

## Creating Value and Enhancing Retention through Employee Development

### The Sun Microsystems Experience

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New Beginnings Career and College Guidance and Sun Microsystems

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## Creating Value and Enhancing Retention through Employee Development

Why should I stay with your organization? We hear this challenge frequently as human resource professionals. This question cuts to the heart of the connection between employees and organizations. It is a strategic issue for the organization as well as a point of major concern for the individual. Today it is the knowledge possessed by employees that represents a key source of sustainable competitive advantage for organizations. Retaining and building that knowledge is one of the major contributions that we can make as human resource professionals.

Answering the opening question is not easy for, as Cisco's President and CEO John Chambers puts it, "you have to change your company almost every two years" (Brandt, 1998). Therefore, we are asking our employees to stay connected while the wheel of our companies turns faster. It is not surprising that sometimes our employees spin out like tiny satellites from a furiously rotating sun. This paper is about an approach to help strengthen the connection between employees and the organization. It is presented in the form of a case study of Career Services at Sun Microsystems.

In the paper we first provide background on human resource work at Sun, then describe the evolution of Career Services. The results of this study are presented in terms of outcomes and measurements addressing activity levels, reach into the employee population, outcomes of the work and approaches to prediction. We conclude with links to related research and summarize lessons learned.

### Background

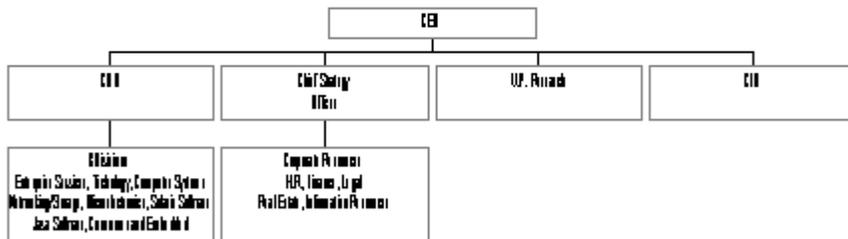
"Kick butt and have fun" is Sun CEO, Scott McNealy's message to the employees. Sun's culture is about having fun while employees work hard at innovation and creating the future. Sun Microsystems, Inc. global headquarters are in Palo Alto, California linking to over 26,000 employees in 55 countries. Founded in 1982, Sun is a global leader in enterprise network computing with over \$9 billion in revenues. While Sun's name is synonymous with Java, its products range from workstations and servers to software services.

More than a decade ago, Sun copyrighted its slogan "The Network is the Computer", a vision which is now ubiquitous. Sun provides enterprise wide solutions to businesses enabling them to leverage information resources in a stable operating system environment. This is an area where competition for employee talent is fierce. The company was recently reorganized into product-based divisions, which are independent yet

aligned (Exhibit 1).

## Exhibit 1

# Sun Organization



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Supporting these divisions are core Human Resources (HR), Finance, Legal and IT services provided by a Corporate Resources group. The role of HR is constantly refined to add greater value to the organization and to keep up with the fast pace of change. HR at Sun has promised to deliver a competitive workforce (W), competitive organization (O) and a competitive workplace (W), commonly referred to as the WOW strategy within the company. HR provides an extensive range of services, from the conventional compensation and benefits to fitness programs, and, to innovative programs like Career Services as profiled here. Measurement of the outcomes of services and their refinement is an important element of the Sun HR culture. In the past three years, Sun has begun to strongly emphasize the importance of measurement in tracking performance in all aspects of the business. All projects require an estimated return on investment in advance. Sun's profit sharing plan for all U.S. employees is based upon each unit meeting its measured goals and on the organization as a whole achieving measured performance targets. Examples of measurements that are tracked include external customer satisfaction, on-time delivery of products and internal employee perceptions. This comprehensive approach to measurement is also reflected in the current study of the impact of Career Services on the organization.

In the years 1996-98, while the high tech industry is believed to have experienced annual employee turnover of 15% and higher, Sun maintained single digit voluntary turnover, in spite of the workforce growing by 20% worldwide each year. Sun made an investment in understanding what attracts employees to the organization and what will retain them. Among the top contributors to attraction and retention were Work Challenge, Career Development, Financial Opportunity, Work Variety, and Organizational Commitment to People. These factors are consistent with those discovered by industry wide surveys of technology companies (for example William M. Mercer, 1997, Saratoga Institute, 1997). At Sun, the importance of Career Development was reinforced by a number of satisfaction surveys and by comments from employees. In an environment of rapid change and little hand holding, it is a major challenge to provide a middle ground between defined career paths and "figure it out for yourself" development. Working with the Career Action Center, a Cupertino based

non-profit organization, Sun developed an approach to support employees in becoming career self-reliant and identified measurable benefits to the organization.

### How Career Services at Sun Microsystems Developed

A great strength of Sun's approach to employee development is long term commitment to continuous evolution and improvement in the process. Within Sun, a primary support mechanism for employees is called Career Services. Counselors from the Career Action Center provide career counseling as a benefit to employees. The Career Action Center provides project management for the counselors and Sun's manager of career services provides the primary link to Sun's organizational needs. The current approach began with a career center opened in 1991. The initial focus was on the manufacturing area and the challenge was helping employees deal proactively with redeployment. The center provided career counseling for employees built around the concept of employees taking "primary ownership" of their career direction, with support by the organization.

This led naturally to the next evolution. Within 18 months the focus of the center and its counseling moved to on-going career management provided as a benefit to all employees. At this point internal reporting responsibility for the center moved to the Human Resources department. The Career Action Center continued to be responsible for delivering the services and guiding content direction. The reach of the counselors was broadened with services being offered at multiple Sun locations around Silicon Valley. Primary activities shifted from items such as resume creation to supporting individuals explore their career aspirations. This included expressing these aspirations in development plans aided by assessment instruments and workshops. The evolution of Career Services continued with an expansion in the number of counseling sessions available as a benefit to employees from two to four; inclusion of telephone counseling to reach a distributed population; dispersion of five counselors to separate locations at different Silicon Valley facilities and one on the East Coast, and increased emphasis on tracking both the ability of the services to reach the Sun population and on measuring outcomes. Today, Career Services is designed to help employees make well informed career choices and match their aspirations to opportunities within Sun. The primary delivery approach is individual career counseling coupled with supportive resources and events such as 1-2 hour group presentations tailored to employee needs.

Employees are informed about Career Services through a variety of channels. These include: Sun's web site, career talks, e-mail, new hire orientation, presence at employee events, locating the counselors' offices close to high traffic areas, and by the counselors linking closely with the local Human Resources representative. According to Carol Guterman, Sun's manager of career services, employees seek services that are "comfortable to use, confidential and accessible". The current arrangement addresses these elements.

### Outcomes and Measurement

In examining the value of the services to the organization, key questions that arise are their ability to address all segments of the employee population and their impact on organizational success. Much anecdotal information was gathered previously from individual employees strongly supporting the value of the services in addressing individual needs. However, there was little quantitative information available about the impact on the organization, since there is a complex chain linking work in this area to business performance. We developed this study to explore this linkage, looking primarily at the impact of Career Services, but also examining the overall impact of human resource spending.

The overall purpose was to look at connections between employee alignment with fulfilling work, employee satisfaction, retention and business performance. The components of the study included analyzing data characterizing business unit financial performance; human resource demographics, resources committed and transfers and promotions; Career Services activity; employee satisfaction; terminations and retention; and links among these elements. The data covers the time 1995 through 1997 with primary emphasis on a

13-month period from September 1996 through September 1997. Over the 13-month period studied, 91% of the one-on-one counseling provided by Career Services occurred in a face-to-face setting and 9% was by telephone. The analysis addressed six separate units in Sun, that at the time of data collection accounted for about 90% of Sun's workforce, which averaged 18,000 people worldwide and 12,000 people in the U.S.

The six operating units in Sun span a broad range of types of business, from service, through state-of-the-art semiconductor design, from hardware development to leading edge software products. The units contain examples of a full range of functional capabilities including research and development, sales, marketing, production and support functions. As such they are representative of leading edge, high technology organizations today. The results of the analysis are as follows.

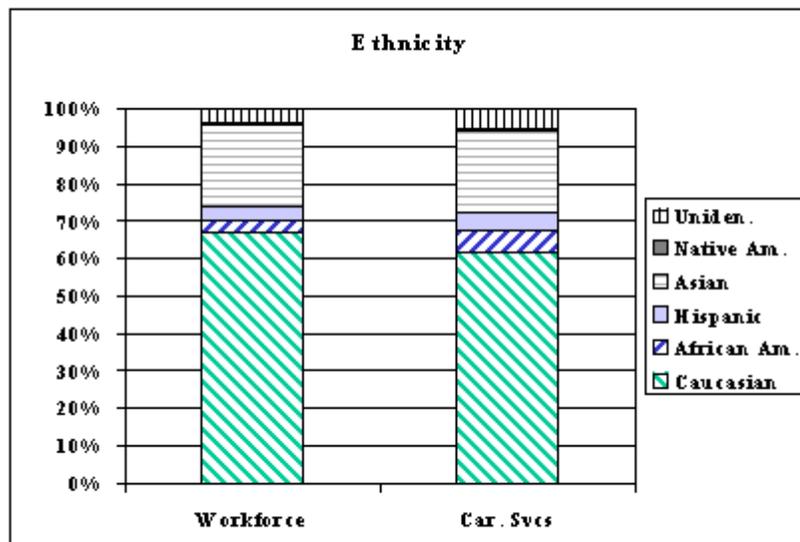
### Activity level

During the 13-month period studied in detail, 1033 people used Career Services. There were 2138 appointments of which 1033 were initial appointments and 1105 were follow up. This continued use of the service beyond the first appointment indicated the value individuals placed in the service. Ninety-three percent of the appointments were made by employees seeking career counseling for development purposes, with only three percent for employees on a termination path. The remaining 4% were interns. Use by interns underlines the appeal to the population about to enter the workforce. In the six units studied usage varied from 6% to 11% of employees in each unit, a high usage compared to benefits such as employee assistance programs. Employees who were transferred made greater use of the service than the general population. A number of these employees would likely have left Sun in the absence of support to aid them in finding suitable transfer and development opportunities. Employees who were promoted used the service less than the general population, as promotions tend to be driven more by the organization than the individual.

### Reaching the Employee Population

A critical question in exploring the value of an approach such as Career Services is how effective it is in reaching the employee population. There are many dimensions to employee demographics including ethnicity, gender, years of service, age, position and function. With this in mind, we compared the population using Career Services with the overall population and in some cases with those people leaving. Exhibit 2 summarizes the ethnicity of employees using Career Services in comparison to the overall population.

### **Exhibit 2**

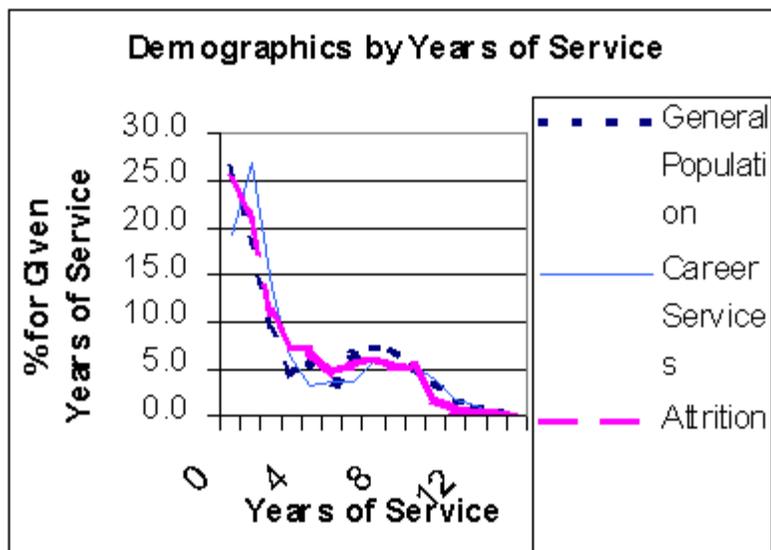


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While, as expected, the Caucasian population is the greatest user of Career Services at 62%, there is a higher usage of Career Services by other ethnic groups at 38% of the total, compared with their constituting only 33% of Sun's workforce. Thus, we are able to conclude that Career Services is a valued resource used by ethnic minorities. This is particularly important for Sun given the growing diversity of its workforce. It also underlines the ability of the career counseling process to reach ethnic minorities, even though the counselor population was exclusively Caucasian. In terms of usage by gender, female clients accounted for 59% of all appointments, significantly higher than the overall population, which is about 40% female. This underlines the effectiveness of Career Services in supporting the female population.

We observed a close match between the age distribution of the population using Career Services and the age distribution of the overall population, again confirming the ability to reach into the employee population representatively. Particularly encouraging was slightly higher use of the service by employees who are younger than 35, as this group is one of the most vulnerable from an attrition perspective. A similar pattern is evident when looking at years of service.



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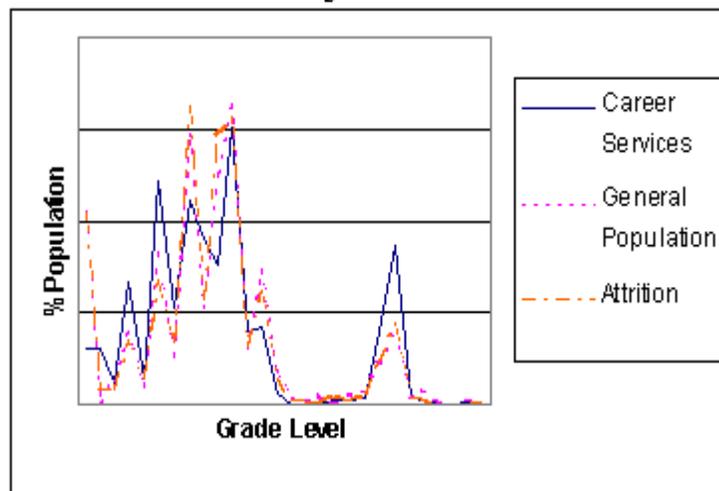
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**Exhibit 3**

Exhibit 3 summarizes the general population by years of service, the population using Career Services and the population leaving. For this latter group voluntary attrition accounted for over 90% of all those leaving during the time studied. The attrition profile closely tracks that of the overall population. The overall population and the profile of those leaving show a high proportion of employees with up to three years of service, underlining the importance of addressing the needs of this group for retention purposes. When we looked at the number of employees leaving as a fraction of the employee population having a given number of years of service, we found the highest attrition rate in the first five years, peaking at about five years. This is a particularly vulnerable point from an attrition perspective and it underlines the importance of Career Services support. As can be seen from Exhibit 3, Career Services was able to support employees at all stages in their careers with particular strength in the early years. This is also true when looking from the perspective of grade level as shown in Exhibit 4.

**Exhibit 4**

## Distribution by Grade Level



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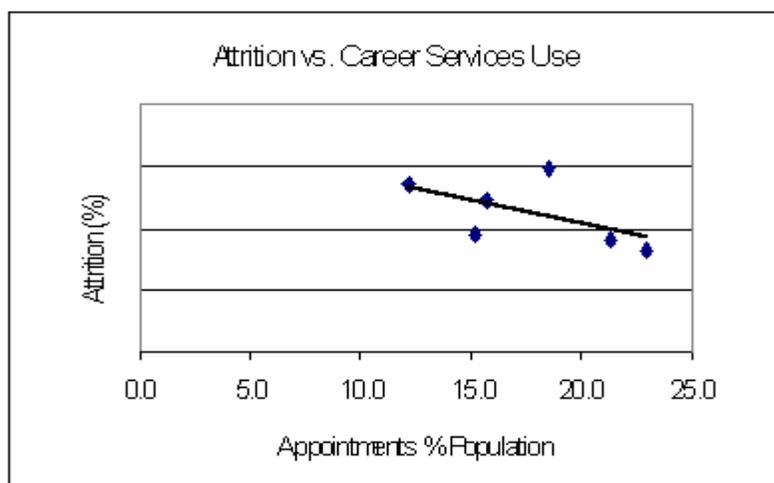
This shows the overall population by grade level, the population leaving and the population using Career Services. People at many levels in the organization use Career Services. This includes use by non-exempt personnel, the segment at the right-hand side, usage by the general exempt employee population, the segment at the left-hand side, and usage by senior level employees and managers, the segment close to the middle. Grade level increases from left to right for the exempt and the non-exempt employees. Career Services is reaching broadly into the workforce and it is addressing employee groups that the organization considers critical for future success. The population using Career Services matches the overall population well, which also closely tracks attrition demographics.

### Outcomes and Benefits

Having established the ability of Career Services to reach the employee population, the question of impact now surfaces. Strong positive impact on employees is confirmed by anecdotal and qualitative comments collected after counseling sessions. How does this translate into organizational performance? One directly measurable element is attrition level. This is expected to reflect employee alignment with fulfilling work, satisfaction and ultimately business performance. By examining results of employee satisfaction surveys and comparing these with investments in human resources (including Career Services), we identified a significant increase in career opportunity satisfaction with increased investment in human resources.

We also examined the relationship between Career Services activity and attrition in each of the six operating units. Since, over the time studied, 10% of the employee population used the service we did not expect to see a significant relationship. However, we were surprised to find that there was a noticeable reduction in the attrition rate as the number of appointments with Career Services increased. This is shown in Exhibit 5 where the attrition rate in each of the six units is plotted against the number of Career Services appointments, expressed as a percentage of the employee population.

### **Exhibit 5**



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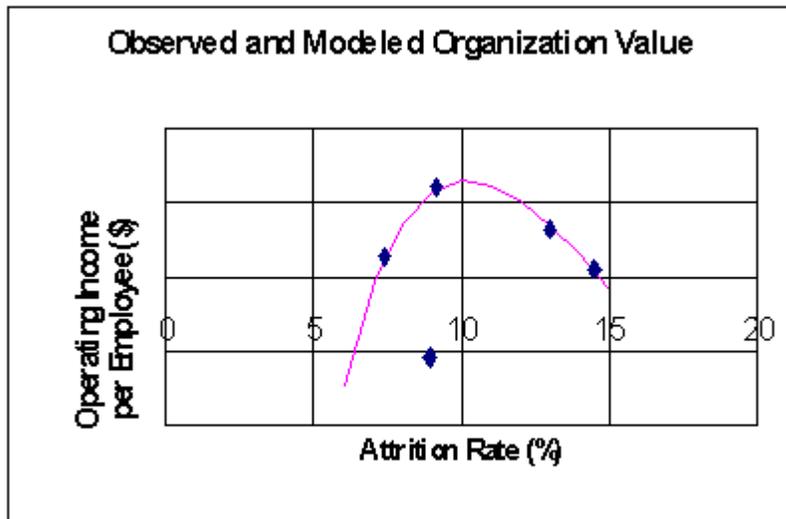
This is illustrated more directly when the attrition rate for the population using Career Services is compared with that for the overall population. In order to annualize attrition data, information for the period from September 1996 to August 1997 was examined. Over this time, 1130 people left the organization voluntarily in the six units studied in detail. For those who did not use Career Services, the attrition rate was 10%. On the other hand, for those proactively using Career Services over the same time, the attrition rate was reduced to 9%, lower by 1% than the reference group. This is true in the operating units studied where Career Services support can be leveraged into transfer opportunities for individuals. The impact is likely less in support functions with fewer alternatives for employees.

The reduction in attrition translates to significant savings for the organization. It is estimated that the cost of losing one person is at least 1 ½ times their annual salary. This includes the cost of recruiting a new person, training costs and lost productivity. The average salary at Sun during the study period was \$70,000 per year, which means the cost of attrition per person was about \$100,000. Today it is much higher. Taking the reduced attrition of 1%, and applying it to the population using Career Services of about 1000 people per year, results in an annual cost saving due to reduced attrition of about \$1 million. Furthermore for those employees in transition, use of Career Services is a cost effective means of support. This is estimated to contribute about another \$100,000 per year relative to the use of outplacement services. Since the fully loaded cost of Career Services is estimated at \$600,000 per year, the return on investment is  $(\$1,100,000/\$600,000) \times 100$ , which is equal to 183%. Here we see a clear, measurable organizational benefit to complement the many qualitative benefits that are observed. Indeed, it is only necessary for Career Services to reduce attrition by one employee every other month to fully recover the cost.

### Predictive Capability

While it is apparent that the approach to employee development offered by Career Services benefits both the organization and the individual an important question remains: Can we predict in advance, how resources committed to employee development will benefit business performance? We explored one aspect of this question, namely the linkage between human resource spending, attrition and business performance. We assume that at very low attrition levels the organization runs the risk of obsolescence and stagnation. At alternatively high attrition levels, the cost of replacement is high. Consequently, there should be an optimum attrition rate, which is likely to vary significantly by business sector and with the rate of change in each sector. Therefore we developed a preliminary mathematical model to test these thoughts (Elsdon and Warner,

1998) and compared it to the data from Sun. This is shown in Exhibit 6, which shows organizational value in the form of operating income per employee, plotted against attrition rate.

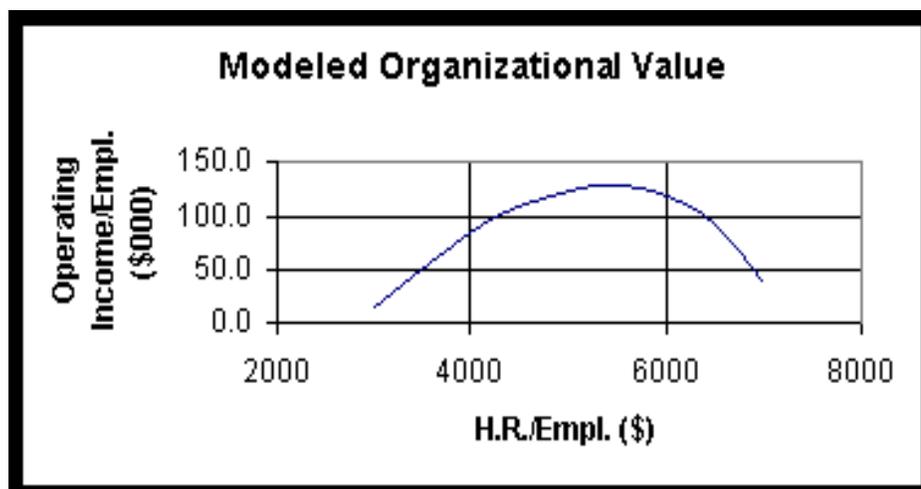


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**Exhibit 6**

The five data points are the five profit centers studied in Sun (one of the six units examined is a cost center). The solid line is a prediction from the mathematical equation, fit to the top four data points. While there is limited data, it does appear to support the likelihood of an optimum. Furthermore, the equation form represents the data points well. It was also possible using data for the fiscal years 1995-1997 in the six units, to show how attrition rate falls linearly with greater investment in Human Resources. We also used this data to investigate the relationship between Human Resource spending and business performance. This model is shown in Exhibit 7, which indicates the probable existence of an optimum human resource spending level.

**Exhibit 7**

The presence of the optimum is of interest, and worth exploring further to assess its general validity. Of equal interest is the possibility this overall approach may offer to develop quantitative predictions of optimum resource commitment. We hope to explore this further in the future. This is particularly important as the analysis in the current study showed that the impact of human resource spending on attrition level translates into potential savings in the tens of millions of dollars for the organization.

### Connection with the Experience of Others

There is limited quantitative information available on the organizational impact of career development work. Also few fundamental models describe cause/effect relationships and therefore predict the impact of given interventions. The complexity of linkages between human resource practices and business performance is reflected in the eclectic range of reference sources summarized by Elsdon and Warner (1998) and highlighted as follows. References vary from an academic to a practitioner focus, from an organizational to an individual, psychological perspective. Regardless of their foundation, there is a common theme, that this subject is important because of the scale of Human Resource commitments and the significant implications of human capital management decisions on the organization and the individual. The importance of Human Resource commitments is borne out by recent analysis of the percentage of sales devoted to people-intensive resources: research and development, sales, general and administrative expenses in eight high tech organizations including Sun, based in Silicon Valley (Elsdon and Warner, 1998). This shows investment in these people intensive resources to be one third of a total revenue base of \$120 billion. Maintaining a fulfilled and productive workforce is critical to maximizing the value of this investment.

There is support for approaches which identify best practices that can be applied broadly. However, this raises the question as to how transferable are best practices from one organization to another. How likely is it that learning from Sun's experience is of general validity? Niehaus and Swiercz (1996, pp. 61-65) group human resource practices into three categories: (1). Those in which a best practice can be identified and applied to other organizations, (2). Those which are specific to a given organization and (3). Those where the link among multiple practices in a given organization is key. Delery and Doty (1996, pp. 802-835) find the strongest support for the first category, which suggests there is value in generalizing from the impact of practices developed at a single organization. The findings from the Sun study fall into this category.

Given this conclusion, a framework developed by Kirkpatrick (Blickstein, 1996) and later extended by Phillips (1997, pp. 43-50) is useful in providing a structure for thinking about organizational impact. This approach, originally developed for the training field, incorporates five levels of measurement. We propose adding a sixth. The six levels are as follows:

- **Level 1: Reaction and Planned Action**
- Measures participant satisfaction and planned action
- **Level 2: Learning**
- Measures changes in knowledge, skills and attitude
- **Level 3: Individual Performance/Behavior**
- Measures changes in on-the-job-behavior
- **Level 4: Business Results**
- Measures business impact
- **Level 5: Return on Investment**
- Compares program benefits to costs
- **Level 6: Prediction**
- Estimates impact of resources on future performance

The work in this study focuses on levels 4 and 5 and begins to explore level 6. We suggest that increased emphasis on level 6 in the future will provide the potential for establishing sustainable competitive advantage. For it is here that proprietary approaches are possible, building on the uniqueness of a particular organization.

As Wright (1994, pp. 301-326) proposes, an organization's workforce offers sustainable advantage if it:

- Creates value
- Is difficult to replicate
- Is not readily imitated or substituted

The approach explored at Sun, and the use of predictive tools, provide means to create value by strengthening the links to individual employees, and tailoring an approach to the individual organization and its workforce. As evident from high attrition rates at many high tech organizations there is a need to strengthen connections with individual employees. For many organizations, the key to competitive survival is building the unique strengths of the workforce. This includes for example, the need for enhanced productivity in a more stable environment and rapid response to change in a dynamic environment.

### Conclusions and Lessons Learned

Based on this case study we offer the following conclusions and lessons learned:

1. Enabling employees to seek greater fulfillment in their work through person-to-person career counseling creates significant value for the organization through enhanced retention. In the example studied, return on investment was well over 100%.
2. Person-to-person career counseling creates greater workforce flexibility by enabling employees to respond rapidly to a changing environment and customer needs. In so doing, this helps retain employees who might otherwise have been lost.
3. Person-to-person career counseling provides an effective means to broadly address the needs of different segments of the employee population. For example, addressing the needs of minority groups, which are of increasing importance with the growing diversity of the workforce.
4. In supporting employees with their career development, it is important to address the different segments of the employee population and track them with appropriate metrics. Segments include those based on ethnicity, gender, years of service, age, position and function. Such profiling can help establish needs of particular groups and permit the development of appropriate support approaches. Additional metrics to track include outcomes such as transfers, promotions and attrition, employee satisfaction and qualitative measures of the impact of services on an individual.
5. Particular emphasis is required to support the retention needs of employees with five or fewer years of service, as this is a vulnerable group. This may include, for example, provision of orientation and development support and internal networking opportunities.
6. The development of predictive tools to estimate, in advance, the impact of human resources on business performance is an approach that offers the potential for developing competitive advantage. This includes, for example, identifying an optimum level of human resource investment and attrition.

This study underlines the critical importance of people as a key source of competitive advantage for the organization. For as 3Com's Chairman and CEO Eric Benhamou observes "I'm much less worried about one of our competitors stealing the designs of our latest product than I am about one of our competitors stealing one of our best minds" (Benhamou, 1998). This means a shift in mindset to a focus on employees as the key source of competitive strength rather than hard assets. This study emphasizes how employee support through person-to-person career counseling helps strengthen the connection between the individual and the organization and in so doing helps build competitive advantage. It is in profiling this impact, in understanding workforce demographics and in tailoring support accordingly that unique and sustainable competitive strength can be uncovered and expressed.

### References

Benhamou, E. (1998). Building A New Kind of Company for "The New Economy".

Keynote Address at the Career Action Center's 16<sup>th</sup> Annual Pinnacle Luncheon.

Blickstein, S. (1996). Does Training Pay Off? Across the Board, 33 (6), June, pp. 16-20.

Brandt, R.L. (1998). John Chambers and the Failure of Deregulation. Interview.

Upside, October, 1998, pp. 123-133.

Delery, J.E. and Doty D.H. (1996). Modes of Theorizing in Strategic Human Resource Management: Tests of Universalistic, Contingency, and Configurational Performance Predictions. Academy of Management Journal, 39 (4), pp. 802-835.

Elsdon R. and Warner D. (1998). Measuring the Impact of Career and Human Resource Services on Organizations. John F. Kennedy University, Orinda, California.

Mercer William M. and Pittsburgh High Technology Council. (1997). Co-Sponsored

Study: Attracting and Retaining High Technology Talent.

Niehaus, R. and Swiercz, P.M. (1996). Do HR Systems Affect the Bottom Line? We Have the Answer. Human Resource Planning, 19 (4), pp. 61-65.

Phillips, J.J. (1997). A Rational Approach to Evaluating Training Programs Including Calculating ROI. The Journal of Lending & Credit Risk Management. 79 (11), pp. 43-50.

Saratoga Institute. (1997). Retention Management, Strategies, Practices, Trends. New York: American Management Association.

Wright, P.M. et al. (1994). Human Resources and Sustained Competitive Advantage: A Resource-Based Perspective. International Journal of Human Resource Management, 5 (2), pp. 301-326.