



FLEXIBLE MODELS OF WORK

AND OTHER SOLUTIONS FOR INCLUSION



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Preface

In India the population of Persons with Disabilities (PwDs) is 2.6 crores as per the 2011 census. In terms of absolute numbers the population of PwDs in India is larger than the population of some countries. Providing the correct environment and resources for employment of PwDs can play a critical role to ensure they grow and thrive.

Policy changes such as the Right to Education Act 2009 and Rights of Persons with Disabilities Act 2016 are ensuring that both our educational institutions and workplaces are more inclusive. Technological advancements such as improved communication tools and advanced software make office spaces more accessible

Post the covid 19 pandemic office spaces have changed. The very idea of what constitutes an office space is being reworked with many people choosing to work from home and other convenient locations. Option of flexible working hours, hybrid working models and accessible communication technology all allow workplaces to be more inclusive. The externality caused by the pandemic could be leveraged for better inclusion of PwDs in the workspace.

Disability is not homogenous and many organisations do not understand the nuances of disability which in turn makes them insensitive to the needs of PwDs. Bridging the gap in understanding of organisations is also a key element for better inclusion.

To understand the impact of policies it is critical to understand the lived experience of people for whom the policies are designed. Data on PwDs including workplace data is limited globally, and in India. This invisibility often results in development narratives leaving out persons with disabilities. Policymakers and practitioners also tend to leave out persons with disabilities due to the unavailability of data.

Youth4Jobs has been working in this sector for over a decade and has an extensive database of PwDs. even from the grassroots, across the country. A customised technology-driven MIS (Management Information system) coupled with SwarajAbility, our AI triggered, accessible livelihood platform is resulting in a rich, invaluable repository of data. Additionally, for this study, we have extensively reached out to our trainees to understand the needs of PwDs in their workspace. We also identify solutions including technological solutions that can help workspaces be more inclusive for PwDs.

Our data-driven study is in line with the UN Expert Group on Disability Data and Statistics, Monitoring and Evaluation which states that data of disability in all areas is essential to ensure progress is measured and persons with disabilities are not left behind in future from the mainstream development programs.

राजेश अग्रवाल, भा.प्र.से. सचिव Rajesh Aggarwal, IAs Secretary



भारत सरकार सामाजिक न्याय और अधिकारिता मंत्रालय दिव्यांगजन सशक्तिकरण विभाग Government of India Ministry of Social Justice & Empowerment Department of Empowerment of Persons with Disabilities (Divyangjan)



I am pleased to be introducing these seminal policy reviews by The Quantum Hub (TQH) and Youth4Jobs concerning the enhancement of workplace accessibility for persons with disabilities, through the provision of reasonable accommodations. I commend TQH, Y4J, and their partner Zoom, for their exhaustive research reports on this issue—which if tackled in the right spirit, can have immensely positive social and economic impacts on India.

It is well-known that persons with disabilities have, for long, faced institutional and social prejudices when it comes to obtaining meaningful employment, an issue that both reports rightly indicate happens both in India and abroad. This is despite overwhelming policy progress, both internationally and domestically, towards enshrining their rights and interests into employment-related laws. Studies consistently show that persons with disabilities working across sectors are often more productive than their peers without disabilities. India, and its business owners, stand to gain from the widespread meaningful employment of persons with disabilities.

The Hon'ble Prime Minister of India, Shri Narendra Modi, recognises this potential. In line with the principles enshrined in the Rights of Persons with Disabilities Act, 2016, the Government of India has undertaken multiple visionary initiatives to enhance the lives and livelihoods of persons with disabilities over the last decade. These include, but are not limited to, the **Sugamya Bharat Abhiyan**, which celebrated nine years in 2024, advancing accessibility for persons with disabilities. The government has also **increased disability reservation categories from 3 to 5**. In 2023, the **Scheme of Assistance to Persons with Disabilities for Purchase/Fitting of Aids /Appliances (ADIP)** achieved remarkable milestones, benefiting 2.91 lakh people with disabilities with assistive technologies.

However, while there is clear state action on making future societies and workplaces inclusive, achieving this vision requires sustained effort from all stakeholders involved. At this juncture, these reports fill significant gaps in our understanding of how to do so, by focusing on the provision of reasonable accommodations in the workplace, such as assistive technologies and flexible work arrangements. The emphasis on the latter is timely, given the growing importance of digital and hybrid work models, in Digital India. I extend my gratitude to the authors for their meticulous research and dedication to this cause, and am confident that their work will serve as an essential resource for advancing workplace accessibility and inclusion in India.







Acknowledgment

This study was conducted by Sameer Nair and Navika Harshe and case studies were done by Gayathri Sreedharan. The study was done for Youth4Jobs Foundation, Hyderabad an organisation dedicated to ensuring youth with disabilities can be poverty free in India.

The report was designed and Illustrated by Madre Designing.

We would like to thank

- 1) **Mr. Rajesh Agarwal**, Secretary, Department of Empowerment of Persons with Disabilities (Divyangjan), Government of India
- 2) Ms. Vakati Karuna, Secretary, Department of Women, Children, Disabled and Senior Citizens
- 3) Ms. Sreedevi Ravi, Senior Manager Talent Acquisition
- 4) Mr. Mallikarjuna lytha, Founder & CEO, IDEA, Delhi
- 5) Mr. Prasanna Kumar, Senior Project Officers, Sightsavers
- 6) Mr. Surinder Kumar, Senior Project Officers, Sightsavers
- 7) Indrajit Shaw, Sustainability and ESG lead CBRE
- 8) Rohit Kumar, Head of Government Relations India, Zoom India

And all the participants in our quantitative study for taking the time to provide your valuable insights to our study.

A special thanks to S and N for sharing their story with us.

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Executive **Summary**

A mixed method study was conducted by Youth4Jobs to understand the workforce challenges faced by Persons with Disabilities (PwDs) in India. The study further aims to understand technological solutions which can facilitate flexible work options for PwDs. The study included a quantitative study with a sample of 232 PwDs and qualitative interviews with key stakeholders in the sector.

Some of the key findings from our quantitative study are:

Severe unemployment continues to be an issue for Persons with Disabilities (PwDs). More than 50% of our sample respondents were unemployed. Among people employed in the tech industries most of our respondents were allowed to work from home. Technological tools for communication such as zoom and whatsapp are being widely used apart from company specific inhouse technologies.

Certain systemic barriers such as limited access to education and poor infrastructure continue to affect the employability of PwDs. Policies such as the RPWD Act 2016, the Right to Education Act 2009 and the New Education Policy are bringing about changes in the system. PwDs who are employed felt the opportunities for growth in the organisation were limited. Our respondents felt that better training especially in technology and mentorship programs could help improve growth opportunities for PwDs.

Some of the technological solutions suggested to improve their growth in the organisations

include virtual training programs (83.3%), remote collaboration platforms (66.7%), advanced software/tools (58.3%) and other digital resources.

Many organisations are consciously working towards better inclusion and government policy also aims to improve inclusion. Stakeholders noted the progressive steps taken by government policy but felt that the implementation of these policies were still poor.



2

Introduction

AS PER THE 2011 CENSUS THE PWD'S IN INDIA



As a percentage of the population the number is small but in actual numbers 26.8 million is comparable to the whole population of certain countries². Yet this segment of the population continues to face structural discrimination to access education, healthcare services and job opportunities³.

National data on employment released by the Ministry of Statistics, Government of India in 2021 notes that nationally **out of 2.68 Crore PwDs about 97 lakh are unemployed** which means that **unemployment among PwDs is 64%**, **or two-thirds of the population**⁴. When we look at the gender break up we find that only **23% of women with disabilities and 47% of men with disabilities have a job**⁵.

Many factors which impact the employability of Persons with Disabilities (PwDs). These include education, skills, accessibility of transportation, facilities, technology tools and aids. Accessibility issues challenge PwDs right from their childhood from receiving medical support to accessing formal education⁶. Some of these issues have been addressed in recent legislation such as the Rights of Persons with Disabilities (RPWD) Act 2016 and the Right to Education Act 2009.

The RPWD Act 2016 fulfills the Government of India's obligation towards the United National Convention of the Rights of Persons with Disabilities. It has moved from a medical model to a social model of disability. In the social model disability is "believed to result from a mismatch between the disabled person and the environment (both physical and social). It is this environment that creates the handicaps and barriers, not the disability. From this perspective, the way to address disability is to change the environment and society, rather than people with disabilities"⁷.

The RPWD Act 2016 acknowledges that disability is an evolving and dynamic concept and it makes provisions for employment of PwDs in the government sector, it provides incentives for the private sector to hire PwDs and prevention of discrimination of PwDs.

¹ Persons with Disabilities(Divyangjan) in India - A statistical Profile 2021, Ministry of Statistics and Program Implementation, Government of India, 2021, New Delhi https://mospi.gov.in/sites/default/files/publication_reports/Persons_Disabilities_31mar21.pdf

² https://www.worldometers.info/population/countries-in-europe-by-population/ accessed on 6th December 2024

³ Designing inclusive programs for persons with disabilities, IDR Online https://idronline.org/article/diversity-inclusion/designing-inclusive-programmes-for-persons-with-disabilities/?utm_source=India+Development+Review&utm_campaign=e43edff677-Issue_381_05_12_2024&utm_medium=email&utm_term=0_2be9adb876-e43edff677-72824827

⁴ Persons with Disabilities(Divyangjan) in India - A statistical Profile 2021

⁵ https://www.forbesindia.com/article/news-by-numbers/news-by-numbers-only-36-of-indias-26-million-persons-with-disabilities-are-employed/68441/1

⁶ Persons with Disabilities(Divyangjan) in India - A statistical Profile 2021

⁷ Olkin Rodha, Conceptualizing Disability :Three Models of Disability ,March 29th 2022, American Psychological Association https://www. apa.org/ed/precollege/psychology-teacher-network/introductory-psychology/disability-models accessed on December 6th 2024.

The law also mandates organisations to provide reasonable accommodation for PwDs at the workplace. Reasonable accommodation is defined as "necessary and appropriate modification and adjustments, without imposing a disproportionate or undue burden in a particular case, to ensure to persons with disabilities the enjoyment or exercise of rights equally with others."⁸ in the RPWD Act 2016. A key feature of this Act is that the number of recognised disabilities have been increased from 7 to 21.

The Right To Education Act 2009 mandated that every child is entitled to free and inclusive education till the age of 14. This allowed many children with disabilities to access education at formal schools⁹. Further Samagra Shiksha the national flagship education program and the National Education Policy (NEP) have all emphasised the need for more inclusive school education. The NEP states "schools/school complexes will be provided resources for the integration of children with disabilities, recruitment of special educators with cross-disability training, and for the establishment of resource centres, wherever needed, especially for children with severe or multiple disabilities. Barrier free access for all children with disabilities will be enabled as per the RPWD Act 2016¹⁰."

The covid pandemic and mandated social isolation made Work from Home (WFH) a viable option. Technological changes combined with the necessities of social distancing allowed people to work from different places. Globally WFH has been a demand made by PwDs for a long time¹¹. With the normalisation of WFH and other Hybrid models of work it is critical to understand how these hybrid work models are accommodating the needs of Persons with Disabilities (PwDs) in India. This study aims to answer some of these questions.

Rationale for the Study

This study was conducted post the pandemic when organisations are reassessing the models of working. Some have gone back to working full time from office spaces while others are trying out hybrid models of work¹². These models are a mix of working from home and working from the office and organisations are trying out different combinations of the two. The models include fixed days of working from an office to allowing employees to choose the days they work from the office. Recent job postings show that about 20% of all job postings have been for Hybrid models of work. This is higher for the tech sector where 38% of the jobs advertised allow a hybrid model of work¹³.

Indian workspaces have not traditionally been inclusive of the needs of people with disabilities¹⁴ buildings did not have the necessary infrastructure such as lifts, ramps and accessible toilets etc which are required for PwDs. Assistive devices and tools were also limited in availability. In addition, biases of employers also prevented them from hiring PwDs. Given this scenario the study aims to understand how technology, especially communication technology can help PwD's in their workplace.

^{8 &}quot;The Rights of Persons with Disabilities Act, 2016 - Section 2(y)." 2016. Ministry of Law and Justice, Government of India. https://cdnbbsr. s3waas.gov.in/s3e58aea67b01fa747687f038dfde066f6/uploads/2023/10/202310161053958942.pdf.

⁹ Grimes, P., et al., Disability-Inclusive Education Practices in India, United Nations Children's Fund Regional Office for South Asia, Kathmandu, 2021.

¹⁰ Ministry of Human Resource Development, Government of India, National education policy 2020 (2020). India. https://www.education. gov.in/sites/upload_files/MEP_Final_English_0.pdf accessed on 6th December 2024.

¹¹ https://www.careerswithdisabilities.com/is-flexible-working-really-better-for-disabled-people/

¹² Verma Prachi & Bhushan Ratna, Hybrid work model is here to stay in New year too, Nov 14, 2024 ,https://economictimes.indiatimes.com/ jobs/hr-policies-trends/hybrid-work-model-is-here-to-stay-in-new-year-too/articleshow/115266542.cms?from=mdr accessed on 6th December 2024.

¹³ Verma Prachi, Indian tech drives faster adoption of hybrid work mode, Aug 4th 20024 https://economictimes.indiatimes.com/jobs/hr-policies-trends/indian-tech-drives-faster-adoption-of-hybrid-work-mode/articleshow/112253169.cms?from=mdr accessed on 6th December 2024

¹⁴ Shenoy, M. (2011). (rep.). Persons with disability & the India labour market: Challenges and opportunities. International Labour Organisation.

The study aimed to understand how technology, especially communication technology, could support PwDs at their workplace. This meant that our criteria for selecting individuals for the study were people whose organisations allow WFH and they use technological tools such as video conferencing, screen readers and text to speech converters for their work. Due to these conditions the largest group of people who qualified for the study were employees of technology (IT) firms.

While we focused on employees from technology companies for the quantitative study it was also critical to understand the perspective of policymakers, recruiters and other organisations which work on disability. Towards this end we conducted qualitative interviews with major stakeholders. These interviews helped identify the systemic challenges and barriers for PwDs which prevent them from being gainfully employed.

The quantitative survey was designed to understand the lived experiences of PwDs in the workplace. The questions focused on understanding the aids, tools and technologies provided to help them perform their roles more effectively. It also helps identify challenges and barriers that PwDs' face at the workplace.

Objective of the Study

The objective of this study is 'To better understand how people with disabilities are using flexible and hybrid work arrangements, and how technology, especially communication tools such as screen readers, video conferencing tools, messaging apps can be used to further support them.

To answer these questions, we will focus on the following

- Identifying accessibility challenges for disabled individuals in the workplace and how flexible work options are being utilised
- 2) Understand how assistive technology in communication and collaboration solutions can help overcome challenges of accessibility.
- 3) An understanding of aids/tools and software which enhances their productivity and support them for career advancement

Methodology of the Study

To understand the current situation of employment and accessibility among PwDs we used a mixed method design combining qualitative interviews with a quantitative survey.

Qualitative Study

We conducted In Depth Interviews (IDI) with key stakeholders including PwDs, senior government officials one, from the central government and the other from the state government of Telangana, senior Human Resource personnel from the private sector organisations) and with other NGOs which work on issues related to persons with disabilities. The IDI's with stakeholders provide a holistic understanding of the education and employment opportunities for PwDs and the current focus and policies of the government to address these issues

The interviews were designed to cull out the nuances of policy making and recruitment to understand the gaps in the process of recruitment. The interviews with the private sector companies focused on the key policies that employers implement while recruiting PwDs. They also discussed technological solutions which they employ to make workplaces more accessible and the pathways for growth of PwDs within the organisation.

We also developed case studies of two individuals, one a hearing impaired man and the other a visually impaired woman who are both employed in the IT sector. These case studies share their journeys including the triumphs and obstacles as they navigate the requirements of corporate India.Based on all the interviews a content analysis was conducted to draw out the major themes and perspectives which have defined their journeys thus far.

Quantitative Study

The quantitative study was intended to be a comparative study of different working models for people with disabilities. It comprised two groups, one of people from organisations that allowed hybrid working/ flexible working models and the other of people who are not allowed hybrid/flexible working. The two groups were to provide an understanding of the software needs which facilitate hybrid models of work for people with disabilities.

The data was collected on google forms and the analysis was conducted using Microsoft Excel and google sheets.

Currently there is no publicly available database on the employees and the type of working arrangement they allow. In addition there is no publicly available database on PwDs and the type of jobs they are employed in. Given this paucity of data our sample was limited to persons who are either directly or indirectly associated with Youth4Jobs

The sampling was purposive to ensure that we collected responses across sectors, region and disabilities. Data was collected through a combination of in-person and virtual interviews using Zoom to accommodate respondents with mobility and visual impairments. Conducting the surveys required both Indian Sign Language (ISL) and linguistic interpreters in many cases. This lengthened the process of data collection

The quantitative study looked at five key components

- 1. Job Opportunities
- 2. Career opportunities and growth
- 3. Aids and Tools
- 4. Communication Tools
- 5. Challenges and solutions

Limitations of the Study

Due to the lack of a national database of people working in hybrid work models and limited data available on PwDs and their employment status, our sample was limited to persons who are either directly or indirectly associated with Youth4Jobs.

Originally the total sample for the study was 200 which included people from both only office and hybrid working models. Our initial analysis indicated unemployment was a severe problem among our respondents. In addition, we also found that many of our respondents work completely from home. To verify our findings, we increased our sample by 10% to 223 and even with the increased sample size we found similar results.

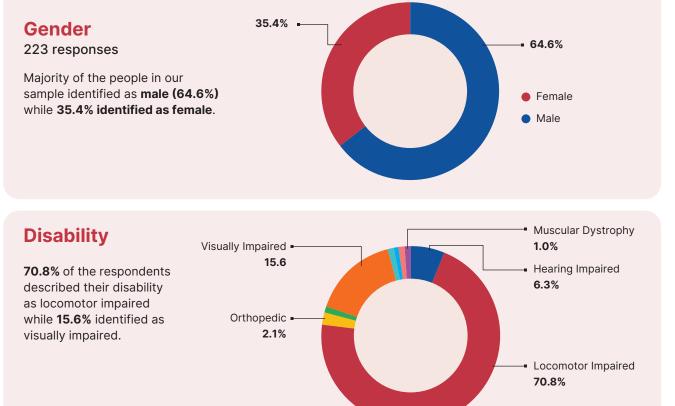
As we were keen on studying hybrid models of work, we were limited in the type of sectors and the type of work we could include hence, there is a larger representation of respondents from the IT sector.

Norms followed

Consent was obtained from all the participants before starting the interview. We ensured that there were interpreters both linguistic and for Indian Sign Language (ISL) as required who explained the consent forms before taking consent.

Profile of our **Respondents**

The average age of our respondents is **28 years.** Some of the other characteristics are as follows:



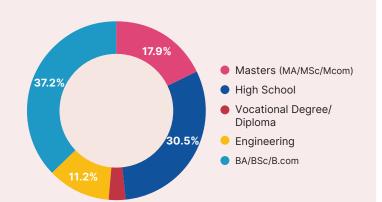
Educational qualification

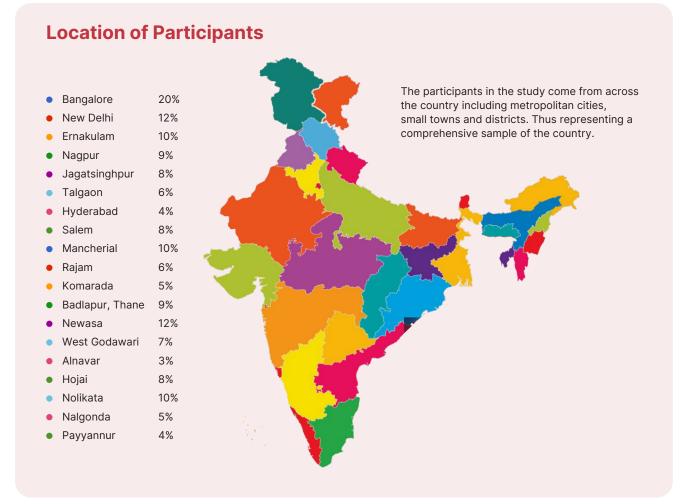
223 responses

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Among our respondents **37%** have a **Bachelor's degree**, **30%** have a **high school education**, **17%** have a Master's degree and **11%** have an **engineering degree**.

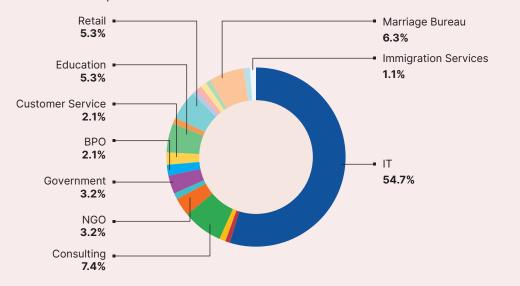
Among our female respondents **38%** have a **high school degree**, **30%** completed their **BA/BSC/B.Com**, **21.5%** master's whereas **8.9%** have an **engineering degree**.





Industry

The majority of our respondents worked in the IT sector **54.7%** followed by consulting **7.4%**, marriage bureau (matchmaking service for marriages) **6.3%**, retail **5.3%** and education **5.3%**. In the consulting sector many worked for tech based companies.



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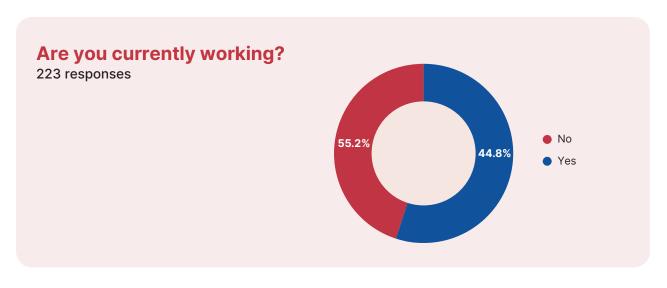
Key Learnings

Some of the key learnings from our study are shared below

Severe Unemployment

In the original design of our study, we planned to interview a total of 200 people, 100 who worked in organisations which allowed for hybrid work and 100 which required employees to work only from the office. As the data collection began and the initial analysis was conducted, we found that more than half the people we interviewed were unemployed. We then increased the sample size by 10% to 223 to see if the results varied. **Even in our final analysis we found that more than half our participants are unemployed**.

These findings corroborate with the national data on employment released by the Ministry of Statistics, Government of India in their 2021 report "Persons with Disabilities (Divyangjan) in India - A Profile 2021¹⁵. The data finds that unemployment among **PwDs is 64%**, which means two-thirds of the population with disabilities is unemployed. As per the 2011 census the PwDs in India was 26.8 million which is about 2.2% of the population. Nationally out of 2.68 crore PwDs about 97 lakhs are unemployed. Further, when we look at the gender break up we find that only 23% of women with disabilities and 47% of men with disabilities have a job¹⁶. In our sample unemployment was the highest among people with a high school degree (43.2%) followed by people with a BA/BSC/B.Com degree (31%).



In our discussions with organisations which are intentionally inclusive in their hiring practices they noted that the skill deficit among PwDs begins at school itself. while our educational system has policies which are inclusive and requires schools to make provisions for persons with disabilities yet implementation of these policies have not been up to the mark. Lack of physical infrastructure and accessible transportation makes it difficult for them to access formal education. National statistics on the education levels of PwDs is shocking **45% are illiterate, only 13% have completed secondary level schooling and only 5% are graduates and above**¹⁷.

¹⁵ Persons with Disabilities (Divyangjan) in India - A statistical Profile 2021

¹⁶ ibid

¹⁷ ibid

A recent UNESCO report finds that **61% of Children with Disabilities (CwD) have been enrolled in school between the age of 5-19¹⁸.** But with each successive year the dropout rate of CwD's increase. The number of girls who drop out is higher than the boys. Resources for teaching CwD including teaching aids and accessible physical infrastructure continue to be scarce in schools.

The situation is worse in rural areas where according to a UNESCO 2019 report **5 million** or **74% of children with disabilities reside**¹⁹. Schools in rural areas suffer from poor infrastructure, lack of non teaching staff, shortage of teaching staff especially well trained teachers. In addition teachers are engaged on non-teaching roles with limited support which lead to multi grade classrooms with high student teacher ratios^{20,21}. While enrollments of children with disabilities have increased the learning outcomes in rural schools are low.Prasanna Kumar and Surinder Kumar from the NGO Sightsavers observed that these schools are inaccessible to children with disabilities both due to the lack of physical facilities and learning aids.

Many children with disabilities dropout of school. The dropout rate is more pronounced in the case of a girl child. In India 55% of women with disabilities are illiterate compared to 38% of men with disabilities²². These results resonate with the global numbers. Women Enabled International in their study on the right to education of girls and women finds that 41% of girls with disabilities have completed primary schooling compared to 50.6% of boys with disabilities and 52% of girls without disabilities²³.

In our conversation with Mr. Rajesh Agarwal, Secretary, Department of Empowerment of PwDs, Ministry of Social Justice, pointed out that the key problem with disability is the societal stigma still associated with it. **Most people, especially parents, are not willing to acknowledge the disabilities of their children**. Sensitising parents to the needs of their children itself is a big hurdle. **He notes that there is still a certain stigma associated with disability** (people believe disability is a result of their past doings). This has also been noted as a key factor in the underreporting of disability in surveys²⁴.

In India the major national surveys such as the Census, National Family Health Survey (NFHS) and the National Sample Survey Reports(NSS) use different definitions of disability while measuring it. The Census is based on self identification, NFHS only counts benchmark disabilities and the NSS includes all the disabilities under the RPWD Act 2016. The varying definitions have led to differing estimations of PwDs in the country as no survey captures every aspect²⁵. The methods used by NFHS and NSS include only those who are certified for their disability and applying for a disability certification in India is a complex process²⁶.

The process is dependent on the medical model of disability and requires extensive documentation and medical examinations. In addition there is a severe shortage of professionals who can evaluate disabilities²⁷. Thus making the process of certification both laborious and time consuming for people and limiting the number of people who get certified.

¹⁸ State of Education Report for India 2019: Children with Disabilities, United Nations, Educational, Scientif and Cultural Organisation (UES-CO), New Delhi https://unesdoc.unesco.org/ark:/48223/pf0000368780/PDF/368780eng.pdf.multi accessed on December12th 2024

^{19 &}quot;Persons with Disabilities(Divyangjan) in India - A statistical Profile 2021

²⁰ Shruti Taneja-Johansson, Nidhi Singal & Meera Samson (2023) Education of Children with Disabilities in Rural Indian Government Schools: A Long Road to Inclusion, International Journal of Disability, Development and Education, 70:5, 735-750, DOI: 10.1080/1034912X.2021.1917525 accessed on 27th November 2024

²¹ Making School Accessible to Children with Disabilities 2016, United Nations Children's Fund (UNICEF), New Delhi https://www.unicef.org/ india/media/1191/file/Making-Schools-Accessible.pdf, accessed on 6th December 2024.

²² Designing inclusive programs for persons with disabilities, IDR Online

^{23.} https://womenenabled.org/wp-content/uploads/2021/06/WEI-The-Right-to-Education-for-Women-and-Girls-with-Disabilities-English-1.pdf, accessed on 6th December 2024.

²⁴ Designing inclusive programs for persons with disabilities, IDR Online

²⁵ Anicca, Abhishek. 2022. "Data Gaps: Undercounting Disability In India." Indiaspend. https://www.indiaspend.com/data-gaps/undercounting-disability-in-india-826835.

^{26 &}quot;Persons with Disabilities(Divyangjan) in India - A statistical Profile 2021

²⁷ Bajaj, Rahul, and Ayushmita Samal. 2024. "Defending disability reservations." The Hindu, July 29, 2024. https://www.thehindu.com/opinion/op-ed/defending-disability-reservations/article68456680.ece.

All these factors combined with the different methodologies used for measuring disability give us varying numbers of PwDs

Parents play a critical role in encouraging and working with PwDs. Acknowledging one's child disability itself is a major hurdle for many parents. In our conversations with PwDs we found that many parents tend to be worried and overly protective of their children with disabilities. This prevents many from accessing opportunities and has been noted as a critical barrier for PwDs²⁸ accessing education and employment opportunities.

Another aspect of disability which both Mr. Rajesh Agarwal and Ms. Sreedevi Ravi, Senior Manager Talent Acquisition Amazon raised was the **issue of invisible disabilities or non-visible disabilities**. Invisible disabilities are defined as " A non-visible disability is a disability or health condition that is not immediately obvious. It can defy stereotypes of what people might think disabled people look like"²⁹. They include both mental and physical health conditions such as autism, epilepsy, dyslexia and other learning disabilities (LD).

According to Mr. Agarwal, for the MoSWJ, addressing invisible disabilities is the need of the hour. He noted that these disabilities are not yet a part of our conscious thinking when we think about disability. It is estimated that about 12% of school going children in India are likely to have some form of learning disabilities³⁰. Recognition of LDs is relatively new in India which means that there are still no clear cut and commonly accepted policies practices or indigenous diagnostic tools in India.³¹

Education policy now recognises these issues. The NEP states "Most classrooms have children with specific learning disabilities who need continuous support. Research is clear that the earlier such support begins, the better the chances of progress. Teachers must be helped to identify such learning disabilities early and plan specifically for their mitigation. Specific actions will include the use of appropriate technology allowing and enabling children to work at their own pace, with flexible curricula to leverage each child's strengths, and creating an ecosystem for appropriate assessment and certification"³². There is a clear policy intent to acknowledge LD and to work towards addressing them.

Mr. Agarwal believes that technology can provide solutions for disability and one of the ways is through developing indeginous diagnostic tools. Towards this goal the Ministry of Social Justice and Health issued a circular on developing an Indian IQ test. Mr. Agarwal explains, " we usually use western tools, and have to pay royalties on the same. Our test will be open source and we have offered to adopt the IQ test to SAARC countries." Some solutions which have emerged include tools to diagnose dyslexia and AI based chatbots that offer mental health solutions.

Job Opportunities

In our interviews with organisations which work with PwDs a constant theme which emerged is the lack of job opportunities commensurate with a person's skills. Mallikarjun Itytha CEO of IDEA foundation an organisation which works on ensuring access to equal opportunities noted that even Pwd's with advanced degrees are often offered jobs which were not commensurate with their skills. Mr. Prassana Kumar recalled an instance where a PwD with a PhD was offered a salary of Rs. 5000 a month at a job interview. He observed that when people offered jobs to PwDs the salaries were a form of charity. Usually, low salaries with no correlation to the work or the qualification of the person were offered. This has also been noted at our Youth4Job centers where employers offer positions such as cleaning staff or watchmen for PwDs irrespective of their qualification.

²⁸ Shenoy, M. (2011). (rep.). Persons with disability & the India labour market: Challenges and opportunities. International Labour Organisation

²⁹ https://disabilityunit.blog.gov.uk/2020/12/17/living-with-non-visible-disabilities/#:~:text=What%20is%20a%20non%2Dvisible,to%20ac-cess%20what%20they%20need. accessed on 26th November 2024

³⁰ https://mgiep.unesco.org/article/learning-disabilities-what-why-and-how accessed on 27th November 2024

³¹ Oberoi Geet, Learning Disabilities- What, Why and How ? UNESCO, https://mgiep.unesco.org/article/learning-disabilities-what-why-and-how , accessed on 26th November 2024

³² New Education Policy 2020, Ministry of Human Resource Development, Government of India, https://www.education.gov.in/sites/upload_ files/mhrd/files/NEP_Final_English_0.pdf Para 6.13

He felt that only technological solutions are not the answer, instead a greater focus on stricter implementation of policy, especially the complete implementation of the Rights of Persons with Disabilities Act 2016 (RPWD) was key to bringing change.

There are also schemes such as the Revised Incentive Scheme for Providing Employment to Persons with Disabilities in the Private Sector³³ which provides companies relief in the payment of Employee Provident Fund (EPF). Thus, encouraging private sector organisations to hire PwDs.

Larger multinational organisations with a sensitivity to inclusion have been making changes in their hiring process by creating better accommodation for recruiting. The organisations have curated hiring programs which ensure that they are being more inclusive in their hiring practices. During the recruitment phase PwDs are provided with the aids and tools required for the interview to make it a level playing field for all the candidates.

After the recruitment, policies such as 'buddy system' where a recruit is paired with an older employee are instituted. The buddy helps the new recruit navigate the organisation's systems and processes, especially in the first few months where dropouts occur. New candidates are encouraged to reach out to HR for whatever support they require.

Organisations noted that it was difficult to scale up personalised requirements. Disabilities can be both visible and invisible and we are still at that stage of inclusion where we are able to address visible disabilities. There was also a conscious effort to have inclusive practices in activities such as team building dinners where an effort is made to ensure that the venues are accessible and acceptable to all.

Organisations are few and far between. Many organisations don't understand disability which makes them insensitive to the needs of PwDs. These organisations find it difficult to monitor PwDs especially when they work from home. Sensitization and a deeper understanding of disability among these organisations will help in improving the situation.

Work From Home Opportunities

The Covid pandemic pushed organisations to look at options which allowed people to WFH. In a way it normalised WFH. Technological solutions such as video conferencing and common online tools for collaborative work made WFH an accessible option³⁴. A study by the Bureau of Labor Statistics, USA found that 21 of the major industries had shifted to a WFH model of functioning during the pandemic³⁵. India saw a similar shift in modes of working but as the pandemic subsided our respondents mentioned that there is a steady return to working from the office. But, the pandemic showed that WFH was a possibility even in a country like India.

Many organisations which worked with PwDs had been demanding for the option to WFH. Normalising WFH due to the pandemic has made it more acceptable for everyone including PwDs to work from home³⁶. Flexible working hours and work from home options give PwDs the flexibility they need to work around their health care requirements. Issues related to accessible transportation, buildings and office spaces can also be managed with the options of WFH.

For PwDs the option of WFH can sometimes be the only way to be employed. One of our respondents suffers from muscular dystrophy and her condition has been deteriorating over time. She is a qualified and articulate woman who was unable to work because of her condition. During the covid lockdown when WFH became a possibility she was able to start working remotely for an e-commerce platform. WFH allows her to work on projects from the

³³ Scheme for Implementation of Rights of Persons with Disabilities Act (SIPDA), Department of Empowerment of Persons with Disabilities (Divyanjan), Ministry of Social Justice, Government of India https://cdnbbsr.s3waas.gov.in/s3e58aea67b01fa747687f038dfde066f6/uplo ads/2023/12/202405092093940198.pdf

³⁴ Donnelly Drew, What is the best technology for working remotely in 2024, April 4th 2024, https://joinhorizons.com/best-technology-for-working-remotely/ accessed on 6th December 2024

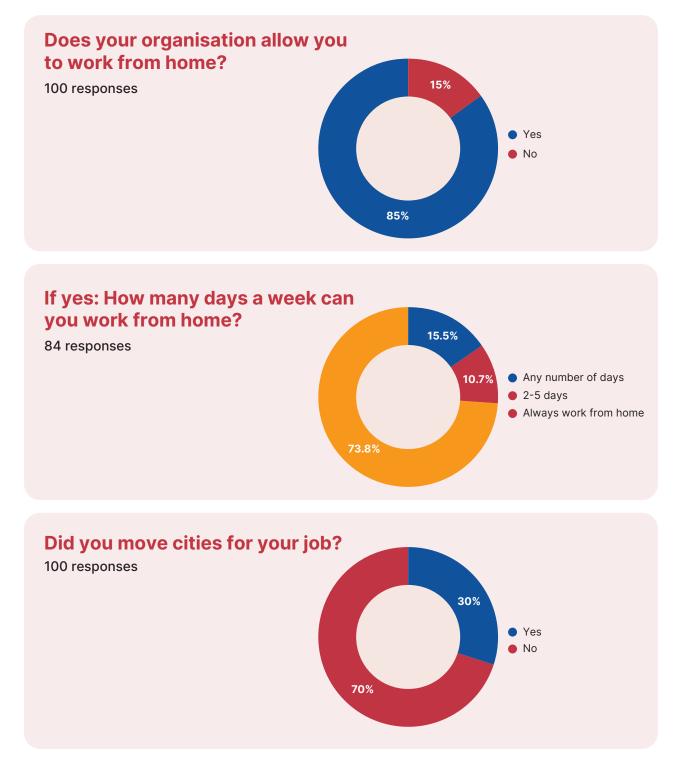
³⁵ Pabilonia . W. Sabrina and Redmond.J.Jill, The rise in remote work since the pandemic and its impact on productivity, October 2024 | Vol. 13 / No. 8, US Bureau of Labour and Statistics https://www.bls.gov/opub/btn/volume-13/remote-work-productivity.htm accessed on 6th December 2024

³⁶ Kitchen Luke , Is Flexible working really better for disabled people ? , August 10th 2023 https://www.careerswithdisabilities.com/is-flexible-working-really-better-for-disabled-people/ accessed on 6th December 2024

comfort of her home. For people with mobility issues and multiple disabilities WFH can be a simple solution which allows them to be gainfully employed.

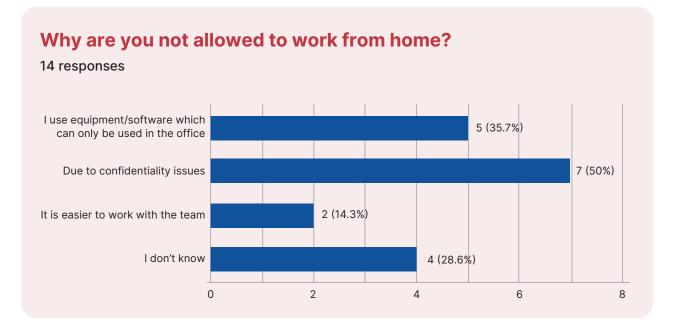
Large organisations have diverse working models which include work from home, office spaces and virtual work. The work timings also include general and rotational shifts. Exceptions are made for people with medical needs. Working times and hybrid work models are determined by the specific team that people are working in.

In our interviews 85% of respondents said they were allowed to work from home.



Moving cities uproots people from their friends, family and other support networks. When they move cities and work from home, they get further isolated. One of our respondents who has a hearing impairment was keen on working from the office but his organisation insisted he work from home. He had applied for office-based roles but was always made to take up roles which were home based. He observed that the only time he was asked to come into the office was when the organisation had to showcase their inclusive workforce. He felt he was unwittingly the poster boy for inclusion in his organisation.

A few of our respondents were not allowed to WFH



The reasons for not being allowed to work from home included the need for using equipment and software which was only available at the office, and the confidential nature of work.

While organisations may be improving on their track record of hiring PwDs the type of roles and responsibilities and career advancement opportunities available are areas which need to be explored further. A WFH policy for PwDs will need to be developed by organisations which is both sensitive to the needs of PwDs while allowing organisations to monitor their work.

Case Study: **S in Bengaluru**

Respondent details: 'S', Late 20s, Man

Location: Bengaluru

Disability, if any: Hearing Impaired

Working Status: Employed, Looking to move to a more Inclusive Environment

Communication Tools & Platforms of Choice: Smartphone, video calling/ Whatsapp, Instagram, Facebook. At work, he has to use Zoom, and basic Microsoft suite (documents and excel sheets).

'S' was born in rural Karnataka, near the suburbs of Bengaluru, but his parents moved his family soon after to the main city. S was born completely deaf - he's not sure if his parents moved particularly to help his chances, but being in Bengaluru definitely helped. S says he only remembers growing up in the big city - he is happiest here, completely comfortable with the changing skyline and increasing amenities. "The smartphone made me a little uncomfortable the first time," he says, "it's still a little inconvenient, the number of features on it. Sometimes you swipe a little extra hard, and land up on a completely different application, (which is) not what you wanted." That aside, he's happy owning a smartphone, using WhatsApp video calling frequently to stay in touch with friends, and family, as he's out and about in town. Most importantly, he can use video calling to quickly get in touch with people who can interpret for him on the go - his family, or interpreters he's connected with through the Youth4Jobs center in Bengaluru.

He also needs interpreters to help him at work. S got his first job five years ago with a major IT company in Bengaluru. He interviewed for a job in coding - he'd taken classes before, found he was good at it and enjoyed it, and applied accordingly. However, on joining the company he was immediately shuffled to a different role - a comparatively 'menial' role of data entry. "All I do is copy-paste data into Excel Sheets...It's not what I interviewed for," 'S' says, "and I raised this issue with my supervisor then". S says he has since asked his supervisors, several times, to change his role, to promote him. "Sure, there would be more money with a promotion, but I'm not entirely concerned by that. I'm concerned about shaping my career, my future. I want more choice in that," S says.

The other challenge S faces - being forced to work from home. When he applied initially, he applied for an office-based role. When he joined his job, he was told he should work from home. S says he has asked several times to work from his employers' offices - he's not physically or visually impaired, and he doesn't require additional assistance, other than sign language interpreters, who are already available to him. Despite this, no luck.

S thinks his supervisor takes an "out of sight, out of mind" approach towards him. (S has applied to other jobs in the past and has been given the same spiel - you'll be better off working from home - despite his insistence that he wouldn't, that he's comfortable with existing technologies and video calling platforms and can represent company interests.)

S says he has tried to quit some 15 times in the last few years - on some occasions, it's out of sheer frustration, on others because he has applied for and been accepted to other jobs. "This company won't let me go," he says, and despite the poor engagement and lack of career growth, S says he thinks knows why. "It's because of the income tax benefits the company gets when they hire someone like me [who is hearing impaired]." S says he

grew up feeling like he was pretty ordinary; he didn't look different on the outside, and so when out and about, the public around him didn't look at him with discrimination either. He has a supportive family, he was social in college, he made friends, and they all helped him whenever he needed it. It's in his work life that he started to experience discrimination and isolation for the first time. "It's been 5 years, and I don't exactly have friends at work, I don't know them, and they don't know me." S is adamant that he's going to quit this job this year and find a more friendly space to work in.





When we looked at the number of years people worked at an organisation we found that 43% have worked for less than a year and 40% have worked in the same organisation between 1-3 years.

Growth within the organisation is also a concern among the people we interviewed. **12% of people had been in the same role for more than 3 years and 6% of people had been in the same role for more than 5 years.** This indicates the lack of a pathway for growth for PwDs.

During our IDI some of the issues which surfaced was that people applied for certain jobs but were then shifted to other roles, which they felt had limited opportunities for growth. Some also noted that the responsibilities given to them were limited thus narrowing their ability to showcase their skills and advance in the organisation.

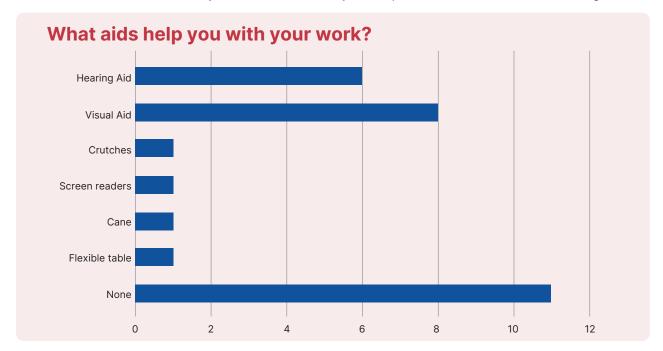
Aids and Tools

We look at both physical and technological tools to understand what is required to ensure that people are able to work efficiently and effectively. Accessibility in buildings continues to be a serious issue which many of our stakeholders mentioned. Ms. Vakati Karuna, Secretary, Social Justice government of Telangana observed **that most government buildings are not disability friendly**. She mentioned that even the secretariat building of the Telangana government did not have a single toilet for PwDs. To rectify this the Telangana government has undertaken an audit of 100 government buildings to assess their accessibility provisions.

Large multinational organisations which have robust DEI policies said they make a conscious effort to hire/buy office space which have accessibility features. Their real estate and facilities teams have set global standards which they apply across the world thus allowing them to hire across disabilities. These organisations are the exception but there are many organisations for whom accessibility is not a major criteria while selecting office space. This could be due to their size or scale of operations. As noted above even many government buildings are not disability friendly.

Accessible physical spaces are not a problem just at the workplace. The problem begins at the school education level. Schools especially in rural areas, where the majority of the country lives are not accessible to PwDs. Moving to a city which might have the necessary infrastructure for a child with disabilities is not always an option for a parent. Thus, severely limiting the options of learning for a child. In our qualitative interviews one of the respondents talked about how as she lost her vision her family felt it would be best for them to leave their hometown and move to Hyderabad. Hyderabad had the schools which could cater to her needs and to access it her entire family left their home in a nearby district and moved to Hyderabad.

Accessible technological tools have been key to supporting PwDs in their work space. Apart from physical spaces technological aids are also a key component of Reasonable Accommodation at the workplace. Reasonable accommodation at the workplace in India is defined as "necessary and appropriate modification and adjustments, without imposing a disproportionate or undue burden in a particular case, to ensure to persons with disabilities the enjoyment or exercise of rights equally with others."³⁷ as per the RPWD Act of 2016. This definition is in line with the UNCRPD. Some of the key aids which are used by our respondents are visual aids and hearing aids.

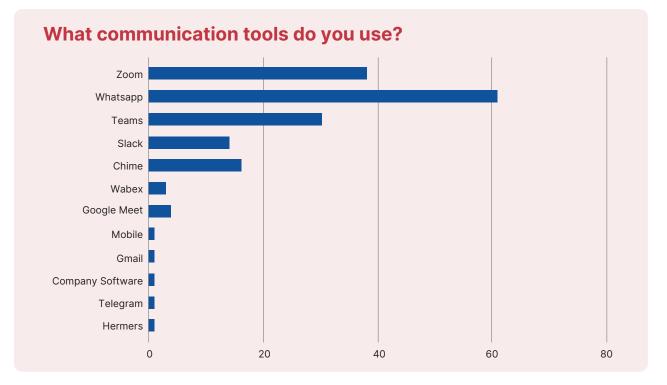


A major limitation of the current aids and tools available is that they still largely focus on visible disability.

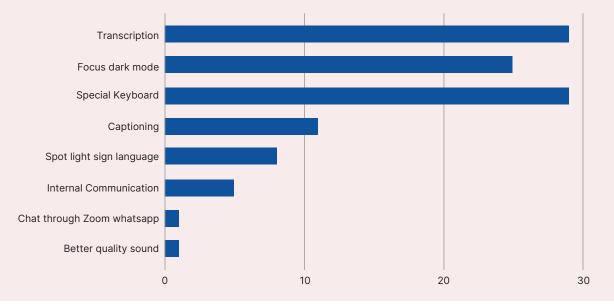
37 "The Rights of Persons with Disabilities Act, 2016 - Section 2(y)." 2016. Ministry of Law and Justice, Government of India. https://cdnbbsr. s3waas.gov.in/s3e58aea67b01fa747687f038dfde066f6/uploads/2023/10/202310161053958942.pdf.

Communication Tools

The common technology tools used by our participants include Zoom, Whatsapp, Slack google meet and other public platforms. The tools are combined and used depending on their needs. Whatsapp is the most commonly used communication tool. Apart from these publicly available tools many organisations have their own inhouse tools. Some organisations said that they test their tools for accessibility before it is used by their employees thus making them more inclusive. In addition they also take licences for screen readers and sign readers tools which they do not have inhouse.



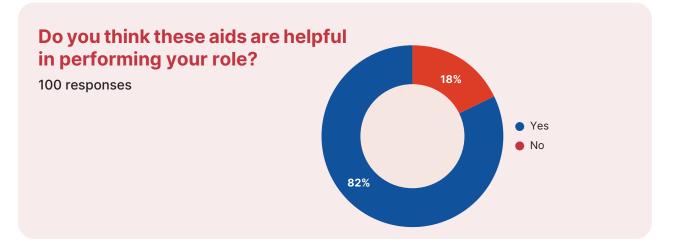
What accessibility features do these communication tools provide?



The accessibility features of these tools include transcription, focus /dark mode special keyboards. Details of the technology and the accessibility features are provided in Annexure I

Efficiency and tools

Most of our respondents felt that the aids and tools currently available helped them in performing their role. Only 18% felt the tools did not help them perform their role.



When asked what additional changes could be made to ensure the aids worked more effectively the suggestions we received were **better quality screen readers and more comfortable furniture**.

While most people were comfortable with using the tools some said additional training on the software and changes to the technology while using it on their phones would make it easier and more comfortable for them to use it

6

Case Study II

Respondent Details: 'N', early 20s, woman

Location: Hyderabad

Disability, if any: Visually Impaired

Working Status: Employed, happy but also keen for a promotion

Communication Tools & Platforms of Choice: Smartphone, video calling, laptop/ Whatsapp, Instagram. I-Reader is the most important app for her, used for every communication. At work, she uses Zoom, and basic Microsoft suite (documents and excel sheets).

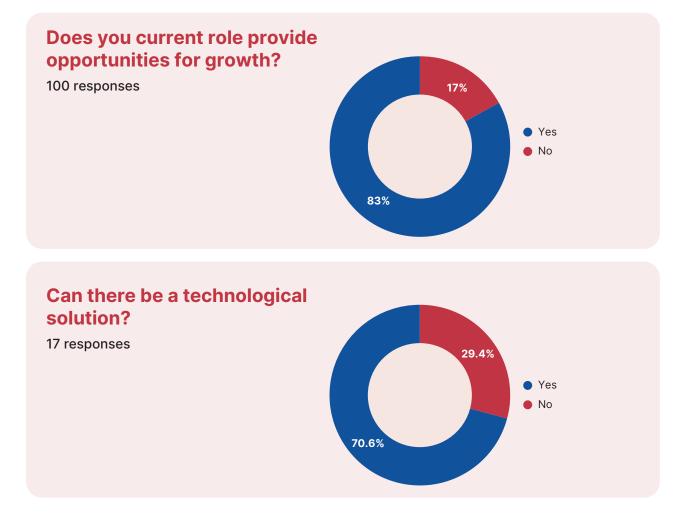
N was born in a district neighboring Hyderabad, in a rural setting, to a loving family who she says have spoiled her all through her life. She was born without any visual impairment - but at the age of 6, when she caught a severe case of chicken pox, it affected her eyes. "My parents rushed me to a hospital in Hyderabad," N says, "where the doctors tried to save my eyes". One morning, N sneezed violently and one of her eyeballs popped out with the force. It's difficult to hear N's description of the incident - one can only imagine how traumatic this incident, and that time in her life, would've been for such a young girl and for her parents too. "My parents then took me to LV Prasad Eye Hospital," N says, "but the hospital said they'd come too late." The hospital authorities offered the family guidance on next steps (now N would have to live life as a blind person) and connected them to NGOs and schools for the blind in Begumpet, Hyderabad. After this, her parents decided to move to Secunderabad, and admitted N to a residential school for blind students in Hyderabad. "Initially, they were not happy about being away from me, particularly my father. They took their time, but ultimately understood that it would be easier for me to be in this school," N says. "Even so, my father would do everything to push me to bring me home, for the weekends, for the holidays. I didn't want to go, I liked being where I was, living my own life."

We infer that a formative incident like losing her eyesight early in life, shaped N's individualistic approach early on, too. N lived in boarding school from the 4th to the 12th std, did extremely well in school, and then moved to live with her parents for 3 years during her college days. "My brothers and father would pick me up and drop me to college". N says she found support in college too, and made good friends who are still in touch with her. She graduated a few years ago and immediately applied for work-from-home, user testing roles. "I haven't had as hard a time applying for jobs, as some of my other visually impaired friends have had," she says. Still, N experienced a few challenges in the first two years of working. The job she held before the current role hired her for user testing but then immediately switched her over to sales. "I got no training, just lists of phone numbers to call in Delhi, Noida, Gurgaon... I had to try to convince them to buy Python and other software training class packages. I knew right away that this wouldn't work, they were aiming at the wrong market. Plus, it's not what I wanted to do."

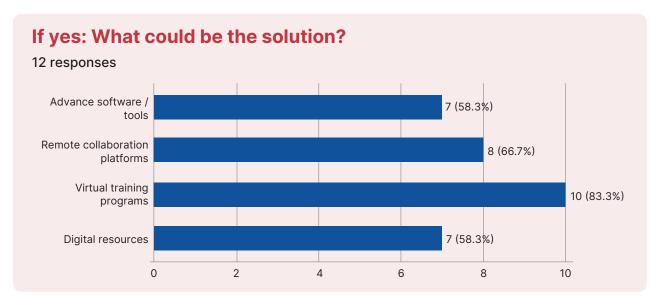
She is currently working in user testing in a major IT company in Hyderabad, and she's enjoying herself. She moved to another part of Hyderabad, to a PG hostel for working women, and she's made a few friends here too. "I work from home most days," N says. She enjoys the weekdays, working remotely on her laptop, using a reader app to consume documents, written instructions etc. and navigate the rest using voice notes sent on whatsapp or other meeting platforms. Her department head is good to her, also because "they have a few other visually impaired persons working with them, so they're experienced". Plus, N says, there's no dearth of interfaces and software solutions available for the visually impaired, they can stay connected and be included in workplaces easily. "There's no shortage of technology available to me, I can't think of any new solutions," N says. N admits this can sometimes be a challenge too; "a VI friend of mine works for a software company in Chennai. They keep her online for 9 to 10 hours every day but insist that she could 'contribute more' - it's very taxing for her."

Growth Opportunities

Hiring, retention and advancement are the key components of ensuring employee growth and satisfaction. While organisations may hire people with diverse abilities it is critical to understand the opportunities for growth and advancement that they provide to their employees. Among our respondents 83% felt that their current role provided them opportunities for growth whereas 17% felt it did not.



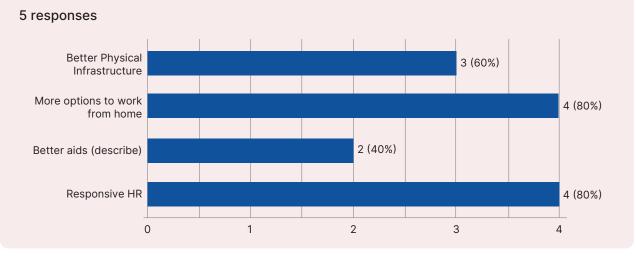
When asked if a technological solution could improve opportunities for growth 70.6% said yes. Further when asked what these technological solutions could be the solutions suggested included virtual training programs (83.3%), remote collaboration platforms (66.7%), advanced software/tools (58.3%) and other digital resources.



Apart from technology an inclusive work culture is key for better retention and advancement of people in an organisation. Ms.Sreedevi Ravi, Senior Manager Talent Acquisition Amazon put it aptly when she said organisations have to be *intentional about inclusion and mindful till it becomes a habit*. Changing the culture of an organisation requires a two-way learning where the leadership makes a conscious effort to be more inclusive. It could be simple gestures like allowing people to take their time to respond during a meeting, choosing locations which are accessible for people when conducting outdoor events. An example Ms.Ravi shared with us of this inclusive culture was of members of the senior leadership learning to sign to make hearing disability team members feel comfortable in the organisation. Training and sensitisation programs within the organisation have also been known to have a positive impact on improving the work culture of an organisation.

When we asked our respondents what they believed would make their workplaces more conducive. Some of the responses we received were more options to work from home, better physical infrastructure in the workplace and a more responsive HR.

WFH options remain a critical component for better inclusion. Organisations will need to be sensitive and design policies which allow for WFH



If not: What would make the environment more conductive to your work?

Flexible Models of Work and Other Solutions for Inclusion 25

7

Suggestions and Recommendations

Based on our discussions with various stakeholders some suggestions and recommendations were made to improve accessibility and inclusion through both policy and organisational changes.

Policy Changes

A focus on better implementation of policies for PwDs especially the New Education Policy, which and the Rights of Persons with Disabilities Act 2016.

- Better educational opportunities at the grassroots level is the need of the day. Schools need to be more accessible both the physical premises and teaching curriculum. Teachers and students need to be sensitised about the needs of children with disabilities.
- There needs to be a greater emphasis on making all technology accessible. Tools for communications, learning and sharing need to be inclusive of PwD's needs. All new technologies need to be tested out on different groups of people to ensure better accessibility

Government policies or organisational policies cannot exist in isolation and interaction between the two is critical for better implementation of all policies. Some of the suggestions we received for making organisations more inclusive include

- Hiring practices need to be made more inclusive across all organisations and sectors. One way to ensure this could be for the government to design an incentive system for hiring based on industry needs.
- Awareness needs to be created for existing government policies which provide support to companies for recruitment. Many companies are not aware/do not avail the existing provision such a as the Revised Incentive Scheme for Providing Employment to Persons with Disabilities in the Private Sector³⁸ which provides companies relief in the payment of Employee Provident Fund (EPF).
- Encouraging startups to focus on assistive devices for invisible disabilities
- Develop a policy for work-from-home which is owned and developed by the industry. Ensure continuous training, interactions and career development programs for PwDs. WFH can get isolating for people online interactions and regular peer to peer interactions
- The focus of most organisations is still on visible disabilities and even with visible disabilities there is a limited understanding of the nuances of disabilities

Conclusion

The study was conducted to understand the barriers that PwDs face in their work environment. We looked at flexible working models, aids/tools and technology used by PwDs to identify the barriers to access and growth for PwDs in their organisation. A mixed method approach was used to conduct the study which allowed us to enhance the depth of our understanding of accessibility and inclusion for PwDs in the workplace. The focus of the study was on technological needs but as the interview progressed the need for better physical infrastructure also emerged.

³⁸ Scheme for Implementation of Rights of Persons with Disabilities Act (SIPDA)

Some of the major findings from the study are that unemployment continues to be a key challenge for PwDs. More than 50% of our respondents are unemployed. While WFH is an option at many organisations people are still expected to move to the same city as the office and WFH in that city. Aids and tools such as screen readers and hearing aids have been helpful tools at work.

Communication tools such as whatsapp, zoom and other inhouse technologies are widely used by our respondents. Some of the key features that are used by our respondents are focus/dark mode and captioning.

Better access to technology and additional training on software were identified as key components for career advancements. Apart from technology, mentoring and an inclusive work culture were highlighted as key factors for better growth and career development.

There is a shortage of data on PwDs and there are no publicly available sources of data for organisations with flexible working models. This limits our study to respondents who are directly or indirectly connected to Youth4Jobs.

Focus on strict implementation of policy and a deeper focus within organisations to create an inclusive workspace were highlighted for improving inclusion and access for PwDs in the workspace.

Annexure I

Assistive Technology

SI. No.	Aids and Assistive Devices	Uses
1	Mobility Aids	Devices that help people move within their environment, electric or manual wheelchairs, modifications of vehicles for travel, scooters, crutches, canes and walkers.
2	Home/workplace modifications:	Structural adaptations that remove or reduce physical barriers such as ramps, lifts, modification in the bathroom to make it accessible, automatic door openers and expanded doorways etc.
3	Seating and Positioning:	Adapted seating, cushions, standing tables, positioning belts, braces and wedges to maintain posture, and devices that provide body support to help people perform a range of daily tasks.
4	Sensory aids for vision/hearing impaired	Such as magnifiers, large print screens, hearing aids, visualing systems, Braille and speech/telecommunication output devices, Focus mode/Dark mode uses a darker background thus reducing strain on the eyes
5	Computer Access Aids:	Headsticks, light pointers, modified or alternate keyboards, switches activated by pressure, sound or voice, touch screens, special software, voice to text software that enable persons with disabilities to use a computer. This category includes speech recognition software.
6	Alternative and augmentative communication devices (AAC):	These devices help people with speech impairments or person having low vocal volume to communicate such as speech generating devices, voice amplification aids and communication software. For visually impaired person, devices as magnifier, Braille or speech output devices , large print screens, closed circuit television for magnifying documents, etc.

(Sources:The National Trust, Government of India, https://thenationaltrust.gov.in/content/innerpage/aids-and-assistive-devices.php accessed on 8th December 2024)



