

## PRACTITIONER PAPER OPEN ACCESS

# Inclusion of Autistic IT Workforce in Action: An *Auticon* Approach

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## ABSTRACT

This paper examines the IT workforce management practices of *auticon*, a pioneering international IT consultancy firm from Germany that employs autistic individuals as its core workforce to deliver economically and socially sustainable IT services. Our analysis of *auticon's* approach allows us to distil four key workplace inclusion lessons for companies on how to best integrate neurodivergent professionals in the workplace and three lessons relevant to the IT industry on its journey to become more equitable and inclusive.

*Autism isn't a processing error, it's a different operating system.*  
Auticon.

## 1 | Introduction

Autistic spectrum condition (ASC), or autism spectrum disorder (ASD),<sup>1</sup> affects one out of 54 children in the United States, one out of 72 children in Germany, and one in 120 globally (worldpopulationreview.com 2022). ASC typically manifests through difficulties in social communication, restricted behavioural activities and interests, and increased sensory input reactivity (APA 2022). At the same time, people with ASC often exhibit exceptional memorization, perception, and attention skills (Uddin 2022). They also frequently excel at understanding input-operation-output relationships because of an inclination to notice patterns and irregularities (Baron-Cohen 2009; Geschwind 2009) and tend to show particular aptitudes for math and deliberative reasoning (Brosnan, Lewton, and Ashwin 2016).

These skills could be advantageous to several career pursuits in the IT profession, including IT management (Topi

et al. 2010), data science (Radovilsky et al. 2018), or digital innovation (Fichman, Dos Santos, and Zheng 2014). Indeed, autistic people are relatively often found in the IT profession (Mayor 2008; Jia, Steelman, and Jia 2022), purportedly because the autistic mind, which thrives on organized data and systematic regularities, fits a rational, precise computing environment (Baron-Cohen 2009).

Despite autistic individuals' noted affinity for IT in their career choices (Harvey et al. 2016) and general interests (Jia, Steelman, and Jia 2022), their inclusion in the workforce remains a significant challenge: The UK Office for National Statistics reports that only 22% of people with ASD are employed in paid work ([www.ons.gov.uk](http://www.ons.gov.uk) 2020), and only 15% of college graduates on the spectrum find employment on primary labour markets (Patton 2019). In Germany, the unemployment rate for autistic people with no intellectual disability is five times higher than the population average (ASD: 25.2% vs. general population: 5.2%, Espelöer et al. 2023). Consequently, the majority of working-age autistic people are job-seekers, early retirees, or forced to accept temporary jobs far below their abilities.

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This lack of workplace inclusion is untenable not only for the affected individuals but also for the IT industry as a whole. Workplace inclusion can provide several benefits to organizations, such as a better representation of consumer bases, increased employee motivation, and more diverse knowledge for innovation, which in turn can increase the likelihood of financial success and revenue growth (e.g., Tarafdar, Rets, and Hu 2023; Shore, Cleveland, and Sanchez 2018). Opening the doors to growing industries such as IT and providing equal pay and career opportunities also validate the status of previously marginalized groups and their ability to exercise human rights and experience dignity (Pohlan 2019).

The dearth of skilled IT workers is another rationale for why recruiting from underrepresented groups may be good for business. Despite a well-publicized labour-skill shortage of IT specialists, forecasted to reach 4.3 million workers and an unrealized output of \$449.70 billion by 2030 globally (Bignell 2022), IT firms still engage notably few professionals with ASC (Loiacono and Ren 2018; Patton 2019). Moreover, the de facto experience of disadvantaged groups in the workplace can hardly be described as inclusive (Tarafdar, Rets, and Hu 2023; Mayer et al. 2024). For example, both students and employees with ASC frequently report encountering barriers such as discrimination, unjust application processes, as well as overburdening emotional and physical job demands (Lorenz et al. 2021; Mantzalas et al. 2022).

One reason for the prevailing situation may be a scarcity of large-scale, real-world examples of successful and sustained workplace inclusion efforts. Existing workplace inclusion programs, for example, those launched by Microsoft, Meta, Ernst&Young, or SAP SE, usually focus on implanting a small neurodivergent workforce<sup>2</sup> within a neurotypical company (Loiacono and Ren 2018). However, this strategy has been criticized as disproportionate to the problem, with neurotypical majorities pointing to increased managerial overhead (Loiacono and Ren 2018; Waisman-Nitzan, Gal, and Schreuer 2019) and perceived unfairness within a team (Patton 2019) as limitations.

Our study reports on a different and arguably more successful approach to IT workplace inclusion. We study the IT workforce management practices of *auticon*, a pioneering company from Berlin, Germany, that has been operating successfully as an IT management consultancy for over a decade.<sup>3</sup> *Auticon* operates under the motto: “Autism isn’t a processing error; it’s a different operating system.” The firm’s distinctiveness lies in exclusively employing autistic individuals as its core workforce while providing contracts at market rate. Of *auticon*’s 370 employees, about 78% are on the spectrum (Auticon Global Impact Report 2022).<sup>4</sup> Since its merger with Unicus, a Scandinavian IT consultancy firm that hires IT specialists with Asperger’s, in June 2023, *auticon* is the largest autistic-majority company in the world, with 575 employees, of which 456 (79.3%) are on the spectrum.<sup>5</sup>

We use the case of *auticon* to illustrate how and why focusing exclusively on an autistic IT workforce (maintaining diagnosis-based uniformity within the company) can be an economically and socially successful IT workforce inclusion strategy at the industry level. We identify seven key lessons from *auticon*’s

approach and formulate recommendations for IT workforce managers seeking to include people with ASC in their workforce. For research, our analysis pinpoints several areas of investigation where further studies on neurodiversity in the IT profession and IT workforce management should be encouraged.

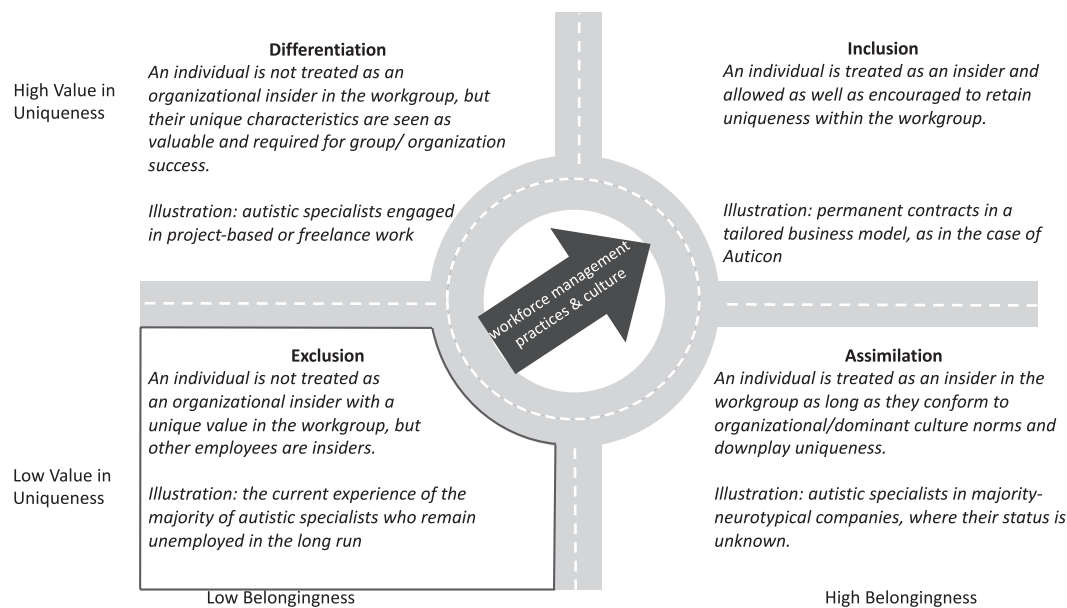
We proceed as follows. First, we review the literature on workplace inclusion in the IT profession and introduce an IT workforce management framework as the conceptual basis for our analysis of *auticon*. We then describe how *auticon* operates and manages its IT workforce. Next, we frame our insights from our case analysis in seven lessons learned. Finally, we discuss the limitations of *auticon*’s approach and sketch opportunities for IS scholars interested in IT workforce management and workplace inclusion.

## 2 | Workplace Inclusion and IT Workforce Management

We start by clarifying the relationship between workplace inclusion and workforce management.<sup>6</sup> For managers, and more broadly from the perspective of an organization, workplace inclusion involves recognizing and respecting differences in identity, background, and knowledge of organizational workforce members (Tarafdar, Rets, and Hu 2023). For employees, workplace inclusion refers to “the degree to which an employee perceives that he or she is an esteemed member of the work group through experiencing treatment that satisfies his or her needs for belongingness and uniqueness” (Shore et al. 2011, 1265). In turn, belongingness stands for the strive to maintain strong, stable interpersonal relationships, and uniqueness stands for the strive to gain respect for individual distinctiveness. The combinations of low vs. high belongingness and uniqueness, when presented in a 2×2 matrix, can be used to describe the positioning of autistic employees in relation to an organization (Figure 1). In Figure 1, the encircled quadrant indicates the state in which autistic individuals are most commonly found at present.

*Exclusion* (lower left cell in Figure 1) characterizes a state where neurodivergent individuals are treated as outsiders to the workforce while other employees are considered insiders. In this setting, a neurodivergent individual’s unique characteristics (e.g., viewpoints, know-how) are not valued, disregarded, or entirely associated with negative connotations. Within an organization, this state is extremely unstable, and in the long run, a rational individual whose needs are not being met is likely to leave the job. For this reason, currently, the most common experience of autistic IT professionals in the job market is that they are literally excluded from the workforce (Lorenz et al. 2021; Mantzalas et al. 2022).

*Assimilation* (lower right cell in Figure 1) characterizes a setting in which neurodivergent individuals are treated as insiders as long as they conform to the dominant cultural norms of neurotypical members of the workforce, which in turn implies that their uniqueness is downplayed (Patton 2019). The employment of autistic professionals in neurotypical collectives in assimilation settings (which is empirically rare) typically manifests itself in the non-disclosure of their ASC status, coupled with autistic



**FIGURE 1** | Visualization of different states that employees may experience in relation to an organization, based on the distinctions by Shore et al. (2011), with illustrative examples of the positioning of autistic employees.

individuals' efforts to mimic the majority in social interactions in an attempt to fit into the workforce.

*Differentiation* (upper left cell in Figure 1) characterizes a setting where neurodivergent individuals are valued for their uniqueness while not being treated as belonging to the firm's dominant workforce majority. Such a situation occurs, for example, in project-based employment formats or freelance work, where individuals with ASC or other neurodevelopmental conditions are only temporary workforce members.

Finally, *inclusion* (upper right cell in Figure 1) characterizes a setting where an individual is both an accepted member of the workforce team and valued for their unique characteristics. In such a setting, neurodivergence is treated as a distinctive organizational resource or asset and, hence, part of the firm's business model. The sense of belonging is achieved due to the esteem and respect expressed by other workforce members. We believe *auticon* exemplifies an organization where autistic employees experience a state of inclusion.

Against this backdrop, the question is: How do firms achieve a state of inclusion where they can meet employees' needs for both uniqueness and belonging? Foreshadowing our analysis of the case of *auticon*, two complementary pathways can be identified: (1) implementing specific workforce management practices and (2) adapting the dominant corporate culture. Corporate culture is the set of values, expectations, and artifacts that guide and inform the actions of all team members (Schein 1992). Often uncoded and tending to be stable, cultural norms can evolve as patterns of behaviour change. Hence, our primary focus is on organizations' workforce management practices.

Generally, workforce management entails four key areas (Shen and Edwards 2006; Orlitzky and Swanson 2006): *Recruitment and selection* cover creating opportunities to enter an organization. These opportunities are typically realized by advertising

jobs and talent profiles, employer branding, carefully choosing the most suitable candidates, and onboarding. *Training and development* cover educational activities for the overall employee's betterment. Training is a short-term (operational) process of upgrading skills and competencies to perform better on current tasks. Development is long-term (strategic) learning opportunities to increase work capacities and prepare for new challenges, for example, promotion or a new role, through a program, networking, and mentoring relationships. *Performance appraisal* refers to providing big-picture feedback on employee efforts through regular reviews of employee contributions to a company, where achievements, skills, and progress are evaluated. *Compensation* is concerned with providing employees with privileges for their work, typically including monetary (salary) and non-monetary benefits (such as health insurance, free lunch, public transport ticket, or fitness club membership).

All four workforce management areas are essential for workplace inclusion (Orlitzky and Swanson 2006). Still, a look at the workforce management practices common in the IT industry suggests that they are not receptive to the needs of neurodivergent candidates. In terms of initial recruiting, for example, our screening of the websites of 48 high-tech companies from the Fortune 500 list in June 2022 found that only two companies (Oracle and Microsoft) explicitly mentioned opportunities for hiring neurodivergent employees on their websites. Two more companies (Microsoft and HP) explicitly communicated their efforts by posting vacancies and employment programs targeting autistic IT specialists (see Appendix B).

At the candidate selection stage, a similar picture emerges: because autism as a neurodevelopmental condition often manifests itself through difficulties in social interactions, typical selection practices pose problems for candidates. For example, most IT professionals with ASC find conversations with hiring managers during interviews—the most commonly used candidate selection technique (Flower et al. 2019)—as off-putting (Morris, Begel,

and Wiedermann 2015). Autistic individuals often have difficulty maintaining eye contact, a well-established cue for candidates to “sell” themselves to interviewers (Fletcher 2013). Failure to make regular eye contact can lead to a poor impression and subsequent rejection (Loiacono and Ren 2018). Furthermore, the tendency of candidates with ASC to interpret language literally is often at odds with typical interview techniques, where small talk and icebreaker phrases are meant to ease the interviewee’s discomfort. Potential sensory distractions (such as lighting or noise) in hiring interviews are also hard to foresee and adjust on the spot (Morris, Begel, and Wiedermann 2015; Flower et al. 2019). Loiacono and Ren (2018) identified only two global high-tech companies that reportedly use alternative candidate selection practice formats, such as internships and on-site problem-solving team activities, in their autism programs. One of these two firms later discovered that 50% of candidates eventually hired through the autism program had previously been screened out through the traditional initial interview process.

Regarding workforce training and development and performance appraisal practices, the picture is not much better either. Performance appraisal as a basis for career advancement considers both hard and soft skills (Judge and Ferris 1993). Despite excelling in technical skill dimensions, IT specialists with ASC often receive average overall reviews, presumably because their neurodevelopmental condition affects soft skill assessments (Morris, Begel, and Wiedermann 2015). A survey of 59 employers in Australia found no statistically significant differences between employees *with* and *without* ASC in their ability to follow instructions, productivity, and quality of work (Scott et al. 2017). However, reported work completion time showed greater variation for employees *with* ASC, meaning that autistic professionals could finish work at times quicker but also at times slower than neurotypical professionals.

When it comes to workforce compensation, little information about autistic IT specialists is available in the literature. An Australian survey of open employment (work arrangements where neurotypical and neurodivergent people work together) with 112 respondents reported a \$1.65 deficit in hourly wages for employees *with* ASC (\$21.84) compared to those without (\$23.49). At the same time, weekly supervision and workplace training costs did not differ significantly (Scott et al. 2017).

In sum, for autistic employees, typical workforce management practices in IT and beyond (Waisman-Nitzan, Gal, and Schreuer 2019) are not conducive to experiences of belonging and uniqueness. As a contrasting example, the case of *auticon* may, therefore, reveal insights that help us understand not only ‘what’ inclusive employment might entail (e.g., Austin and Pisano 2017; Annabi, Sundaresan, and Zolyomi 2017) but also ‘how’ inclusive IT workforce management can be enacted.

### 3 | Analyzing the Case of *Auticon*

Our empirical interest was to ascertain from the ground up how *auticon* hires and manages its neurodiverse IT workforce, how its operations impact employees and clients, and why *auticon* opted for the exclusive employment of autistic IT specialists. Methodology details are provided in Appendix A. Our primary

data source was semistructured interviews with 19 employees, 13 managers, and two clients of *auticon Germany* and *auticon Switzerland*<sup>7</sup> in June and July 2023. We also gathered three types of secondary data: (1) internal company documents, (2) publicly available data from sources such as *auticon*’s website, YouTube, Google News, and other media, and (3) employee reviews about work at *auticon* from the online platforms Kununu, Glassdoor, Indeed, and Stepstone.

*Auticon*’s beginning was driven by personal pain. Through experiences with his son, who was diagnosed with Asperger’s, *auticon*’s founder, Dirk Müller-Remus, recognized a lack of career opportunities for people with ASC despite having highly desirable technical qualifications.<sup>8</sup> He founded *auticon* in Berlin in 2011, which has since expanded to 15 countries worldwide<sup>9</sup>. Their client pool includes more than a third of blue-chip publicly listed corporations, such as BMW, Lufthansa, Siemens, GlaxoSmithKline, or Channel 4, together with a growing number of small and medium-sized companies. Over 260 projects are completed annually, and the company is expanding (in 2022, they reported a 50% revenue increase).

Employment contracts for *auticon*’s autistic workforce are predominantly permanent: 100% of contracts are permanent in *auticon Switzerland*, and in *auticon Germany*, most contracts are permanent. However, fixed-term contracts are also available, for example, when a narrow skillset is required for a fixed-term project. Because of its approach and success, *auticon* is regularly invited to conduct inclusion workshops at companies, universities, and schools, and it has received multiple social impact awards.

*Auticon*’s business model (Figure 2) explicitly builds on a deep awareness of the particularities of IT specialists with ASC, both positive and challenging. Matching autistic strengths with in-demand IT services creates the company’s unique value proposition. At the same time, the mediating role of job coaches and the firm’s culture of acceptance alleviates the typical challenges autistic workers face. This combination creates a three-pronged advantage: benefits for clients, economic gains for *auticon*, and career prospects for IT professionals with ASC.

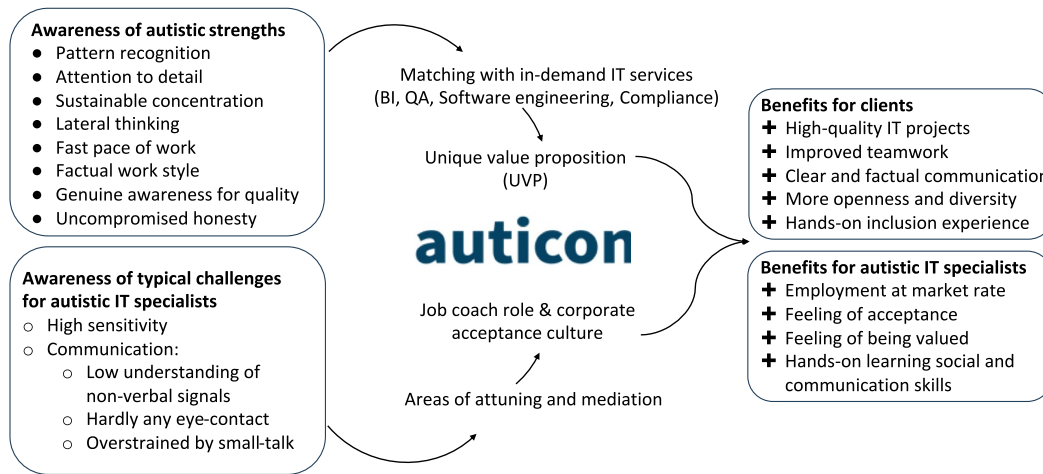
Key to the business model of *auticon* is the recognition of strengths in their workforce. IT consultants with ASC exhibit good pattern recognition abilities, heightened attention to detail, aptitude for routine work, and aspirations for high-quality results. The following three statements illustrate the level of understanding and appreciation *auticon* reserves for its staff:

Frequently, yes, really the emphasis on frequently, certain of our people love the repetitive things. They can concentrate very well even in so-called boring activities and carefully perform work.

(Job coach, Interview)

...They see mistakes more quickly. They are often very honest. So they are direct.

(Job coach, Interview)



**FIGURE 2** | The business model of *auticon*.

The starting point [for partnering with *auticon*] was certainly a functional background. Because for the task, it was very important to work very precisely but also very repetitively. In other words, it scared off many of our employees.

(Client, Interview)

These strengths are the foundation of the IT service offerings that *auticon* chooses to bring to the market. Specifically, *auticon* offers five types of IT services: quality assurance and testing, analytics and business intelligence, software engineering, compliance, and cybersecurity. These IT services are both in high demand and match the strengths of *auticon's* workforce members, which, together with their IT knowledge stack, create the company's value proposition. Table 1 summarizes *auticon's* five IT service areas, aligned with the recognized strengths of the autistic IT workforce, and cites exemplary cases from *auticon's* client work.

Of course, *auticon* is not unequivocally successful; the particularities of its workforce also present challenges to the organization. Noted issues include the preferred communication style of autistic IT specialists (e.g., very direct language, a disregard of nonverbal signals), hypersensitivity to physical stimuli (e.g., light, noise, smells, crowds), distinctively perfectionistic tendencies at work that can cause progress delays and time management issues, and heightened tendency to become psychologically distressed from interpersonal interactions. As in other workplace settings, *auticon's* employees with ASC are also relatively more susceptible to burn-out, depression, and other mental health conditions (Mantzalas et al. 2022), as evidenced, for example, by relatively long employee sick leaves. Two examples shed light on these issues:

So, people are very often angry with me without me understanding why.

(IT consultant, Interview)

...perfectionism often limits me. I tend to keep working on content before I give up at some point. Which leads me to not being particularly fast, but delivering good

work. But I can't really balance between that. It can also be bad and it has to go fast. And then I have problems with that.

(IT consultant, Interview)

To help cope with the communication and mental challenges of their autistic workforce, *auticon* created a position for job coaches. They serve as middlemen between IT consultants and clients and provide internal, cross-boundary support on demand. Job coaches work closely with *auticon's* HR team.<sup>10</sup> Their mission is to act as a trusted party that addresses the individual concerns of IT consultants, helps them maintain task focus, and facilitates smooth communication between clients and neurodivergent IT specialists.

In addition to IT consultancy, *auticon* has formalized its expertise in neurodivergent workforce management by recently launching a suite of neurodiversity and inclusion services in November 2022. These comprise a Diversity, Equity, and Inclusion strategy audit, workshops designed to raise awareness of neurodivergence and neurodiversity within an organization or department, and individual job coaching services for neurodivergent employees in other companies.

#### 4 | How *Auticon* Builds and Manages its Autistic IT Workforce

In describing the steps taken by *auticon* to build and operate their core workforce, which is exclusively comprised of autistic IT professionals, we structure our case analysis along the four general areas of IT workforce management discussed above, namely: hiring and selection, training and development, performance appraisal, and compensation. For orientation, Table 2 summarizes the differences and similarities between *auticon* and traditional neurotypical IT companies in each IT workforce management area.

Cutting across, and thereby enabling, the four areas of IT workforce management practice, the culture<sup>11</sup> at *auticon* also stands out as an important element of their approach. Culture is essential because agreed and lived unwritten rules promote smooth

**TABLE 1** | IT consultancy services delivered by specialists with ASC at *auticon*.

Area	Strength of IT specialists with ASC	Exemplary industry cases
Quality assurance and testing	<ul style="list-style-type: none"> <li>• Mistakes spotting and a sense of quality: “Bugs naturally strike the eye.”</li> <li>• Accuracy in detail, precision, and endurance even after hours of manual data collection and comparison</li> <li>• Pattern recognition enables to uncover logical connections and to double-check the existing assumptions                             <ul style="list-style-type: none"> <li>• High intrinsic motivation to acquire all-encompassing knowledge on a new IT topic</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Manual visual inspection of database exports (files with several 100 K rows) for outliers, recurring patterns, and duplicates and clarification of the causes for further automatization for an international asset management company*.</li> <li>• Quality analysis and manual testing of the banking process releases for Atruvia AG.</li> <li>• Digitization of family books for the Registry Office Wiesbaden, incl. validation of approx. 17 K registers in &lt; 60 days.</li> </ul>
Analytics and business intelligence	<ul style="list-style-type: none"> <li>• Recognition of rules and their consistent implementation</li> <li>• Autistic bottom-up thinking as adds-on to typical thinking</li> <li>• Logic and attention to detail ensure outstanding results</li> <li>• Presentation of the solutions through absolutely factual argumentation                             <ul style="list-style-type: none"> <li>• Structured reporting delivers clear and transparent results</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Support of the internal service center for advanced analytics &amp; Big Data at Daimler</li> <li>• Optimization of IT reporting for Allianz, that is, analysis of Allianz’s global IT costs (approx. 20 K data sets from various sources for 80 contacts per quarter) and automation of previous manual evaluation steps to minimize the reports’ error rate.</li> <li>• Support of the data warehouse and the internal wiki at BayernLB.</li> </ul>
Software engineering	<ul style="list-style-type: none"> <li>• Discover code patterns others might miss</li> <li>• Affinity to programming languages as they are based on logic and structure</li> <li>• Lateral (outside-the-box) thinking allows for innovative solutions                             <ul style="list-style-type: none"> <li>• Preference for order supports clean coding</li> </ul> </li> <li>• Clear communication, unambiguous choice of words                             <ul style="list-style-type: none"> <li>• Rapid penetration of the technical domains through analytical and logical thinking</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Development of entirely new software to replace the old system for a mobility and industrial technology concern with 40 K employees and &gt; €25 B revenue*.</li> <li>• Design and development of a web-based database application for tax management for an international audit company*.</li> </ul>
Compliance	<ul style="list-style-type: none"> <li>• Intuitive search for logical constructs in all action sequences</li> <li>• Understanding compliance and very accurate detection of deviations                             <ul style="list-style-type: none"> <li>• Independent analysis, unbiased by previous experience, leads to new and innovative insights                                     <ul style="list-style-type: none"> <li>• Factual and logical reasoning   <ul style="list-style-type: none"> <li>• Accuracy in detail</li> </ul> </li> </ul> </li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Optimizing event management in a new CRM system for MSD, balancing strict events documentation requirements and transparent processes to increase employees’ adoption of the new system.</li> <li>• Conceptual support in fraud prevention for Commerzbank, incl. deriving patterns for early fraud detection, defining requirements for new software, and designing internal bank guidelines on the subject of “Fraud in the case of letters of credit.”</li> </ul>
Cyber-security	<ul style="list-style-type: none"> <li>• Quick detection of errors, gaps in processes and deviations from standards</li> <li>• Honesty and perseverance until the error has been rectified</li> <li>• The different way of information processing in the brain complements IT security strategies and avoids “blind spots”</li> <li>• Thinking outside the box allows to grasp how cybercriminals think and better prevent attacks.</li> </ul>	<ul style="list-style-type: none"> <li>• Processing alerts and analyses of specific situations, searching through vast amounts of log files, identifying deviations in patterns for an aviation enterprise*.</li> <li>• Support for the Security Operations Center of a large energy and infrastructure enterprise*: Evaluation of the software and adaptation to the customer’s requirements, security process analysis and optimization and SOAR (Security Orchestration, Automation and Response); “threat hunting” and creation of attack scenarios.</li> </ul>

Note: “\*” stands for companies that requested anonymity.

**TABLE 2** | Differences in IT workforce management between *auticon* and neurotypical IT firms.

Workforce management area	What is different at <i>auticon</i>	What is the same as in other IT firms
Hiring and selection	<ul style="list-style-type: none"> <li>• Submission of medical diagnosis as a prerequisite.</li> <li>• Autistic-friendly usability and accessibility are at the forefront of job description design (precise wording, no vague expressions).</li> <li>• Flexibility with application formats (a free-form e-mail, response to a Facebook post, a call, a structured CV).</li> <li>• Proactive discovery of skills and strengths through additional questions and “reading between the lines”</li> <li>• Flexible contract offers between 20 and 40 h/week</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-screening for psychological aptitude for project work.</li> <li>• Technical skills assessment.</li> </ul>
Training and development	<ul style="list-style-type: none"> <li>• Job coach presence who is responsible for the mental preparation of IT consultants and clients for joint work and for reducing the communication burdens</li> </ul>	<ul style="list-style-type: none"> <li>• Internal weekly peer exchange (called “Auticon academy”)</li> <li>• Advanced training in project-free time</li> </ul>
Performance appraisal	<ul style="list-style-type: none"> <li>• Indirect feedback from the client via a job coach</li> </ul>	<ul style="list-style-type: none"> <li>• Direct feedback from the client</li> </ul>
Compensation	<ul style="list-style-type: none"> <li>• Availability of job coaches for professional development</li> <li>• Entitlement to mental health counseling sessions per year with an external provider</li> <li>• 10% of working time set aside for mental health programs</li> </ul>	<ul style="list-style-type: none"> <li>• The market rate wages</li> <li>• Superannuation package                             <ul style="list-style-type: none"> <li>• Paid vacation days</li> <li>• Paid sick leave</li> </ul> </li> <li>• Corporate bike rental</li> <li>• Corporate discounts at various retailers</li> </ul>

operations, realistic and clear expectations of oneself and colleagues, and friendliness within the firm. One employee expressed it as follows:

The pure fact that I’m already outed as a staff member in *auticon*. Everybody knows I’m in trouble. Everybody’s in trouble. Everybody knows they have to be a little bit cautious about staff. And I just don’t have to explain why I need XYZ. I just say it’s important to me. Is accepted and is not discussed: “Yeah, but why? Who doesn’t need that?”

(IT consultant, Interview)

Once an open, respectful attitude towards specialists with ASC becomes the default assumption for all work, the need to constantly consider how to deal with neurodevelopmental conditions disappears. The fact that an autistic individual is performing a task fades into the background, allowing professionalism, that is, IT expertise, to take the spotlight.

*Auticon’s* staff also commented that for such a respectful culture to emerge, acceptance of neurodivergent team members must permeate all levels of the organization. Only having an HR department that only expresses value statements and stipulates norms that speak to being inclusive is insufficient. One senior executive explained this vividly:

If the mindset doesn’t change outside the HR departments... [it is not enough]. [It is should be] here,

in middle management and when people are really in teams. That’s the only success factor. You can have the most left-wing, green-wing, strong-mouthed diversity managers at the administrative level, but that won’t help if you don’t really have team leaders and department heads who understand what it’s all about.

(Senior manager, Interview)

With its mission set to be an inclusive company already at the outset, *auticon’s* goal has always been to achieve and live equality for autistic IT professionals. However, while intentions may be crafted from the beginning, culture as an interdependent system of values, rituals, and artifacts develops slowly. It took a decade of active mindset development effort at *auticon*, and the opening of new offices abroad required regional adaptation. For example, when expanding to the UK, they found that autism was generally more openly discussed there than in Germany. Through these incremental steps in building an inclusive culture to lay the foundation for inclusive practices, *auticon* has witnessed positive cumulative effects. One senior manager explained:

Every form of inclusion correlates positively with every other form of inclusion. A company that has already installed parenting-friendly workplaces and wheelchair ramps will respond better to everything *auticon* brings than a company that has never thought about anything.

(Senior manager, Interview)

## 4.1 | Hiring and Selection

Congruent with and building upon its cultural values, *auticon*'s workforce management starts with a selection and hiring strategy explicitly targeted at autistic IT professionals.

To attract potential candidates, *auticon* uses an outreach program involving psychiatrists and diversity and inclusion workshops at companies, universities, schools, and job centres. Media coverage, such as a newspaper article or a television report, has also proven fruitful because it alerts family members and friends of autistic job seekers who become aware of the company and can recommend it respectively. *Auticon's* homepage makes it very explicit that their recruitment is targeted at IT specialists on the autism spectrum. This level of transparency fits well with the need for direct communication among autistic individuals. It contrasts the approach taken by most IT companies (Appendix B), where hiring options for neurodivergent candidates are often intransparent or communicated as special programs, both of which diminish the potential belongingness experience. *Auticon's* approach also differs in terms of fostering an expression of uniqueness: while usually, non-disclosure of a neurological condition is advised (Hensel 2017; Johnson and Joshi 2016), *auticon* makes submitting a medical diagnosis a prerequisite. Both a manager and an IT consultant confirmed this practice:

We have employees who asked themselves their whole life what is wrong with me. Of course, they have also tried again and again to get a foot in the door at work and have noticed that it doesn't work in the team, or they don't get along with their supervisors or structures. And at some point, they received the diagnosis late when they came to Auticon, so to speak, as: Thank God, there is also a company where I also feel accepted.  
(Manager, Interview)

That [hiring process] was very pleasant. So I have to say, I've never felt as comfortable in my life as I do at Auticon. As I said, I didn't have to pretend or make an extra effort; it was actually more relaxed than with other employers. I'm a very bad liar, and there [at auticon], I could tell the truth. And they [auticon] knew how to interpret that, so to speak, I can't sell myself so well or my qualities well.  
(IT consultant, Interview)

The job descriptions are also designed to be accessible to candidates with ASC. *Auticon's* autistic employees from outside the IT department (12% of the operations team also have an ASC diagnosis according to Auticon Global Impact Report 2022) regularly proofread website content and design for clarity and appeal to autistic individuals. They review job descriptions for factual information known to be well-received by individuals with ASC, for example, programming languages, education, interests, experience, and analytical skills. In contrast, generic neurotypical statements like "excellent communication skills," "team player," "join our fast-paced, fun, vibrant team," or "duties will vary/this is a stretch role" (LinkedIn 2015) are considered undesirable and thus eliminated from job descriptions.

Moreover, *auticon* designed an application and applicant tracking system that is flexible enough to handle CVs and resumes in various formats, recognizing that people on the autism spectrum often do not market themselves well. For example, the initial contact expression can be informal, such as a comment on a Facebook post, a free-form email, or a website contact form submission. To start the multistage hiring process, an official diagnosis and a CV listing education, skills, and previous experience are enough.

What we don't need, or optionally what you can send, are work samples, references, such a great cover letter, such a motivational cover letter...we refrain from that from the beginning because we know that many autistic people have difficulties with that and can feel scared off by it.

(Manager, Interview)

Suppose the overall impression of a candidate's initial application is positive. In that case, *auticon* provides them with a questionnaire to tick off their IT skills in a structured, subject-related, tabular way (through list questions such as "Which of the following programming languages do you know?"). *Auticon's* hiring managers do not ask any questions related to social skills because this marks the point of highest insecurity for many autistic people. Instead, there is an initial informal conversation (deliberately labelled as "a conversation" instead of "interview") with a job coach, during which the job coach attempts to discover skills and strengths in technical and cognitive areas, which the specialists also noticed during their hiring experience:

Many autistic people tend to present themselves worse than necessary because they simply underestimate themselves in some areas. We know that, and that's why we can look behind the curtain a bit and tease out certain things in the conversation, where we realize that there's still something there, and we could look into it again.

(Manager, Interview)

So that first conversation was with a job coach and my project manager. There was an interview, but like I said, it was a bit different than usual. A bit more relaxed, so I wasn't so stressed.

(IT consultant, Interview)

Next, *auticon* conducts competency analyses through cognitive skills tests and technical assignments, with a deadline of 2 weeks. Typically, this step involves an additional conversation with a project manager, to whom a new employee would report in the future, or with a peer colleague, who knows more about the technical side of the job.

The final phase in *auticon's* approach to hiring and selection is a three-day workshop where work scenarios and projects are simulated. It is offered for several candidates to model group problem-solving. The last step in that phase presents an opportunity for

candidates to verify that *auticon* suits them: “Are the projects I would do at *auticon*, or are the tasks I get from the customers suit me? Is it something that corresponds to my interests? Can I imagine fitting in at *auticon*?” The idea of *auticon* at this stage is to shift the hiring decision-making toward the candidate. To illustrate the entire process, one IT consultant described all steps chronologically:

I read the post on Facebook, I just left my details there. They got back to me. I had an initial interview with someone who is the job coach. I had a few questions, and then they had me for another interview with the job coach and project manager. After that, a couple of tests. All kinds of tests. I went over my tests with an employee who understands the content better. And that was okay. And yes, after that, there was a three-day seminar (about) what Auticon is, what it does, what it does to the customers, case studies, etc.

(IT consultant, Interview)

## 4.2 | Training and Development

One of the main elements in *auticon*'s approach to IT workforce management is the employment of mediators (called job coaches) who accompany autistic IT specialists on an ongoing and concurrent basis.<sup>12</sup> While traditionally, a job coach's role is to co-develop a strategy for clients to achieve their career goals (Lyons 2022), at *auticon*, they instead focus on assisting IT specialists in the day-to-day operations through task prioritizing, social skill development, and workplace accommodation support. In this sense, job coaches act as boundary-spanning resources (e.g., Levina and Vaast 2005) that employees can mobilize on an as-needed basis. For example, some employees fully use their weekly one-on-one time, while others check in at certain intervals to say they are doing well.

At *auticon*, job coaches typically have social work or healthcare educational backgrounds. While such a qualification is likely beneficial, the job coaches also admit that a lot of their professional competency relies on soft skills and the gradual build-up of operational experience that comes from interacting closely with autistic specialists over time: One job coach put it as: “It's active listening, and it's reading between the lines.”

Job coaches contribute to workforce management by mentally preparing employees with ASC for project assignments, making client workplace adjustments, and aiding communications between specialists and clients. Because these tasks are ongoing and concurrent with actual project work, a job coach duty involves intentional emotional and social engagement:

You do build up a relationship with your own coachees. And you actually have relatively close contact with them. You prepare them for their projects, but you also accompany them during the projects.

(Job Coach, Interview)

One of the job coach's main tasks is to decide, together with the autistic IT specialist, on adjustments that might be needed

at the client's workplace, for example, a particular lighting, noise-cancelling earphones, or an extra monitor. Most often, job coaches note communication uncertainties that they then attempt to resolve, or they recognize a need for more support in structuring, prioritizing, and organizing:

They [IT consultants] are really unsure concerning clients. “How is this meant? And how do I go to meetings? What do I pay attention to?” [...]And then I have colleagues [IT consultants] who get along relatively well in the projects and are also already very experienced and very “fit” in what they can do professionally, but need a lot of organizational support.

(Job coach, Interview)

At the beginning of an IT project, job coaches also prepare client teams to work with autistic IT specialists. These briefings include general information on autism and how the *auticon* employees they will be working with may behave, namely preferred workspace arrangements (multiperson vs. one-person room vs. remote), handling of free working time, and working style preferences. During a project, job coaches remain available as contact persons, along with project managers responsible for the technical aspect of the project execution. One job coach explains:

Eye contact is hard for the colleague. Don't be irritated if they're not looking at you and things like that. It's not disinterest. [...] some people enjoy the company of others. Others, however, are happy if (a job coach) informs or they themselves announce that they need the time for themselves and do not like additional communication or contact with others.

(Job coach, Interview)

Finally, job coaches also support autistic IT consultants in the time between projects. When IT consultants are “on the bench,” they undergo vocational training in one *auticon*'s list of in-demand skills (e.g., cybersecurity), as one of the specialists explained to us:

The expectation at Auticon is that if you don't have a project, you should continue your training. And I had a few times when I didn't have a project and was, therefore, expected to do further training. And I did this in a relatively uncoordinated way, and then at some point, I had a conversation about how I could do a coordinated training program.

(IT consultant, Interview)

Most training courses are offered as online certification courses because the autistic workforce often prefers this format. A job coach also supports advancing into new professional areas if IT specialists with ASC experience choice difficulties, as both a job coach and an IT consultant told us:

There are regular feedback meetings with the supervisor [project manager] to exchange about further training. Whether you are on the right track, so to speak. It will

be looked at as to why one has perhaps not yet achieved something. How one would like to progress.

(Job coach, Interview)

So I want to go a bit in the direction of AI. If I had time now, I'd already be on the course and so on...And cybersecurity too, actually, but that would be more of a secondary one.

(IT consultant, Interview)

### 4.3 | Performance Appraisal

Performance appraisal at *auticon* is handled in a common way, that is, via direct feedback from clients, job coaches, and project managers. One executive explained:

That's the classic work of a manager, gathering feedback, giving feedback. In that respect, we're no different from other companies that don't employ autistic people.

(Senior manager/executive, Interview)

Like other firms, *auticon's* management believes it is primarily their responsibility to initiate feedback and administrate clients. Job coaches are involved in this process because they handle much of the IT specialist-client communication:

We [job coaches] often exchange with the client, asking: "How is the work going? How satisfied are you with the consultant?" And sometimes the consultant is also involved, telling us where they worked. And then their colleagues [on the client's side] tell us what they think of the work the IT consultants have done.

(Job coach, Interview)

What might be notable is that *auticon's* autistic IT specialists show high appreciation for direct appraisal of their work. One consultant explained:

On a technical level, it could happen more often sometimes. But otherwise, yeah, well, when I'm told that I'm on the right path, on the task, that's always nice. I know that I have been right and not spent time going in the wrong direction.

(IT consultant, Interview)

### 4.4 | Compensation

*Auticon* operates as a for-profit organization similar to other IT management consultancy providers in the market. Their stated goal is to be profitable enough to pay all employees market-level salaries while still maintaining revenue growth:

Equality can only be achieved if salaries are equalized. It is really about people becoming independent. Many

are, because of unemployment or early retirement, simply dependent on government agencies. And for many, the step to work at *Auticon*, to get a permanent position there, is a step into becoming autonomous, which enriches their lives incredibly.

(Senior manager, Interview)

That said, with *auticon* offering predominantly permanent yet flexible work contracts (contracts are possible for 20–40 h), their salaries lie in the lower range of market salary levels when calculated on an hourly basis, as was confirmed both by *auticon's* IT specialists and by employment reviews visible on job review platforms such as Kununu, Glassdoor, Indeed, or Stepstone:

You have people working how much they want to work. Meanwhile, the standard in the market is 35 hours a week. You can still do it at 40, but the standard in the market by salary is much higher.

(IT consultant, Interview)

Concerns about compensation that is lower than at other companies are also visible on job review platforms such as Kununu, Glassdoor, Indeed, or Stepstone:

■ The salary is relatively low for the industry

(IT consultant, Kununu review, 2021)

■ Social benefits and salary should be adapted to the industry in order to better retain staff and become more attractive to new applicants.

(IT consultant, Kununu review, 2022)

One reason salaries are at the lower end of the market range lies in the cost structure, which mirrors *auticon's* organizational distinction. Because they define and operate a dedicated support role (job coaches), project administration costs at *auticon* are higher than those of other IT consultancies with neurotypical staff. Moreover, expanding the client base is more effortful and costly due to the pervasive societal and business-related prejudices surrounding autism, with many potential clients underestimating the skills, professionalism, and adaptability of autistic professionals. Overcoming these barriers requires proactive education and advocacy. As a result, *auticon's* overhead is higher because additional resources are allocated to client briefing, diversity training, and creating a supportive environment for both employees and clients.

Still, most employees with ASC we interviewed report being generally satisfied with *auticon's* compensation package, mentioning standard salary, insurance, vacation days, corporate discounts, and corporate bike rental services as bonuses. Autistic IT consultants also rated the availability of job coaches as a bonus:

Especially the job coach is a benefit that I would like to mention because you don't find that in other companies. So, job coaches take care of you if you have problems or something. That, yes, is really one of the benefits of *Auticon*, that I have a contact person

here who, regardless of technical aspects, can also stand by my side when I'm not doing well and listen to me.

(IT consultant, Interview)

As part of its efforts to offer competitive compensation packages, *auticon* also partners with a mental health service provider specializing in improving workplace well-being. For example, *auticon Germany* collaborates with *nilo.health* ([Nilohealth.com](https://nilohealth.com) 2024). Employees are granted six sessions per year (45 min each) with a health psychologist as part of their compensation package. These benefits are voluntary and anonymous: to take up the mental health service options, employment at *auticon* is verified electronically, but the service itself is private, without notifying *auticon* about the employee's exact identity. Given the high sensitivity of IT consultants to feelings of overload, the provision of external counseling is also seen as a means of preventing burn-out in the long term.

## 5 | Lessons Learned

*Auticon's* case offers several strategic takeaways. In the following, we discuss how firms can initiate and manage a workforce that includes neurodivergent professionals (lessons A1–A4) and what the IT industry should consider to enact inclusion more generally (lessons B1–B3).

**Lesson A1. Leverage the skills of neurodivergent personnel as a competitive resource base for unique selling propositions.** *Auticon* discovered and leveraged value in autistic people, not just as an item of a politically or morally driven inclusion agenda but as a sustained competitive advantage. Their case shows that acknowledging the particular skills of IT staff with a neurological condition can yield a valuable, rare, inimitable, and non-substitutable resource base (Barney 1991). *Auticon* realized this opportunity and leveraged the cognitive strengths of their autistic IT specialists to craft a unique selling proposition in the competitive IT service consultancy market. The company designed its offering portfolio (Table 1) deliberately around IT services (namely, quality assurance and testing, analytics and business intelligence, software engineering, compliance, and cyber-security) that require technical, structured, and formal problem analysis and solution discovery skills that are well-suited to the aptitudes and interests of their autistic employees.

**Lesson A2. Attune workforce management practices to one neurodevelopmental condition at a time.** The story of *auticon* is evidence that focusing on one neurodivergence group might be more successful than aiming for a highly neurodiverse workforce all at once. *Auticon's* workforce management is customized to one aspect of neurodivergence, namely, to IT consultants with ASC. As such, during hiring, free-form application, precise vacancy description, and skills discovery in an interview are measures attuned to autistic applicants. In an internal communication tool, a preferred method of contact can be specified, for example, “Text me before calling,” which is also in line with an autistic dislike of spontaneity. The complex nature of the disorder and the inherent variety of its manifestations already require considerable knowledge from managers and job coaches. Interviewees of all positions often mentioned a

saying describing daily interaction with autistic colleagues: “If you know an autistic person, you indeed know only one autistic person,” celebrating feelings of uniqueness. Moreover, neurodevelopmental conditions frequently come in multiples: for 25% of *auticon's* employees, autism is coupled with attention deficit hyperactivity disorder (ADHD) or dyslexia (*Auticon Global Impact Report* 2022).

By maintaining diagnosis-based uniformity within the firm (i.e., focusing primarily on one neurodevelopmental condition), *auticon* was able to scale operations and impact and, thereby, provide a sense of belongingness. Autistic IT specialists frequently reported a sense of community, of “being like all others.” For example, they appreciated explicit, fact-based texting and structured, transparent communication. Interestingly, this lesson implies that to contribute to inclusion at the macro (industry) level, it may be efficient for individual firms to target one type of neurodivergent workforce. It takes time to build expertise and excel in even one primary neurodivergence area, as *auticon's* gradual expansion since 2011 demonstrates. This contrasts with the prevalent, but often unsuccessful, attempt to integrate various neurodivergent members into a neurotypical workforce all at once, without any supporting structure such as job coaches.

**Lesson A3. Managing a neurodivergent workforce requires acceptance of neurodevelopmental conditions, not a constant debate about their fundamentals.** *Auticon's* workforce management practices build upon the premise that all network members understand neurodivergence and autism as a special case of it. The diagnosis is taken seriously, without exhausting suspicions that people just pretend and without doubts about workplace adjustments. The shared knowledge among all employees and clients about the condition and the subsequent distinct preferences is fundamental and simplifies the life of IT consultants on the spectrum. It eliminates repeated explanations of the basics of the diagnosis, needs, and accommodations to other team members<sup>13</sup>. Likewise, *auticon's* job coaches ensure that clients adjust their workplace arrangements for the IT specialists with ASC, not vice versa.

Building on colleagues' autism as given, not as a matter of possible change or doubts, can be fruitful for instilling curiosity, candor, and acceptance. Once the fact is admitted, it is easier to respond constructively, for example, by focusing on a positive and respectful attitude toward autistic co-workers. Without this basic mindset (“a person is autistic, we respect them and work with them”), formalizing or mandating IT workforce management practices can otherwise become a well-intended but ultimately futile exercise.

**Lesson A4. Engage mediation professionals in the day-to-day operations.** The story of *auticon* also highlights the key role of job coaches as mediation professionals. Conceptually, the roots of this role go back to occupational social workers (Mudrick 1991) as on-site facilitators of the employment of people with disability. Unlike traditional diversity, equity, and inclusion specialists in large corporations who work closely with the HR management as high-level advisors, *auticon's* job coaches mediate all value creation-relevant aspects of the job on a very operational, day-to-day level. *Auticon's* job coaches are trained in IT services; they are, for example, familiar with

the distinctions of Waterfall vs. Agile, Scrum vs. Kanban, and other specifics of software development. They cannot replace a project manager but can back up an urgent meeting with clients. In this way, job coaches help to learn task-specific social skills and organize the on-site routine, smoothing the IT professionals' workday. Some autistic IT specialists require more job coach support in terms of the number of meetings and assistance in structuring the workday, while others check in biweekly, sometimes to say they are doing well. Regardless, the point is to engage mediation professionals not only as an advisory, trainer, or managerial support role but as a key cog in the operational processes through which firms create and capture value.

The second set of lessons we identify from our analysis of *auticon* concerns the IT industry as a whole and the management of its workforce in particular. Together, the insights below highlight the importance of human actors in IT workforce management.

**Lesson B1. Include alternative hiring and selection practices to better match job content to desired candidates' core competencies.** The case of *auticon* illuminates the benefits of having a broader portfolio of workforce management practices that can be tailored to different groups of potential employees. For example, when targeting autistic professionals, highly accurate job descriptions and interviews designed specifically to target those IT competencies a company desires can improve hiring success. This strategy may pay off even when not intended for inclusion purposes: writing factual job descriptions with clear expectations minimizes search costs. In addition, allowing more flexibility in the application formats will enable companies to stand out from the common, strictly formalized HR systems that often require a separate registration and manual re-entry of a candidate's resume. Finally, interview tasks that simulate day-to-day work and allow technical skills to shine through are more likely to reveal the applicants' competencies and their fit for the targeted job. For example, *auticon* offers online coding tests with a two-week deadline. Or, being aware of the overly modest self-presentation and perfectionism of autistic people, *auticon's* recruiters proactively inquire about the IT stack that could be advantageous for the position, even when the candidate does not explicitly highlight it. Such competency insights often go unnoticed in standardized oral assessments, which typically manifest as interrogations and often mask competencies behind a candidate's ability to perform in anxiety-inducing situations in the presence of a hiring manager.

**Lesson B2. Be prepared to replace ceremonious, verbose, and obsequious corporate language with clear and straightforward language.** A second learning is that direct communication with unambiguous word choice is preferred by autistic workforce members, meaning that organizations need to prepare for different communication behaviours. Our respondents pointed out that direct and honest feedback from autistic individuals sometimes goes against conventional corporate communication, which is governed by a mandate for political correctness, subtle cues, careful word choice, conflict avoidance, and hierarchy enforcement. *Auticon* exemplifies conversely that saying openly what is meant as opposed to the necessity of reading between the lines offloads all conversants cognitively.

**Lesson B3. The path to an inclusive IT industry might involve many firms, each focusing on one group of neurodivergent IT workforce.** The case of *auticon* also shows that contributing to workplace inclusion at the macro (industry) level is rooted in focused efforts, which implies being, to some extent, exclusive at the firm level. As a for-profit IT consulting firm, *auticon* has to make certain choices in its offerings—most notably, specializing in services that IT professionals with ASC and no intellectual disability are expected to perform well. This choice leaves out other potential workforce members (e.g., neurodivergent IT workers who have conditions such as attention-deficit/hyperactivity disorder, dyslexia, dyscalculia, or dyspraxia but who are not autistic) and whose inclusion might yield benefits to a firm. For example, workforce members with attention-deficit/hyperactivity disorder exhibited remarkable efficiency in problem-solving and implementing creative solutions, which could form a key competitive advantage for some firms (Hotte-Meunier et al. 2024). In other words, even if *auticon* makes a sustainable commitment to workplace inclusion, as evidenced by its many awards, it cannot and will not be relevant to every neurodivergent IT professional. As a result, we envision different firms specializing in offerings that cater to the specifics of a particular group of neurodivergent IT workers. If adopted by enough companies, such a niche differentiation strategy would significantly advance workplace inclusion in the IT industry as a whole.

## 6 | The Boundary Conditions of *Auticon's* Approach

No combination of IT workforce management practices will ever be a strategic panacea. Despite the viability of *auticon's* approach, it would be misleading to say that *auticon* solved all inclusion problems or avoided creating new ones. In other words, while *auticon* is more inclusive than typical IT firms from the perspective of specialists with ASC, it is not necessarily inclusive per se. This becomes evident, amongst others, in their hiring decisions: *auticon* only employs autistic individuals without intellectual disabilities. Further, being a profit-oriented company, it has to meet clients' quality demands; hence, domain expertise remains a decisive criterion during personnel selection over and above any social criteria. The next boundary *auticon* faces is in its capability expectations. The company does not provide in-house education or trainee programs; candidates must possess or acquire IT expertise elsewhere. Meanwhile, neurodevelopmental conditions can affect performance in school and higher education (Mantzas et al. 2022), leaving degrees unfinished and skills unaccredited. Market-driven enterprises withdraw from long-term and costly investments in nurturing neurodivergent human resources from the ground up, which exacerbates the inclusion challenge at the hiring stage.

Another issue for *auticon* is retention and development. The organization is considered a good fit for entry and mid-level IT professionals but not necessarily beyond. It provides opportunities for growth within the company, but these are limited. This leads to the situation that once autistic employees, through their work at *auticon*, gain more confidence in client interaction, workplace communication, and mastery of IT skills, the risk of pursuing career challenges outside of *auticon* is palpable. A critical aspect

of this risk is remuneration. Although the salaries of *auticon's* IT specialists broadly align with market rates, they reside at the lower end of the salary distribution because of the additional operation costs associated with *auticon's* business model. Even though employees recognize and respect these limitations, the reality is that they receive lower monetary compensation than in other companies, which can turn out to be a reason to leave over time.

## 7 | Future Research Opportunities

Our analysis of *auticon's* case opens up at least six opportunities for research. First, while *auticon's* business model can be understood as successful, the exact nature of the match between cognitive, behavioural, and social characteristics on the one hand (Misra and Khurana 2017) and IT professional skills and abilities, on the other hand (Radovilsky et al. 2018) still remains largely unknown. A more fine-grained analysis of desired versus provided skills would improve the ability to generalize the insights from the case of *auticon* to other business settings with workforce members with other disorders or difficulties (such as ADHD or dyslexia).

Second, all seven lessons we derived from our analysis of *auticon's* case primarily relate to IT consultancy work. This career combines two types of work—consulting and IT—each with its own specific focus. For example, autistic individuals have an affinity for IT work in general (Jia, Steelman, and Jia 2024) but also a noted reservation against social interaction (as is often required in consultancy). This situation begs the question of the relative dominance or, conversely, the intersection of aspects of work that may be favoured or disfavoured by neurodiverse employees. It stands to reason that not all our lessons are fully transferable to other management consulting work that is less directly related to IT. Some lessons (e.g., about the leverage of job coaches) may not be directly applicable when autistic professionals do more “pure” IT work.

Third, the case of *auticon* testifies to the social nature of IT work (Maier et al. 2021; Bapna et al. 2013). To be effective in the workplace—to benefit themselves, their employer, and the broader economy—“hard” technical skills are only one of six skill areas employers seek. The remaining five skill areas include higher-order thinking (creativity, problem-solving, decision-making), personal skills (self-control, initiative, emotional literacy), people/social skills (teamwork, ethics), generic skills (leadership, project management), and self-perceived employability skills (resilience, networking) (Misra and Khurana 2017). Job coaches' key role is managing the relationships between specialists and work demands, specialists and their employers, and specialists and their clients. Here, the unique soft skills such as people management, time management, communication, or even workplace arrangements all point to the need to revisit taken-for-granted assumptions about IT job design (Ang, Slaughter, and Yee Ng 2002).

A fourth research opportunity we see concerns the comparison of different approaches to workforce inclusion. *Auticon's* case can be seen as an initiative that centres on building a

diagnosis-based uniform workforce primarily consisting of IT specialists with ASC. As Loiacono and Ren (2018) and Appendix B illustrate, other and more common (albeit by no means frequent) attempts rely on directly integrating neurodivergent members into a neurotypical IT workforce. Whether or not all aspects of *auticon's* strategy (Table 2) would hold in such a setting is an open question.

Fifth, we see an opportunity to develop an even deeper understanding of IT firms' performance and compensation management practices and how they relate to personnel with neurodevelopmental conditions. In these two areas of workforce management, we found no apparent differences between *auticon* and other companies. However, we caution that ethical clearance and worker's council approval conditions also hindered us from obtaining more detailed performance assessment or compensation data.

Finally, while our paper concerns workplace inclusion, our insights tie into the broader discourse about social inclusion (e.g., Andrade and Doolin 2016; Annabi and Lebovitz 2018; Tarafdar, Rets, and Hu 2023). The reason is that workplace inclusion is a key lever to breaking down structural barriers, challenging persistent stereotypes, and thus moving towards social inclusion. Workplace inclusion not only offers financial independence but also a sense of purpose, self-esteem, and belonging (Lysaght et al. 2017). When previously disadvantaged people can bring their skills and perspectives to bear alongside their peers, they report feeling valued and accepted for who they are. This positively spills into mental health, private lives, and social contacts (*auticon* | unicus Global Impact Report 2023). To unlock the promising employment prospects, we advocate for a comprehension of the interconnection between IT workforce management, workplace integration within the IT sector, and broader social inclusion initiatives pertaining to or involving IT (e.g., Loiacono and Ren 2018; Patton 2019; Fedorowicz et al. 2023) as a further pivotal research avenue.

## 8 | Conclusion

Despite the known affinity of autistic individuals for IT, the majority of them are unemployed, retired early, or forced to accept temporary jobs far below their abilities. The exclusion of autistic IT specialists from the workforce is detrimental to the entire IT industry.

Our paper presents an example of a successful approach to managing an autistic IT workforce. The case study of *auticon* illustrates that (1) IT companies can turn neurodivergent distinctiveness into a unique selling proposition; (2) targeting one neurodevelopmental condition may be more effective than building a highly neurodiverse workforce all at once; (3) inclusion should start with building a neurodivergence-aware culture; (4) it mediation professionals should become involved in day-to-day operations. *Auticon's* pioneering case of the synergy between economic and social goals holds valuable lessons and serves as a role model for the IT industry (and beyond) on its journey for workplace inclusion in the IT profession.

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## Conflicts of Interest

The authors declare no conflicts of interest.

## Data Availability Statement

Our research data are not publicly available due to privacy and ethical restrictions. The scraped publicly available data, *auticon*'s reports, and interview protocols are available from the authors on request. The research project was approved by the institutional review board of the University of Potsdam on December 8th, 2022.

## Endnotes

- <sup>1</sup> Autism Spectrum Disorder (ASD) is the official term used by the American Psychiatric Association (APA) in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) and the International Classification of Diseases, 11th revision (ICD-11). Outside of the medical profession, it is more common to refer to Autistic Spectrum Condition (ASC) to move away from the negative connotations associated with the word “disorder.” Hence, whenever possible and outside of any reference, we will use the term ASC and “autistic people/individuals” or “on the spectrum.”
- <sup>2</sup> Neurodivergence is an umbrella term covering all variations in the human brain and cognition, such as variations in attention, learning, sociability, and mood (Armstrong 2011); neurodivergent as an adjective refers to an individual. Neurodiverse/neurodiversity refers to a group of people with neurodivergent members.
- <sup>3</sup> Our research procedures are summarized in Appendix A.
- <sup>4</sup> At *auticon*, all IT specialists are autistic, but other roles (e.g., management, job coaches, administrative support) can also be filled by neurotypical employees.
- <sup>5</sup> Our case focuses on *auticon*'s operation prior to the merger. Other IT companies that specifically hire autistic people include the Danish *Specialisterne* (<https://specialisterne.com/>) and the Belgian *Passwerk* (<https://www.passwerk.be/>).
- <sup>6</sup> We use the term workforce in its common interpretation to denote the individuals engaged in or available for work. The term workplace denotes all relevant aspects of the setting in which workforce members operate.
- <sup>7</sup> Qualitative data comes primarily from Germany and Switzerland. Therefore, our conclusions are mainly derived from *auticon*'s operations in these two countries. While *auticon*'s core business model is consistent worldwide, slight local nuances may exist. Publicly available data is scraped for *auticon* worldwide.
- <sup>8</sup> This situation has not changed much. Before joining *auticon*, their IT specialists with ASC were, on average, unemployed for 2 years (Auticon Global Impact Report 2022).
- <sup>9</sup> Since the merger in June 2023, *auticon* and Unicus together have over 30 offices in 15 countries (Germany, UK, France, Switzerland, Italy, USA, Canada, Australia, New Zealand, Poland, Sweden, Norway, Finland, Ireland and the Netherlands).
- <sup>10</sup> More precisely, in Germany, job coaches form their own department that interacts closely with the HR department, while in Switzerland, job coaches are part of the HR department.

<sup>11</sup> By culture, we mean the values, beliefs, rituals, routines, and artifacts that construct the basic assumptions that members of the organization take for granted (Schein 1992).

<sup>12</sup> As of summer 2023, *auticon* maintained an average ratio of one job coach per 10 IT specialists.

<sup>13</sup> Note that explaining basics over and over again and wondering whether and why accommodations are needed has bothered autistic specialists. This should not be confused with the ongoing autism education that *auticon* managers and coaches undergo to stay on the cutting edge of current developments.

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## Appendix A

### Research Procedures

#### Research Team Composition

Our team combines two IT industry professionals and two information systems (IS) academic researchers. One practitioner team member is on the autism spectrum himself and was the Chief Operating Officer at *auticon* Switzerland from 2021 to 2023. In our project, he provided a crucial emic perspective (Davison 2021) to understanding *auticon*'s management. Moreover, as a co-director of a participatory research network on autism ([www.forschung-autismus.ch](http://www.forschung-autismus.ch)), he contributed to the design of our qualitative study through his experience in empirical studies that involved autistic participants. Our second practitioner co-author has been Marketing Manager at *auticon* Germany since June 2019. Interacting with autistic IT consultants (e.g., by organizing workshops and events) and observing their impact on numerous IT projects belongs to her daily work routine.

The lead etic team member is an IS researcher specializing in the social implications of digital technology, who has been in close contact with *auticon* since May 2022, visited their Munich and Berlin offices, and attended several firm-internal online meetings. The second etic team member is an IS academic focusing on firm-level digital innovation and transformation research who has been in contact with *auticon* since October 2022. All authors are convinced that digital technologies bring forth both potential and challenges in addressing diversity, equity, and inclusion and that a more inclusive workplace must be built in practice and the academic profession.

## Case Study Design

We used an inductive holistic-single case design. Our data sources (Table A1) included semistructured interviews as primary data and three types of secondary data: internal company documents (in particular project reports with goals, solutions, and outcomes), publicly available data published on *auticon*'s website, YouTube, Google News, and other media, and employee reviews from online platforms such as [glassdoor.de](https://www.glassdoor.de), [stepstone.com](https://www.stepstone.com), [indeed.com](https://www.indeed.com), and [kununu.com](https://www.kununu.com). Our analysis was primarily based on our coding of the primary data. We used secondary data to understand better the context in which *auticon* operated and to cross-validate our interview findings. For example, we corroborated our insights from the interviews with internal company documents such as recruitment and training policies. Next, we looked at online employee reviews to verify interviewees' claims about compensation and performance reviews.

TABLE A1 | Data sources.

Semi-structured interview	
With management/coaches	1 with a marketing manager (2.5 h) 1 recorded client—IT consultant webinar (1 h) 11 with job coaches/project managers (in total, 13 h) 1 executive manager (1.5 h)
With clients	2 from financial services and aircraft industry (in total, 1.7 h)
With autistic IT consultants	19 with IT consultants, inkl. 16 current and 3 former employees (in total, 18 h)
Internal documents	2 case studies 1 company portrait 10 completed projects examples & company portfolio
Publicly available data about <i>auticon</i>	3 reports from the company's website ~50 Youtube videos ~800 relevant articles Google News 7 employee reviews from <a href="https://www.glassdoor.de">glassdoor.de</a> and 30 employee reviews from <a href="https://www.kununu.com">kununu.com</a> 2 employee reviews from <a href="https://www.stepstone.com">stepstone</a> 1 employee review from <a href="https://www.indeed.com">indeed.com</a>
Informal data sources	Biweekly online meetings with <i>auticon</i> managers (members of research team) to discuss updates, study ethics as a part of IRB application to minimize possible risks for participants, refine question catalogue, agree on study participants' recruitment strategy and administer the data collection progress.

The academic members of the author team conducted semistructured interviews in June–July 2023. We designed three types of protocols with pre-planned questions to cover the subject area (Rubin and Rubin 2004): one for *auticon* managers and job coaches, one for autistic IT specialists, and one for *auticon* clients. This was important, mainly because the interviews for IT specialists with ASC had to cater to the specific needs of these informants. We revised our protocols in multiple rounds with the entire author team. We relied on the checklist for autism-friendly research with adults (autismus-forschungs-koooperation.de 2023) and adjusted both questions and their wording, striving for understandability by our respondents, especially those on the spectrum (IT consultants). Our questions were formulated in German (the primary language in *auticon* Switzerland and Germany) and then translated into English for analysis and publication purposes. During the interviews, follow-up inquiries were used in addition to the protocol to gain a deeper understanding of the subject matter or to clarify individual responses.

To complement the formal data through informal means, the academic authors conducted regular online meetings with the *auticon* representatives to discuss study ethics, minimize potential risks to and hurdles for participants, refine data collection protocols, decide on study participant recruitment strategy, manage data collection progress, and to discuss and validate data analysis outcomes. In addition, etic and emic members of our author team had dozens of informal telephone conversations and email exchanges to clarify and validate various aspects of *auticon*'s operations.

## Data Analysis

Our analysis strategy relied primarily on developing polyphonic presentations (Sarker et al. 2018). We sought to generate an accurate picture of *auticon*'s practices that integrated multiple stakeholder voices, namely their IT consultants, coaches, managers, executives, and clients, each of whom spoke for themselves. Inductive open coding (Miles, Huberman, and Saldaña 2014) then allowed us to dig deeper into *how* and *why* the polyphonic presentations of *what auticon* was doing were appropriate interpretations for their success without being scaffolded by existing theories.

To structure our analysis of how *auticon* was doing IT workforce management differently, we used existing models of workforce management (Shen and Edwards 2006; Orlitzky and Swanson 2006) as a bracketing device to separate *auticon*'s practices into four discrete stages, each of which could then be contrasted to common industry practices as documented in the literature.

Table A2 illustrates our inductive coding, generated through an iterative process. We primarily used thematic data analysis to build a data structure that aggregated and grouped the identified first-order concepts adhering to the interviewees' terms into second-order conceptual themes. Then, we related these themes to stages of IT workforce management as conceptualized in the HR literature (Shen and Edwards 2006; Orlitzky and Swanson 2006).

We proceeded as follows. We started by agreeing on a four-stage workforce management model to separate practices into four areas. Next, the

**TABLE A2** | Inductive data coding examples.

Example quote	First-order concept	Second-order theme	Stage of workforce management
“The starting point [for partnering with <i>auticon</i> ] was certainly a functional background. Because for the task, it was very important to work very precisely but also very repetitively. In other words, it scared off many of our employees.” (Client, Interview)	Technical skills (high precision degree, resistance to repetitive tasks)	Strengths of autistic IT workforce	Hiring and selection & Training and development
“Very direct in their communication. Don't have the need to hide, but are very, almost childlike. Tell everything right away, which might be a problem. That kind of straightforwardness is very valuable in certain areas. Not certainly when it comes to positioning oneself and in interpersonal things.” (Job Coach, Interview)	Straightforwardness communication	Communication challenge	Hiring and selection & Training and development
“...being very correct can also be a difficulty when the code has to be so correct and somehow they are never satisfied, right? At some point you have to be satisfied with 80% or 70% or with a working code. Where is the limit, when is something good enough to pass? They can handle fuzziness poorer, e.g., when it's not very clear, when is a code good enough”. (Job Coach, Interview)	Perfectionistic tendencies	Work organization challenge	Training and development
“So, people are very often angry with me without me understanding why.” (IT consultant, Interview)	Unclear about the reasons behind anger of others	Communication challenge	Training and development
“I regularly have trouble structuring my daily life or workflow myself. So, time-wise.” (IT consultant, Interview)	Troubles structuring workflow	Work organization challenge	Training and development
“We have employees who actually only received their diagnosis in their mid-40s, who have asked themselves their whole life what is wrong with me. Of course, they have also tried again and again to get a foot in the door at work and have noticed that it doesn't work in the team, or they don't get along with their supervisors or structures. And at some point, they received the diagnosis late and then came to <i>Auticon</i> , so to speak, as: “Thank God, there is also a company where I also feel accepted.” (Manager, Interview)	Late diagnosis Relief at <i>auticon</i> Acceptance at <i>auticon</i>	General job market entry challenge	Hiring and selection & Training and development

(Continues)

TABLE A2 | (Continued)

Example quote	First-order concept	Second-order theme	Stage of workforce management
“What we don’t need, or optionally what you can send are work samples, references, such a great cover letter, such a motivational cover letter...we refrain from that from the beginning because we know that many autistic people have difficulties with that and can feel scared off by it.” (Manager, Interview)	Flexibility in application formats	Attuning hiring to the particularities of autistic IT workforce	Hiring and selection
“...Because some people enjoy the company of others. Others, however, are happy if (a job coach) informs or they themselves announce that they need the time for themselves and do not like additional communication or contact with others. “	Different level of sociability	Flexible support structures	Training and development
“There was the one who wanted to be texted via MS Teams before you call him” (Job Coach, Interview).	Spontaneity is undesired	Communication challenge	Training and development
“So far, I’ve actually gotten feedback, so very positive feedback from the client. So, I thought that’s normal. But the customers were overjoyed” (IT consultant, Interview)	Positive direct feedback from clients	Feedback	Performance appraisal
“So, the normal legal minimum. Salary, vacation days, sick days. All that kind of stuff.” (IT consultant, Interview)	Salary and social benefits	Benefits in general	Compensation

two academic authors analyzed interviews and agreed upon line-by-line coding of this data and their association with one or more stages of workforce management. We triangulated the insights we gleaned from primary data analysis by cross-checking the interview responses and our interpretations with publicly available materials and official documents to reduce the response, retrospection, and interpretation bias. For example, we validated *auticon's* reported approach to performance appraisal and compensation against online reviews left on Glassdoor, Indeed, Stepstone, and Kununu platforms. We also compared the reported hiring and selection experiences of *auticon's* employees against the documented hiring and selection policy documents. Once agreement was reached, we involved the co-authors from the practitioner side for their critical feedback, which led to further revisions of analysis, coding, and reported findings. We iterated this process until we reached a consensus amongst the entire research team.

**Appendix B**

**Hiring Opportunities for Neurodiverse Employees by Fortune 500 IT Firms**

Replicating the approach used by Loiacono and Ren (2018), we screened the websites of high-tech companies from the Fortune 500 ( $N=48$ ) for mentioning employment opportunities that were explicitly offered to neurodiverse employees in general and autistic employees specifically (Table B1).

**TABLE B1** | Summary of insights from website screening of 48 Fortune 500 IT companies.

Company	Website (URL)	Neurodiversity job opening/ employment program mentioned on the website or under the career table (IT or non-IT)?	Autistic IT specialists job opening/ employment program mentioned on the website or under the career table (IT or non-IT)?
Apple	<a href="https://www.apple.com/">https://www.apple.com/</a>	NO	NO
Oracle	<a href="https://www.oracle.com/">https://www.oracle.com/</a>	NO but there is a Tab with “Oracle Diverse Abilities & Neurodiversity Networks” <a href="https://www.oracle.com/de/corporate/careers/diversity-inclusion/disability-inclusion/">https://www.oracle.com/de/corporate/careers/diversity-inclusion/disability-inclusion/</a>	NO
Salesforce.com	<a href="https://www.salesforce.com/">https://www.salesforce.com/</a>	NO	NO
Microsoft	<a href="https://www.microsoft.com/">https://www.microsoft.com/</a>	YES <a href="https://careers.microsoft.com/us/en/job/1374865/Neurodiversity-Hiring-Program-Full-time-Opportunities-for-Students-Software-Engineer">https://careers.microsoft.com/us/en/job/1374865/Neurodiversity-Hiring-Program-Full-time-Opportunities-for-Students-Software-Engineer</a> and <a href="https://careers.microsoft.com/us/en/job/1374256/Neurodiversity-Hiring-Program-Intern-Opportunities-for-Students-Software-Engineer">https://careers.microsoft.com/us/en/job/1374256/Neurodiversity-Hiring-Program-Intern-Opportunities-for-Students-Software-Engineer</a> → Both IT (Software Engineer)	(YES) Autism was mentioned in the program description.
Alphabet	<a href="https://www.alphabet.com/">https://www.alphabet.com/</a>	NO	NO
HP	<a href="https://www.hp.com/us-en/home.html">https://www.hp.com/us-en/home.html</a>	NO	(YES) “HP is offering a program focused on recruiting, hiring, and retaining qualified candidates with autism” but no specific role <a href="https://www.hp.com/us-en/hp-information/about-hp/diversity/spectrum-success.html">https://www.hp.com/us-en/hp-information/about-hp/diversity/spectrum-success.html</a> → IT and Non-IT
Sanmina	<a href="https://www.sanmina.com/">https://www.sanmina.com/</a>	NO	NO
Western Digital	<a href="https://www.westernrdigital.com/">https://www.westernrdigital.com/</a>	NO	NO
Xerox	<a href="https://www.xerox.com/en-us">https://www.xerox.com/en-us</a>	NO	NO
NCR	<a href="https://www.ncr.com/">https://www.ncr.com/</a>	NO	NO
NetApp	<a href="https://www.netapp.com/company/">https://www.netapp.com/company/</a>	NO	NO

(Continues)

TABLE B1 | (Continued)

Company	Website (URL)	Neurodiversity job opening/ employment program mentioned on the website or under the career table (IT or non-IT)?	Autistic IT specialists job opening/ employment program mentioned on the website or under the career table (IT or non-IT)?
Intel	<a href="https://www.intel.com/content/www/us/en/homepage.html">https://www.intel.com/content/www/us/en/homepage.html</a>	NO	NO
Jabil Circuit	<a href="https://www.jabil.com/">https://www.jabil.com/</a>	NO	NO
Qualcomm	<a href="https://www.qualcomm.com/home">https://www.qualcomm.com/home</a>	NO	NO
Micron Technology	<a href="https://www.micron.com/">https://www.micron.com/</a>	NO	NO
Broadcom	<a href="https://www.broadcom.com/">https://www.broadcom.com/</a>	NO	NO
Applied Materials	<a href="https://www.appliedmaterials.com/">https://www.appliedmaterials.com/</a>	NO	NO
Texas Instruments	<a href="https://www.ti.com/de-de/homepage.html">https://www.ti.com/de-de/homepage.html</a>	NO	NO
Cisco Systems	<a href="https://www.cisco.com/c/en/us/index.html">https://www.cisco.com/c/en/us/index.html</a>	NO	NO
Amphenol	<a href="https://amphenol.com/">https://amphenol.com/</a>	NO	NO
Motorola Solutions	<a href="https://www.motorolasolutions.com/en_us.html">https://www.motorolasolutions.com/en_us.html</a>	NO	NO
IBM	<a href="https://www.ibm.com/us-en/">https://www.ibm.com/us-en/</a>	NO	NO
CDW	<a href="https://online.arizona.edu/partner/cdw">https://online.arizona.edu/partner/cdw</a>	NO	NO
Cognizant Technology Solutions	<a href="https://www.cognizant.com/de/de">https://www.cognizant.com/de/de</a>	NO	NO
Booz	<a href="https://www.boozallen.com/">https://www.boozallen.com/</a>	NO	NO
Amazon.com	<a href="https://www.amazon.com/">https://www.amazon.com/</a>	NO	NO
Facebook	<a href="https://de-de.facebook.com/">https://de-de.facebook.com/</a>	NO	NO
Expedia	<a href="https://www.expedia.com/">https://www.expedia.com/</a>	NO	NO
eBay	<a href="https://www.ebay.com/">https://www.ebay.com/</a>	NO	NO
Adobe Systems	<a href="https://www.adobe.com/de/">https://www.adobe.com/de/</a>	NO	NO
intuit	<a href="https://www.intuit.com/">https://www.intuit.com/</a>	NO	NO
Dell	<a href="https://www.dell.com/de-de">https://www.dell.com/de-de</a>	NO	NO

(Continues)

TABLE B1 | (Continued)

Company	Website (URL)	Neurodiversity job opening/ employment program mentioned on the website or under the career table (IT or non-IT)?	Autistic IT specialists job opening/ employment program mentioned on the website or under the career table (IT or non-IT)?
paypal	<a href="https://www.paypal.com/de/home">https://www.paypal.com/de/home</a>	NO	NO
flextronics	<a href="https://flex.com/">https://flex.com/</a>	NO	NO
seagate	<a href="https://www.seagate.com/de/de/">https://www.seagate.com/de/de/</a>	NO	NO
CommScope	<a href="https://www.commscope.com/">https://www.commscope.com/</a>	NO	NO
DXC Technology	<a href="https://dxc.com/de/de">https://dxc.com/de/de</a>	NO	NO
Leidos Holdings	<a href="https://www.leidos.com/">https://www.leidos.com/</a>	NO	NO
Insight Enterprises	<a href="https://www.insight.com/en_US/home.html">https://www.insight.com/en_US/home.html</a>	NO	NO
Science Applications International	<a href="https://www.saic.com/">https://www.saic.com/</a>	NO	NO
Booking holdings	<a href="https://www.bookingholdings.com/">https://www.bookingholdings.com/</a>	NO	NO
Uber technologies	<a href="https://investor.uber.com/home/default.aspx">https://investor.uber.com/home/default.aspx</a>	NO	NO
Qurate Retail	<a href="https://www.qurateetailgroup.com/">https://www.qurateetailgroup.com/</a>	NO	NO
Harman International	<a href="https://www.harman.com/">https://www.harman.com/</a>	NO	NO
wayfair	<a href="https://www.wayfair.com/">https://www.wayfair.com/</a>	NO	NO
Thermo Fisher Scientific	<a href="https://www.thermofisher.com/de/de/home.html">https://www.thermofisher.com/de/de/home.html</a>	NO	NO
Samsung electronics	<a href="https://www.samsung.com/us/">https://www.samsung.com/us/</a>	NO	NO
Huawei	<a href="https://www.huawei.com/">https://www.huawei.com/</a>	NO	NO