



A Study on Job Satisfaction in the ICT Sector in Egypt

Sherif Kamel

The American University in Cairo, skamel@aucegypt.edu

Marwa El-Ayouti

Maastricht School of Management, marwa.el-ayouti@vodafone.com.eg

INTRODUCTION

During the last two decades the explosive growth in the ICT sector and its continuous integration in various businesses as well as its increasing role in economic development have created a globally significant increase in demand for highly skilled ICT expertise that are needed in virtually every sector and industry. In order to maintain competitive edges and cost-efficient operations, high tech and non-technology companies and institutions are competing for the same workers. On the other hand, supply of these employees, grew at a slower pace, thus further raising global competition among companies and employers. This shortage in ICT professionals has plagued the sector by enormous levels of employee turnover, and job-hopping from company to another and from country to another. Such a competitive market has created high escalations in salaries, whereby labor employed in the sector has become relatively better paid than others in similar positions in different industries. Natarjan asserts that the ICT sector has clearly different measures than other sectors where a fresh graduate with minimal ICT knowledge is paid more than an executive in other fields and where he claims that the concept of rewards has undergone dramatic changes in the information age.

Employers in this tight labor market have been suffering from high turnover rates and difficulties in employee recruitment, retention, and retraining. Furthermore, the global competition has lead to a state of brain drain, whereby countries are losing their most skilled professionals to other countries. The brain drain has been significant in the Egyptian ICT sector, whereby the majority of skilled employees have been seeking jobs abroad. With the increasing importance of the industry, failure to meet demand for ICT professionals could have severe consequences for the economy's competitiveness and growth, thus creating urging needs to retain skilled professionals and meet their requirements.

The significant growth of the Egyptian ICT industry over the past few years has created a rising need and demand for highly skilled professionals. The fact that this enormous level of demand is eminent at a worldwide scale creates a critical importance of acquiring and retaining these skills. Additionally, the growing importance of ICT to economic growth and development makes it necessary to maintain Egyptian specialists within the country. However, recruiting and retaining skills can only be achieved through motivating employees and creating a high level of job satisfaction. This paper reports the findings of a survey conducted in Egypt to examine the level of satisfaction of ICT professionals in Egypt.

RESEARCH QUESTIONS AND DESIGN

The main objective of the study is to use theoretical and empirical evidence to understand the overall level of job satisfaction among Egyptian ICT professionals, identifying the major factors that affect their satisfaction, and highlight the key driving forces leading to the brain drain effect of skilled ICT professionals to jobs abroad. Using a conceptual framework, this study assesses the major aspects affecting job satisfaction and ranks them by importance. Empirical evidence also illustrates the willingness of ICT professionals to seek job opportunities abroad, and the major forces leading to brain drain. The research questions includes the assessment of the level of job satisfaction

among employees in the ICT sector; the identification of the major elements affecting the satisfaction of employees; whether the majority of ICT professionals seek job opportunities abroad and why and how can managers increase job satisfaction and further motivate and maintain employees?

METHODOLOGY, DATA COLLECTION AND ANALYSIS

The major objective of the study is to test the level of job satisfaction among Egyptian ICT professionals through identifying the key motivational factors, as well as further understanding their willingness to seek job opportunities abroad. An empirical investigation was carried out attempting to answer the research questions. The study is an exploratory quantitative case study, aiming at understanding and gaining insights on the level of job satisfaction in the Egyptian ICT Sector.

Data required was mainly primary data collected through an employee survey conducted using self-administered questionnaires and personal interviews. Although the survey mainly relied on primary data it was also necessary to formulate the analysis based on secondary data explaining theoretical concepts of job satisfaction, as well as benchmarking with other surveys previously conducted in this field. The sample selected covered various segments of the ICT sector including private, public and multinational companies operating in Egypt. Furthermore, due to the fact that ICT professionals are employed in various industries, it was necessary to additionally include a diverse sample, employed in different industries, such as financial institutions, telecommunications, retail and service providers.

The total sample size used in the analysis was 110 ICT professionals, including 100 questionnaires and 10 interviews. The self-administered questionnaire was circulated among 75 professionals, whereas the online questionnaire was mailed to 180 employees. The response rate for the former was 87%, as for the online questionnaire; it had a 19% response rate. Survey respondents represent a cross-section of industries, primarily led by IT and telecommunication companies.

The data collected was analyzed using statistical models, relating the different independent variables to the dependent variables. The analysis aimed at identifying the importance of each factor to individuals, and understanding the level of satisfaction held by individuals for each factor. Job aspect ranked by importance and by degree of satisfaction was also undergone. Ranking the four groups of aspects by importance and by degree of satisfaction allowed to perform a gap analysis aiming at identifying the factors with highest disparity between importance and satisfaction. Moreover, further analysis was undergone, comparing the importance and degree of satisfaction of job aspects among the different sample classes. Correlations were done based on age, gender, title and years of experience.

RESEARCH FINDINGS AND ANALYSIS

The analysis of the research findings based on the importance and satisfaction ratings for all job variables within the four groups of aspects was measured on a 5-point scale ranging from very dissatisfied to very satisfied. Additionally, data was analyzed to indicate the levels

of turnover and employee willingness to seek jobs abroad. Such analysis showed that analyzing job satisfaction as a function of the four groups of job aspects, (economic, psychological, training and development and social), revealed that more than 50% of respondents are satisfied with their current jobs; however that figure does not necessarily reflect the strongest measure on which to base conclusions regarding the level of job satisfaction, as it does not directly translate the components of job satisfaction. Thus, further analysis of the four categories and the several facets showed that 15 job factors impact employee satisfaction, which the respondents were asked to assess, and rate based on its importance to their satisfaction. The results showed that the majority of the respondents ranked recognition on work they do and access to new technologies as the two most important factors contributing to their job satisfaction. Good working environment and training and development were equally ranked as the next most important factors. Monetary rewards were listed further down the list, with salary ranked as the fifth most important factor. Psychological aspects such as regular feedback on performance and opportunity to contribute to business goals, and job security were rated as the least important factors. Hence, it is clear that ICT professionals demand more from work recognition, access to new technologies and high training than they demand from monetary rewards.

The overall satisfaction with social aspects was the highest among the other groups of job aspects. The respondents were most satisfied with their working relations with their direct managers; however, their view of the level of cooperation among the different departments in their organization was less favorable with only 34% indicating positive interdepartmental cooperation. With respect to psychological aspects, on average, approximately 67% of the respondents were satisfied with all psychological job aspects. The only exception was the satisfaction with the time they had away from work for their personal lives; only 25% of respondents were satisfied with this aspect, which were mainly employed in governmental organizations. As for training and development, although respondents ranked training and development as the second most important group of aspects, unfortunately, the overall average showed that employees were dissatisfied with the amount of training they received. Furthermore, they had a negative perception on the opportunity they had for improvement and whether they had a clear career path. Finally, with respect to the economic aspects, it received the lowest satisfaction rating among the four groups of aspects. The majority of non-public sector respondents have clearly stated that the level of salaries among Egyptian ICT professionals has rapidly increased over the past couple of years, due to the aggressive competition. Multinationals were aggressively penetrating the market with high salaries and better offers for packages. This further initiated the increase in overall salaries. They also stated that they believed that they were paid relatively higher, when compared to other sectors. However, they felt that their salaries did not fully pay off their skills and efforts, when compared to other markets. However, when comparing their salaries to worldwide levels, employees found themselves extremely underpaid; therefore, the dissatisfaction with economic variables was the highest among ICT professionals employed in public sector and governmental institutions.

CONCLUSION AND RECOMMENDATIONS

The findings of the study indicated that empirical evidence shows that a gap exists between the levels of satisfaction of respondents with working in the ICT sector in general, versus their satisfaction working in the ICT sector in Egypt; the orientation of companies towards sales of products and services leading to salaries of employees being directly linked to sales quotas indirectly impacts other professionals who are more technical and do not receive any credibility and are not compensated on sales volumes; the lack of an infrastructure for the development of ICT professionals leads to their poor development and that is due to factors such as high cost barriers, taxation, low technological access, and inefficient systems; the number of ICT professionals trained annually still remains low compared to market needs and the training

provided is not sufficient; managers as a group are the least satisfied whereas junior staff are the most satisfied; the rapidly increasing demand for ICT professionals and the highly competitive labor market associated with the massive growth of the sector, has been moving around employees across jobs.

To conclude, contrary to the expected results, the majority of respondents stated that they were satisfied with their current jobs with 52% of the sample satisfied, 26% neutral about their jobs and only 22% stating that they are dissatisfied. However, the results have clearly indicated that the majority of respondents, 71%, are willing to seek job opportunities abroad where they will receive higher training levels, and would have a clear and challenging career path. The findings of the study imply that the overall level of job satisfaction among ICT professionals in Egypt was to a great extent, surprising to the study team since the level of satisfaction was expected to be lower than actually indicated. However, there still remains the problem of skilled ICT brains being drained to job opportunities abroad, where they get the opportunity of advancement and career development because their current job satisfaction levels does not fully compensate for all their needs. However, it is important to note that the reason they travel is not that they are generally dissatisfied, instead, it is that they need to find the job that provides them with a clear career path, provides a chance to grow, and exposes them to advanced technologies. Therefore, it can be concluded that these job aspects are the key motivational factors for retaining Egyptian ICT professionals.

REFERENCES

- Callahan, Robert E., Patrick Fleenor and Harry R. Knudson (1986). *Understanding Organizational Behavior: A Managerial Viewpoint*. A Bell and Howell Co.
- Egypt Information and Communications Technologies Dashboard. (September 2000). US-Egypt Presidents' Council. [On-line] <http://www.us-egypt.org>
- Elamrani, Issandr (2000). "Wanted High Tech Help: Are Egypt's IT Human Resources Up To Snuff?" *AmCham's Business Monthly*. [On-line] <http://us-egypt.org/uptosnuff.html>
- Hamroush, H. and Hend El Sineity (2000). *Info Tech Sector – Status and Opportunities*. LEADIM US and FCS International Marketing Insights
- The Information Technology Landscape in Egypt (2000). [On-line] <http://www.american.edu/carmel>
- Johns, Gary. (1988). *Organizational Behavior: Understanding Life at Work*. Scott Foreman and Company, 2nd ed.
- Lincoln, James R. and Arne L. Kalleberg (1990). *Culture, Control, and Commitment*. Cambridge University Press
- Maister, David H. (1997). *Managing the Professional Service Firm*. First Free Press Paperbacks Edition
- Middlemist, D and Michael A. Hit (1988). *Organizational Behavior: Managerial Strategies for Performance*. West Publishing Company.
- Natarjan, Hema. "Job Satisfaction in Information Technology Era" *The Hindu*, May 2000. [On-line] <http://www.indoaserver.com>
- Robbins, Stephen P. (1989). *Organizational Behavior*. Prentice Hall Inc., 8th ed.

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