

What does the employment future hold for disabled men and women with a successfully completed college career behind them? How can the business community utilize the skills and abilities of these individuals? New computer adaptations allow disabled persons to function as competitive and productive members of the work force. Corporations have a unique opportunity to capitalize on a newly emerging group of talented and highly motivated individuals.

The author has attempted to explore what corporations can do to assist the disabled person in job training, accommodations, and employment. This report gives examples of initiatives in general, not all of which are unique to any one company, including the author's employer.

Corporations have a unique opportunity to expand the horizons for people. They can provide accommodations for disabled employees and use their technology to develop products that enhance the quality of life for the disabled community. These activities, in turn, often benefit people without disabilities.

This chapter discusses how the private sector can help the disabled person, both in business and in life. It also discusses the need for companies to ensure that products are accessible to the disabled community.

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When Employees Become Disabled

"Where would I be without all this stuff? Possibly without my company, without the equipment and

help, probably in a rehabilitation home somewhere, shuffled off in a corner." This was the reply a young man, who had become a quadriplegic after a motorcycle accident, gave a television reporter. It points out very succinctly what companies can do for employees who are disabled.

Even though he is now a quadriplegic, he is still making valuable contributions to his company. When he first joined, he was a systems engineer. After the accident, the company retained him as a programmer and provided accommodations to enable him to accomplish his work. The accommodations included physical changes to his home and a terminal which allow him to work at home and to communicate with colleagues. Since he cannot use a keyboard, he uses a speech-recognition system instead.

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Another company gets involved immediately when one of its employees becomes severely injured and needs a long recovery period at home. It works with its medical department, the state rehabilitation agency, and other key organizations to enable the person to start working again as soon as it is medically possible through a home terminal. Not only does recovery often occur faster, but the injured individual has a chance to keep occupied during the recovery period. The program has proved so successful that the company now markets the service for a fixed fee and two other companies have adopted the model.

These two examples show what can happen when companies make the extra effort to retain employees who become disabled.

Hiring Disabled People

The service industry, too, has had its share of success with disabled employees. For many years, a national

fast-food chain has encouraged hiring mentally retarded people, with positive results.

However, an establishment does not have to be a national organization to successfully hire disabled people. There is a small restaurant in Connecticut where 60% of the employees have a learning or another mental disability. The owner is very pleased with the quality and productivity of their efforts. They earn competitive wages and stay for one to three years. When they leave, they usually find jobs with other restaurants at prevailing wages.

Providing Employment Opportunities

There are more disabled people in the work force than many employers realize. Out of 240 million people in the United States, 36 million are disabled, with 17.2 million (one in 12) of working age. Worldwide, the United Nations estimates that 500 million people have disabilities.

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Not all of these individuals were born disabled. Five out of every six became disabled during their working or retirement years from accidents or sickness.

That last statistic shatters any stereotypes that persons with disabilities are generally young people seeking jobs rather than older persons with an established work history. It also shows that employers are very likely to have employees who become disabled after they are hired.

Whether they have employees who become disabled or whether they hire disabled people, employers need to be aware of the accommodations they can provide to enable disabled employees to make the best use of their skills. If they have employees who become disabled, the benefits of providing accommodations for them are obvious. The company gets back valuable,



experienced, and still productive employees. Government retains taxpayers instead of having to provide disability payments for each disabled individual who cannot find employment.

But most of all, the people who are now disabled regain their self-esteem and some of the independence they had before becoming disabled. They are still a productive member of society, which is important to those who have worked most of their lives only to be slowed down by an accident or a debilitating disease.

When companies hire people who are disabled, they often find that such employees have performance and attendance records comparable to their non-disabled colleagues. One executive said recently, "When a snowstorm hits Colorado, I know which parking spaces will be filled first—the ones reserved for the disabled. They're here before most of the non-disabled persons." The disabled have fewer accidents, which means that they are good insurance risks, and their insurance rates do not affect Worker's Compensation rates. Disabled employees also tend to have a lower turnover rate.

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Providing Accommodations

How can corporations help disabled employees or those who become disabled? First, they can provide accommodations if they are needed to make performing tasks easier. There is a wide range of accommodations at varying costs that are available for employees with various disabilities. According to a Louis Harris survey of managers of 210 different companies, 80% rated the cost of accommodations as "not too expensive" or "not expensive at all."

Simple accommodations can assure the productivity of disabled employees. Blocks under desks so wheel-

chairs can fit under them are an example. Another is the removal of doors so wheelchairs can pass through them.

Other simple accommodations are braille or audio versions of written documents for visually impaired employees. Sign language interpreters and open captioned versions of videotapes can be provided for the hearing-impaired. Keyboard guards are available for those who have trouble handling the keyboard, such as those with cerebral palsy. (These guards enable only one key to be struck at a time.)

More sophisticated accommodations are speech synthesizers for the blind or speech impaired. Others are voice recognition systems or keyboard emulators for the upper-mobility-impaired individual.

There can be side benefits to providing accommodations for disabled employees, such as an increase in overall productivity. For example, a manager obtained an experimental voice recognition system for a technical editor who was a quadriplegic. After the system was installed, the manager found that the impaired employee had significant productivity increases—so much so that he was outperforming his ten non-impaired colleagues. As a result, he ordered another ten systems for the department.

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Management Training Programs

Companies who hire disabled people do so for two reasons, one being legislation. If they have contracts with the federal government, they cannot discriminate on the basis of religion, color, ethnic background, or handicapping condition. Of all the companies with federal contracts, 75% have hired disabled people during the past three years (65% in 1986) according to a Louis Harris survey done for the International Center

for the Disabled. In comparison, 52% of companies without federal contracts have hired disabled people in the past three years (48% in 1986).

The other factor, company policy, is even more effective and encompassing. Of those companies with a policy of hiring disabled people, 80% have hired the disabled, with 67% doing so in 1986.

When companies hire disabled people, managers are the critical link between the disabled employee and the company. The decision to hire a disabled person rests, for the most part, with the assessment of the qualifications of the applicant. It is important that managers know how to manage, train, and promote disabled employees. Appropriate management-training programs can teach them how to be a better manager to their disabled employees as well as help them to be more sensitive to their needs.

For example, written documents such as performance plans and minutes of meetings should be online or in machine-readable form for the blind so they can use speech synthesizers to "see" what's on the screen. If speech synthesizers are not used, documents should be typed for reading by an optical reader or put on an audio cassette. A sign language interpreter should be available for the hearing-impaired for meetings, if needed, or a note-taker used. If an interpreter is not available, the manager should meet with the hearing-impaired employees beforehand to discuss the agenda so they will know what will be covered. If employees have had a spinal cord injury, the manager should be aware of their special needs concerning attendant care and availability of accessible restrooms.

Whether a large corporation or a "mom and pop" store, the private sector can hire, train, and promote qualified disabled individuals. And it can be done not because of legislation or a sense of social responsibility but simply because it makes good business sense.

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Microcomputers and the Disabled Person

With accessible computers and with products that make it easier to use computers, people with disabilities can participate very effectively in the work force. Computers not only make it possible for the disabled to handle tasks, but also make tasks easier for the non-disabled. Speech recognition systems are an example. While people who cannot use keyboards find them indispensable, people who do not like to type also like them. As a result, they are used by a wide segment of the population because they make accomplishing tasks easier for everyone, disabled or not.

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When computers are made accessible to the disabled, the nondisabled user also finds them easier to use. For example, if all power switches are located in the front instead of in the back, everyone finds it easier to turn on the equipment. Another example is the capability to press two keys sequentially instead of simultaneously. This simple change helps those with a temporary disability, such as a broken arm, who cannot use both hands for the keyboard. It also benefits those who are spastic or upper-body-impaired.

Companies should be aware that new enhancements to computers may make it more difficult for the disabled to use them. For example, graphics are increasingly being used to make operating computers easier for new users. But visually impaired users who depend on speech synthesizers to read the computer display will find that their tasks are more difficult, because speech synthesizers cannot handle graphics.

That situation points out a potential problem: new technology can create difficulties for the disabled at the same time that it can make lives easier for them. How can the private sector make sure that new technology does not lock out the disabled but instead makes tasks easier for both the nondisabled and dis-

abled? Accomplishing this will take a combination of business sense and social sensitivity.

Corporations and Research Centers: A Partnership

Corporations also have a unique opportunity: they can work with universities and research laboratories to explore technologies that might benefit the disabled. Examples of such research include robotics, spinal cord stimulation by portable microprocessors, artificial vision by microprocessors and the use of expert systems strategies. Again, there is the possibility that the results of such research will benefit the population in general, not just the disabled.

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Job Braining Programs for the Disabled

When companies employ or plan to hire disabled people, effective job preparation programs can assure that jobs are designed with their special needs in mind. For example, communications needs must be considered when working with the hearing-impaired. For many hearing-impaired people, English is not the primary language; their first language is American Sign Language. They may not only need sign-language interpreters, but also have difficulty with written English, since English is not their native language.

Outside the company, training programs can be set up to train people with disabilities for jobs. In that area, companies can provide the technology and people to establish such programs.

Projects with Industry is an example of training centers. Sponsored by the federal government, its goal is to train disabled people for available jobs. As of 1984, one company had trained over 2200 disabled individuals as programmers in more than 30 training centers throughout the United States.

These programs give disabled people an opportunity to learn skills in demand in their particular geographic location. After graduation, they find jobs more quickly because they have skills that employers need.

Media Campaigns

Corporations can also do much to make the general population aware of the disabled community, not as a people with disabilities but as unique individuals with abilities.

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They can accomplish this objective through media campaigns. One popular McDonald's commercial featured two deaf teenagers, while one for Levi's highlighted an individual in a wheelchair. An IBM print advertisement spotlighting the **1984 International Games for the Disabled** commented that there was one thing that IBM's computers couldn't measure at the Games: the determination it took for those individuals to get there in the first place.

Conclusion

What is the young man mentioned in the beginning of this chapter doing now besides his job as a programmer? He didn't let his disabilities hinder him from starting three small companies in addition to his job as

a programmer. One provides transportation for disabled persons in the Maryland suburbs of Washington, D.C., a second does construction work, and a third handles a nursing registry. He is also completing his law studies at Georgetown University.

But where would he be if his company had not taken the initial step toward providing accommodations so he could continue working? What if there had been no products available to help him to use computers? This situation emphasizes the fact that technology can enhance the lives of the disabled but that only the private sector makes it available.

It is important to remember, however, that a pragmatic approach is the key in employing, training, and accommodating individuals with disabilities. As previously mentioned, providing a technology that no one can afford accomplishes nothing. Likewise, employers cannot assume that, if they spend a large amount of money on accommodations for disabled employees, they will be properly accommodated. Sometimes simpler accommodations will meet their needs better than the more expensive ones. To avoid overspending, employers should ask their disabled employees what the best accommodations to suit their needs are. For example, many hearing-impaired people do not need sign-language interpreters for meetings, and many visually impaired people do not read braille. Speech recognition systems may not be necessary for quadriplegics if they can use a mouthstick to press keys on the keyboard. The mouthstick is a simple and inexpensive accommodation, yet it can be more effective than a speech recognition system for many disabled individuals.

To repeat the beginning sentence of this chapter, corporations have a unique opportunity to expand horizons for disabled people. They can do this by providing the assistance, training, and support needed by the

disabled person. Support and assistance should not be given because the law requires it or because it's good for a corporation's public image, but because it's right for society and it's good for business.

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