Lowering IT Costs with Modernization

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Director
Oracle Modernization Project Advisement
Today’s IT & Business Challenges

Colliding pressures

- Reduce IT Costs
- Reduce Complexity
- Reduce Risk

- Increase Rate of Change
- Manage More Information
- Improve Quality of Service

These are a few of the dizzying changes forcing companies to reinvent how they do business.

One thing is certain: Change is no longer something that happens periodically. It’s continuous, constant and unrelenting.”

“In order to achieve high performance, businesses will need to continually refine market focus and position, and develop distinctive capabilities that can adapt to shifting sources of competitive advantage, as well as harness innovation to create new markets.”

Change Happens!
What is IT Modernization?

IT Modernization is the evolution of a business and its business processes. Goals include increasing revenue, improving agility, lowering risk and reducing costs by evolving to more modern IT environments while preserving business content and rules.

IT Modernization represents a complete overhaul of the culture of IT. IT organizations are now faced with generational shifts in technology, business pressures and IT skills, and must close the gap between yesterday’s IT implementations and tomorrow’s IT demands.
Modernization is more than lowering costs!

What is the business value that you will derive?

- Will costs be reduced?
- Will you see better business efficiency?
- Will your business become more agile?
- Will you have better visibility into your business?
- Will this grow your revenue?
- Will the IT staff be more productive?
- What is the ROI? The TCO?

Change without innovation is not Modernization.
Modernization Payback

- Stay on legacy
- Modernize

Break-Even Point
Cumulative Savings
Project Investment
Challenges with Legacy Software

- Product Sunsets
- Increasing Costs & Business Risks
- Inflexible Systems
- Data Isolation and Redundancy

Aging Resources
- Natural
- 4GLs
- Assembler

- ADSSO
- RACF
- APPC
- TCP
- LU6.2
- Adabas
- ISAM/VSAM
- 3270
- CA/7
- JES
- ISPF
- z/OS
- CICS
- COBOL
- PL/I
- Appc
- LU6.2
- TCP
- 3270

Oracle Modernization

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Is This Your Data Center?

- Multiple vendors products
- Lots of processor power
- Separate storage silos
- Different operating systems
Is This Your Software Portfolio?

Availabilty

Manageability

Storage Management

Security
Oracle Modernization
Open Architecture on Open Systems with Open Standards: Complete – Open – Integrated

... and the Means to Get There

Provides a Target Architecture
Oracle’s Application Integration Architecture
Oracle’s Maximum Availability Architecture
For Many, These Transformations Resemble “Science Projects”
Legacy Realities and Consequences

Intense Pressure to Minimize IT Costs and Increase Agility

- Maintenance for 1000 MIPS legacy environment runs $3M-$5M/yr
- Lock-in and high cost limits funds for new initiatives
- High integration cost and time-to-market delays impact front-end agility

60-80% of IT Budget Consumed by Maintenance Cost (Apps and Systems)

2/3rd of Business-Critical Applications are on Legacy Platforms

Legacy Skills are Diminishing

- Loss of business process knowledge as people retire
- Increased risk to supporting, enhancing core applications
- IT cannot react quickly to emerging business requirements

35M LOC Maintained in Legacy Apps at an Average Fortune 100 Company

“Gartner predicts¹, by 2008, organizations that have not developed a legacy modernization strategy risk losing the opportunity to leverage this portfolio due to a decline in skills and knowledge of these systems (0.7 probability).”

Legacy Software Hinders Performance

- Dramatically slows speed of business
  - Must be an agile business to:
    - Thrive, beat their competitors and succeed
    - Address globalization and emerging markets

Legacy Application & Infrastructure
Software & Hardware
That no longer meets business needs

- Application maintenance costs are a drain on your business and IT resources
- Rare legacy skills are expensive

Oracle Modernization
Solid foundation to grow your business

• Proven business value
  ➢ Increase business agility & capability
  ➢ Preserve your investment while reducing risk
  ➢ Improved compliance
  ➢ Increase ROI while reducing TCO

• Proven business solutions
  ➢ Complete, Open & Integrated

• Proven methodology (business & technical)
  ➢ Incremental phased projects driving value over multiple years

• Proven partners
  ➢ System Integrators
  ➢ Specialty modernization vendors
Demonstrated Customer Success
Spanning all industries…

[Logos of various companies]
Multiple Modernization Approaches

COTS Replacement
custom apps with COTS: Oracle Apps for HRMS, CRM, Financials, Procurement

Re-Architect
By uncovering business rules, mining models and forward-engineering to re-useable services, BPM flows, and Business Rules.

Re-Host
Migrate to open systems with automated process, preserving code and data, SOA enable and integrate

SOA Integration
Leave applications on MF, extend in place via adapters, WS, etc.

Automatic Migration
Convert 4GLs to COBOL or Java, PL/I to C/C++, etc.

Mix multiple approaches based on your modernization goals
COTS (Commercial-off-the-shelf) Replacement

Oracle Modernization

HR
Financials
CRM
Legacy Databases

Consulting

Oracle E-Business Suite 11i
Oracle Collaboration Suite
Oracle PeopleSoft Enterprise
Oracle JD Edwards EnterpriseOne
Oracle Siebel Customer Relationship Management
Differentiator: Most Complete, Integrated Stack

Benefits
- Best of Breed for each component
- Integrated management
- Integrated functionality
- Integrated troubleshooting & support
- Performance Optimization
- Interoperability testing
- Standards based
- One Stop Support

Examples
- Integrated Security Model
- Synchronized organizational structure across all applications
- Embedded analytics

Open Standards
## Applications

<table>
<thead>
<tr>
<th>Industry</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enterprise Deals</td>
<td>PeopleSoft, Siebel</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>Go, Demantra, agile</td>
</tr>
<tr>
<td>Retail Industry</td>
<td>Retek, ProfitLogic, 360Commerce</td>
</tr>
<tr>
<td>Comms Industry</td>
<td>PORTAL, netsure, Active Network Optimization</td>
</tr>
<tr>
<td>Banking Industry</td>
<td>i-flex, Mantas</td>
</tr>
<tr>
<td>Utilities Industry</td>
<td>SPL, LODestar Corporation</td>
</tr>
<tr>
<td>Insurance Industry</td>
<td>AdminServer, skywire, LogicalAdd, TempoSoft</td>
</tr>
<tr>
<td>Others</td>
<td>LogicalAdd, Sigma Dynamics, Technical Systems</td>
</tr>
</tbody>
</table>

## Technology

<table>
<thead>
<tr>
<th>Management</th>
<th>Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Hyperion, Interlace Systems</td>
</tr>
<tr>
<td>Identity</td>
<td>oblix, Bharosa, Bridgstream, OCTETSTRING</td>
</tr>
<tr>
<td>Content</td>
<td>STELLENT, Captivation, context media</td>
</tr>
<tr>
<td>Middleware</td>
<td>TANGOSOL, Sunopsis</td>
</tr>
<tr>
<td>Database</td>
<td>TimesTen, TRIPLEHOP, InnoDB</td>
</tr>
<tr>
<td>Systems</td>
<td>Auptyma, Moniforce, Reasoning</td>
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</table>
## Case Study – Large Worldwide Retailer

<table>
<thead>
<tr>
<th>Legacy</th>
<th>Target</th>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>• PowerBuilder and homegrown applications handling merchandizing</td>
<td>• Oracle Retail</td>
<td>• Provided additional functionality</td>
</tr>
<tr>
<td>• DB/2 back end</td>
<td>• Oracle Database</td>
<td>• Improved business processes</td>
</tr>
<tr>
<td>• Needed to take application to next level</td>
<td></td>
<td>• Improved market positioning as or more important than cost savings</td>
</tr>
<tr>
<td>• Many applications across many countries</td>
<td></td>
<td>• Many to 1 application</td>
</tr>
</tbody>
</table>
Where is the business value?

- Will costs be reduced?  Yes
- Will you see better business efficiency?  Yes
- Will your business become more agile?  Yes
- Will you have better visibility into your business?  Yes
- Will this grow your revenue?  Yes
- Will the IT staff be more productive?  Yes
Case Study – Large Insurance Company

**Legacy**
- IBM Mainframe running the business
- 3 – 4 month maintenance cycles
- Replacing all cost prohibitive

**Target**
- Leave applications on the mainframe
- Self developed infrastructure based on standards

**Facts**
- 3 – 4 week maintenance cycles
- Less regression testing
- Opened door for other use of SOA services
- Further modernization - one service at a time
Where is the business value?

- Will costs be reduced?  
  - Yes
- Will you see better business efficiency?  
  - Yes
- Will your business become more agile?  
  - Yes
- Will you have better visibility into your business?  
  - Maybe
- Will this grow your revenue?  
  - Hopefully
- Will the IT staff be more productive?  
  - Yes
Case Study – Government

### Legacy
- Vital Stats and Motor Vehicles
- 15+ year old NATURAL/ADABAS
- 2.5M lines of code
- Needed new functionality

### Target
- Oracle AppServer
- Oracle 10g
- Cognos BI
- Novell eDirectory
- 700K lines of Java/XML

### Facts
- 18 month implementation
- 2/3 of reports eliminated
- Maximum use of SOA
- Maximum use or new architecture
- Batch almost eliminated
- Reduced costs from $330K per month to $50K per month
- Same external interfaces
Where is the business value?

- Will costs be reduced?  Yes
- Will you see better business efficiency?  Yes
- Will your business become more agile?  Yes
- Will you have better visibility into your business?  Yes
- Will this grow your revenue?  Yes
- Will the IT staff be more productive?  Yes
Automated Migration

- Natural/Adabas
- PowerBuilder
- COBOL Fortran "C"

Translate

Partners

Oracle Modernization
- Oracle WebCenter
- Oracle 10gAS
- Oracle 10g DB
- Oracle Tuxedo

Oracle 10g DB

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## Case Study – Government

### Legacy
- Economic and Business Affairs Dept.
- Business Registration
- 2,700 NATURAL/ADABAS programs

### Target
- J2EE
- Oracle DB
- Linux
- Web Based

### Facts
- 50% Operational Cost Savings
- Database Consolidation
- Easier web access
- No reliance on NATURAL/ADABAS skill sets
Where is the business value?

- Will costs be reduced?  ➡️ Yes
- Will you see better business efficiency?  ➡️ Yes
- Will your business become more agile?  ➡️ Somewhat
- Will you have better visibility into your business?  ➡️ Hopefully
- Will this grow your revenue?  ➡️ Yes
- Will the IT staff be more productive?  ➡️ Yes
Re-Hosting

Same Environment

Oracle Modernization

COBOL
ISAM/VSAM
JES

SI Partners

Oracle Tuxedo
Oracle RAC
### Case Study – Large Assurance Company

<table>
<thead>
<tr>
<th>Legacy</th>
<th>Target</th>
<th>Facts</th>
</tr>
</thead>
<tbody>
<tr>
<td>• 50M members/80,000 end users</td>
<td>• Automated re-host of all business logic and data</td>
<td>• Phased migration and data center consolidation</td>
</tr>
<tr>
<td>• 12,000 MIPS IBM and Bull mainframe env.</td>
<td>• Oracle Database</td>
<td>• $55M savings in one year after migration</td>
</tr>
<tr>
<td>• COBOL/CICS/DB2 on IBM; COBOL/TP8/UFAS on Bull</td>
<td>• Oracle Tuxedo</td>
<td>• 1 year ROI</td>
</tr>
<tr>
<td>• 3,500 COBOL programs, 4,600 JCL jobs</td>
<td>• Oracle Portal</td>
<td>• Processing time reduced by 8 hrs/day</td>
</tr>
<tr>
<td>270 Tb of data</td>
<td></td>
<td>• Zero down time, no missed payments</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• IT ready for further component-based modernization</td>
</tr>
</tbody>
</table>
Where is the business value?

- Will costs be reduced? Yes
- Will you see better business efficiency? Expect to be the same
- Will your business become more agile? Expect to be the same
- Will you have better visibility into your business? No, visibility is the same
- Will this grow your revenue? Potentially through self-funding projects
- Will the IT staff be more productive? Maybe
Oracle Modernization Approaches

1. Replace with COTS
   • Purchase a packaged application to replace legacy
     ✓ Cost effective and adopts new technology such as SOA

2. SOA Wrapping
   • Leave Legacy and wrap with SOA Interfaces
     ✓ Fast and easy to start – but still have legacy

3. Re-Architecting
   • Recover content and leave legacy technology behind
     ✓ Maximizes cost reduction, agility and use of SOA

4. Automated Migration
   • Transform legacy artifacts automatically
     ✓ Gets to new environment – but leaves legacy trail

5. Re-Hosting
   • Move “as-is” to another platform
     ✓ Saves operating cost – but still have legacy
Start with Oracle!

1. Identify your immediate business needs
   ✓ Specific technology you need to eliminate
   ✓ Specific short term need due to lease expiration
   ✓ Immediate business need

2. Formulate your modernization strategy/roadmap
   ✓ Understand your business drivers
   ✓ Evaluate your needs
   ✓ Determine target architecture
   ✓ Examine which Modernization approaches work for you
   ✓ Develop the business case for your next step
   ✓ Review potential partners

3. Ensure your success
   ✓ Develop and implement an execution plan
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<th>Sales Rep</th>
<th>Phone</th>
<th>Email</th>
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<td><a href="mailto:joe.noonan@oracle.com">joe.noonan@oracle.com</a></td>
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<td>+1 781.354.0468</td>
<td><a href="mailto:nicolas.de.beco@oracle.com">nicolas.de.beco@oracle.com</a></td>
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<td><a href="mailto:kenneth.blair@oracle.com">kenneth.blair@oracle.com</a></td>
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