

AVOIDING WORKPLACE GROWING PAINS: UNIVERSAL DESIGN FITS EVERYONE

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DESIGN SHOULD TREAT ALL PEOPLE AS VALUABLE ASSETS

In this paper, we discuss how organizations can apply the principles of universal design and customized employment in their workforce today. They need only consider the following areas:

1. Equitable Use
2. Flexibility in Use
3. Simple and Intuitive to Use
4. Perceptible Information
5. Tolerance for Error
6. Low Physical Effort
7. Size and Space for Approach and Use

Workforce management may be the perfect birthplace for fairness and quality improvement. Whether in design or definition, simplicity, flexibility, and efficiency benefits everyone.

A QUINTESSENTIAL QUESTION

“What do you want to be when you grow up,” is a popular question from kindergarten to college. People have a variety of answers: doctor, astronaut, chef, teacher, and ballet dancer. American society promotes traditional job roles and expectations from an early age. Only later in life do children discover the details of what they wanted to do. Doctors work nights and weekends, astronauts need college degrees, chefs stand on their feet for twelve hours a day, teachers don’t always work with A+ students, and ballet dancers must be a certain weight and height to be cast in a show. Persons with disabilities have an even shorter list of potential occupations.

In 2013, individuals ages 18-64 with disabilities had an employment rate of only 26.8 percent. On the other hand, individuals between the ages of 18 and 64 *without* disabilities had an employment rate of 64 percent.ⁱ In the United States, the employment gap between individuals with and without disabilities is nearly 40 percent. Eight out of every ten people with disabilities ages 16-64 do not even participate in the workforce.ⁱⁱ Many people with disabilities spend a lifetime not only unemployed, but also believing that they are unemployable.

Everyone has felt limited or disadvantaged. Even people without disabilities sometimes discover they are unable to do what they originally *wanted* to do, whether it is in a job or with a software application. Instead of focusing on what people cannot do or on what everyone should be able to do, highlight existing abilities and teachable skills. Skills are the crux of success. Pressuring individuals to fit inside a role or job title

excludes potentially productive employees from work and limits the employer from the full talent pool. Think about the frustration caused by lack of customization, or the inefficiency of inflexible or difficult to use products. The same problems exist for employees excluded or limited from engaging with the workplace.

Luckily, workforce asset management professionals (WAM-Pros) can make the workplace a more inviting and equitable place. They understand the value of universally designed systems and customized employment solutions. Using these initiatives to guide system design and organizational strategy, the WAM-Pro can create greater equality and more opportunity for all in the workplace.

WHAT IT MEANS TO BE DISABLED

Reasons for low employment rates among the disabled are diverse. One fundamental problem is the lack of awareness or education on disability. The definitions and qualities of disabilities are neither universal, nor are they well understood by the general population. The quintessential painted wheelchair on the parking lot space is an over-simplified image of disability, yet many policies and initiatives still reflect only the needs of the physically disabled. Accommodating disabilities that employers cannot see like mental illness, or cannot anticipate like stress, present even more challenges. Unfortunately, a disabled person's perceived capabilities and workplace fit come from biased observation or subjective experience.

For better equality, employers must shift their focus to abilities. The new approach should not be a comparison or competition between people with or without disabilities, but rather a match between business need and labor solutions. Every abled and disabled person lacks some skill or experience; that does not make him or her wholly unemployable. In these cases, the organization could focus on the skills and experience they *do* have. As disability awareness and assistive technology grows, people might realize that the line between definitions of abled and disabled is more arbitrary than imagined. The organizations who view their corporate structure as inflexible or fine just the way it is likely said the same thing about their paper time sheet system. Progress requires creative deviance and adjustment.

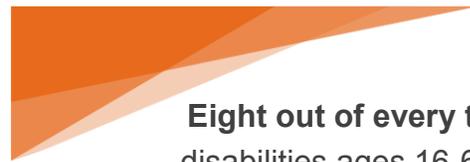
The WAM-Pro is already familiar with translating policies and principles into process and design. She breaks down problems like understaffing and creates solutions offering employee and employer alternative options, such as short shifts or cross-training. She configures the scheduling system to organize workload by tasks and activities instead of particular people or job roles. The examples listed here are not the only options; consider your workforce dynamic and operational constraints. The goal of workforce asset management is use technology as an enabler for all people, including people with disabilities.

CUSTOMIZED EMPLOYMENT AND UNIVERSAL DESIGN

Universal design stemmed from earlier barrier-removing inventions and accessibility movements like the dropped curb or closed captioning. Universal design in the workplace guides system design and encourages job role decomposition—basing work on *when*, *where*, and *how* it is accomplished, not

necessarily *who* should perform it. The WAM-Pro asks questions like, “How can I make systems easier to use and access?” “Where can I put this report to make it easier to find?” “When can I alert people to important items without interrupting their workflow?” “How can I break down and schedule this workflow into tasks that are workable for a larger, more diverse population?” Although universal design initially focused on helping the disabled, a simpler, more flexible, and more efficient system design and workplace benefits everyone.

Typically, when organizations match labor with demand the focus lies on *what* and *who*—what does this job require and who can fill it perfectly. The obsession with classifying people as the sum of their abilities (the complete package) stifles creative conversation and negotiation around the job details. Meeting every item on a checklist does not ensure a perfect match between labor and need. Customized employment looks at the work through the lens of *how*. Job task analysis can help organizations understand the particulars of a job, and customized employment helps them rearrange them to a structure that fits best. Instead of categorically excluding certain people from the workforce, design the workforce for inclusion.



Eight out of every ten people with disabilities ages 16-64 do not even participate in the workforce.¹

How might your organization employ someone with disabilities?

THE SEVEN PRINCIPLES OF UNIVERSAL DESIGN © FOR WORKFORCE ASSET MANAGEMENT

In 1997, a group of architects, designers, engineers, and researchers led by Ronald Mace met at North Carolina State University. Together, they developed a list of seven principles that would guide future construction and design, making things more accessible and all-user-friendly. Today, WAM-Pros can use this same list to create more accessible and usable workforce management systems.

1. EQUITABLE USE

Provisions for this principle include providing the same means of use for all employees, avoiding segregation or stigmatization of users, and making the same or equitable options available for everyone.

For example, documenting time worked, or punching the clock, is a topic of heated debate. In most organizations, only nonexempt, hourly employees punch the clock. Exempt, salaried employees are excluded from the practice because of their “professional” status. This can create a stigma that clocking in and out is only for low-wage, hourly workers. It may even be referred to as a privilege. Sometimes these policies makes sense operationally, but other times they can simply be carryovers from another time.

To promote fairness across the organization, implement a universal punching policy. Capture exempt employee punch data through discrete means, such as computer login or badge swipe entry. This will enable a more equitable policy and process for all employees, regardless of status or pay rate.

Equitable use might also include integration. If only one department controls all the organization's data and does not share it (or does not know how or what to share), decision-making power and insights are limited. Integration requires people and systems to collaborate and communicate between departments. It demonstrates a desire to improve shared business outcomes, not just personal or departmental outcomes. Integration might help the organization avoid excessive or duplicate efforts; it could also lead to a more even distribution and governance of data.

2. FLEXIBILITY IN USE

Provisions for this principle include accommodating a wide range of preferences, offering options in methods of use, and providing adaptability to match the user's pace.

Self-service for leave requests or time off allows all employees a fair chance at submitting their request at the time most convenient for them. Creating a formalized leave request system also allows the employee and employer to track the status of the request. By using self-service, the employee can anticipate next steps, the manager can identify troublesome patterns, such as favoritism or lack of use, and the employer has an audit trail of time off for accrual purposes.

User profiles and user rights are another option for more flexibility. Creating delegate and proxy rights may allow a manager on intermittent or temporary leave to assign some duties to another person. If the employee can still perform the fundamental aspects of the job, then proxy and delegate assignment may be a feasible accommodation.

Customized employment options for employees with disabilities might include task reassignment, job carving, or job sharing. Use task reassignment in workplaces where tedious tasks overwhelm current employees. For example, at an environmental non-profit, Ollie might print labels for envelopes, stuff them with information pamphlets, and deliver them to the post-office or door-to-door. Job carving allows for some job task exclusions, such as Henry cannot lift heavy boxes or Kate cannot answer the telephone, creating a modified job role. Job sharing is where two people share one job and split the tasks based on strengths and abilities.

Individualize the workload and break down jobs by tasks and actions with advanced scheduling tools. The technology may even be able to assign employees specific tasks at a granular level. However, the process does not stop at simply breaking down the workload. Pay codes, labor levels, and job codes might need alteration, reconfiguration, or addition to the WFM system. A WAM-Pro understands the implications of these changes and has the knowledge to implement it.

3. SIMPLE AND INTUITIVE TO USE

Provisions for this principle include making things easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level.

Part of design includes user interface. The look and feel of the product can be as important as the functionality. For example, use universal color-coding such as red for stop, delete, or cancel, and green for go, save, or publish. To reduce redundant processes, create report templates for commonly used or requested reports or arrange them in order of importance in the system. Create prompting screens, such as a reminder to clock in or document time when a user logs into a computer, or a notification at the end of the week to approve records or create a report for all overtime. Strive to make GUIs, labels, naming conventions, and others intuitive. For those with vision or hearing impairments, make closed captioning and font size adjustments easy to find and use. Maintain data dictionaries and make reference checklists available during and after change to ease the transition process. This process might even include simplifying language in instruction guides, manuals, and policies. Keep jargon to a minimum and explain acronyms and abbreviations. Having clear, simple language helps avoid stress, improving the experience for people with mental disabilities worsened by frustration or confusion, and other users as well.

4. PERCEPTIBLE INFORMATION

Provisions of this principle include communicating essential information effectively to the user, regardless of user's sensory abilities or other external conditions.

For example, alerts might vibrate or ring on a personal device, such as a cell phone, instead of flashing on a screen. A Web browser might use a different font size or color on the screen to distinguish it from other content. A Web browser might also create redundant reminders about FMLA leave or how to file a leave request form, or California overtime law when a manager approves an overtime pay code.

Avoid stress-causing elements in design, such as warnings that linger on screen until addressed, alerts that make prolonged or loud noises, or notifications that flash with strobe-like frequency. For easier use and recall, organize information efficiently. Some organizations do not organize files due to the tedious amount of work it requires and high price (paying a FTE to alphabetize hard copy files). However, disorganization can trigger employee anxiety and stress; worse yet, disorganization can cause

INVENTIONS FOR PEOPLE WITH DISABILITIES

1. Braille Smartphone (phone with screen comprised of grid of pins)
2. Lucy 4 Keyboard (keyboard operation requires no hands)
3. Stair Climbing Wheelchairs
4. SMART belt (detects seizures)
5. Virtual Mouse (mouse controlled by eye movements)
6. Image-to-Sound Converter (different regions of image expressed by different pitches or notes)

file loss and lack of compliance. With customized employment, a cross-departmental file organizer job would suit a meticulous, but perhaps otherwise disabled, employee. People might argue about the speed of a disabled employee versus that of a nondisabled employee. It is an issue of resource allocation; perhaps the employee without disabilities performs other strategic duties when relieved from this task.

5. TOLERANCE FOR ERROR

Provisions of this principle include creating controls to avoid errors, or having backup processes that protect the application from permanent actions. The system should not require users to take unconscious action or maintain constant vigilance.

Automation drastically changed management. Instead of remembering which employees clocked in late and which items need approval each week, there are automatic reminders and prompts to substitute for a good memory. For example, many WFM systems can automatically highlight or mark missed punches and high overtime, making them visible for both employee and employer. This programmable vigilance gives all managers access to important insights, not just the ones with good memories or scripting experience. With greater transparency, organizations resolve errors in real-time before they become patterns of abuse. Increased visibility draws attention without requiring immediate repercussions. WFM systems might also have warnings when editing or deleting information—are you *sure* you want to overwrite this punch? Automated warnings and prompts can alleviate the need for constant management and oversight. These fail safe measures help those with limited technology experience or learning a new system avoid making innocent mistakes, and help seasoned technicians from overlooking something or operating on autopilot.

With automatic settings, WAM-Pros consider the cost of override support versus the cost of security. For example, if an organization turns on a lock setting that restricts users from a system after failing a certain number of password or login attempts, consider the threshold. If set too low, it can cause excessive stress and frustration, especially for those employees struggling with typing, vision, or remembering complex passwords. Technologies such as voice recognition and biometrics may be good alternate logins; employees cannot lose them and they may reduce the need for help desk support.

6. LOW PHYSICAL EFFORT

Provisions for this principle include the ability to operate simply, efficiently, and with minimal fatigue. This means limiting the amount of repetitive actions and sustained effort to complete a task.

Using a WFM system should not require too much physical effort, but consider related items that do. Using an RFID card, PIN number, or keystroke analysis for clocking in or out, for example, can be a challenge for those with limited mobility. Biometric options, like telephony, interactive voice recognition, or facial recognition, and mobile resource management tools, like geo-fencing or near field technology, might be alternatives for those with restricted mobility, or for those who struggle to remember cards or passwords.

Consider tracking tasks and activities that require high physical effort. These activities have a higher risk of causing stress and fatigue among any employee population. Fatigue and sleepiness cause accidents, errors, and worse, regardless of the employee's initial physical ability. Configure flags and warning for when an employee reaches thresholds for hours worked, consecutive shifts, or missed rest breaks. Employees with disabilities might need to work fewer hours or be reminded to take breaks, so they might need alternative schedules.

7. SIZE AND SPACE FOR APPROACH AND USE

Provisions for this principle include placement strategies that consider reach and interaction regardless of body size, posture, or mobility. Although the last principle here, it is often an employer's first accommodation consideration.

Of course, the height and placement of a WFM kiosk are important, especially for employees restricted to a wheelchair. However, there are other concerns for size and space. For example, sometimes devices are impacted by temperature. Someone with extremely low heat/cold tolerance should not work in computer server maintenance, as those machines require chilly environments. Other size and space concerns include the kiosk's proximity to a door or emergency exit or even to employees' workspace. If the kiosk process is slow or time-consuming, then lines can cause congestion around doors and exits, a safety hazard during emergencies. If the kiosk is too far from an employees work area, then it can cause cumbersome navigation and excessive time traveling to and from the clock. If the kiosk is located close to employee workspaces and makes loud noises, then the noise can upset employee workflow and productivity. Also, consider the other daily activities or items with which employees interacts. Consider the size and placement of schedules, billboards, posters, and reminders, including fonts size and language as well.

CONCLUSION

A more equitable workplace starts with awareness. Avoid making assumptions about an employee's abilities or proclivities, or segregating those with special needs from others. Create universal solutions and customizable options that fit your workplace or circumstance. These initiatives do not require overhauling everything that exists today, but rather incrementally adjusting and experimenting with new methods for success. Here are just a few reasons to employ these solutions:

- Some universal design solutions help organizations align with existing regulation or policy
- Universal design initiatives widen labor options for both employee and employer
- Customized employment activities take time to explore unmet needs and new ways of distributing labor
- Flexibility, simplicity, and efficiency in the workplace contributes to overall work-life balance for all
- Cost is never the only issue; productivity and potential count too

- If we save time, what we *do* with that time?
- If we limit ourselves to the “old way of doing business,” how will we ever improve or beat our competition?
- There may even be financial incentives
 - Federal tax incentives for those hiring people with disabilities
 - ADA Small Business Tax Credit (up to \$5,000 per year)
 - Work Opportunity Tax Credit (up to \$2,400 per individual hired)
 - Welfare-to-Work Tax Credit (up to \$8,500 per individual hired)
 - Disabled Access Credit (up to \$5,000 per year)
 - Barrier Removal Tax Deduction (up to \$15,000 a year)

“Necessity is the mother of invention.”

Jonathan Swift. *Travels into Several Remote Nations of the World* (1726).



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REFERENCES

- Callahan, M., Mcloughlin, C., & Garner, J. (Eds.). (1987). *Getting employed, staying employed*. Baltimore, MD: Paul Brookes Publishing.
- Callahan, M. (2002). Employment from competitive to customized. *TASH Connections Newsletter*, 28(9), 16-19.
- Deal, T. E., & Kennedy, A. A. (1982). *Corporate cultures: The rites and rituals of corporate life*. Reading, MA: Addison-Wesley Publishing.
- Griffin, C., Hammis, D., & Geary, T. (2007). *The job developers handbook: Practical tactics for customized employment*. Baltimore, MD: Brookes Publishing.
- Griffin, C. C., & Winter, L. (1988). *Employment partnership: Job development strategies in integrated employment*. Denver, CO: Winter Group Marketing, Rocky Mountain Resource & Training Institute & Colorado Developmental Disabilities Planning Council.
- NC State University. (1997) *The Principles of Universal Design*. The Center for Universal Design.
http://www.ncsu.edu/ncsu/design/cud/pubs_p/docs/poster.pdf

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ⁱ Bureau of Labor Statistics. Persons with a Disability: Labor Force Statistics Summary 2013.

<http://www.bls.gov/news.release/disabl.nr0.htm>

ⁱⁱ Bureau of Labor Statistics. Table 1. Employment status of the civilian noninstitutional population by disability status and selected characteristics, 2013 annual averages.

<http://www.bls.gov/news.release/disabl.t01.htm>