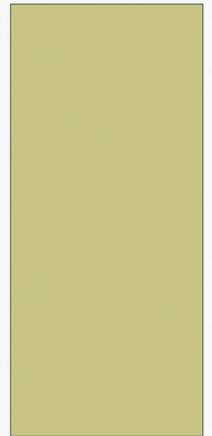


INFORMATION TECHNOLOGY CLASSIFICATION STUDY

IT EVALUATION PILOT & IT 'HOT SKILLS' SURVEY RESULTS

CIO FORUM, APRIL 2016



PILOT PLAN

PURPOSE:

- State will identify:
 - Depth of training that will be needed by evaluation teams
 - Time needed for a team to conduct a position evaluation
 - Gaps in training and/or evaluation process
- Participants:
 - Gain a working knowledge and understanding of the new process,
 - Become familiar with the required forms,
 - Understand how to use the tools and job aides in the review and evaluation of IT positions,
 - Apply the IT inclusion criteria and evaluation tools when evaluating positions, and
 - Provide constructive feedback on, and validation of, the training and position evaluation process.

TRAINING OUTCOME

Objective: Refine and finalize the IT Job Evaluation Training using participant feedback and validation.

- **Structure of Training**
 - PowerPoint & Lecture
 - Exercise – Evaluate a position description in a group
- **Training Tools**
 - Evaluation Tool (hard copy)
 - Evaluator's Handbook
 - Inclusion / Exclusion Criteria and Decision Tree
 - Work Examples - Power User vs. Technical
 - Rating Factors
 - IT Job Families Descriptions
 - Glossary - Technical Definitions, Job Evaluation Tool and Inclusion Criteria Terms, General IT industry descriptions of IT disciplines / work

Outcomes:

- Training needs to be 1 full day to cover learning curve
- Conduct a section-by-section review of the evaluation tool in conjunction with a position description
- Need to fully review the IT job families

PROCESS OUTCOME

Objective: Accurately assess the time and level of effort needed to conduct IT position evaluations when conducted by committed, qualified and skilled subject matter experts (SME's).

- **Structure of Process**

- 6 teams, 7 reviewers per team, mix of agency/HE, mix of IT and HR SME's
- 7 IT teams (supervisor & direct reports) from 6 agencies were reviewed for a total of 221 position reviews

- **Training Tools (hard copies)**

- Evaluators Handbook
- Evaluation Tool
- Evaluation Log

Outcomes:

- Approximately 1 hour to review an IT Team (Supervisor & direct reports with average of 7 position descriptions per team)
- Evaluation Team structure is critical - Need balance of HR and IT SME's
- Group size of 5 - 7 would work best
- Facility setup is critical to efficient process

STUDY UNIVERSE

| Primary Job Family | # Of PD's Received |
|-----------------------------------|--------------------|
| 1. Application Development | 944 |
| 2. IT Architecture | 154 |
| 3. IT Business Analysis | 330 |
| 4. Customer Support | 769 |
| 5. Data Management | 333 |
| 6. IT Policy and Planning | 59 |
| 7. Network and Telecommunications | 282 |
| 8. IT Project Management | 167 |
| 9. IT Security | 122 |
| 10. Systems Administration | 571 |
| 11. IT Vendor Management | 9 |
| 12. Family Review Required | 163 |
| Total | 3,903 |

OTHER LESSONS LEARNED

- Training and evaluations need to be conducted together for first-time evaluators
- Need skilled HR and IT staff
 - Not a process for someone to *gain* subject matter expertise
- Training:
 - Full day needed to help IT SME's understand the job evaluation process
 - Provide snacks
- Evaluation Process:
 - Need consistency in evaluation teams to mitigate wide variations in scoring
 - Diminishing returns on the quality of the evaluations after six (6) hours of review
 - Provide snacks

IT 'HOT SKILLS' SURVEY

- Responders
 - 22 organizations – 5 Higher Education, 17 agencies
 - 34 individuals – 8 HR, 26 IT
- Results require further drill down
 - 71% of responders identified Applications Development as the top hard to recruit skill. Approximately one quarter of all IT positions (944) identify 'Applications Development' as the primary job family
 - *What specific skill set for Application Developer's is scarce?*
 - Mainframe skills needed to maintain the states existing infrastructure not identified in survey per responders
- Location, Location, Location
 - Numerous comments focused on salaries in Seattle regardless of the question

| Answer Options | Compensation is not competitive | Unable to offer performance pay increases | Location of Job Issue - High cost area, rural area | Applicant pool does not meet minimum requirements | Hiring process too long, lose applicants to other jobs | No career path available | No ongoing training / certification provided | Response Count (34 total) | Response % |
|-------------------------------|---------------------------------|---|--|---|--|--------------------------|--|---------------------------|------------|
| Applications Development | 21 | 11 | 8 | 16 | 7 | 5 | 2 | 24 | 71% |
| Database Administration | 20 | 6 | 6 | 13 | 3 | 5 | 1 | 22 | 65% |
| Developer / Programmer | 19 | 9 | 9 | 15 | 5 | 6 | 4 | 21 | 62% |
| Security / Cybersecurity | 20 | 11 | 4 | 16 | 5 | 6 | 6 | 21 | 62% |
| Business Analyst - IT | 11 | 5 | 2 | 9 | 4 | 4 | 5 | 17 | 50% |
| Enterprise Architect | 16 | 9 | 5 | 12 | 2 | 2 | 4 | 16 | 47% |
| Web Developer | 14 | 9 | 6 | 9 | 5 | 4 | 1 | 16 | 47% |
| IT Project Management | 12 | 4 | 3 | 8 | 5 | 3 | 1 | 15 | 44% |
| Network Engineers | 14 | 7 | 3 | 11 | 4 | 5 | 4 | 15 | 44% |
| Mobile Applications Developer | 12 | 7 | 5 | 9 | 3 | 5 | 2 | 13 | 38% |
| Business Intelligence Analyst | 11 | 4 | 2 | 6 | 4 | 1 | 3 | 12 | 35% |
| Front End Development | 11 | 7 | 5 | 5 | 3 | 4 | 1 | 12 | 35% |
| Data Modeler | 10 | 3 | 2 | 4 | 3 | 1 | 1 | 11 | 32% |
| Cloud Integration | 5 | 3 | 2 | 5 | 1 | 3 | 1 | 8 | 24% |
| Database Engineer | 7 | 3 | 2 | 2 | 3 | 2 | 1 | 8 | 24% |
| Data Scientist | 6 | 2 | 2 | 2 | 3 | 3 | 1 | 6 | 18% |
| IT Auditor | 3 | 2 | 1 | 1 | 0 | 3 | 1 | 6 | 18% |

IT “HOT SKILLS” SURVEY RESULTS

Level of Experience

| What level of experience are you looking for? | | |
|---|-------------------|----------------|
| Answer Options | Response Percent | Response Count |
| Entry | 23.5% | 8 |
| Journey | 73.5% | 25 |
| Expert | 91.2% | 31 |
| Manager | 20.6% | 7 |
| Other (please specify) | | 4 |
| | answered question | 34 |
| | skipped question | 0 |

Summary of comments (4):

- Don't hire entry, don't have time to train only journey or above
- Can't find journey/expert level, hire in at higher levels and have to train/develop

Educational Requirements

| Answer Options | Response Percent | Response Count |
|--|-------------------|----------------|
| AA Degree in Computer Sciences or allied field | 58.8% | 20 |
| Bachelor's Degree or higher in Computer Sciences or allied field | 70.6% | 24 |
| IT Certifications such as CISM, CRISC, CISSP, PMP, CISA, CISE... | 61.8% | 21 |
| Other (please specify) | | 14 |
| | answered question | 34 |
| | skipped question | 0 |

Summary of comments (14):

- Experience is valued more than education
- Lack degrees or Agile, ITL, CMS, BABOK and other certifications in candidate pools because they are desirables