

IT Staff Management Techniques For Improved Recruiting and Retention

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Abstract

Annual turnover rates for Information Technology staff have traditionally exceeded other job classifications by ten to twenty percent during both boom and recession cycles. How do we achieve acceptable retention rates for the technician who is often viewed as being more loyal to the Information Technology profession than to the organization? Besides the retention challenge, managers of technical staff must face up to the recruitment task of acquiring experienced IT professionals. This paper suggests that the techniques and practices that management utilizes for IT professionals can be customized to match the ambitions, character traits and personality of the IT staffer.

Turnover rate, recruiting and Management Challenges

Experienced, mature and well rounded IT professionals, who possess the technical skills *de jour* are notoriously hard to locate, recruit and place in positions to their liking. Computer based technology, meaning new development environments such as Microsoft's .NET, new programming languages, improved Web development techniques and even the more baseline skills such as database design and network skills, continues to change rapidly. A particular set of skills and experience highly sought after in one period of time can become yesterday's "old news" within a very short period of time. Constantly changing technical skills are a major challenge to the recruiter.

A second challenge to the efficient recruiting of IT professional has to do with the very nature and personality of the technician. The following section provides some thoughts regarding the personal make up of the IT staffer. Many technicians do not fare as well as others in the interview process due to poor oral and interpersonal skills. Some have also exaggerated their skill set regarding the depth of those skills or their length of experience utilizing such skills. Many overly rely on their most recent in-demand skills but fall short in areas such as job stability, business and management skills. Therefore two recruiting challenges exist here, the difficulty in locating technically qualified technicians and the difficulty of making the match regarding well rounded business oriented individuals.

Once past the challenging and onerous recruiting process, the organization is faced with training the IT staffer in both the business and technical environment. Following the training process, the organization seeks to make the employee a productive member of a team, and finally, hopes to retain the individual. Turnover rates for IT staff typically run from ten to twenty percent higher than for non-IT staff. Again, constantly changing technical skills serve as a lure for those individuals possessing them. IT technicians tend to go where the "action" is, that is, to those organizations which require and utilize those technical skills that they possess. They may appear to be quite satisfied in their current organization, but if they feel that their skills are becoming stale and outdated, they will move on to an organization where they may learn and practice newer technical techniques. It is even common for them to take courses related to current, in-demand technology in order to smooth the path for such a transition.

The third challenge in the sequence, following those of recruitment and retention, is that of managing the IT technician. Any experienced manager will state that her objectives are to bring in quality projects on time and within budget. However, the technician's goals are to utilize the latest technology, surmount technical challenges and to finish the project possessing a deeper skill set. The manager's and the technician's goals are not necessarily at odds, but a good manager must find methods of satisfying the technician's needs while implementing the project successfully. This typically takes excellent management skills with a background and experience in technology in order to see the technician's viewpoint and to motivate him to meet the project goals. Management of IT staff still requires the application of sound and proven supervisory techniques and principles but also calls for knowing what motivates the technician and how these seeming diverse goals can be satisfied in the completion of IT projects.

IT Staffers' Aptitudes, Behaviors and Needs

A common error regarding the recruiting, retention and management of information technology staff is assuming that they have a similar set of career goals, personal values and motivations as the non technical employee. Unfortunately, applying the same management policies and practices to technical staff often leads to poor results, or worse, to exacerbating existing issues. Technicians tend to be well educated with the typical application programmer possessing a four year degree and perhaps several certifications in a technical specialty. When it comes to social skills, many technically oriented people, including engineers, scientists and highly skilled craftsmen, tend to be more reserved and can be uncomfortable in unfamiliar social situations. It follows that while they may be proficient in oral and written skills, they tend not to begin conversations, are terse in their responses and basically are less communicative than their non-technical counterparts. Many studies have confirmed that those of who have superior technical skills tend to have below average people skills.

At the same time, technicians tend to be motivated by different factors. For example, a lead clerk may be motivated to work hard in order to achieve the level of supervisor. Many technicians are motivated by being involved with a popular or leading edge technology rather than pleasing management so they may advance. Being assigned to a technically challenging project in an important position tends to be their motivation and goal. When it comes to growth, the technician is seeking to expand his technical knowledge and expertise, not so much to grow into positions of increased responsibility. Regarding compensation, non-technical staff members tend to see advancement and increased responsibilities as the method of receiving higher financial rewards. Technicians are typically well compensated and can easily achieve six figure salaries. Becoming and remaining proficient in emerging technologies is viewed to the key of achieving their compensation goals.

Finally, technicians tend to be more loyal to the technology than the firm especially in the first year or two with an organization. They look to utilize their talents within a particular system of technology, not within a particular business. IT staffers' attraction for technology plays a larger role in motivating them than do the more typical business related career goals.

Shortcomings of Traditional Management Practices

Given the significant differences in The motivations, behaviors and needs of technical staffers, the question arises, "Do I manage IT staff differently since they, in fact, appear to be dissimilar to my non-IT employees?" Well, yes and no. Experienced IT managers would respond with a resounding "yes" while authors on the topic of personnel management recommend the application of traditional management techniques in identical fashion to all staff. Louis A. Allen is one such writer and does not differentiate between the various types of employees. He defines management as consisting of four major components, namely:

- 1) Planning
- 2) Leadership
- 3) Organization
- 4) Control

Many managers would most likely agree that these four management mechanisms should be applied in identical fashion to IT staffers as well as non-IT staff alike. However, the major point of this paper is that the application of management principles should vary and be customized for IT staffers in order for the mechanisms to be effective. The application of the four leadership mechanisms to IT staff may be modified as follows:

1) Planning – The Duchess of Windsor is claimed to have said, "You can never be too rich or too thin." For any IT project, you can never have enough planning. A solid project plan consisting of the task, a task description, notation of the required deliverable as well as the traditional elements of the responsible person and due dates, is essential. As important as the project plan itself, is a frequent review of the deliverables and due dates. This lets all free spirits know that the project is a serious one and will be managed appropriately. The technical environment, variety of internal and external players and sets of interdependencies make good IT project planning and absolute necessity. So with regard to planning, this management mechanism is even more important to apply to IT staffers and projects than with traditional

projects. Project plans must be detailed, clear as to deliverables, and reviewed regularly. In the absence of clear, detailed and robust project plans, the IT technician tends to over focus on technology issues and becomes involved in technical tasks that are to his liking.

2) Leadership – A precise definition of this management mechanism that is acceptable to even a majority of people is difficult to offer. We can probably agree that this rather ethereal personality and character trait is important. IT staffers are notorious for being more independent than other employees so an IT manager must exhibit strong leadership. Somehow, the manager must inspire, motivate and get the IT technicians to follow his lead, to trust and admire him, and to want to succeed for the sake of the project and the manager. Is leadership a natural born ability tied to one's character? Can it be learned? These points are very much debatable but we can say that frequent and clear communications between managers and IT staff are critically important and a good leader is generally a good communicator, knows how to inspire and motivate people, and is sincere and caring.

3) Organization – this management mechanism, as opposed to planning and leadership, is typically not as critical with regard to managing and retaining IT staff. Information Technology projects can be incredibly complex involving new hardware, software and operating systems. Even the development environment, including compilers, data base management systems, middle ware, web tools and the like, call for a good degree of adaptability, flexibility, trial and error and the setting of policies and rules on the fly. An overly structured organizational environment and the application of standard business organization concepts often are found to be too rigid for IT projects. This is an area where an experienced manager needs to listen to the feedback of his staff and adopt an organizational structure that is customized and appropriate for the particular IT project.

4) Control – This final management mechanism should be applied in about the same measure and depth as in traditional non-IT projects. One of the most important controls, as mentioned above, is the regular project plan review meeting which usually occurs on a weekly basis. Here all questions about the project plan, including clarification of tasks, deliverables and time frames can be thoroughly covered. The meeting also serves as a forum for parties who interface with one another to clarify and explain their interactions and dependencies. Lastly, the meeting itself serves as a reminder to all IT staff that the project is important, that management is depending upon them and it is also an indicator as to where the individual technician fits in the big picture.

In short, a strict and rather nearsighted application of standard management practices to IT staff who are involved with complex, highly interactive and leading edge technology is not generally appropriate. Yes, it is important to set goals, deliverables, standards, timeframes, budget and quality thresholds but an IT manager should concern himself less with how exactly the technical design and tasks are accomplished. However, at the outset, the manager must set some proven system development methodology and structure which serves as the scaffolding for all planning, agreed upon content of documents, verification of task completion and time frame verification.

Arguments may be made that IT staff should be managed no differently than non-IT staff. But, at the same time, many organizations have accepted the reality that:

- IT projects are significantly different in nature than traditional projects
- IT staff are difficult and expensive to hire.
- Turnover rates of technical staff are generally higher than non-technical staff.
- IT staffers are in high grade levels and receive relatively high salaries and bonuses as compared to the "average" worker.
- Organizations count on the timely implementation of IT projects to gain market share or simply just to remain competitive

We can therefore see that traditional management practices have their limitations when applied to most IT projects and staff. The personal make up of the IT professional coupled with the criticality and complexity of IT projects call for somewhat of a customized management approach. Additional planning and thought is required by IT managers even before the commencement of the project. Given the recruiting costs, compensation levels and the criticality to the organization of many IT projects, traditional management techniques and practices must be carefully examined and possibly modified before their application to IT staff.

Retention First - Recruitment Second

No matter how enlightened, novel and successful an organization's recruitment of quality IT people may be, a high turnover rate will be costly. IT project teams must have a sufficiently stable staff in order to realize efficiencies that only come with practiced and stable teams. Experts say that an organization's first priority should be to keep the good employees that it has. "There's so much opportunity out there that people are very comfortable about looking somewhere else, and once people start thinking about it and looking, it happens", says Gale Fitzgerald, Chairman and CEO of CTG, an IT services company in Buffalo, NY. When an organization closely examines turnover costs and their negative impact, it becomes abundantly clear of just how important it is to retain staff. High turnover rates lead to high recruiting costs. For example, many of the following costs come into play:

I. Turnover Costs

A. Direct Costs: (Defined here as having a measurable impact on the bottom line)

- Candidate Interviews (Multiple)
- Candidate Screening
- Candidate Testing
- Employment Advertising
- Employment Liability
- Executive Search Fees
- Exit Interviews
- IT/Security Department Costs
- Job Board (web sites) Charges
- Lost Training Expenses
- New Hire Processing
- New Hire Training
- New Hire Orientation
- Personnel Department Costs
- Recruiter's Salary
- Recruiting Bonuses
- Relocation Fees
- Remaining Staff's Overtime Pay
- Separation Processing
- Separation Pay

B. Indirect Costs: (Often higher than Direct Costs but more difficult to quantify)

- Delay in Projects/Services/Production
- Dissatisfied Customers
- Employee Theft
- Improper Use of Equipment
- Inventory Anomalies
- Job Errors
- Lost Intellectual Capital
- Lost Sales
- Potentially Unrealized Sales
- Reduced Billable Hours (from declining productivity)
- Reduced Morale
- Reduced Reputation

II. Cost of Lost Customers Due to:

- Inexperienced Replacement Employees
- Remaining Personnel are overworked and so the quality of their work is lowered
- Poaching by departing employees

Even a cursory examination of the costs incurred by losing experienced employees, as well as the cost of replacing them, would lead most organizations to set up and follow a retention program. In fact, companies with low turnover rates often appear near the top of list of companies which are the best and most sought after by candidates. Many of the organizations who take deliberate steps to retain employees are the ones who are more caring of employees in general.

Recommended Retention Methods

Laura Roe, an IT recruiter, in her article titled "*Focusing on Retention*", which appeared on the Monster.com web site in April 2006 cited a twenty-five percent IT industry average turnover rate at that time. Stated in a different fashion, these figures suggest that, over a four year period an organization would need to recruit and hire the same number of employees that were on the payroll in the beginning of year one.

Some suggestions as how to improve retention rates follow. Many of them may be classified as intangibles but are, even so, are critically important and should be considered for adoption:

- Retention starts with the hiring process which must be as good as possible – good hires mean better retention.
- Technical staff need to be motivated and told just how important their project is to their team, department and company. They should know how important their individual contribution is to success and that the organization is looking to them as an expert in the implementation of technology.
- Continued assignment of everyday tasks involving stale technology will increase turnover. Technicians, especially those at risk of leaving, should be assigned technically challenging tasks whenever possible.
- Training – yes it is considered a retention method, not just a way to improve staff skills. In a recent CIO Institute poll of system administrators and network specialists, training was the most frequently mentioned way that respondents said their employers could make them want to stay. "If their bosses won't get them the education that they need, they are going to look for someone who will", says Allan Paller, director of education and research at the CIO Institute in Bethesda, MD. When it comes to the perceived need for training, IT staffers consider both current needs as well as longer range career related requirements.
- Enhance assignments to make them challenging beyond the basic specifications.
- If necessary, create internal assignments employing leading edge technologies.
- Besides attendance at formal training sessions, be sure that the technician attends several conferences and seminars annually.
- Manager/IT Staffer Relationships have a profound effect on retention. Managers need to make the effort to:
 - communicate
 - express their appreciation
 - cut red tape on the behalf of the employee
 - provide guidance
 - express their commitment to the IT staffer
- Construction and execution of a career development plan.
- Provision of a high quality workplace and corporate atmosphere. Google was rated the most desirable company to work for in 2006 and, not coincidentally, has perhaps one of the most attractive workplace environments in the country. They even provide dry cleaning pick up services for their employees. Google receives 1,300 unsolicited resumes a day. John White,

manager of enterprise computing for Cluett-Peabody states “We’ve got a fun work environment that focuses on getting the job done but enjoying yourself while you do it. Two hour lunches are not unusual, but neither are ten hour days. We’re going to the best steak house in Atlanta in two weeks and taking the whole department. That’s cheaper than paying one headhunter once”.

- “Caring” is a common keyword that is mentioned in exit interviews. Managers need to let their technical staff that the organization cares for them as people.
- Telecommuting may be a viable option for many technical positions.
- Compensation levels should be examined for alignment with responsibilities, skills and the neighboring competition. This includes bonuses in addition to base salary level. While some ex-employees are reluctant to state they are leaving for higher compensation levels, compensation remains as a leading factor in turnover. Caution – simply throwing more money at employees may not work. Employees tend to stay with an organization when the organization takes steps to instill loyalty in their staff.
- Provision of a significant degree of enablement. This becomes especially important with senior IT staff. Obtaining approvals for seemingly minor actions are especially irksome to technicians.
- The upgrading of technology levels, both in hardware, operating systems, and developmental environments can be considered as a retention method, not simply a means of remaining current.
- Quality of life issues in the workplace need to be addressed and improved if necessary.
- Provision of day care services.
- Provision of an on-premises health club.
- Financial assistance to employees in the form of tuition reimbursement, low cost loans and other aid.
- Job sharing.
- Outsourcing of the more mundane and less technically challenging tasks while keeping the more interesting development work in-house.
- Ranking, or choosing which of these retention methods should be employed first, is important since it may take months or years to implement all of them. So which of these retention methods are the most important? Infoserv, an organization which performs third party employee surveys, states that, in their employee interviews, they always ask about:
 - supervisor/employee relations
 - pay and benefits
 - work environment
 - corporate communications

Similarly, in an article by Stan Mork and Rick Sovitsky titled “*Attracting and Retaining IT Staff*” which appeared in *Infotech Update* in May, 1999, the top three reasons why IT professionals leave a firm were cited as:

- compensation and benefits
- advancement opportunities
- hours and life style

Laura Roe, in the Monster.com web article mentioned above cautioned about bonuses. She stated that they can be a problem. They are often promised and tied into overall project success, not individual

accomplishments. Somewhat surprisingly, she also stated that they are not always paid as promised. Many other recruiters and HR staff support this finding. Another suggestion from Ms. Roe was that internal recruiters can often have significant input to a company's retention plan and policies.

Recommended Recruiting Methods

A survey of seventy-five companies in thirty-four states conducted by the Information Technology Association of America in the early spring of 2004 indicated:

- that IT positions are substantially harder to fill than others
- on the average, it took thirty-seven percent longer to fill IT jobs than non-IT jobs
- the required skills, especially for application software developers, change rapidly
- over seventy-six percent of the organizations offered sign on bonuses for IT workers compared to fifty-two percent for non IT workers

IT trade periodicals addressing the topic of IT turnover and recruiting cite the fact that at any given time frame, one in ten IT jobs remain unfulfilled. Over this decade almost a million new IT workers will be needed but currently less than twenty-five thousand Computer Science graduates enter the workforce each year. The number of college students who have declared their major in computer science has declined over the past four years and is now thirty-nine percent lower than in the fall of 2000, according to the Taulbee Survey of the Computing Research Association. Couple these numbers with baby boomers starting to retire, there are predictions of significant shortfalls, in spite of overseas outplacements of work, in the IT workforce. A recent web article titled "*Employee Retention in Information Technology – The Solution*" from the authors of the book "*Contented Cows Give Better Milk*", estimate the cost of hiring an experienced IT professional at almost twenty thousand dollars. The recruitment effort then, is critically important to the organization yet is expensive and challenging. No job function appears to be spared. The gamut of required skills may range from very specific technical expertise to in depth project management experience.

Some recruiting suggestions that may be considered include:

- Widen your search sources for IT talent. Recently a local movie theater showing the latest Star Wars epic ran an ad in the pre-show advertisements seeking IT help.
- Use work related blogs and web casts
- Consider dual majors of business and computing for entry level positions, not just computer science majors.
- Recruiters can attend IT association meetings, conferences, special events and tap into professional networks in order to meet potential candidates. First hand, face to face meetings of people in this manner can be very valuable in the recruiting process.
- Employee referrals. Referral bonuses range from \$500 to \$3,000 per new hires in the mid level salary ranges.
- Be creative.
- Be more flexible.
- Broaden the search to include candidates who previously might have been considered as unqualified.
- Consider hiring candidates who have somewhat less than one-hundred percent of the skills and experience desired. Ask, "can some training and OJT bridge the shortfall?" Look for the appropriate aptitudes and degree of "trainability" in candidates.
- Training new recruits and current employees to fill key positions, especially those involving new technologies, may be easier than finding someone with the skills you need.

- Expand the recruiting pool. Your organization may have an untapped well of business people with some decent IT skills.
- Hire interns from local universities.
- Consider hiring entry level people right out of college. While the salary might be only about \$35,000, consider training costs and the time needed to bring these recruits up to required levels. Develop relationships with local university HR people and with Computer Science faculty. They can help to identify the best candidates.
- Consider utilizing consultants in place of permanent employees.
- Look overseas or set up satellite offices where IT workers are available.
- Reconsider the skills that are really needed. Are the technical skills actually that critical? Might the skills of effective communication, interpersonal abilities and project management be important? If you can hire people with these skills, can you then train them in the technical skill set?
- Manually scan resumes in an attempt to pick up non technical skills such as personality and character.
- Look for strong motivational skills in candidates. They usually are eager and successful in gaining needed technical skills.
- Be detailed, positive and accurate regarding how you describe the firm such as in advertisements.
- Candidates often access a potential employer's web site so it should be appealing to potential future employees as well as customers. Does it have an Employment section?
- Participate in job fairs. Most of the attendees are serious job seekers and you have the opportunity to meet the candidate in person.
- Distinguish your firm from others. What makes it unique and why would anyone want to work there? What do you offer that others don't? What is your operating philosophy and what makes your company exciting, dynamic and a user of appealing technology?
- Use the job posting services such as Monster.com but be prepared to be bombarded with resumes, many from unqualified candidates.

Some alternatives towards lessening recruiting expenses are to:

- Utilize off the shelf software packages and reduce custom in-house software development (Caution: you will need employees with new skill sets – those of system integration).
- Outsource the type of work for which hiring is most difficult.
- Increase IT worker efficiency in order to lessen the demand for more IT staff.
- Re-examine IT project priorities and payback. Deploy the limited talent on hand to the most critical projects with the best return to the organization.

Training as a Management Tool

A January 2004 survey by The Training Camp, a training oriented trade association, published findings linking higher amounts (measured in training days) of training provided to IT employees with significantly improved (eighty-seven percent) retention rates and promotions received. It was proposed that training can be used as a tool to improve retention rates, worker productivity and morale.

The typical IT worker regards training in current or near horizon technologies as critically important for his career. Even if the technologies in question are not currently utilized in his organization, the IT staffer feels that they are necessary for his betterment and, without them, risks difficulties in landing his next position. A paradox exists in that attainment of current technical skills, even if not used in his current organization, may influence him to remain since he is now comfortable that he could be successful in the job marketplace if necessary. On the other hand, not being trained in new technology, even if not utilized in his current organization, often causes the technician to worry about his future and therefore may lead to a resignation so he may gain the technical skills elsewhere.

Some suggestions regarding the provision of training as a management tool of IT staff:

- Make training available which is desired by technicians for development of future needed skill sets as opposed to provision of training aimed at providing skills needed for just the current job at hand.
- Allocate a set number of training days annually for technical staff.
- Provide both on the job as well as formal training.
- Schedule attendance for leading edge technology forums, conferences and seminars.
- To a modest extent, allow training in technologies that are not utilized in the organization but are important to the IT staffer.

Conclusion

The management, training and hiring of IT staff, in order to significantly improve retention rates in a complex and fast changing technological environment, require a different approach than traditional methods. IT staffers seek challenging assignments, clear goals and are often self motivated.

Given that technicians are driven by the challenge of technology and often may be focused upon technical issues as opposed to project goals, it is proposed that the application of management principles be shaped and customized for IT staffers. Project objectives, goals, dependencies and schedules need to be emphasized while the technicians may be granted more leeway regarding the execution of detailed tasks.

An experienced IT manager once guided a newly appointed Project Manager with this advice: "Hire the right people; provide training to those who need or want it; stress quality, timetables and budget. Give the team the needed resources and keep them motivated without smothering them". Such counsel may be easily stated, but requires significant thought and judgment in its administration.

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