Recruiting and retaining scarce information technology talent: a focus group study

Diane Lockwood
Seattle University, Seattle, Washington, USA
A. Ansari
Seattle University, Seattle, Washington, USA

Introduction

It is not surprising that there is a considerable current and forecast shortage in qualified IT specialists (Computerworld, 1997-1998; Kaufman, 1998). Computerworld (1998), for example, states that there were 350,000 vacant IT jobs in the USA in 1998 with a forecast of 1.3 million more IT workers needed in the next decade. Added to the skills shortage, is an average annual turnover rate of 13 percent or higher (Computerworld, 1997/1998). Those companies that manage to not only recruit but also retain scarce IT talent have a competitive advantage, since the costs of turnover in terms of recruiting dollars and lost project continuity are high. The purpose of this study, therefore, was to investigate what some companies are doing to recruit and retain scarce IT talent. Are IT recruiting practices today different than in the past? If so, in what ways? What recruiting strategies have some companies found to be particularly successful? What retention strategies have companies found to be particularly successful? In short, what works and what does not in the IT recruiting and retention game?

Methodology

A focus group was used as the methodology for this study because the authors wanted to gain in-depth insights into various recruiting and retention strategies, as well as specific examples of successful (and relatively unsuccessful) practices. In addition, alternative contact methods such as phone and mail questionnaires, while more generalizable, are often regarded as having suspect motives (i.e. perceived as competitive spying). It was reasoned that in an academic setting, where participants are encouraged to share practices with a small group of their known peers, they might be more willing to be candid in their remarks.

Participants in the focus group were selected from a membership roster of a local chapter in the Pacific Northwest of the Society for Information Management. The Society for Information Management is composed of senior IT practitioners, usually at the Vice President or Chief Information Office (CIO) level of the company. All participants had previously indicated their interest in attending a forum on recruiting and retention strategies. The focus group consisted of 14 participants, ten of whom were VP level and above from industry, and four from professional recruiting firms. The group facilitator was a PhD academic, with private industry IT experiences. Of the ten industry participants, eight were from large Fortune 1,000 companies and two were from government institutions. In total, participants represented 14 different organizations (i.e. no two were from the same organization). All participants were promised anonymity. The session was intense, lasting four-and-a-half hours. Participants were asked the following questions:

1. What factors were important to IT recruits in the past (pre-1990s)?
2. What is important to IT recruits today (1998-present)?
3. In what ways, if any, are the old and new recruiting paradigms the same? Different?
4. What recruiting strategies have you found to be particularly successful?
5. What retention strategies have you found to be particularly successful?

Responses to each of these five questions are summarized in the next sections, followed by discussions.

Similarities and differences between old and new recruits

After participants brainstormed responses to each question, they were encouraged to prioritize them from “most-to-least” important. In descending order of importance, participants listed the following as being important to IT recruits in the past (pre-1990): 1. money (base salary); 2. job security (based on longevity of the organization); 3. interesting/challenging work; 4. training; and
When asked what they perceived was important to IT recruits today, participants listed the following in descending order of importance:

1. Money (base salary plus bonuses and stock options);
2. Chance to learn new skills (i.e. those that the market values);
3. Reputation of the company in technology innovations;
4. Flexible work environment (e.g. flextime, shortened “4/10” workweek, telecommuting);
5. Working conditions (e.g. physical, overtime, colleagues and boss, casual dress); and
6. “Outside the box” benefits.

Examples cited of “outside the box” benefits are too numerous to list exhaustively, but include such practices as on-site day care, on-call baby sitters for care of sick children, domestic partner benefits, on-site fitness and yoga classes, three-day weekend mini-vacations in company-owned cottages, mortgage financing, work visa and other legal assistance for foreign citizens, and even pick-up/drop-off car repair! While some of the former benefits are already in practice in many European organizations, they are relatively recent developments in the USA.

When asked to “compare and contrast” the expectations of today’s recruits with their counterparts of the past, participants identified similarities and differences. Responses are summarized in Table I.

### Money

Money, defined as base salary offering, was still identified by participants as being the single most important factor in a decision to join an organization for both past and present IT recruits. What is different about today’s recruits, however, is that an attractive base salary alone is not enough. That is, in many cases hiring bonuses and stock options are also necessary monetary incentives. Hiring bonuses (also called signing bonuses) typically range anywhere between $1,000 to $5,000, depending on the required experience level of the job. While stock options, at least in the short run (e.g. less than ten years), seldom return sizable gains, recruits have come to expect them. The myth of instant “Microsoft millionaires” is very real and recruiters must respond to these expectations. The two government participants in the focus group pointed out that since hiring bonuses and stock options are usually out of the question for public employees, they have to rely more on offering the opportunity to learn new, market-valued technical skills. They point out that, contrary to popular opinion, government investments in leading edge technologies are quite sizeable when compared to their counterparts in private industry, but their salary classification systems are quite restrictive.

### Training

According to participants, training and the opportunity to learn new skills are still valued as much by today’s recruits, as they were by their counterparts in the past. Life-long training is part of the embedded technology culture and work challenge, but it is also perceived as a means of making oneself more marketable, presumably at a higher salary. What is different about today’s employees, however, is the recognition that real job security comes with the acquisition of new, market-valued skills, not with the longevity of a company. That is, today’s employees recognize that corporate downsizing and mergers are a fact of life. For example, in the past if someone went to work for IBM they could pretty much be assured of a job for life, but that is no longer the case today. A demonstrable commitment to training (Tunick, 1997a) is perceived as a means to future employment at a higher salary.

### Benefits

Participants indicated that traditional benefits plans (retirement plans and health insurance) are taken as “givens” by employees today, but their importance varies with the age of recruits. As one participant stated, “It’s hard to sell a 25-year old recruit on a retirement plan, when what they really want today is a new BMW!” Not only do today’s recruits expect traditional benefits packages, but they also desire “outside-the-box” benefits such as on-site day care and flexible work schedules. Childcare demands play an increasingly important role in the employment decisions of today’s dual-career family recruits.

### Flexible work schedules

Finally, flexible work schedules were identified by participants as the other major difference between today’s recruits and those

---

**Table I**

<table>
<thead>
<tr>
<th>Similarities</th>
<th>Differences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Money (base salary)</td>
<td>Signing bonuses and stock options</td>
</tr>
<tr>
<td>Interesting and challenging work</td>
<td>Job security via skills acquisition</td>
</tr>
<tr>
<td>Training opportunities</td>
<td>“Outside the box” benefits</td>
</tr>
<tr>
<td>Traditional benefits</td>
<td>Flexible work schedules</td>
</tr>
</tbody>
</table>
of their counterparts in the past. Flexible work schedules could take many different forms including flexitime, 4/10 shortened workweeks, job sharing and telecommuting. In fact, one government participant indicated that she had to guarantee a prospective employee a 40-hour maximum workweek (no overtime) in order for them to take the job!

Discussion of successful recruiting practices

Participants in the focus group were asked to identify successful recruiting practices which they had used in their own organizations, or which they knew that other employers had used successfully. “Successful” was loosely defined as “getting a good applicant pool and hiring the people you wanted to hire on a relatively consistent basis”. Participants brainstormed a list of practices and then prioritized them as a group in descending order from most to least successful. The following eight strategies were identified:

1. employee referral programs;
2. dedicated information technology recruiters;
3. acquisition strategies;
4. speed hiring;
5. local print and radio advertising;
6. company Web sites with employment opportunities pages;
7. college recruiting; and
8. job fairs.

Employee referral programs

Employee referral programs were unanimously identified by participants as the most successful recruiting practice today. In an employee referral program, current employees contact qualified people they know and encourage them to apply for a job at their company. If the applicant is hired then the recommending employee is paid a typical bonus of $2,000 for high-level professionals, $1,000 for mid-level, and $500 for entry-level, with the recommending employee receiving half upon the new employee's first day, the remainder six months later. Tunick (1997b), however, identifies a couple of caveats associated with employee referral programs. First, some organizations, especially midsize enterprises, are seldom equipped to handle the influx of employee referrals. They often fail to update the recommending employee and candidate about what is going on, thus creating disappointment. A good process should be in place, which acknowledges the referral (through e-mail) and keeps the employee informed about the candidate’s progress, which could counter the problem. Second, and perhaps even more important, is the necessity to clearly define job requirements and the criteria for “qualifying” leads. Vague job requirements and qualifying criteria invite submissions of dozens of undifferentiated business cards as leads (Tunick, 1997b).

Dedicated IT recruiters

Dedicated IT recruiters are often used to augment enterprise-wide corporate human resources recruiters which cannot keep pace with the combined load of general corporate recruitment, new IT professionals and replacements of departing IT professionals. Dedicated IT recruiters may be obtained using different strategies. Some organizations create a specialized IT recruiting arm, separate from enterprise-wide human resources, that reports directly to the management of information technology. In such cases, it may even be necessary to legally spin-off the IT group to become independent service providers, thus freeing IT recruiters so that they no longer face constraints of the corporate parent HR salary classification system. Others may turn over the entire IT recruiting process to outside parties (“headhunters”) to negotiate competitive compensation packages. John Nyhan, a recruiter for Information Management Resources, is particularly successful in recruiting computer scientists from foreign countries like Brazil (Kaufman, 1998). Finally, organizations may contract with temporary staffing firms (i.e. contract work) to hire 10-20 percent of their IT professionals.

Acquisitions

Organizations have also found outright acquisitions to be a successful recruiting strategy, thereby avoiding most of the traditional recruitment advertising costs. For example, Cisco corporation’s motto is, “if you can’t hire talent, just buy it!” (Nakache, 1997). This strategy is particularly successful where the acquiring company has an established reputation for technology innovations; that is, highly publicized high-tech companies where growth is achieved through acquisitions for scarce engineering and R&D talent.

Speed hiring

Participants agreed that “time is of the essence” in successful recruiting. That is, employers often require applicants to make an acceptance/rejection decision within one week from the date of the initial job offer. Frequently, employers also add an incentive signing bonus equal to one month’s salary for
an applicant’s acceptance response within 72 hours of the initial offer.

**Local advertising**

As traditional as it sounds, participants agreed that enterprises still use local newspaper advertising ("help wanted" advertisements) and, to a lesser extent, radio advertising as successful recruiting tools. Radio advertising on business-oriented channels was more successful in geographic areas typified by long commutes.

**Web sites**

When participants were asked about the relative success of using Web sites for recruiting purposes, there were mixed responses. When organizations posted job positions on career or employment Web sites such as CareerPath (www.careerpath.com), Yahoo! Classifieds (www.classifieds.yahoo.com), or Online Career Center (www.occ.com), these were not generally perceived as being successful in attracting the kind of experienced applicants with the specialized technical skills that companies were looking for. On the other hand, participants indicated that a specific company Web site with an employment opportunities section was somewhat more successful, especially if the company was already well-known as a technology innovator. For example, Cisco (Nakache, 1997) has an artificial intelligence tool called “Profiler” on its employment Web page that asks applicants to provide education and employment information. Profiler will then ask a handful of questions specific to an applicant’s background such as: account manager position – “What has been your average dollar/new customers goal in the last three years, and what has been your year-to-year growth rate?”. Cisco can then follow up on potential recruits from Profiler by pairing the applicant with their Friends program which helps prospects make a pal at Cisco who can describe what it is like to work there. The “Friend” employee also has an incentive to recruit in the form of a generous employee referral program. In sum, it is more effective to couple a company Web site employment section with, for example, a subsequent employee referral program, than it is simply to post a job opening on the Web.

**College recruiting and job fairs**

Responses of participants were mixed when asked about the relative success of college recruiting and job fair employment strategies. Participants agreed that the success of college recruiting really depends on the strength and reputation of local education programs. National recruiting from “top name” US universities was usually shunned because of stiff competition and salary inflation. College internship programs targeted to specific jobs, on the other hand, were perceived by participants to be a useful “look-see” approach for both parties. One firm went so far as to build its specialized programming lab on a university campus and “loaned” a professional staff trainer for a class. The success of job fairs in recruiting efforts depends on whether an organization stands out from the crowd. For example, both Dell Computers and City Bank recently instituted PC video-conferencing interviews between prospects at job fairs and IT professionals at the home office. Low-cost PC-based video-conferencing interviews have the added benefit of reducing initial interviewing expenses, as well as accelerating the interview process.

**Discussion of successful retention strategies**

When participants were asked to describe retention strategies that were particularly successful in maintaining a low turnover rate, they listed the following:
- raising salaries;
- stay bonuses;
- career advancements, promotions;
- training;
- personal recognition;
- time off; and
- working conditions.

**Raising salaries**

A *Computerworld* hiring survey (December 1997/January 1998) found that 70 per cent of IT professionals said they left for more money, coupled with 64 percent who also left for career advancement. Participants in this study also agreed that offering a valued employee more money to stay (i.e. at least equal to or greater than the prevailing industry local salary level) was instrumental in getting them to stay, but that this strategy also had several unwanted side effects. First, it establishes an unwanted precedence that “the only way to get a raise around here is to threaten (or rumor) to leave!” Second, this strategy often runs counter to lock-step enterprise-wide salary classification systems. In a lock-step salary classification system there is a given salary range not to exceed a maximum amount for a given job position. If one wants to raise an employee’s salary who is at the upper range, then the employer has to go through the difficult and often unsuccessful process of creating a new (higher salaried) position for the employee. But if you want the employee to do
Diane Lockwood and A. Ansari
Recruiting and retaining scarce information technology talent: a focus group study
Industrial Management & Data Systems
99/8 (1999) 251–256

essentially the same work at higher pay, then the process is exasperated. Participants agreed that a more proactive retention strategy in the long run is to have a salary classification system for IT employees that annually indexes salary increases to the prevailing local industry norms. Thus, when current employees comparison-shop, they are less likely to be lured away by higher salaries elsewhere. In Europe, Furlonger (1997) also suggests that retention plans should be regularly monitored to ensure a competitive compensation package and that failure to meet the challenge will mean a further attrition of the skills base. When people leave, a company has to make up the shortfall by subsequently paying substantially above average. In Furlonger’s (1997, p. 3) words, “careful retention planning is not an optional extra!”

Stay bonuses
“Stay” bonuses are used in situations where a company is being acquired or merged with another firm. The acquiring company wants to retain a valuable employee from the acquired organization in order to stay with an ongoing project through to completion, since it is difficult to bring new employees into a project midstream. In such cases, the employee from the acquired organization is offered a fixed salary bonus to “stay” until the project is completed. The amount of a stay bonus depends on, among other factors, the importance of the project and the length of development time remaining.

Career advancements and promotions
Participants generally agreed that a well-defined career progression ladder and promotional opportunities were essential to retaining employees. Employees want to know what their career opportunities are with the organization and what it will take to achieve promotions. Presumably, salary increases are concurrent with promotions, thus making it difficult to separate these two retention factors.

Training
According to the Computerworld’s hiring survey (1997/1998), the top method to combat IT staff turnover is training. Yet, according to this same survey, only 27 percent of IT professionals who leave for other companies actually do so to receive more training (the majority leave for more money). Participants in this study indicated that a demonstrable commitment to training was an essential part of retention efforts, but should not be viewed as a substitute for salary parity issues. Organizations typically offer 40 hours of formal training annually. Such training can take a myriad forms, from off-site seminars conducted by industry experts to in-house pairings with outsourcers or contract staff to learn new skills on the job. One participant indicated that he had his employees actually hire the outsourcing staff that they wanted to work with! This strategy not only communicated his faith in his employees’ judgement, but also insured that his employees had a vested interest in the success of the project. Another participant indicated that when her company outsources work, she always tries to hire two outside people – one to do the routine maintenance task of the in-house employee in order to free them up to learn new skills, the other outside expert to train the paired employee. Training opportunities to learn new, market-valued skills are also related to salary and career advancement factors. Presumably, the more current and marketable the skills, the more opportunities for higher salaries and jobs elsewhere.

Personal recognition
Participants indicated that recognizing individual achievements of employees was an important retention practice. Such recognition could take many forms, including using employees as teachers to show off their “cool stuff” at in-house luncheon seminars, stock option bonuses, time-off rewards and even such mundane practices as employee recognition programs publicized in a company newsletter. Furlonger (1997) indicates that the same principle of recognizing individual achievement to motivate people also exists in Europe (i.e. it is a universal human need).

Time off
Common practice suggests that most people need a vacation break sooner or later to prevent job stress and burnout, especially after schedule-driven IT projects are successfully completed. Scandinavian and European enterprises typically offer more vacation benefits and three-day weekend mini-vacations than do their US counterparts. One participant indicated that his company used a form of contingent time off as a reward, whereby a team of employees earned X number of days off for completing a project on schedule with appropriate quality control checks. Such contingent time-off practices may be particularly useful in government organizations where salary and bonus incentives are more difficult to obtain. Participants indicated that it was difficult to describe adequately the “working conditions” retention factor since it encompasses a myriad subfactors such as:
Conclusions

Results of this focus group study, in general, confirm Herzberg’s (1974) theory of motivation, which suggests that hygiene factors such as money and job advancement opportunities must be present to both recruit and retain qualified IT professionals. Absence of these hygiene factors will result in discontent, but total fulfillment of hygiene factors will be insufficient to retain employees if motivational factors such as challenging work, training, praise/recognition and working conditions are not also addressed. Conversely, results suggest that simply offering more training will not retain IT employees if the basic hygiene factors of money and job advancement opportunities are perceived to be inadequate or more attractive elsewhere. Put simply, money is the *sine qua non* of both recruiting and retention efforts.

Results of this focus group study must be tempered by a couple of factors. First, while focus groups afford the opportunity to explore responses in rich detail, the generalizability of results to a wider population is suspect. Nevertheless, results of this study are generally consistent with survey method results using larger samples reported by industry research groups such as Gartner Group, Forrester, and Computerworld. The relative success of particular recruiting and retention practices could be expected to vary with such factors as demographics of potential IT recruits, geographic locale, local labor market conditions, and even country-specific cultural effects. It would be interesting for future research to replicate this focus group study in different countries for comparative purposes. Second, while focus group participants were employers with considerable industry experience in recruiting IT professionals, they were not actual IT recruits. Future research should investigate if the perceptions of recruiters, as to the importance attached to various recruiting and retention strategies, would be consistent with those reported by actual recruits.

In conclusion, the purpose of this study was to describe the recruiting and retention practices and experiences of participants. Their in-depth insights offer prescriptive practices that other enterprises may want to explore further when they examine their recruiting and retention strategies. Any practice must, of course, be viewed within the context of a given enterprise’s opportunities and constraints.

References


