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Entry-Level Employment and the Role of Technology in the Vocational Rehabilitation Process

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Abstract

Entry-level employment opportunities in sales and stock clerk occupations for people with disabilities require technology competencies to meet competitive marketplace expectations. A series of labor market surveys concludes that the business imperative for competitiveness has added a technology competency overlay to the traditional skills associated with these positions. This reality combined with the trend towards greater levels of electronic recruitment through one-stop web portals, private job web portals, and electronic job application kiosks has added a technology barrier to the very start of the employment process. As the line between accommodation and business innovation blurs, the need for application software fluency is quickly becoming an absolute competitive necessity for all applicants.

Introduction

Under the U.S. Department of Labor, the US Bureau of Labor Statistics tracks multifactor productivity data. This is defined as output per combined units of labor and capital inputs in the private sector. Multifactor productivity rose by 1.8% in 2005 over 2004 values (US Bureau of Labor, 2006). Measuring multifactor productivity growth allows the individual impacts of general economic growth due to technological change,

efficiency, and other capital investments to be quantified separate from labor productivity. In just the half decade from 2000 to 2005, data from multifactor productivity offers that Major Business Private Sector productivity has increased by 9.65% due to innovations of technological enhancements. When work in almost every sector of our economy has an innovation and productivity component directly linked to technology and when access to the job market is simultaneously becoming more automated, what role does technological competence play in helping people with disabilities gain access to entry-level labor markets?

This paper will discuss the role that basic computer skills play in securing competitive employment in entry-level retail and entry-level stock clerk occupations. Labor Market Surveys (LMS) for these occupations were conducted for the Philadelphia Metropolitan Statistical Area (MSA) in the fall of 2006. The primary focus of the LMS was to determine the qualifications for employment given the open labor positions identified for the selected occupation. Issues of access and accommodation were not reviewed since the desired 'knowledge' criteria sought in the LMS focused on technical and computer skill requirements. This paper will also review the impact of job seeker technology and electronic recruitment trends.

This paper will conclude that entry-level job seekers with disabilities who desire to find employment in fields traditionally considered unrelated to technology will lack competitiveness in the labor market without computer skills.

Entry-Level Employment Described

CareerInfoNet (<http://www.acinet.org/acinet/>) is sponsored by the U.S. Department of Labor and offers a series of tools to assist businesses, job seekers, students, and workforce professionals to locate employment resources; one feature of this site is that it offers occupational profiles. It is intuitive that entry-level occupations such as administrative, clerical, customer service, call center representative and other similar 'office' positions have a technology burden. What is not generally intuitive is that occupations such as *retail sales person* and *stock clerk* require a technological set of core competencies.

Retail Sales Occupational Description

The Bureau of Labor Statistics Office of Occupational Statistics and Employment Projections (OSEP) offers that a competitive candidate for entry-level retail sales will need to perform tasks such as computing sales prices and accessing inventory control systems while maintaining a current understanding of sales and promotions, office policies, and security and safety practices. The competitive entry-level candidate will

also need to maintain sales records, prepare sales contracts and use a computer to enter, access, and retrieve data. OSEP goes on to offer that competitive candidates will need to use database software (at the user interface level), bar coding technology, Point Of Sale (POS) retail data collection software, and word processing software. Skills in these areas are required to meet the basic technological qualifications for a position that pays \$8.69 per hour (median wage for Pennsylvania as of 01/2007).

Retail Data Collection Trends. These are just the basic technology-dependant skills required for a candidate to be qualified as competitive—a job offer, however, is the result for the best candidate, not the one who simply meets the basic requirements. Business trends in retail are placing increasing emphasis on the ‘customer experience’ to create and deploy customized marketing strategies (Meyer & Schwager, February 2007). The front line data gatherer for these sophisticated marketing experiences is the retail salesperson. Using, maintaining, and editing customer profile data is an increasing trend in the sales position that requires user proficiency in database applications. As these systems become more integrated with inventory and POS efforts, the role of the successful salesperson becomes more dependent on how they can interact with technology because the customer has an expectation that each sales experience can be highly customized to their needs. The prevailing ‘shopper’ expectation is that the person behind the register (now a sophisticated computer) can tell them about their account balances, their purchasing history, sales, rebates, and item delivery details. Customer expectations are driving more technology into the hands of the retail sales force (Naisbett, 1999).

LMS for the Philadelphia MSA for retail sales. Based on a profile of a candidate who met the essential functions of an entry-level retail sales position with the exception of not having any prior computer experience a LMS was conducted in which 15 employers were contacted. These employers were segmented into three categories, each consisting of 5 contacts. The categories were: 1) ‘strip mall retail’ (i.e. Petco, Staples, etc.), 2) ‘big box retail’ (i.e. Best Buy, Circuit City, Target, etc.) and 3) department stores in a high-density retail locations (i.e. Lord & Taylor, Macy’s, etc.). In 14 of the 15 contacts, the sample candidate was deemed NOT QUALIFIED by the human resource contact queried. Again, please note that the overlay of disability was not mentioned in the LMS. 12 of the 14 sources contacted reported that their hiring process involved a computer skill testing component; the rationales were consistent to two responses: 1) inventory and customer history searches/updates require application software facility and

2) human resource functions, safety, and internal training functions are delivered and accessed via an internet or intranet process.

Stock Clerk Occupational Description

As an entry-level position, successful candidates who achieve employment in this occupation receive \$9.66 per hour (median wage for Pennsylvania as of 01/2007) according to OSEP. To be employed as a stock clerk, a person must receive, store, and move floor merchandise and materials to retail shelves or to final customer order destinations. For stock clerks that work in a retail or warehouse capacity, some of the occupational tasks that require computer competencies include the following: compile and maintain data from purchase orders and requisitions, access records regarding proper storage methods and identification (labeling and pricing) procedures, maintain records on lost or damaged inventory, prepare inventory reports (or queries), and receive items and record inventory data electronically. As with the retail sales position discussed above, basic computer and technology skills are embedded within this occupation.

Trends in Material Management. Economic and resource efficiency has created the well established notion of Just In Time (JIT) inventory control procedures. Simply stated, JIT offers that the materials that are needed are where they are needed when they are needed. Charles Leadbeater, in his book, *The Weightless Society*, explains that we are experiencing a type of 'corporate collapse' that flattens an organization to a dashboard of data that can allow key decision makers to meet needs and capitalize on opportunities in real time because of detailed access to granular data (Leadbeater, 2000). In an environment where consumers have the ability to compare features and prices to make their purchase decisions, inventory efficiencies and carrying costs play an increasingly large part of the pricing and availability model that marketers use to meet marketplace needs as they supply and stage their products. The successful stock clerk will need to use bar-coding, record keeping, and other technology for establishing shipping details, determining shelf life, managing storage requirements, and facilitating other key product factors to meet the demand of their employers in a competitive economy (Kumar, Venkatsen, & Reinhartz, March 2006).

LMS for the Philadelphia MSA for stock clerk. Based on a profile of a candidate who met the essential functions of an entry-level stock clerk position with the exception of not having any prior computer experience a LMS was conducted in which 12 employers were contacted to determine the extent to which this fictitious candidate would be qualified. These employers were segmented into two categories, each consisting of 6 contacts. The categories were: 1) 'big box retail' (i.e. Target, Home Depot, etc.) and 2)

specialty parts supplier (i.e. Pep Boys, and plumbing/electrical parts suppliers). Of the employers queried for the LMS, 8 of the 12 said that a lack of prior computer experience would DISQUALIFY the candidate for the available position. The remaining 4 employer contacts (3 of which were from the specialty parts supplier category with the last from the 'big box retail' category) offered that a lack of prior computer experience would be able to be addressed and delivered through on the job training. In answering in this manner, these organizations were confirming that computer skills are important - as evidenced that they will be provided by training and support through on-the-job exposure. Most importantly, all of the contacted employers confirmed that inventory, order fulfillment, and safety information/training requirements necessitate that a computer will be used by the successful candidate.

Electronic Job Search

Electronic recruitment offers employers several benefits as they seek to fill openings for entry-level workers in the fields selected for this paper. First, employers have a basic mechanism to qualify the candidate based on background and other employment eligibility criteria that may be provided on an electronic job board. For example, CareerBuilder.com asks candidates to complete a detailed employment profile before their résumé can be posted to prospective employers. Recruiting through a job board also speaks to a candidate's basic computer literacy and spelling skills; since using these electronic tools have a functional burden associated with their successful use. It is worth noting that both CareerBuilder.com and contemporary Monster.com have articles on entry-level job search skills (for retail and distribution occupations). It is also worth noting that these materials are prepared at the 10.4 grade level according to Flesch-Kincaid. The CareerBuilder.com article (Retail Jobs Are in Season - <http://careerbuilder.com/JobSeeker/careerbytes/CBArticle.aspx?articleID=536>) has a Flesch Readability Index of 52.5; which means it falls (in terms of reading ease) somewhere between Time Magazine and The New York Times. The Flesch Readability Index is a tool that can estimate the reading comprehension level necessary to understand a document. The Flesch readability score (0-100) indicates how difficult the document is to understand, with lower numbers indicating more complicated documents.

While a passive tool that speaks to user computer skills is a benefit of posting these occupations electronically, the central driver to these job postings is that of economics. It is estimated that internet recruitment is about 10% of the cost of traditional recruitment efforts and that applicant processing costs (due to the electronic nature of the endeavor) may be as much as 25% less than traditional 'human intensive' screening

(Cober, 2000). Given the productivity that can be ascribed to technological enhancements as a productivity tool and as a mainstream business management staple, it appears self-evident that the continued reliance and expansion of electronic recruiting methods will occur. Anecdotally, entry-level employment is also turning to the use of automated application kiosks to capture candidate information at a variety of entry level opportunities; Acme Supermarkets, Home Depot, Staples, Wal-Mart, and many others now use a computer kiosk to elicit applicant information in addition to other electronic recruitment efforts.

Conclusion

The relentless march of technology drives business efficiency by giving managers access to real-time information from the shop or warehouse floor. In an environment where consumer decisions are freed from the friction of marketplace uncertainty, customized reactions and efficient resource allocation are part of the new management landscape. Technology efficiency also allows businesses to recruit and hire employees with more efficiency because of the cost benefits inherent in a centralized electronic data system that validates, scores, and qualifies candidates. Collectively, this speaks to the role that technology and computer skills play to the selected occupations : or - entry-level sales and stock clerk. While on the surface, it seems counter-intuitive that these positions would require technology skills, a review of the essential functions of the job, the business trends that drive innovation and productivity, and the method by which employers find qualified candidates suggest that computer application skills and reading comprehension skills are essentials for all candidates. Knowing this and further knowing as rehabilitation professionals about the additional challenges faced by candidates with disabilities, often time without prior job experience, only heightens the need for competitiveness in any area occupational area that is possible. This paper concludes that technology skills and competencies are the new currency of the entry-level labor market and that having them is often the difference between being qualified for competitive employment and staying on Federal benefits.

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