

**GBET 2001 - Government Business Education & Tech Expo**

# **HR Issues in Managing IT Professionals**

## **Presenters**

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# Challenges

- **Demand Is Strong Despite Economic Slowdown**
  - ❑ **About 900,000 New IT Positions Are Expected in 2001**
  - ❑ **Approximately 425,000 of These Vacancies Will Remain Unfilled Through 2001**
  - ❑ **Technical Support Jobs Are Most in Demand Through Q1 2002**
  - ❑ **Public Sector Severely Affected, Since Salaries Are Generally Not Competitive With Private Sector**

**Information Technology Association of America (ITAA), April 2001, Computerworld  
September 2001**

# Agenda

- **Leadership**
- **Staffing Skills**
- **Training**
- **Retention**

## **15 Minute Break**

- **Recruiting**
- **Contractors**
- **Case Study**
- **Questions**

# Leadership

# **IT Leadership Best Practices**

- **Align IT Organization With Business Direction**
- **Participate in Strategic and Tactical Business Planning and Execution**
- **Identify IT Project Scope and Objectives**
- **Monitor IT Projects Against Business and IT Plans**
- **Coordinate Recruiting and Retention of Permanent and Contractor Resources**

# Required Leadership Skills

- **Champion – Provides a Management Commitment and Vested Interest in the Success of Projects**
- **Facilitator – Expedites Impartial Systems Support of Business**
- **Synthesizer – Interprets Information From Numerous Sources and Determines IT Impact**

# IT Leadership Trends

- **IT Leaders and Their Organizations Must Possess Business and Technology Skills to Be Effective**
- **Deep Technical Resources Will Be Acquired Contractually to Support These Organizations**

# IT Leadership Summary

- **Business and IT Strategies**
  - ❑ **Are There Business and IT Strategic Plans?**
  - ❑ **Are They Aligned?**
- **Organizational Alignment**
  - ❑ **Is the IT Organization Aligned to Support the Business?**
  - ❑ **Are Business Executives Including IT in Key Decisions?**
- **Roles and Responsibilities**
  - ❑ **Is IT Authority Clearly Defined?**
  - ❑ **Are IT Responsibilities Understood?**
  - ❑ **Is IT Held Accountable?**
  - ❑ **Does IT Have the Necessary Expertise/Resources to Deliver?**

# Staffing Skills

# **Critical IT Functions & Business Skills**

- **Research and Development – Strategic Planning, System Analysis, Statistics and Evaluation**
- **Administration – Procurement, Contract Administration**
- **Applications – Project Management, Application Software Maintenance and Development, Database Administration**
- **Operations – Data Center, Network Administration, Security Administration, Internet/Intranet Services, Installation and Maintenance Technicians**
- **Support – User Support, Help Desk, Training**

# IT Staff and Organization Trends

- **Organizations Mandate IT Alignment With Business Mission**
  - ❑ **More Centralization Due to Web Technology**
  - ❑ **Greater Integration Expertise**
  - ❑ **Increased Responsibility and Independence**

# Five “Most Wanted” Skills

## 1. Support – Office, E-mail and Groupware

- ❑ Microsoft Exchange
- ❑ Lotus Notes
- ❑ Novell GroupWise
- ❑ cc:Mail

Computerworld, September 2001

# Five “Most Wanted” Skills

## 2. Applications

- ❑ **Project Management**
- ❑ **Internet Application Development – JAVA, XML, HTML, ASP**
- ❑ **Language Skills – Java, C++, C, Cobol**
- ❑ **Enterprise Applications – Oracle, SAP, PeopleSoft, Siebel, J.D. Edwards**
- ❑ **Development Tools – Visual Basic, Oracle Developer, Visual C++, PowerBuilder**

Computerworld, September 2001

# Five “Most Wanted” Skills

## 3. Operations

- ❑ **DBMS – Oracle, Microsoft SQL Server, Microsoft Access, DB2**
- ❑ **Operating Systems – Windows NT/2000, Solaris, Linux, UNIX**
- ❑ **Web Server Administration**
- ❑ **Communications Protocols – TCP/IP, IPX, SNA**
- ❑ **LAN – Microsoft NT Server, Ethernet, HTTP, Novell NetWare**
- ❑ **Internetworking – Routing, Ethernet Switching, Gigabit Ethernet**

Computerworld, September 2001

# Five “Most Wanted” Skills

## 4. Research and Development

- ❑ Data Warehousing and Mining
- ❑ Project Management

Computerworld, September 2001

# Five “Most Wanted” Skills

## 5. Non-technical

- ❑ **Project Management**
- ❑ **Group Facilitation**
- ❑ **Contract Management**
- ❑ **Scope Management**
- ❑ **Oral and Written Communications Skills**
- ❑ **Budget Management**
- ❑ **Risk Management**
- ❑ **Issue Identification and Resolution Skills**

# IT Staffing Summary

- **Business and IT Strategies**
  - ❑ **Is There Gap Between What You Have and What You Need?**
  - ❑ **What Expertise Do You Need to Support Your Business and IT Strategies?**
- **Organizational Alignment**
  - ❑ **Does the IT Organization Successfully Align With the Organization's Business Mission?**
  - ❑ **Is the IT Organization Structure Limiting Success?**
- **Roles and Responsibilities**
  - ❑ **Does the IT Organization Have Clear Roles and Responsibilities in Each of Its Critical Functions?**

# Training

# **IT Training as Management Priority**

**“The jobs you’re doing today aren’t keeping you current in the marketplace. I want you to have confidence in your ability to sell yourself to any IT organization, but I want you to [choose] to stay at Farmers. So I want you to develop a tool kit so you’ll have the choice... The sign-on was incredible.”**

**Cecilia Claudio, CIO, Farmers Group, Inc., Los Angeles, Message to IT staff, Computerworld, March 26, 2001**

# IT Training Plan

- **Support Both Business and IT Strategy**
- **Begin with Up-to-Date Skills Inventory**
- **Emphasize Future Skills Requirements**
- **Provide Flexibility**
- **Provide Adequate Training Budget**
- **Prioritize Training in Organization**
- **Evaluate Employee Skills and Performance**

# Training & Resource Requirements

- **Expect Constant Technology Change**
  - Web Technology
  - Y2K
  - Security
  - Applications
- **Continuing Education Required to Support Constant Technology Change**
  - Organizations Should Offset Recruiting with Training
- **Inadequate Training Has Costs**
  - Often Moving From Job to Job Becomes Another Method of Training

Computing Research Association, 1999

# Certifications

- **Sought After Certifications**
  - ❑ **Networking – Cisco Certified Internetworking Expert**
  - ❑ **Software Development – Senior Java Certifications, Microsoft Certified Solution Developer**
  - ❑ **Database – Oracle Certified Professional**
  - ❑ **Applications – SAP/R3 Certification**
- **Costs**
  - ❑ **Training and Examine Costs Range From \$500-\$18,000**
  - ❑ **Higher Salaries**
  - ❑ **Re-certification**

Computerworld, May 2001

# IT Training Trends

- **Top IT Organization**
  - ❑ **Spent \$7,000-\$11,000 or 7-17 Days on IT Training Per IT Employee in 2000**
  - ❑ **Project 2001 Budget to Remain the Same or Increase**
  - ❑ **Provision of Training is Tied to Employee Reviews and Performance**
  - ❑ **Training Improves Recruiting, Hiring and Retention**

Computerworld, June 2001

# IT Training Summary

- **Business and IT Strategies**
  - ❑ **Do You Have a Training Plan?**
  - ❑ **Is Your Training Plan Aligned With Business and IT Strategies?**
- **Organizational Alignment**
  - ❑ **Do You Have a Skills Inventory?**
  - ❑ **Have You Projected Your Skills Requirements?**
  - ❑ **Is Your Training Plan and Budget Adequate to Close the Gap?**
- **Roles and Responsibilities**
  - ❑ **Is the Responsibility for Training High Enough in Your Organization?**
  - ❑ **Are Employees Evaluated to Receive Training that Supports Business and IT Strategies?**

# Retention

# Retention Factors

- **Flexible Paths for Advancement**
- **Opportunities to Learn New Technologies**
- **High Visibility Projects**
- **Open, Communicative, Visionary Leadership**
- **Training Opportunities**
- **Balanced Work-life**
- **Financial Incentives**
- **Financial Stability**

# **Top 10 Reasons For Leaving**

- 1. Offered Promotion at Another Organization**
- 2. Received Significant Increase in Base Salary**
- 3. Lack of Career Advancement/Development**
- 4. Inadequate Compensation**
- 5. Opportunity to Work on New and/or More Challenging Technology**
- 6. Dissatisfaction With Supervisor**
- 7. Lack of Senior Management Leadership/Vision**
- 8. Lack of Training Opportunities**
- 9. Need for Better Work-life Balance**
- 10. Desire for Alternative Work Arrangements**

WorkForce Magazine, 2001 IT Market Compensation Study

# Improving Retention

- **Increase Management Communications**
- **Provide Job Security**
- **Offer Job Flexible Work Environment**
- **Increase Opportunities for Advancement**
  - **Difficult to Achieve in Era of Economic Slowdown**
  - **Offset With Other Benefits**
- **Invest and Train in *Necessary* New Technologies**
- **Assign Teams to Challenging Projects**

# IT Retention Summary

- **Business and IT Strategies**
  - ❑ **What Makes the Business Direction of Your IT Interesting?**
  - ❑ **Are Existing Employees Assigned to Support New Projects and Technologies?**
- **Organizational Alignment**
  - ❑ **Do Employees Understand the Organization's Goals?**
  - ❑ **Is the Organization Set Up to Encourage Employee Contributions to a Positive Work Environment?**
- **Roles and Responsibilities**
  - ❑ **Are Employees Empowered to Grow Toward Different Roles and Responsibilities?**
  - ❑ **Do You Have Recognition Programs That Acknowledge IT Employees' Support of Business Objectives?**

# Recruiting

# Recruiting Strategies

- **Provide Security and Flexible Benefits**
- **Offer Flexible Work Schedules**
- **Offer Competitive Salaries and Retention Benefits**
- **Increase Probationary Periods**
- **Commit to Ongoing Training**
- **Recruit Via the Web**
- **Partner with Schools Using Internship to Screen and Attract Recruits**

# Compensation Trends

- **IT Salary Increases Are Moderate, Approximately 6%, but Higher Than Overall of 4%**
- **Bonuses Are Disappearing**
- **Employees Seek Security and Flexible Benefits**
- **Increased Probationary Periods**
- **Disappearance of Signing Bonuses**

**Computerworld, September 2001**

# Education Alternatives

- **Two-Year Technical Degrees**
  - **System Support Specialists**
  - **Network Installation**
  - **Web Developer**
  
- **Four-Year Technical Degrees**
  - **Database Administrator**
  - **Systems Analysts (High Demand)**
  - **Business Analysts**

## **H-1B Visa Option**

- **Foreign Worker Short-term Employment Visa Program**
  - **Provides Highly Skilled Foreign Workers As a Short-term Staffing Solution**
  - **INS Estimates 54% of H-1B Visas Were Issued for Technology Workers in 2000**
- **H-1B Visa Ceiling Raised October 2000 From 115,000 to 195,000 for Fiscal Years 2001 - 2003**
- **Burdens Employer With Documentation Requirements**

# Web Job Sites

| SITE             | JOB POSTINGS | SEARCH ENGINE | CONFIDENTIALITY | RESULT TRACKING | ADDITIONAL SERVICES |
|------------------|--------------|---------------|-----------------|-----------------|---------------------|
| techies.com      | ●            | ●             | ●               | ●               | ●                   |
| ComputerJobs.com | ●            | ●             | ●               | ○               | ●                   |
| Dice.com         | ●            | ●             | ●               | ○               | ●                   |
| Vault.com        | ●            | ●             | ●               | ○               | ●                   |
| HotJobs.com      | ●            | ○             | ●               | ●               | ●                   |
| 1-Jobs.com       | ●            | ●             | ●               | ○               | ●                   |
| Monster.com      | ●            | ●             | ○               | ●               | ●                   |
| CareerCast.com   | ●            | ●             | ○               | ●               | ○                   |

PC Week, January 10, 2000

# Recruiting Summary

- **Recruiting Approach**
  - ❑ **What Are Your Key Recruiting Methods?**
  - ❑ **Who Are Your Recruiting Sources?**
  - ❑ **Could Local Higher Education Institutions Supplement Needs?**
- **Minimum Requirements**
  - ❑ **Are The Education Requirements Appropriate?**
  - ❑ **How Can You Use Short-term H-1B Resources?**
  - ❑ **Could Existing Staff Fill Needs with Additional Training?**
- **Competitive Benefits**
  - ❑ **What Flexible Employment Arrangements and Benefits Are Available?**
  - ❑ **Do You Offer Ongoing Training?**

# Contractors

# Contracting and Outsourcing

- **Pre-qualified, Short-term Contract Staffing**
  - **Time and Materials**
  - **Fixed Fee**
- **Competitive Solicitations for One-time Projects**
- **Outsourcing Commodities and Retaining Core Competencies**

# Trends

- **Outsource Commodities**
  - **Telephony**
  - **Network Communications**
  - **Desktops, Data Centers, Help Desk**
  - **Security**
- **Acquire Applications**
  - **Vendor Applications**
  - **Service Agreements**
- **Focus on Core Competencies**

# Reasons to Contract

- **Specialized Technologies**
- **One-time Projects**
- **Discrete Services**
- **Independent Validation & Verification**
- **Shared Risks**
- **Supplemental Resources**

# Contracting Risks

- **Building Good Contracts**
- **Ability to Manage Outsiders**
- **Hiring a Reputation and Not Getting Quality**
- **Offending Your Own Resources**
- **Not Transferring Knowledge**

## **Outsourcing Risks**

- **Negotiating a Comprehensive Contract**
- **Retaining Control of the Outsource Entity**
- **Terminating and Transitioning Back to Internal Resources**
- **Addressing Collective Bargaining Agreements for Those Transferring to the Outsource Entity**
- **Retaining Staff**

# IT Contractor Summary

- **Business and IT Strategies**
  - ❑ **What Permanent Expertise Do We Need for the Next Five Years?**
  - ❑ **What Needs Are Temporary Over the Next Five Years?**
- **Organizational Alignment**
  - ❑ **What are Our Core Competencies?**
  - ❑ **What are Our Commodities?**
- **Roles and Responsibilities**
  - ❑ **Do We Know How to Develop Contracts?**
  - ❑ **Do We Know How to Manage Contracts?**

# Case Study

## **Problem**

- **The IT Department In A Large City Had Difficulty Hiring and Retaining Qualified Resources**
  - **Position Descriptions Were Not Meaningful to Outside Applicants**
  - **Few Applicants Possessed The Skills Needed**
  - **Existing Staff Lacked Business Skills**
- **Low Retention Rates Increased Need to Hire**
- **Departments Began Hiring Own Resources**

## **Solution**

- **HR Modified Personnel Policies To Allow Flexibility to Offer Competitive Salary and Employee Benefits**
  - **Generous Benefit Packages Improved Retention**
  - **Use of Premium Pay/bonuses Increased Salaries**
- **Decentralized HR Reps Conducted Frequent Classification Studies**
  - **Ensured That Minimum Requirements Were Valid**
  - **Duty Statements Were Customized For Each Opening**
- **IT Staff Participated in Projects With Line Departments**
  - **Shared Vision Built Business Understanding**

# Questions