Ralph Menzano
Executive Director
Safe Harbor Statement

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Oracle in the Transportation Industry

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- Former SEPTA CIO/VP of Technology
- Former CIO/VP of Technology, JP Morgan Chase Bank, GM, St. Gobain
- BA, MBA Villanova

- Gartner cover story
- Chair APTA IT Committee
- Adjunct Professor at Univ. of Penn.
- Board Member, Villanova University

Memberships:

Author of “Making IT Happen”
Mission: Establish Oracle as the leading provider of enterprise business and infrastructure software and hardware to the Travel and Transportation Industry.
<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
<th>Run</th>
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<tbody>
<tr>
<td>50 of the Top 100 North American Airports</td>
<td>Run Oracle Applications</td>
<td></td>
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<tr>
<td>30 of the Top 40 North American Transits</td>
<td>Run Oracle Applications</td>
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</tr>
<tr>
<td>23 of the 50 State Highway Departments, 11 of top 20 Toll Roads Run Oracle Applications</td>
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<td>12 of the Top 20 North American Seaports</td>
<td>Run Oracle Applications</td>
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<tr>
<td>Federal Departments of Transportation Including FRA, FAA, FHWA, FMC, FTA, &amp; Transport Canada</td>
<td>Run Oracle Applications</td>
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</table>
Oracle in Ports & Shipping

3 of the top 5 port operators owning more than 100 ports run Oracle Applications

7 of the top 10 ports run Oracle Applications

7 of the top 15 shipping companies run Oracle Applications

8 of the top 10 ports run Oracle Technology
Managing WITH IT in the Public Sector
-- Course for University of Pennsylvania,
-- Fels School of Government

Outline:
Why was course deemed necessary?
Planning for IT Success
Justifying IT Projects
Techniques for IT Achievements
## 23 States Ranked in Fortune 100 (in 2006)

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
<th>2005 Revenue</th>
<th>State</th>
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<tbody>
<tr>
<td>1.</td>
<td>Wal-Mart Stores</td>
<td>$288</td>
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<tr>
<td>2.</td>
<td>Exxon Mobil</td>
<td>$270</td>
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<td>3.</td>
<td>General Motors</td>
<td>$193</td>
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<td>4.</td>
<td>Ford Motor</td>
<td>$172</td>
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<td>5.</td>
<td>General Electric</td>
<td>$152</td>
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<td>6.</td>
<td>Chevron Texaco</td>
<td>$147</td>
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<td>7.</td>
<td>Conoco Phillips</td>
<td>$121</td>
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<td>8.</td>
<td>Citigroup</td>
<td>$108</td>
<td>CALIFORNIA ($112)</td>
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<td>9.</td>
<td>Amer. Intl. Group</td>
<td>$98</td>
<td>NEW YORK ($107)</td>
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<td>10.</td>
<td>Intl. Business Mach.</td>
<td>$96</td>
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<tr>
<td>14.</td>
<td>Verizon Comm.</td>
<td>$71</td>
<td></td>
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<tr>
<td>20.</td>
<td>JP Morgan Chase</td>
<td>$56</td>
<td>OHIO ($54)</td>
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<tr>
<td>30.</td>
<td>Johnson &amp; Johnson</td>
<td>$43</td>
<td>PENNSYLVANIA ($52)</td>
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<td>45.</td>
<td>Sears Robuck</td>
<td>$36</td>
<td>ILLINOIS ($43)</td>
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<tr>
<td>54.</td>
<td>Walt Disney</td>
<td>$30</td>
<td>MASSACHUSETTS ($34)</td>
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<td>59.</td>
<td>MCI</td>
<td>$22</td>
<td>KENTUCKY ($20)</td>
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<td>61.</td>
<td>Honeywell Int'l</td>
<td>$24</td>
<td>WASHINGTON ($26)</td>
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<td>62.</td>
<td>FedEx</td>
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<td>WISCONSIN ($26)</td>
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<td>MCI</td>
<td>$22</td>
<td>TENNESSEE ($25)</td>
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<td>69.</td>
<td>TEXAS ($69)</td>
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<td>71.</td>
<td>MASSACHUSETTS</td>
<td>$34</td>
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<tr>
<td>72.</td>
<td>NORTH CAROLINA</td>
<td>$32</td>
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<tr>
<td>73.</td>
<td>GEORGIA ($32)</td>
<td></td>
<td></td>
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<tr>
<td>76.</td>
<td>Sears Robuck</td>
<td>$36</td>
<td></td>
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<tr>
<td>78.</td>
<td>Verizon Comm.</td>
<td>$71</td>
<td></td>
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<tr>
<td>80.</td>
<td>MCI</td>
<td>$22</td>
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</tr>
<tr>
<td>81.</td>
<td>MCI</td>
<td>$22</td>
<td></td>
</tr>
<tr>
<td>90.</td>
<td>MCI</td>
<td>$22</td>
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Source: Center for Digital Government fiscal year 2005-2006 estimates; The 2005 Fortune 500
Evolution of Ideas in Business

<table>
<thead>
<tr>
<th>Time</th>
<th>Breakaway Opportunity</th>
<th>Competitive Opportunity</th>
<th>Competitive Necessity</th>
<th>Operational Necessity</th>
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</thead>
<tbody>
<tr>
<td></td>
<td><strong>Pioneer</strong></td>
<td><strong>Early Adopter</strong></td>
<td><strong>Mainstream</strong></td>
<td><strong>Cookbook</strong></td>
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<tr>
<td>Example</td>
<td>- High Risk</td>
<td>- Moderate Risk</td>
<td>- Low Risk</td>
<td>- No Risk</td>
</tr>
<tr>
<td></td>
<td>- Long time to</td>
<td>- Moderate time to</td>
<td>- Short time to</td>
<td>- Implement for</td>
</tr>
<tr>
<td></td>
<td>implement</td>
<td>implement</td>
<td>implement</td>
<td>survival</td>
</tr>
<tr>
<td></td>
<td>- Potential ROI</td>
<td>- Proven ROI</td>
<td>- Moderate ROI</td>
<td>- Negative ROI if not done</td>
</tr>
<tr>
<td>Example</td>
<td>- PC’s in 1985</td>
<td>- PC’s in 1990</td>
<td>- PC’s in 1995</td>
<td>- PC’s in 2000</td>
</tr>
</tbody>
</table>

Source: Competing in Time: Using telecommunications for Competitive Advantage, Peter G. W. Keen, 1986/1988, Ballinger, Cambridge, MA
Evolution of Computing Technology

- **Mainframe Computing**
- **Client/Server Computing**
- **Network Enabled Computing**

Productivity

Technology In The Transit Industry

Productivity Gap

- Lost Opportunity Zone
- The Productivity Gap

- Network Enabled Computing
- Gov’t Computing

- Mainframe Computing
- Client/Server Computing

1970-1985
1985-2000
2000 +
Drivers

Business Strategy

Technology Planning Triad

Application Portfolio Plan

Infrastructure Plan

Resource ($ & People) Plan

Rapid Deployment Tactics

Value-Added Systems

Operational Necessities
Competitive Necessities
Competitive Opportunities

Drivers

Business Strategy

Technology Planning Triad

Application Portfolio Plan

Infrastructure Plan

Resource ($ & People) Plan

Rapid Deployment Tactics

Value-Added Systems

Operational Necessities
Competitive Necessities
Competitive Opportunities
Business Justification of IT Projects

- Legal Requirement
- Revenue Enhancement
- Cost Avoidance
- Risk Mitigation
- Competitive Advantage

Ease of Proof
Low -> High

Resonance With Executives
Low -> High
System Development Methodology

Phase 1 - Plan
- Create Sponsoring Team
- Project Plan
- Business Case
- Project Proposal
- Approval
  - No: Go Back To Work
  - Yes: Go To Phase 2

Phase 2 - Design
- Create Project Team
- Create Project Control
- Business Requirements
- System Design & Prototype
- Revised Proposal
- Approval
  - No: Go Back To Work
  - Yes: Go To Phase 3

Phase 3 - Build
- Designate Ops Manager
- Set System Expectations
- Software & Hardware
- Training
- Test
- System Piloted
- Revised Project Proposal
- Approval
  - No: Go Back To Work
  - Yes: Go To Phase 4

Phase 4 - Implement
- System Installed
- Complete Project Rollout
- Post-Project Review
The Maintenance Paradox

Development

Maintenance

Start-Up

Maturity

Long Established
Solution to the Paradox... Strategic Sourcing

- Development
- Maintenance
- Strategic Sourcing of Non-Core Services

Time

Start-Up  Maturity  Long Established

0%  100%
Strategic Sourcing Techniques

- Piggyback Procurements
  - *State Contracts* -- Competition Managed by Commonwealth of Pennsylvania; eliminate the need for internal attorney oversight

- Commercial Off-The-Shelf Software
  - Development effort “Outsourced” to Commercial software house

- Fully Loaded Hardware Purchase
  - Includes Set-Up, Migration, Maintenance, & Disposal

- Internship Programs
  - Staff Augmentation In Exchange For Workplace Experience

- General IT Blanket Contracts
  - On-Demand Staff Augmentation Without Long-Term Commitment

- Managed Services
  - Web Site Hosting, Application Service Provider’s, Public Infrastructure
Managing WITH IT in the Public Sector
-- Course for University of Pennsylvania,
-- Fels School of Government

What’s Next ????
-- Business Intelligence
-- Enterprise Content Management
-- Enterprise 2.0
9/11 Crisis in the Airline Industry
Southwest Airlines adapts with Oracle BI

83 million passengers a year
63 destinations
3300 flights a day

Needs
- Determine how long cash balances of $1 billion would last – immediately
- Develop capital spending plans and 15 month rolling forecasts in 1 day
- Create business cockpits for executives and other functional areas to track key metrics

After
- Ability to forecast within 2% of outcome, providing top-bottom and bottom-top analysis
- Analysis provided comfort level (no employees laid off; no need for government loans)
- Finance moved to spending 10% accumulating data and 90% analyzing (75% / 25% before)
The Manifestation of “Accountability & Transparency” in Public Sector Transportation

- Financial Analytics
- Procurement Analytics
- Supply Chain Analytics
- HCM Analytics
- Industry Standard Analytics
- Sustainability Analytics
- Incident Analytics
- Customer Analytics

BI Tool
Warehouse Tool
Infrastructure Tool
Operations KPI using OBIEE – Terminal Processes
### Operations KPI using OBIEE – Terminal Processes

#### KPI Monitoring

<table>
<thead>
<tr>
<th>Mot Type</th>
<th>Metric Description</th>
<th>2007 Target</th>
<th>YTD Actual</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reservation</strong></td>
<td>Abandoned Rate</td>
<td>5%</td>
<td>16.51%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Booking Accuracy</td>
<td>100%</td>
<td>99.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Complaints resolved on time</td>
<td>24%</td>
<td>27.96%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rollovers</td>
<td>0%</td>
<td>1.30%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Service level</td>
<td>95%</td>
<td>74.29%</td>
<td></td>
</tr>
<tr>
<td><strong>MT Release</strong></td>
<td>Availability of CHE</td>
<td>85%</td>
<td>90.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Availability of MT containers</td>
<td>100%</td>
<td>100.00%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Average truck turn-around time</td>
<td>30%</td>
<td>20.03%</td>
<td></td>
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<tr>
<td></td>
<td>Complete and accurate validation of all documents during tagging/clearing</td>
<td>100%</td>
<td>99.96%</td>
<td></td>
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<tr>
<td></td>
<td>Container Pick-up and delivery served on-time</td>
<td>100%</td>
<td>92.62%</td>
<td></td>
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<tr>
<td><strong>Load Planning</strong></td>
<td>On-time submission of loadlist</td>
<td>100%</td>
<td>93.06%</td>
<td></td>
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<tr>
<td></td>
<td>On-time transfer of containers based on loadlist</td>
<td>100%</td>
<td>99.93%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No. of shut-outs/shut-ins</td>
<td>0%</td>
<td>0.02%</td>
<td></td>
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<tr>
<td><strong>Container Loading</strong></td>
<td>On-time submission of accurate VAR</td>
<td>100%</td>
<td>99.97%</td>
<td></td>
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<tr>
<td></td>
<td>Scanning accuracy</td>
<td>100%</td>
<td>99.41%</td>
<td></td>
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<tr>
<td></td>
<td>Accurate generation of BL</td>
<td>100%</td>
<td>99.59%</td>
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<tr>
<td><strong>Cargo Documentation</strong></td>
<td>Accurate submission of manifest</td>
<td>100%</td>
<td>99.92%</td>
<td></td>
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<tr>
<td></td>
<td>On-time submission of VAR</td>
<td>100%</td>
<td>99.97%</td>
<td></td>
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<tr>
<td><strong>Vessel Discharge</strong></td>
<td>On-time departure of vessels</td>
<td>100%</td>
<td>99.92%</td>
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</table>

### Port Revenue Month vs Month Ago

- % Diff Month Ago Actual
- Actual

### Port Revenue Target vs Actual

- Target
- Actual
Port Cost Analysis

Port Revenue

Calendar Year 2007

<table>
<thead>
<tr>
<th>Port</th>
<th>March Month Ago Actual</th>
<th>% Chg Month Ago Actual</th>
<th>March Month Ago Actual</th>
<th>% Chg Month Ago Actual</th>
<th>April Month Ago Actual</th>
<th>% Chg Month Ago Actual</th>
<th>May Month Ago Actual</th>
<th>% Chg Month Ago Actual</th>
<th>June Month Ago Actual</th>
<th>% Chg Month Ago Actual</th>
<th>July Month Ago Actual</th>
<th>% Chg Month Ago Actual</th>
<th>August Month Ago Actual</th>
<th>% Chg Month Ago Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port 1</td>
<td>0.010</td>
<td>0.010</td>
<td>0.010</td>
<td>0.010</td>
<td>200.00%</td>
<td>200.00%</td>
<td>0.010</td>
<td>0.010</td>
<td>-0.02</td>
<td>0.010</td>
<td>-0.02</td>
<td>0.010</td>
<td>0.010</td>
<td>-0.02</td>
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<td>Port 2</td>
<td>0.020</td>
<td>0.010</td>
<td>0.030</td>
<td>0.020</td>
<td>100.00%</td>
<td>100.00%</td>
<td>0.030</td>
<td>0.020</td>
<td>0.00</td>
<td>0.030</td>
<td>0.00</td>
<td>0.020</td>
<td>0.010</td>
<td>0.00</td>
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<td>Port 3</td>
<td>0.020</td>
<td>0.010</td>
<td>0.020</td>
<td>0.020</td>
<td>50.00%</td>
<td>50.00%</td>
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<td>0.020</td>
<td>0.00</td>
<td>0.020</td>
<td>0.00</td>
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<td>Port 4</td>
<td>0.020</td>
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<td>0.020</td>
<td>0.020</td>
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<td>Port 5</td>
<td>0.020</td>
<td>0.010</td>
<td>0.020</td>
<td>0.020</td>
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<td>100.00%</td>
<td>0.020</td>
<td>0.020</td>
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<td>0.00</td>
<td>0.020</td>
<td>0.010</td>
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<td>Port 6</td>
<td>0.020</td>
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<td>0.020</td>
<td>0.020</td>
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<td>0.00</td>
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<td>0.010</td>
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<td>Port 7</td>
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<td>0.020</td>
<td>0.020</td>
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<td>Port 8</td>
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<td>0.020</td>
<td>0.020</td>
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<td>0.020</td>
<td>0.020</td>
<td>0.00</td>
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<td>Port 9</td>
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<td>0.020</td>
<td>0.020</td>
<td>100.00%</td>
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<td>0.020</td>
<td>0.020</td>
<td>0.00</td>
<td>0.020</td>
<td>0.00</td>
<td>0.020</td>
<td>0.010</td>
<td>0.00</td>
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<td>Port 10</td>
<td>0.020</td>
<td>0.010</td>
<td>0.020</td>
<td>0.020</td>
<td>100.00%</td>
<td>100.00%</td>
<td>0.020</td>
<td>0.020</td>
<td>0.00</td>
<td>0.020</td>
<td>0.00</td>
<td>0.020</td>
<td>0.010</td>
<td>0.00</td>
</tr>
<tr>
<td>Overall</td>
<td>0.050</td>
<td>0.010</td>
<td>0.040</td>
<td>0.020</td>
<td>25.00%</td>
<td>25.00%</td>
<td>0.040</td>
<td>0.010</td>
<td>0.04</td>
<td>0.030</td>
<td>0.00</td>
<td>0.030</td>
<td>0.010</td>
<td>0.00</td>
</tr>
</tbody>
</table>

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Port Customers Analysis

Top 10 Customers
Time run: 1/28/2008 7:35:15 PM

Top 10 Customers Across Months
Questions..
ORACLE IS THE INFORMATION COMPANY