THE COMPETITIVE DISADVANTAGE OF SMALL BUSINESSES OF TWENTY FIRST CENTURY

Sanjib Chowdhury, University of Tennessee at Martin
John Overby, University of Tennessee at Martin

ABSTRACT

For several years the U.S. economy is enjoying an unprecedented growth. Many believe that the current economic growth is partly due to the demand and growth of information technology. Small businesses, especially the IT based small businesses, one where the name of the game is continuous innovation, are heavily dependent on their high-tech work force. Although necessary for small business growth, this phenomenon is creating new environmental threats. Due to the increasing international orientation of the IT workforce, these businesses are having to deal more with international human resources issues than ever before. This paper summarizes the specific problems faced by small high tech businesses regarding international human resources.

As Al Gore puts it, 60 percent of new jobs will require advanced technological skills. Bill Bradley says school improvement is one thing we need to lead in the 21-st century. George W. Bush demands reform because our new economy requires higher skills." NYT

INTRODUCTION

For several years the U.S. economy has enjoyed an unprecedented growth. Many believe that tile current economic growth is partly due to the demand and growth of information technology (Edwards, 1999). Since the early days of information technology, the US economy has been riding the information technology horse to its success. However, according to Edwards and many others, the proper ride is still under development. One of the major elements for continuation of this success is an adequate supply of a highly educated and technically skilled work force. Lacking the adequate supply of such a workforce, the U.S. economy is looking for ways to access external supply.

Small businesses. especially the IT based small businesses, where the name of the game is continuous innovation, are also dependent on their high-tech work force. Although necessary for small business growth, this phenomenon is creating new environmental threats. More than ever these businesses are having to compete head-on with their larger counterparts to attract and retain both domestic and foreign IT professionals. Due to the increasing international orientation of the IT workforce, these businesses are dealing with international human resources issues more than ever before. Thus, these businesses are having to deal more with laws of a federal immigration agency that seem to favor larger businesses.

This paper provides an understanding of the high tech small business environment from the perspective of the supply and demand of international IT professionals. To do so, it discusses the need for international IT professionals for small businesses. Specifically, it explains the new challenges faced by IT based small businesses.

ECONOMIC AND POLITICAL ASPECTS OF IT ENVIRONMENT

A recent article by U.S. Department of Commerce (1999) reports an extraordinary increase in productivity by IT industry. According to this, about 35 percent of the nation's real economy is the contribution of IT- producing industries. Also, in 1997, the decreasing price of IT-products/services contributed a 0.7 percent point decrease in inflation. During 1990 through 1997. IT-producing industries experienced a 10.4 percent average annual growth in value added per worker. which is significantly higher than that of non IT- producing industries. According to the Department of Commerce, by year 2006, about half of the U.S. workers will work for either IT producer or intense user. This extraordinary growth in IT industries not only did help bring the inflation down, but it also contributed to an enormous source of employment.

Recognizing the need for the growth of IT industry and its importance to keep the economic leadership, the U.S. government is keen to allow temporary work visas to the best and brightest foreign IT professionals. In 1998, U.S. congress passed legislation to increase the number of temporary work visas for skilled professionals from 65,000 to 115,000 for the years 1999. As this additional inflow turned out to be negligible compared to growing demand, Congress is looking into further increasing the quota of such visas. In addition, the U.S. government is pursuing ways to increase domestic supply of IT professionals. A portion of the fee received by the Immigration and Naturalization Services from HIB applicants is to be used by the government for boosting domestic IT training. Furthermore, in January 1998, the White House has announced a $20 million federal initiative to train and quickly increase the supply of domestic computer programmers (Reynolds, 1998).

These new economic and political considerations have important implications on small businesses, especially small IT based businesses. Consequently. how do small IT based businesses fit into considerations such as international HR and INS laws? Specifically, what are the potential new threats, if any, faced by, today's IT based small businesses? Answers to all these questions are important for researchers and practitioners of small businesses and the following sections are dedicated to that task.

SMALL IT BUSINESSES AND U.S. ECONOMY

Small businesses are important contributors to the U. S. economy. Small firms account for a considerable portion of the gross national product in the United States. According to Almus and Nerlinger (1999), small high-tech businesses are growing significantly faster than small non-high tech businesses. A small IT business is defined here as a SBA categorized small business whose primary production is information technology and/or who primarily uses information technology for internal process. These small IT businesses not only contribute to the growing U.S. economy, but many of them are also capable of becoming future giants. According to a 1999 report by the SBA Office of Advocacy, small businesses, besides information technology producing firms, are increasingly adopting electronic commerce as a new way of doing business. According to a report 9 by Small Business Economic Trends, a record 34% report that it is hard to fill job openings. A record 24% report that finding qualified labor is their most important business problem.

With the phenomenal growth of information technology industry in the U. S., the balance between supply and demand for people with IT know-how has suffered tremendously. While small businesses enjoyed increasing demand for IT outputs, they suffer from the extreme shortage of a "led workforce. Although U.S. universities and other educational institutes have geared up their output of IT trained people, this increase has not been sufficient to reduce the increasing gap between the supply and demand of IT professionals. Moreover, the increase in demand for IT professionals is not at all a temporary phenomenon; IT spending by U.S. companies has continually risen since 1992 (Business Week- 1999) and is expected to rise in the future. This is a growing challenge for IT businesses. and for small IT businesses this challenge is especially threatening.

IT Human Resource Need and INS

Currently, IT professionals, especially those that are trained in the U.S. are becoming increasingly expensive for organizations. Consequently. organizations, both large and small, looking for IT professionals are turning to sources outside the border. Recognizing the need for increased IT productivity to maintain global leadership, the U.S. government has made a provision to bring professionally skilled human resources from abroad in the form of HIB visas. HIB visas are offered to professionally skilled workers for working in U.S. However, this visa is only valid for a temporary stay with a maximum limit of six years. Generally, U.S. employers file petition for HIB visas for potential professionally qualified employees. Upon approval Ln, the INS (takes about 2 months), these employees can start working.

Immigration and Naturalization Services (INS). a U.S. federal agency, is responsible for making policies regarding granting HIB visas in addition to other types of visas. In their effort to keep immigration in control, INS policy requires extensive documentation from U.S. employers for granting H I B visas. Furthermore, INS has been limited by Congress to the number (quota) of HIB visas to be issued per year. However, this quota gets exhausted half way through every year. This has been the case even after an increase in the quota in 1999. Obviously, the IT growth in the U.S. is surpassing the expected demand for IT professionals.

Hence, the task of attracting and retaining IT professionals is increasingly becoming a serious problem for most organizations that produce and use IT. Specific problems are in the form of increased ~N ages/salaries for IT professionals, increased competition for U.S. educated IT professionals, limited number of foreign IT professionals, and complicated process of hiring foreign IT professionals. Although these problems are common to all IT organizations, small IT businesses are worse affected by them.

Due to their size, lack of experience, and track record, small businesses in particular are having more difficult-,, resolving these issues. It is the inherent nature of small businesses that makes them more vulnerable to these problems. First, due to the need for continuous innovation, it is more important for small businesses to maintain people that can keep innovating. Second, due to the size of their resources, small businesses are less equipped to handle an international workforce than their larger counterparts. Finally, due to their size and short track record, it would be harder for them to convince INS regarding their ability to sustain foreign workers.

Need for Continuous Innovation and Small Business Problem

Many researchers have recognized the need for continuous innovation as the name of the game in the new economy dominated by information technology (Drucker, 1998, Miles, Snow, Mathews, Miles, & Coleman, 1997: Miles, Miles, Perrone, & Edvinsson, 1998). Moreover. the inevitable challenges that exist at the core of entrepreneurial small businesses are the challenges of growth, innovation and risk. Hence, in today's environment small businesses must emphasize innovation to achieve above average growth.

For new firms where growth is an important performance indicator, production and/or utilization of IT seems to provide an advantage. In other words, new IT Finns achieve, on average, higher growth rates than non-IT based new firms (Almus and Nerlinger. 1999). Also, small businesses that are innovative found to be better performing than those that are not (Sterlacchini. 1999). So, in today's environment the importance of information technology and innovativeness for small business success is evident. A recent report by the SBA suggests that. by recognizing the environmental demand, successful small businesses are becoming increasingly innovative. According to the 1999 report by SBA's Office of Advocacy (1999). small businesses produce twice as many product innovations and other significant innovations per employee as large businesses. Consequently, since 199 1. the number of high tech employees is increasing in small businesses.

More than ever before, small businesses looking for continuous innovation, especially the IT based small businesses, are having to attract and retain an increasing number of high tech professionals. Hence, small IT businesses are competing head on with their larger counterpart for high tech professionals. With limited resources (which is usually the case for small businesses), small businesses face tough challenges from large firms in their pursuit to attract and retain high tech professionals. Usually, small firms lose to their larger counterparts in hiring high tech graduates from top U.S. universities that ask for salaries that small businesses cannot afford. Also, high tech graduates from top schools do not see a lucrative career development path with small businesses. Thus, for small IT businesses most domestic hires are from third tier schools that require extra training compared to those that are from top tier schools. Moreover, small businesses are more likely to lose to their larger counterpart when it comes to hiring exprienced employees. Consequently, many IT professionals get their initial training in small businesses before finding lucrative jobs in larger businesses.

There are other avenues for businesses to deal with the extraordinary IT growth. One way is to develop strategic alliance with domestic or foreign IT companies. Small businesses could get their IT job done through an IT based alliance partner. However,, this might jeopardize the internal innovation and extraordinary profit potential. Another option available for small businesses is to get contracting companies (also called job shops or body shops) to supply them with needed IT professionals. However, these companies target larger businesses first, as they can get a better bargain from larger businesses. In addition, these companies are considered the most frequent abusers of the temporary work visas (Cole-Gomolski, 1998). Finally, small businesses can trv to perform their own hiring of foreign IT professionals on HIB (temporary work) visas. Although there are many "happy-to-be here" foreign high-tech talents ready to come to U.S. (Cole-Gomolski, 1998), small businesses are losing to their larger counterparts in capitalizing from this resource. Compared to large businesses, small businesses do not have the experience with INS, nor do they have the experience of handling foreign professionals.

Need for Handling International Workforce and Small Business Problem

The advances in information technology have accorded opportunities for smaller firms to emerge as multinational. However, traditionally small businesses do not have a long track record of being international. This creates problems in handling an international workforce. These small IT businesses may face problems in many specific areas, such as: Selection. Training, Compensation, National culture.

Selection of a foreign national as an employee for a domestic assignment is a critical decision. To choose the best employee for the job, management should emphasize cultural sensitivity as a selection criterion. Also, for a company trying to hire a foreign national, it is important that it has the capability to properly screen candidates' foreign credentials. Without the understanding of cultural backgrounds of different foreign candidates, a proper comparison and selection are not possible.

The assumptions that people everywhere respond in similar fashion to the same images, symbols. and slogans have hurt U.S. companies. Cross-cultural training sensitizes candidates for international assignment to the local culture, customs, language, tax laws, and government. Firms can use compensation packages to enhance the effectiveness of expatriate assignments. However, compensation policies can create conflict if locals compare their pay packages to the expatriate's and conclude that they arc being treated unfairly.

Companies operating in multiple countries need to worry not only about meeting the special needs of expatriate employees and enhancing their performance, but also about the design and implementation of HRM programs in diverse crosscultural settings. In many countries, reliance on U.S., or Western, managerial practices are likely to clash with deeply ingrained norms and values. For example, the open-door style of management, which works well in a culture that readily accepts questioning of authority, will probably not work "here such behavior is considered unacceptable.

The globalization of industry raises numerous EEO issues, some of which the U.S. courts have addressed and others of which they have not. Several texts devoted solely to employment law do not deal explicitly with international issues, indicating that this is not a well-developed area of employment law.

It is generally recognized that there are five dimensions of national culture. These major dimensions are: Power distance, Individualism. Uncertainty avoidance, Masculinity/femininity and Long-term/short-term orientation. Understanding these dimensions are crucial for managing a foreign workforce. Overall, the effectiveness of an international HRM practice depends on how well it matches a culture's value system.

Approval from INS

The federal agency, Immigration and Naturalization Services (INS) has set out several laws that monitor the influx of foreign workers in U.S. Recognizing the extensive need for IT professionals, the HIB visa was created in 1990. Since then the INS has modified it many times and added several new documentation requirements for granting HIB status. If filed properly, on average it takes about two months and $5000 (application fee and preparer fee) for processing an HIB application. The employer can either use an attorney or try to prepare the petition himself/herself.. However, improper filing of the petition may result in considerable delay or sometimes denial of approval. Therefore, as small businesses generally lack experience with INS, they must employ an immigration attorney to file a petition. This. although assures proper filing of the petition, might increase the time to prepare the petition. Large businesses that hire foreign IT professionals are experienced and efficient in preparing petitions themselves. With a limited number of HIBs, this delay puts small businesses at a disadvantage.

With a limited availability of HIBs, IT companies with extensive resources are trying innovative ways to beat others competing for this labor pool. Every year INS starts excepting petitions in October, and often large IT companies recruit foreign IT professional a few months before October and file a large number of petitions immediately when INS starts accepting petitions. Often these businesses apply for more HIBs than they actually hire, and soon after getting the desired number of approvals, they withdraw other petitions. Competitive strategies like this cannot be matched by small businesses with limited resources.

Finally, in its pursuit to control immigration, INS requires that the petitioning company provide proof of their authenticity and capability to manage an international workforce. Most of the requirements are biased in favor of large businesses. According to the National Immigration Services, an internet law firm exclusively practicing U.S. immigration law for a global clientele, INS requires that the employer keep a few considerations in mind. -The foreign national must be paid the same or more than other workers in the same job. The Department of Labor wants to make sure that U.S. employers are not exploiting foreign workers by paying them less than their American coworkers. The company must pay a $500.00 scholarship fee as part of the HIB application. Congress established this fee as a way to fund scholarships to encourage U.S. students to study the sciences. The company cannot seek reimbursement of this fee from the applicant. The company will have to provide notice to its other employees of the salary that it is paying the HIB applicant through posting a notice at the workplace or by giving it to a union representative. The company will have to maintain a publicly accessible file that details how the applicant's salary was derived. The file will also record how public notice of the labor condition application was provided to other employees. The company will also need to update this file whenever the HIB employee receives a change in his salary. During the course of the HIB foreign national's employment, if the HIB employee transfers to a different work site, the employer may need to file a new HIB application with the INS. This is to provide notice to the INS of a -material change." While the company has the right to terminate the HIB foreign national in accordance with the employment laws of its state, the company will be responsible for paying for the foreign national's return flight home."(National Immigration Services, 2000). All these require resources that favor larger businesses.

DISCUSSION

Globalization is being accelerated by at least five major factors. These consist of. movement to market based economics, continuing privatization of large state owned companies, continued removal of trade barriers, constant telecommunications/technology advances. and a usual slow growth in mature markets. As globalization continues, organizations are experiencing the importance of telecommunication and information technology. This, in turn, is increasing global competition for a global labor pool of IT professionals and a need to create and manage worldivide teams.

With the IT industry being knowledgeintensive, it presented a need for IT organizations to focus on their human resources. HR should be focused upon to build the organization and for the organization to continually survive the global competitions in the inputs and outputs markets. At least three of the five global forces are human resources issues for all IT organizations.

First is the increasing competition in a global labor pool and the INS/immigration quotas and the associates problems already discussed. As the globalization of the labor pool continues, the recruitment process will become even more complex. Recently the German Chancellor, (Gerhard Schroeder) requested and received special legislation from the government to immigrate high-tech foreign professionals (Islam, 2000).

A second global factor that is a human resources issue is the need for organization to remain skilled as telecommunications/technology advances continue to grow and also increase the rates of change. Employees within knowledge-intensive organizations will have to be continually trained. With the increasing dependencies of IT organizations having to hire from the global pool, then a U.S. employer only being allowed to employ on HIB visa for six years, will result in a large training investment being exported to the native country of the employee.

Especially in the larger IT organizations, the human resource function will be responsible for creating and managing worldwide teams. Telecommunications/technology is providing the platform for organizations to construct virtual offices of most any configuration desired. Virtual offices allow employees to work as independent individuals or as a member of a project team though faced with the special problems of spatial distance and time differences.

It is difficult enough for an organization to create and manage teams when the team is at the same location and the group members are of a similar cultural and demographic background, much less when the team is globally diversified culturally and geographically.

Many organizations, both large and small, are being criticized for paying the HIB visa employees lower wages than their American counterparts. (Cole-Gomolski, 1998) Recent research into the wages being paid indicates that the global labor pool pressures for forcing wages to continually increase in the U.S. (Parks, 1998) The situation for the small IT organizations can only get worse, especially, with the under-capitalization found in most American small businesses.

A daunting task that the small IT organizations in the global environments will be facing is having to remain competitive with larger IT organizations for a temporary labor pool which is going to be an increasingly highly culturally-diverse employee group. Small IT organizations have a much smaller capital base from which to pay for the expenses of immigration, continual training, the latest IT equipment and the necessary cultural adjustments of their immigrated employees. The issues of immigration and cultural adjustment are spheres where a few large IT organizations would possess the expertise required to deal with the issues, much less a small IT organization, Thus for these IT organizations, the expertise would have to be acquired from an external source and would require the organization to incur considerable expenses.

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