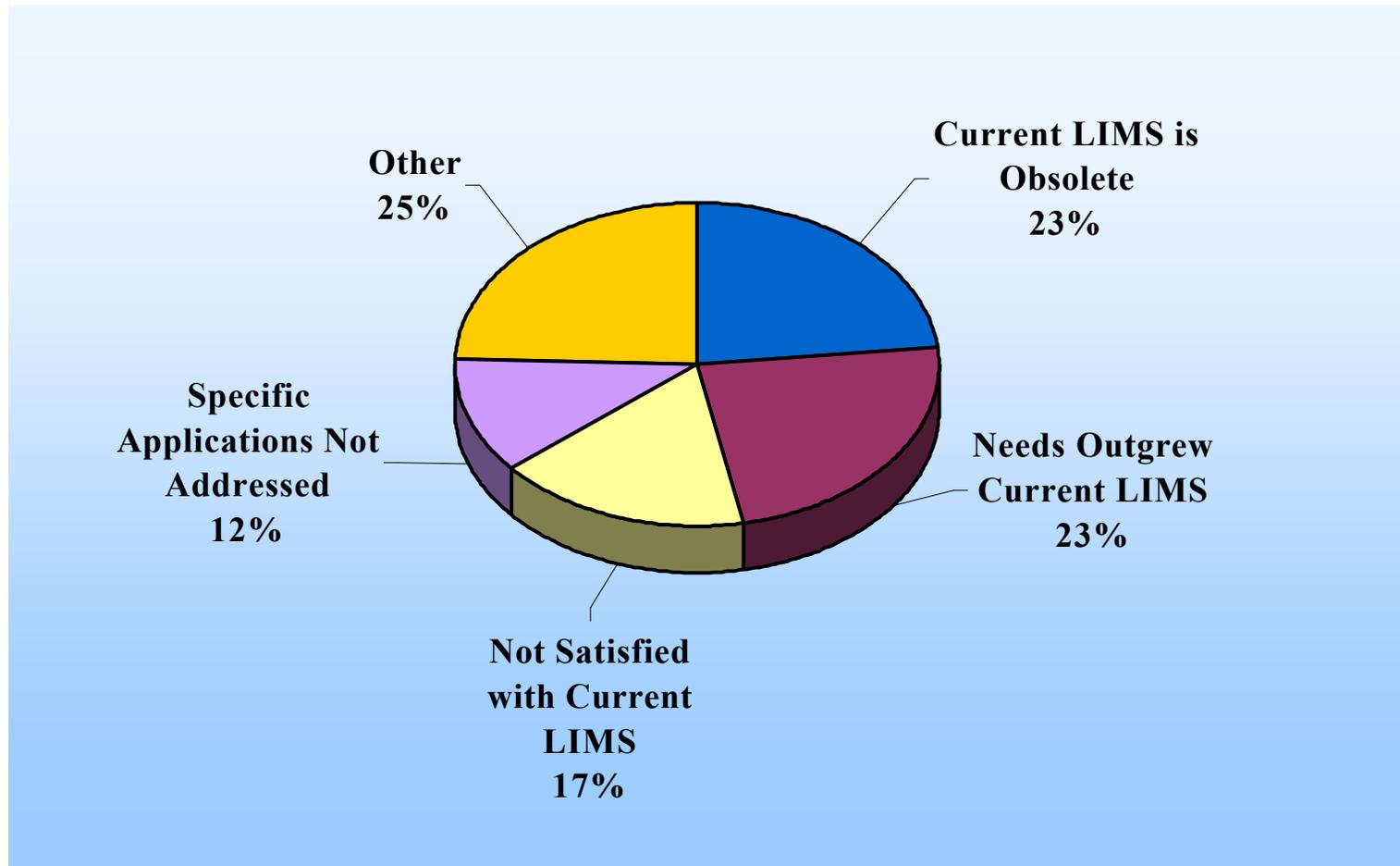
Standardization saved companies the cost of IT and user training for multiple LIMS, estimated at up to \$250 per user per year

LIMS Migration/Upgrades

- **Major Reasons**
 - System Obsolescence
 - Limit Resources
 - Business Requirements
- **Challenges**
 - Migrating data
 - Customization
 - New Reports
 - Validation and Testing
 - User acceptance and transition
 - Impact on business continuity



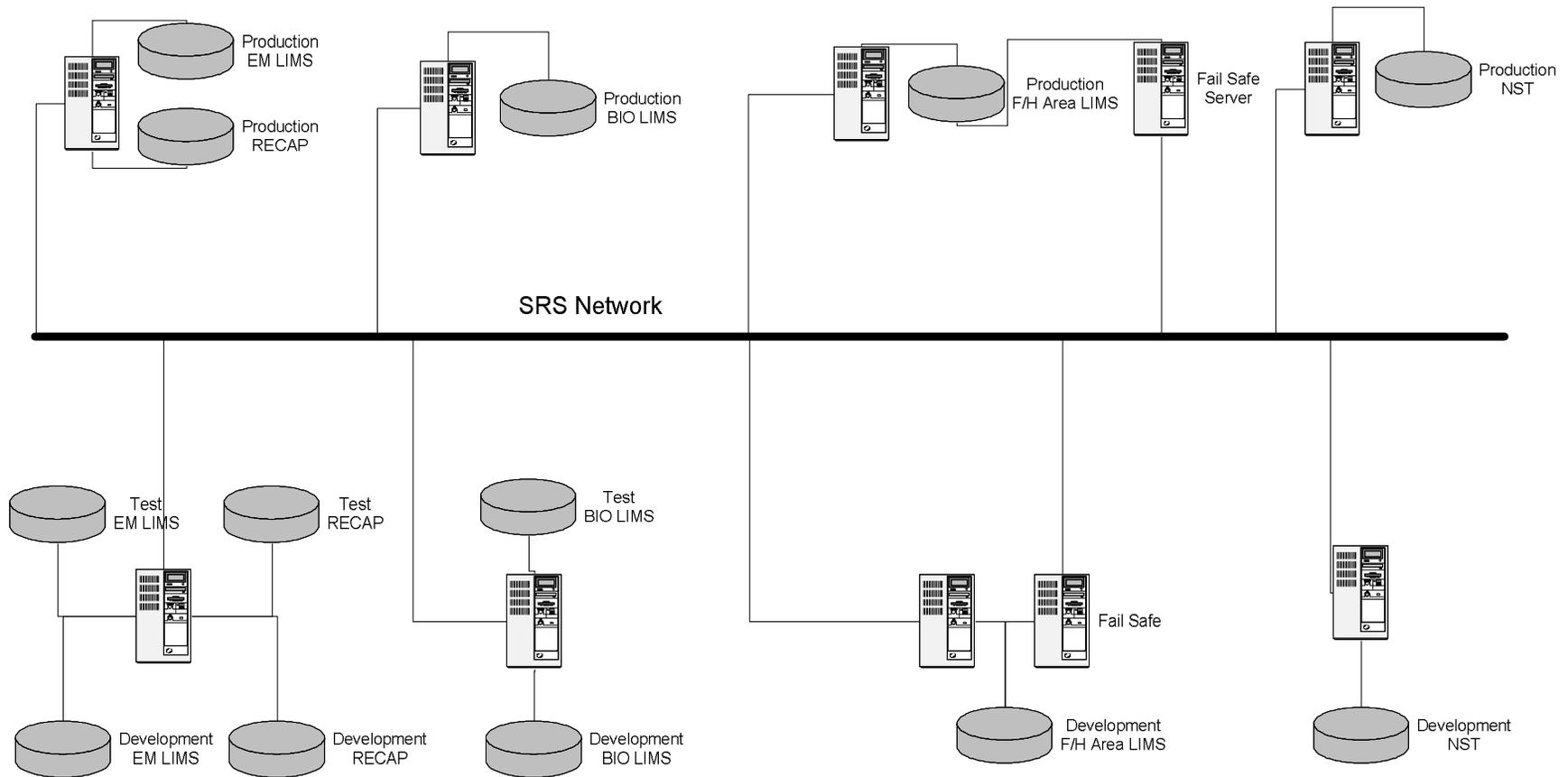
Reasons for Replacing a LIMS



Strategic Directions International 2004

This information is not approved for further distribution without written approval of WSRC.

Current System Plan



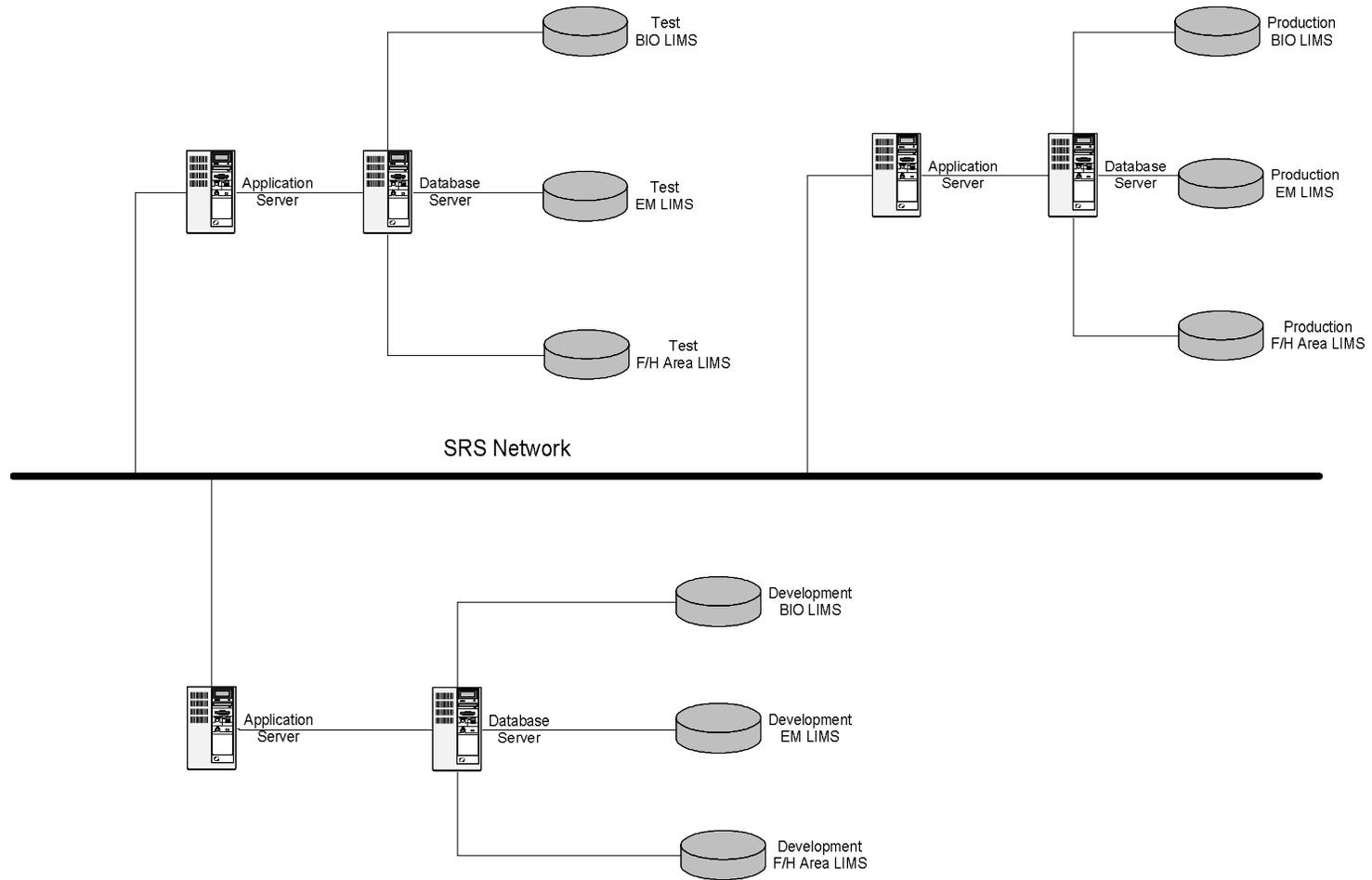
Current Annual Cost

- **Labor**
 - Application Support \$551,500
 - Database Administration \$74,500
 - System Management \$128,700
 - Security and Patch Management \$92,200
 - Instrument Support \$109,000
- **Licenses Fees**
 - Oracle Enterprise Edition \$21,200
 - Oracle Application Server \$20,000
 - SQL*LIMS \$87,900
 - Hardware Maintenance \$56,000
- **Total Cost \$1,141,000**

Business Case to Upgrade to SQL*LIMS 5

- **Reducing overall Total Cost of Ownership by:**
 - Reduce hardware footprint
 - Lower database maintenance cost
 - Lower security and patch management cost
 - Lower software license fees
 - Upgrade all LIMS application to same version of LIMS applications (SQL*LIMS 5)

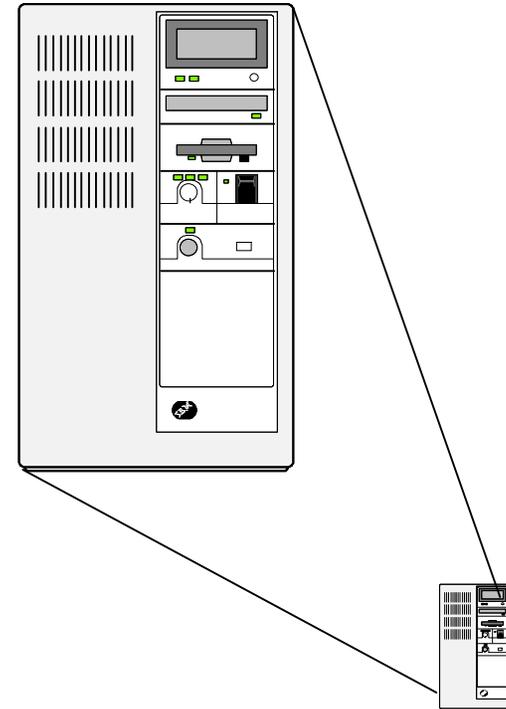
Future System Plan



This information is not approved for further distribution without written approval of WSRC.

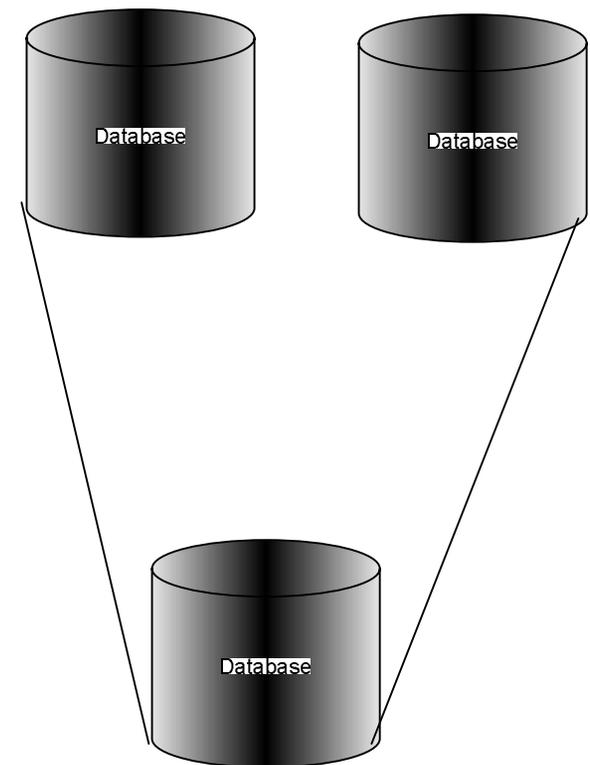
Reduce Hardware Footprint (Cost Saving)

- Reduce the number of server from 10 to 6
 - System Management Cost
 - Current Annual Cost \$128,700
 - Estimate Future Annual Cost \$77,200
 - Annual Saving \$51,500
 - Hardware Maintenance Fees
 - Current Annual Cost \$56,000
 - Estimate Future Annual Cost \$17,000
 - Annual Saving \$39,000
- Total Annual Saving \$90,500



Lower Database Maintenance Cost (Cost Saving)

- **Two Tasks to be performed**
 - **Consolidate LIMS applications**
 - **Currently have 4 LIMS applications**
 - **Merge the 2 Environment Monitoring LIMS applications into 1 LIMS application**
 - **Upgrade to SQL*LIMS 5.0 for all LIMS applications**
 - **Current Annual Database Maintenance Cost \$74,500**
 - **Estimated Future Annual Cost \$55,700**
- **Total Annual Cost Saving \$18,800**



Lower Security and Patch Management Cost (Cost Saving)

- **Streamline security and patch management cost**
 - Patching only 6 servers instead of 10 for
 - Microsoft Security Updates
 - Oracle Critical Patch Updates
 - Current Annual Security Cost \$92,200
 - Estimated Future Security Cost \$55,700
- **Total Annual Cost Saving \$37,200**

Microsoft

ORACLE

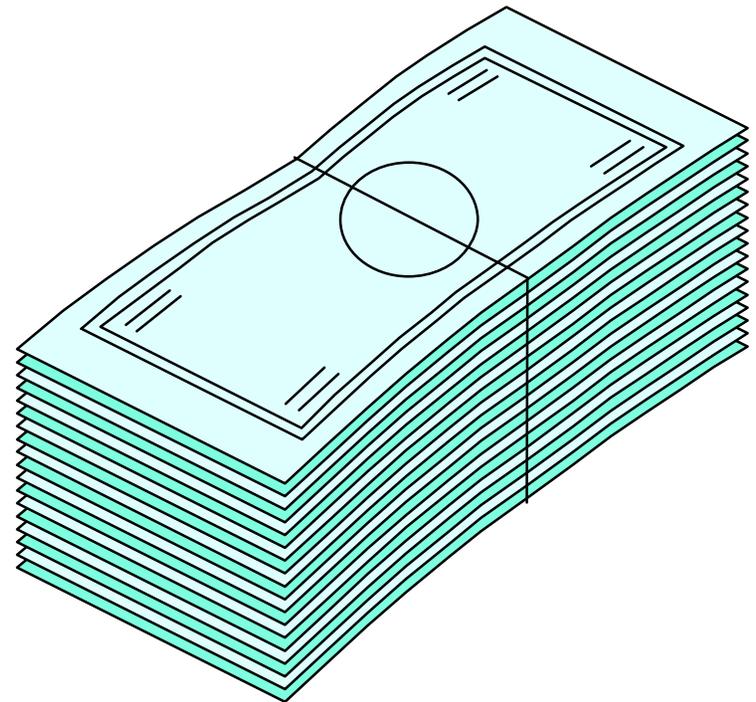
Lower Software License Fees (Cost Saving)

- **Go to Standard One Edition from Enterprise Edition of Oracle Database**
 - Current Annual Cost \$21,200 (\$341 per user)
 - Estimate Future Annual Cost \$10,900 (\$149 per user)
 - Annual Saving \$10,300
- **Reduce number of LIMS Licenses**
 - Current Annual Cost \$87,900
 - Estimate Future Annual Cost \$60,500
 - Annual Saving \$27,400
- **Total Annual Saving \$37,700**

The Oracle logo, consisting of the word "ORACLE" in a bold, red, sans-serif font.The Applied Biosystems logo, featuring the letters "AB" in a stylized blue font followed by the words "Applied Biosystems" in a smaller blue font.

Total Cost Saving

- **Hardware Reduction: Annual Saving \$90,500**
- **Database Maintenance: Annual Saving \$18,800**
- **Security and Patch Management: Annual Saving \$37,200**
- **Licenses Fees: Annual \$37,700**
- **Total Annual Saving : \$184,200**



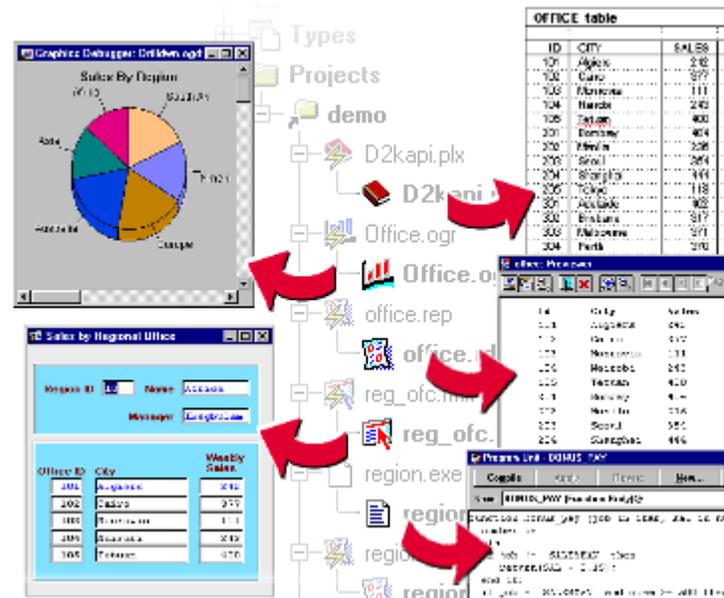
Cost of the Upgrade

- **Labor Cost**
 - Applied Biosystems Support \$18,000
 - PC&S Support \$137,200
 - Lab Testing \$19,000
 - Total Labor Cost \$174,000
- **Hardware Cost**
 - More disk space \$5,000
 - More CPU \$5,000
 - Total hardware Cost \$10,000
- **Total Cost \$184,200**



Cost Benefit Analysis

- Spend \$184,200 to upgrade
- Saving \$184,200 per year
- Payback period 1 year



Projected Annual Cost

- **Labor**

- Application Support \$413,800
- Database Administration \$ 55,700
- Application Server Administration \$137,000
- System Management \$77,200
- Security and Patch Management \$ 55,700
- Instrument Support \$109,000

- **Licenses Fees**

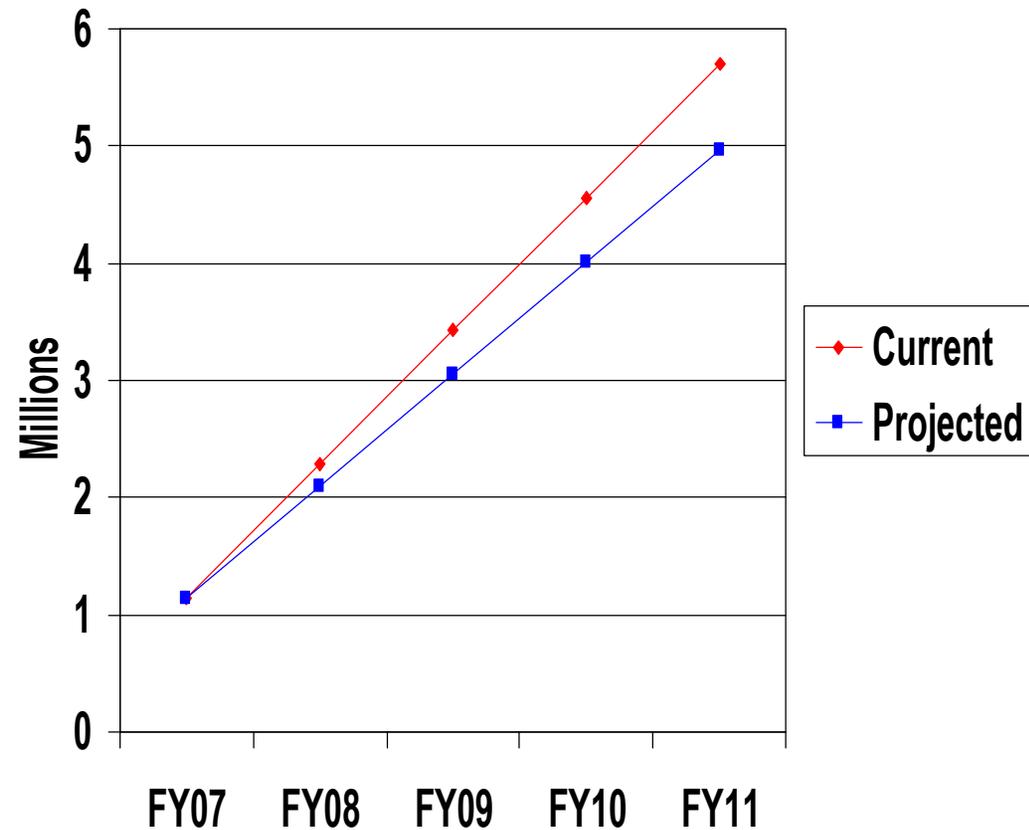
- Oracle Standard One Edition \$ 10,900
- Oracle Application Server \$20,000
- SQL*LIMS \$60,500
- Hardware Maintenance \$17,000

- **Total Cost \$956,800**



Analysis

- **Projected Annual Savings \$184,200**
- **Projected Savings over 4 years \$736,800**



QUESTION
