
EXECUTIVE SUMMARY

Research Question

What strategies are most effective for attracting, engaging and retaining experienced hires in technical roles (i.e. Information Technology)? What are some industry best practices?

Introduction

Retaining experienced information technology (IT) professionals is important for organizations, given the challenges in keeping the valuable knowledge and the high cost of sourcing for replacements. Particularly, indirect costs occur when there is a gap between employees leaving and finding replacements as well as time for the new employee to descend learning curve for technical and organizational knowledge. This report includes the main industry trends in IT professional turnover, and recommendations on best practices for organizations to monitor, control, and decrease turnover in IT positions.

Causes of IT Professional Turnover

In addition to common exit reasons including salary increase, co-worker relationship, overall job satisfaction, and leadership support, the factors below have specific contribution to IT professional turnover.

1. **Job-task changes:** IT professionals are more likely to seek positions that increase in level of challenge, and directly contribute to the broader view of the IT environment. Also, IT professionals tend to seek positions that provide a better fit for their talents and interests.
2. **Work exhaustion:** Insufficient staff and resources, changes in technology and business environment, unrealistic deadlines, expectations and needs of users and unclear objective all lead to burnout and exhaustion of IT employees. Particularly, changes in technology and unrealistic deadlines are the most frequent complaints found among IT workers.
3. **Job opportunities:** Although a weak labor market has limited the quantity of turnover, organizations' most skilled IT personnel are still coveted and valuable resources. With solid technical skills and corporate experience, these IT professionals are also those most equipped to leave their firm and find new work. In addition, access and proficiency in internet significantly increase IT workers' exposure to the market when they start job searching.

Best Practices for Retaining Technical Professionals

1. Flexibility in management styles may be much more effective than popular methods of flextime, telecommuting, and casual dress. At **Baxter International Inc.**, an American health care company with good technical employee retention credit, workers can choose among three career tracks: become world class experts in their fields, manage complex projects (e.g., designing artificial hearts or developing blood substitutes), or manage a technical portfolio (e.g., a range of drugs and devices related to kidney disease).
2. "Keeping current on technology" is No. 1 workplace concern of technical employees, and to resolve that, organizations can combine in-house and external resources to meet their training needs. For instance, **Hewlett-Packard's** resident fellowship program, available to R&D workers who have shown special promise during several years with the company, allows employees to return to school full-time to get a master's degree while drawing a salary and receiving grants for books and tuition.

3. The opportunity to do exciting and significant work especially with talented colleagues reduces turnover of technical professionals. At **Pacific Northwest National Laboratory**, one of the United States Department of Energy National Laboratories, employees are challenged by technical complexity and cross-team cooperation. As a result, the feeling of “make a difference in the world” helps to increase the employees’ job satisfaction.
4. The management team of **Saphikon Inc.**, a sapphire crystal maker, has a real respect for technical skills. Some degree of freedom in project selection is a common job-satisfaction factor among the employees. The culture of trusting employees’ technical capability is an ideal fit for curiosity-driven professionals.

Recommendation

During the research interview, HR managers noted that current HR interventions for attracting, engaging and retaining IT professional inside the company include: employee referral, education, employee development communication, monetary incentive and rotation program, which covered most aspects of technical workers’ retention practice. The below recommendations can be added to technical position retention concept.

Make training less technical. Many technology organizations provide high-quality training on technical topics such as requirements management, database design, and programming in a range of languages. As critical as these skills are, some institutions are also experimenting with new types of training; specifically, providing training that helps technology personnel to understand the actual business operation, which is possible by showing the technology’s value and tangibility that provide invaluable context for interacting with nontechnology managers. Such training can include information about the company’s customers, products, strategies, and market position, as well as its operations.

Support technology passions. The best people in technology shops have a passion for technology. They are excited by the opportunity to use innovative technologies to solve problems. With all the focus on top-down management of IT project portfolios, individual innovation and experimentation are easily discouraged or lost, and organizations can prevent stagnation by encouraging or rejuvenating employees’ passion for innovation. For example, companies can help engineers “recharge” after a long and grueling project by allowing them free time to work on ideas they are passionate about.

Facilitate outside exposure. Technology is a community that extends far beyond any individual company or institution. By providing time and opportunities for managers and high performers to participate in industry conventions and functional groups, companies can lead technology shops to expand their high performers’ horizons and help them to feel connected to a broader technology community.

Conduct exit interviews. By asking departing employees why they’re leaving, what was positive or negative about their work experience, etc. management teams are able to adjust their retention program accordingly. Efforts should be made on those retention programs actually works.

Transfer knowledge. Turnover rate cannot be 0. In order to control the cost of knowledge lost and lower productivity due to turnover, organizations need to consider knowledge transferring programs such as building a community of practice to retain the technical knowledge inside the company.

Conclusion

Although organizations cannot control every aspect of retention, they can use variety of methods to significantly improve their retention rate and prevent turnover. Technical professionals ask for special attention to their unique needs such as respect for technical skills, challenging work description and flexible management. Employers who specifically work on those aspects will benefit from a loyal and well-motivated technical talent pool.

Cited Reference

1. Retention: What are some innovative ways to retain high-tech employees? . (2012, 8 31). Retrieved from <http://www.shrm.org/TemplatesTools/hrqa/Pages/retainhigh-techemployees.aspx>
2. De Long, D.W., & Davenport, T. (2003). Better practices for retaining organizational knowledge: Lessons from the leading edge. *Employment Relations Today*, 30(3), 51-63. Retrieved from <http://search.proquest.com/docview/237054582?accountid=10267>
3. Barcus, S. A. (2008). The impact of training and learning on three employee retention factors: Job satisfaction, commitment and turnover intent in technical professionals. (Order No. 3381138, University of North Texas). *ProQuest Dissertations and Theses*, , 69-n/a. Retrieved from <http://search.proquest.com/docview/304538331?accountid=10267>. (304538331)
4. Ang, S., & Slaughter, S. (2004). Turnover of information technology professionals: The effects of internal labor market strategies. *Database for Advances in Information Systems*, 35(3), 11-27. Retrieved from <http://search.proquest.com/docview/196634520?accountid=10267>
9. Dinger, M., Thatcher, J., Stepina, L. P., & Craig, K. (2012). The Grass is Always Greener on The Other Side: A Test of Present and Alternative Job Utility on IT Professionals' Turnover. *IEEE Transactions On Engineering Management*, 59(3), 364-378. doi:10.1109/TEM.2011.2153204
5. Niederman, F., & Sumner, M. (2004). Effects of tasks, salaries, and shocks on job satisfaction among MIS professionals. *Information Resources Management Journal*, 17(4), 49+. Retrieved from http://go.galegroup.com.proxy.library.cornell.edu/ps/i.do?id=GALE%7CA177274214&v=2.1&u=nysl_sc_cornl&it=r&p=AONE&sw=w&asid=71ea98ee6a0e0aaaf1aa9c7bbf6aeb58
6. Joseph, D., Kok-Yee, N., Koh, C., & Soon, A. (2007). TURNOVER OF INFORMATION TECHNOLOGY PROFESSIONALS: A NARRATIVE REVIEW, META-ANALYTIC STRUCTURAL EQUATION MODELING, AND MODEL DEVELOPMENT. *MIS Quarterly*, 31(3), 547-577.
7. Amaram, D. I. (2005). Issues in Recruitment and Retention for the IT Workforce. *Journal Of American Academy Of Business*, Cambridge, 6(2), 49-54.

Recommend Reading

1. (2012). *Technical talent management: Sourcing, developing, and retaining technical talent (best practices report)*. Retrieved from <http://www.apqc.org/knowledge-base/documents/technical-talent-management-sourcing-developing-and-retaining-technical-ta>
2. Paramkusham, R., & Gordon, J. (2013). INHIBITING FACTORS FOR KNOWLEDGE TRANSFER IN INFORMATION TECHNOLOGY PROJECTS. *Journal Of Global Business & Technology*, 9(2), 26-36