

THE POTENTIAL OF HRTECHS & EDTECHS FOR

PROMOTING WOMEN'S PROFESSIONAL EDUCATION AND EMPLOYMENT



ACUMEN LATAM IMPACT VENTURES (ALIVE) designed and commissioned this research project as part of its ongoing efforts to better understand gender dynamics in the value chains of its portfolio companies and to disseminate to the broader ecosystem original insights and recommendations for improving sector gender practices and outcomes across those value chains.

Dutch Good Growth Fund

This study was made possible primarily with funding from the **Dutch Good Growth Fund.**



Women, to execute the research and production of this report with guidance and support from the ALIVE team. Value for Women (VfW) is a specialized advisory firm helping organizations advance gender inclusion. VfW works with a range of partners and institutions, including investors, enterprises, and financial institutions across Africa, Asia, Latin America, and the Pacific, to drive gender-forward solutions within their operations. Learn more at **www.v4w.org.**

This report is the intellectual property of Acumen Latam Impact Ventures and Value for Women. It may be reproduced without express permission from, but with acknowledgment to, Acumen Latam Impact Ventures and Value for Women Ltd., 2023.

Research leads: Natalia Sant' Anna Torres & Daniela Moctezuma Salas **Editor:** Shoshana Grossman-Crist | **Design:** Gerardo Mejia

Suggested citation: ALIVE & Value for Women. The Potential of HRTechs & EdTechs for Promoting Women's Professional Education and Employment. Bogotá: Acumen Latam Impact Ventures, 2023.

TABLE OF CONTENTS

	EXECUTIVE SUMMARY
3	PROJECT BACKGROUND, METHODOLOGY, AND TARGET AUDIENCE
7	INTRODUCTION
	3.1 Gender gaps in employment in Latin America3.2 The future of employability3.3 The business case for EdTechs and HRTechs to address
	gendered challenges women face
10	BARRIERS AFFECTING WOMEN'S ACCESS TO EMPLOYMENT
13	CURRENT LANDSCAPE OF GENDER INCLUSION IN EDTECH & HRTECH
22	FIVE RECOMMENDATIONS FOR EDTECHS AND HRTECHS
	6.1 Collect and use sex/gender-disaggregated data 6.2 Use inclusive algorithms
	6.3 Create diverse product development teams
	6.4 Develop a value proposition tailored to women customer and users
	6.5 Be intentional about gender in marketing & outreach
34	CONCLUSION
35	APPENDICES
	1. Guidance for companies on how to collect and use sex- disaggregated data
	2. Guidance for companies on gender-responsive market research
50	REFERENCES



EXECUTIVE SUMMARY

Today, only 58% of women participate in the labor force, compared to 82% of men¹. And occupations continue to be sex-segregated, with women particularly under-represented in science, technology, engineering, and mathematics (STEM): women account for only 28% of higher graduates in engineering and 40% in computer science worldwide. In most Latin American and the Caribbean (LAC) countries, women's representation among graduates in fields of engineering and information technology and communication (ITC) rarely exceeds 40%².

If the current gender gaps continue in the midst of the technological revolution that is currently underway, women are at risk of losing out on tomorrow's best job opportunities and companies will face a restricted applicant pool and a reduced diversity dividend³.

Multiple barriers underpin these gender gaps in women's access to professional education and employment in Latin America, including cultural norms, shortage of time (due to disproportionate care work), limited professional networks, genderbased violence, and the greater economic and digital exclusion women experience.

In the face of these immense challenges, technology-based companies working in education

(EdTech) and human resources (HRTech) are supporting a successful transition to the future of work by helping learners develop a range of skills and credentials and access employment opportunities. By nature of being largely digital and flexible, many of the solutions may contribute to reducing some gender inequalities. But to do this well, they must consider gender throughout their business models.

This report looks at how EdTech and HRTech firms can better contribute to increasing women's ability to access professional training and formal employment. It also provides these firms with actionable recommendations to improve gender outcomes across their solutions and market approach.

The potential payoffs to businesses and investors for doing so are immense; just closing the gender gap in access to online learning platforms in emerging economies would mean 8 million women joining the paid online learning market each year⁴.

To answer this question of "how," the report draws from conversations with over 30 tech companies, regional specialists, intermediary organizations, consultations with more than 100 women, and an extensive literature review.

¹ IDB, 2019

² IUS, 2021

³ WEF, 2016

⁴ IFC & Coursera, 2022



It finds that some EdTechs and HRTechs are already catalyzing gender inclusion in professional development and employment, offering solutions that address key gender-related barriers. Among EdTechs, powerful solutions existing today include challenging gender norms at younger ages, helping mothers reenter the labor market, and providing connections with employers and professional networks. Among HRTechs, they include making it easier to implement affirmative actions, mitigating biases in recruitment processes, facilitating the formalization of women workers, and helping mothers reenter the labor market.

With gender inclusion generally being a new focus area for EdTechs and HRTechs, besides a few notable examples (i.e., solutions at the vanguard), there is much opportunity for these companies to do more to support gender equality. But where to start? We share the following five recommendations for EdTechs and HRTechs:

Collect and analyze
sex-disaggregated data. By using tech
companies' existing wealth of user data
to compare how women's platform
access and use differs from that of men, tech
companies can identify how to better serve women.

Use inclusive algorithms.

Ensure artificial intelligence does not replicate gender stereotypes, and that teams can both prevent bias and act when bias is identified.

Create diverse product development teams. Formalizing practices and policies that promote diversity in the company and delivering anti-bias training to product development teams will help de-bias technologies.

Develop a value proposition tailored to women customers and users.

Design and adjust products and services based on evidence about market niches, preferences, pains, and wishes of women in all their diversity.

Be intentional about gender in marketing & outreach. Make concerted efforts to reach women audiences through audiovisuals, language, and channels.

By implementing these recommendations, and with the support of investors, accelerators, and business hubs and networks, the HRTech and EdTech sectors could increase the odds that women benefit from the technology transformation occurring in Latin America's economy, and that businesses flourish.



PROJECT BACKGROUND, METHODOLOGY, & TARGET AUDIENCE

This report was funded primarily by the Dutch Good Growth Fund and is the result of a research project commissioned by Acumen Latam Impact Ventures (ALIVE) and executed by Value for Women (VfW).

It is a two-part study on how technology companies working in education (EdTech) and human resources (HRTech), can best contribute to:

women's ability to access professional training and formal employment in Latin America; and



women's ability to retain formal employment and/or grow professionally in Latin America.

This volume (i) looks at how EdTech and HRTech firms can better contribute to increasing women's ability to access professional training and formal employment.

This is the first study of this kind focused on Latin America. The previous analyses in the region have focused, above all, on the gender composition of EdTech and HRTech leaders and teams⁵. This study, therefore, adds a new layer of analysis by focusing on the products and services these companies offer.

⁵ Lustosa, C., Yaacov, B., et al., 2021



Methodology

Between September 2022 and January 2023, we conducted 31 interviews with technology companies, corporate users, intermediary organizations, and regional specialists. We asked companies about:

- their business models to identify opportunities to contribute to reducing gender gaps;
- any inclusive business policies, practices, and strategies they have; and
- their opinion on how tech platforms could contribute to women's ability to access professional training and formal employment in Latin America, accounting for the sector's strengths, gaps, and sophistication.

This last question was also the focus of our conversations with intermediary organizations in the field and regional specialists.

In parallel, we consulted over 100 women across Latin America⁶, through a survey and focus groups discussions. We asked women about:

- the barriers they face;
- their experience using HRTechs and EdTechs:
- whether this tech influenced their opportunities of finding a job and improving their professional education; and
- what they would improve on these platforms.

This data, together with an extensive literature review, provided a picture of the factors that shape women's access to professional training, formal employment, and career growth in Latin America. From there, we developed concrete recommendations for how EdTech and HRTech can contribute to reducing gender inequalities in the region through their products and services.

The findings from the primary and secondary research inform all sections of the report.

Target audience

EdTech and HRTech firms operating in Latin America (both B2B and B2C) and seeking to have greater impact on the professional development of their women users.

This study is also helpful for:

Ecosystem players — such as investors, business incubators, and accelerators — interested in gender inclusion.

⁶ The women consulted came from the following countries: Argentina, Brazil, Bolivia, Chile, Colombia, Ecuador, El Salvador, Mexico, Peru, and Venezuela.



What's in this report

Deriving from the research, this report presents:

THE BARRIERS

There are gendered barriers that affect the way women access professional training and interact with the labor market. In this section, you will find an overview of the multiple barriers that limit women's ability to access professional training and formal employment in Latin America. Knowing these barriers is the first step for developing products and strategies aligned with women's experiences.

THE LANDSCAPE

EdTechs and HRTechs have great potential to contribute to the professional development and employability of women. This section analyzes how EdTechs and HRTechs are uniquely suited to reduce some of the aforementioned barriers; identifies the EdTech and HRTech solutions at the vanguard supporting gender inclusion; and describes the main challenges EdTech and HRTech companies are facing to taking greater action for gender inclusion. We look specifically at the EdTech and HRTech solutions that have the greatest capacity to directly impact the professional lives of their women users: those focused on preparing and training women for the labor market and on, intermediation between candidates and vacancies.

THE RECOMMENDATIONS

EdTech and HRTech firms can consider gender in their business models in a variety of ways. This section provides concrete recommendations on how EdTech and HRTech companies can take action to support women's employability and professional advancement.



ICONS TO GUIDE YOU THROUGH THIS REPORT

EdTechs



HRTechs

In an effort to support readers in identifying the report content most relevant to them, we have included a series of labels that identify when content is relevant for EdTechs or HRTechs, when it is relevant to internal-facing teams (e.g., those that focus on people management, internal systems and processes) or external-facing teams (e.g., those that focus on product development, customer service, and marketing), and when it is relevant for models that are B2B or B2C.



Internal-facing teams



External-facing teams



B2B model



B2C model



3 INTRODUCTION

3.1 Gender gaps in employment in Latin America

Despite important progress during the past 50 years, the pace of progress on gender equality slowed in the early 2000s. **Today, still only 58% of women participate in the labor force, compared to 82% of men**⁷. But that is not the only gap.

Sex segregation by occupation continues; women workers continue to be concentrated in occupations that do not require significant technical skills, and lag behind men in science, technology, engineering, and mathematics (STEM), making up only 22% of the professionals working in artificial intelligence⁸. Women are less likely than men to be in managerial positions. And, for each hour worked, women earn an average of 17% less than their male peers⁹.

The economic crisis caused by the COVID-19 pandemic aggravated these inequalities. While nearly all the jobs men lost during the pandemic were recovered by the end of 2021, 4.2 million jobs women lost had yet to be recovered by that same time, due to both the face-to-face nature of these jobs and women's increased caregiving and household responsibilities¹⁰.



⁷ IDB, 2019

⁸ UNESCO, 2021

⁹ ILO, 2019

¹⁰ ILO, 2022



This gender gap in labor force participation is particularly striking because on average, women in LAC today have a higher level of education, and education of better quality, than men. Furthermore, the pandemic led to more women than men to decide to learn online¹¹.

Critically, however, women learners usually have lower completion levels of paid specialization and professional certificates ¹² than do men. Additionally, women are underrepresented in STEM education. Worldwide, women account for only 28% of higher graduates in engineering and 40% in computer science ¹³. In most of LAC, women rarely make up more than 40% of engineering and information technology and communication (ITC) graduates ¹⁴.

3.2 The future of employability

In today's quickly evolving workplace, adult learners will increasingly need to educate themselves many times over during their careers to remain relevant¹⁵. The World Economic Forum predicts that men will face one new job created for every three jobs lost. Meanwhile women will face less than one new job created for every five jobs lost¹⁶. Latin America faces the possibility that 21% of women workers may need to transition to other occupations¹⁷.

This indicates that if the current gender gaps and industry trends continue, women are at risk of losing out on tomorrow's best job opportunities even more than they are today, and companies

- 11 IFC & Coursera, 2022
- 12 IFC & Coursera, 2022
- 13 UNESCO, 2021
- 14 IUS, 2021
- 15 IFC & Coursera, 2022
- 16 WEF, 2016
- 17 Bustello, M, Frisancho, V. & Viollaz, M., 2020
- 18 WEF, 2016
- 19 IFC & Coursera, 2022
- 20 Castillo, P., Callegaro, H., 2020
- 21 IFC, 2021

will see a limited applicant pool, losing out on the proven benefits of having diversity within the company¹⁸.

3.3 The business case for EdTechs and HRTechs to address the gendered challenges women face

Addressing the gendered challenges women face offers an opportunity for tech company growth. Closing the gender gap in access to online learning platforms in emerging economies would mean 8 million women joining the paid online learning market each year¹⁹. In HRTech, while the business case has yet to be calculated, the rapidly growing diversity and inclusion agenda among the private sector worldwide has created heightened demand for HRTech solutions that support companies on their diversity and inclusion strategies. Further, there is a clear business case for promoting diversity within the workforce and EdTechs and HRTechs can contribute toward companies of all sizes and sectors achieving diversity.

As is becoming more widely known, businesses that embrace diversity tend to both outperform their peers financially and benefit from increased internal collaboration and innovation²⁰. Also, evidence demonstrates that, by better serving women customers, businesses increase sales and income²¹.



EDE

BOX A — But what are EdTechs and HRTechs?

EdTech

The term **EdTech** comes from combining the words "education" and "technology." Although there is still no consensus around its definition, it usually refers to the combined use of computer hardware, software, and educational theory and practice to facilitate learning. In this sense, technology can make learning more efficient and effective²².

Market segmentation

The EdTech market can be segmented multiple ways, the most common being by age and educational level:

- Early childhood (Pre-K)
- K-12
- Post-secondary or higher education
- Workforce development and upskilling
- Others

Or, alternatively, by subject:

- Advanced technology
- STEM and coding
- Language learning
- Online learning
- Tutoring and testing
- Management systems
- Workforce upskilling
- Digital content
- Others

HRTech

The term **HRTech** refers to using technology in human resources to increase sector intelligence, optimize processes, and improve results. The main objective of HRTech is to reduce the bureaucracy of processes²³. HRTechs are part of the larger "era of Human Resources (HR) 4.0," where human resources are shifting toward a more strategic role.

Market segmentation

HRTechs are mostly segmented by their business areas, as follows:

- Job marketplaces
- Recruiting tools
- Learning & development
- Performance management
- Employee experience
- Work-life balance and wellbeing

- Internal communication and engagement
- Work management
- Workforce planning
- Personnel department
- Payroll
- Benefits
- Others



²² Abstartup, 2020

²³ Guimarães, B., 2021



4 BARRIERS AFFECTING WOMEN'S ACCESS TO EMPLOYMENT

A wide array of factors prevents women from achieving their full economic potential, ranging from gender norms to political representation, social protection, access to financial services, gender-based violence, access to justice, and reproductive rights among others.

Understanding these barriers is the first step to designing value propositions that contribute to reducing gender gaps. Here we list those that are most critical to women's ability to develop their professional qualifications and obtain employment and that can be, as we will see later, addressed by EdTechs and HRTechs:

- Gender biases impact, albeit unconsciously, the way the marketplace perceives women. Stereotypes of women as emotional and passive negatively impact how hiring teams conduct recruitment processes. In addition, social expectations that women be the primary caregivers, and prioritize caregiving over careers, mean that businesses often don't take women seriously as employees²⁴.
- Women, especially mothers with young children, face greater time poverty than men due to these same unequal social norms. Latin American and Caribbean women spend twice as many hours as men doing domestic labor and unpaid care work. This means that until men take up a more equal share of household responsibilities, women have more time limitations on their schedules^{25,26}.
- Women have less access to quality internet and are less likely to own a device (cell phone, tablet, computer)²⁷. In most Latin American and Caribbean countries, men have more mobile connectivity than do women²⁸. Furthermore, women are more likely to access the internet exclusively on mobile phones or shared devices as opposed to computers or tablets²⁹ and are more likely to face challenges related to the cost of connectivity.

²⁴ World Bank, 2021

²⁵ CEPAL, 2021

²⁶ ILO, 2019

²⁷ GSMA, 2022

²⁸ IDB, 2022

²⁹ IDB, 2022



- Women face financial exclusion due to barriers accessing financial products and services³⁰. In Latin America, women are less likely than men to have a bank account at a formal financial institution and only 25% of women have borrowed money from a formal financial institution or used a mobile money account, compared with 36% of men³¹.
- Women tend to have more limited business networks and encounter more challenges in establishing and joining such maledominated networks³². This is the result of both sexism inherent in many networks and women's tendency to rely more heavily on family connections and informal networks. The result is women have less access to professional information and opportunities than men.
- Gender norms from an early age discourage girls from pursuing studies in STEM fields, meaning that there is a limited pipeline of women entering STEM, despite having the same innate ability as men³³.

"Too often, we are pigeonholed in certain topics or work areas. In my case, what I studied [not related to STEM] was because my dad, as progressive as he was, didn't want me to major in STEM. He had the best of intentions in advising me not to [major in STEM], but nevertheless it was detrimental to me."

- MEXICAN WOMAN, EDTECH USER

and STEM-related learning and working environments tend to have practices unfavorable, and even hostile, to women, such as microaggressions, interruptions, sexist conversations, schedules, and models that disregard women's demands. In a vicious cycle, this makes these sectors unattractive to women, which further perpetuates exclusionary male-dominated cultures³⁵.

"I didn't feel comfortable in the classroom, most of the attendees were men, and when I had questions, I felt small in that masculine environment."

- MEXICAN WOMAN, EDTECH USER

"In the tech sector there are few women, and no women programmers. Some companies and team members are happy to have women programmers, but others don't take it that well. I have always been the only woman, and it's a weird feeling. Most of the time, people [men] don't accept my opinion."

- VENEZUELAN WOMAN, HRTECH USER
- Gender-based violence, which can range from physical and verbal abuse, sexual harassment and unwanted sexual advances, psychological abuse and intimidation to abusive working conditions, can be detrimental for women's learning, productivity, workplace permanence, and well-being³⁶.

³⁰ Lazarte M., 2021

³¹ Global Findex, 2021

³² Chin, K., 2017

³³ Spearman, J., & Watt, H., 2013; Ruigrok, A., Salimi-Khorshidiet, G., et al., 2014; Eliot, L., 2013; Riegle-Crumb, C., King, B., et al., 2012; Hyde, 2005; Halpern, D., Benbow, C., et al., 2007, UNESCO, 2017.

³⁴ UNESCO, 2017

³⁵ UN Women, 2020

³⁶ IFC & Coursera, 2022; Agbaje, O.S., Arua, C.K., Umeifekwem, J.E., 2021











BOX B — Gender-based violence

Women are more exposed to types of violence related to gender-based power relations, which can affect women workers' mental and physical health, productivity, and learning³⁷. Gender-based violence (GBV) in the learning and work environment includes physical and verbal abuse, sexual harassment and unwanted sexual advances, psychological abuse and intimidation, abusive working conditions, and subtle microaggressions.

Barriers affecting women's access to employment in Latin America



³⁷ Agbaje, O.S., Arua, C.K., Umeifekwem, J.E., 2021



GURRENT LANDSCAPE OF GENDER INCLUSION IN EDTECH & HRTECH

EdTech has been flagged as potentially one of the most powerful growth engines for LAC, accelerating the economic recovery, addressing inequalities, increasing access, and multiplying the support for and impact of LAC's parents, mentors, teachers, and institutions. The sector has demonstrated a clear ability to scale and internationalize, expanding dramatically in recent years to number more than 1,500 EdTech companies and over 4,500 jobs in 2021, and having attracted US \$1B in investment over the past 10 years³⁸. Venture capital investment in LAC EdTech more than tripled between 2020 and 2021³⁹.

The HRTech sector seems to follow the same trend. In line with global patterns, **the HRTech sector in Latin America has accelerated since the start of the pandemic**, reaching a market size of US \$1B in 2022 and expected to reach US \$1.7B by 2028⁴⁰.



EdTechs and HRTechs are uniquely positioned to support gender inclusion

In the face of the immense gender challenges described in the previous section, EdTechs and HRTechs are supporting a successful transition to the future of work by helping learners develop a range of skills and credentials and access employment opportunities. **The solutions HRTechs and EdTechs offer tend to be remote, flexible, highly accessible, and scalable, and as such, contribute to reducing some gender inequalities.**

"Self-directed courses have worked for me. Being with children at home and having family responsibilities, even when I share them with my partner, there is still a more significant burden on me as a mother. Plus, I have a formal job, which complicates things further. That's why [a course that] is directed and with fixed times is challenging to follow."

- COLOMBIAN WOMAN, EDTECH USER

³⁸ Lustosa, C., Yaacov, B., et al., 2021

³⁹ Lustosa, C., Yaacov, B., et al., 2021

⁴⁰ IMARC Group, 2022

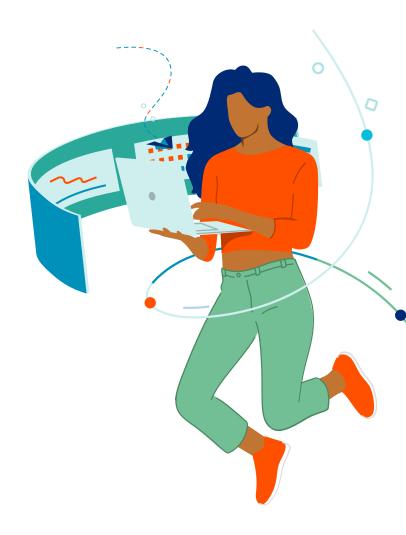


"As a university professor, I noticed how having online courses gave women with children access to education. These were women who wouldn't have been able to go to university in person."

- EDTECH EXPERT

The ability to connect anytime from anywhere was the top benefit of online training women mentioned in our survey and focus groups⁴¹. In fact, Coursera, a global leading online courses provider, found that 60% of women caregiver users said they would postpone or not study at all in the absence of online learning. Digital solutions can provide the easy access that time-strapped individuals need, offer more affordable training options than brickand-mortar options, and eliminate transportation costs to the user. They can also provide democratic access to job opportunities beyond one's network.

But to realize the entirety of HRTechs' and EdTechs' potential to address gender gaps, they must do it intentionally with specific actions, products, and solutions to consider gender in their internal and external operations.



Some powerful solutions in the market today

Some EdTechs and HRTechs are already catalyzing gender inclusion in professional development and employment, offering solutions that address key gender-related barriers. **The most powerful solutions identified in our research include**:



Developing educational online programs for K-12 that challenge gender norms at earlier stages. These types of programs bring girls closer to the digital world and awaken their interest in science and math. Studies⁴² in low and middle-income countries have found that access to technology is disproportionately more empowering for girls than boys, with wider benefits.

⁴¹ IFC & Coursera, 2022

⁴² Webb, D., Barringer, K., et al., 2020



Profile of an EdTech that intentionally addresses gender gaps

NAME:	<u>Digital House</u> DIGITALHOUSE
TYPOLOGY:	K-12; post-secondary or higher education; workforce development and upskilling; STEM and coding; online learning
DESCRIPTION:	Digital House is an edtech organization that seek to transform people's lives developing digital skills that impacts society. With this objective, it offers fully remote training under an innovative methodology with a special focus on practice.
	Its world-class academic offering includes a variety of intensive courses to train in the most demanded digital skills. It also offers a series of Executive Programs as well as in-company courses tailored to train and attract the talent corporations need for its digital transformation, and programs with schools. Its most recent launch, Certified Tech Developer, a two-year program that aims at creating a new degree concept based on agile methodologies and learn by doing.
GEOGRAPHIC COVERAGE:	Brazil, Argentina, Chile, Colombia, Mexico, Peru, and Uruguay
GENDER INCLUSION APPROACH:	Committed to gender equality, Digital House has developed initiatives such as its school-based programming training for students ages 10 to 17. This aims to develop students' interest in tech at an early age and break gender stereotypes, ultimately increasing the participation of women in tech. Digital House also partners with large companies that finance scholarships for women to
	participate in the company's programs. Companies, in turn, benefit from a pipeline of women in tech to hire in the future.



Providing participants connections with employers and professional networks, interview preparation support, and socio-emotional skill building (soft skills) as part of the programs.

According to EdTechs interviewed, these types of approaches contribute to developing women's professional networks and boosting both their confidence to job search and their employability. Additionally, EdTechs that offer accreditation signal women participants' employability to potential employers.



Profile of a hybrid HRTech EdTech that intentionally addresses gender gaps

NAME:	Talently talent[ly]
TYPOLOGY:	Job marketplace, recruiting tools
DESCRIPTION:	Talently is a company that seeks to empower Latin American tech talent by mentoring senior tech talent to prepare them for recruitment processes and by offering a marketplace that matches tech talent with companies.
GEOGRAPHIC COVERAGE:	Latin America, especially in Colombia, Mexico, and Peru
GENDER INCLUSION APPROACH:	Talently identified lower participation of women in its program. To help close this gap, Talently gives scholarships to women, which has successfully attracted more women. The company has also been intentional about gender in its admission process (e.g., requiring less work experience).
	Talently's mentoring program supports participants during the whole recruitment process. It has found that helping women build their self-confidence and resilience, particularly in the face of rejections, has brought good results in their finding employment.
	Talently partners with Laboratoria to support Laboratoria's women graduates as they grow and look for jobs at more senior levels.



Using technology to help companies open vacancies exclusively for women or search specifically for women candidates. Tech-based talent acquisition solutions can support companies by offering recruiters enhanced search capabilities, allowing them to filter and search for candidates by specific diversity attributes like gender and race or ethnicity. These solutions can help to increase the participation of women, especially in those roles where they have lower participation.

"HRTechs can influence if companies achieve gender parity. We can do this through our algorithms that can find women for specific roles. HRTechs hold the trigger."

- ANDRÉS JOYA, CEO COALLY



Profile of an HRTech that intentionally addresses gender gaps

NAME:	Gupy Gupy
TYPOLOGY:	Multiple products for HR
DESCRIPTION:	Gupy is a women-founded Brazilian HRTech company with 37 million registered users. Founded in 2015, Gupy became known in the market for its artificial intelligence-based solutions to automate and increase the accuracy rate in recruitment and hiring processes. Currently, Gupy offers an ecosystem of solutions for Recruitment & Selection, Admission, Corporate Education, and Employee Engagement & Performance Management.
GEOGRAPHIC COVERAGE:	Latin America
GENDER INCLUSION APPROACH:	Whenever candidates agree to disclose their diversity-related data, Gupy's recruitment tool allows recruiters to monitor the representativeness of underrepresented groups in each stage of the recruitment process, conduct selection processes specifically focused on underrepresented groups, and create alerts and filter candidates based on diversity variables. Gupy also allows recruiters to develop outreach campaigns to attract diverse candidates and offers training, and guidelines to support recruiters to reduce biases along the process. Furthermore, in conventional processes (not exclusively targeted at women or other groups), the AI developed by Gupy reads neither the personal characteristics of candidates, such as gender, nor the gender of words in Portuguese. In this way, it promotes greater diversity in the recruitment stage. On the candidate side, to create a safe and accessible environment for candidates, Gupy uses inclusive language and added a plug-in for automatic translation in sign languages.



Developing solutions to mitigate biases in selection processes. To reduce the likelihood that diverse candidates get screened out because of conscious or unconscious bias, some HRTech solutions apply AI, machine learning, algorithms, text mining, sentiment analysis, and natural language processing to detect biases in job description language, "nudge" recruiters to use biasreducing behavior, and score candidates on how well a candidate fits with the team culture. Offering "blind" resumes and "blind" interviews/group dynamics (the latter replacing candidates' voices with robotic voices and avatars) can have the same effect⁴³. Automatized candidate experience surveys can bring visibility to candidates' experiences in the recruiting process. These solutions can help to increase the pipeline of women candidates by counteracting gender biases.

⁴³ Sherman, S. Jackson, C., 2019



"Being able to identify any deviation between the experience lived by women and men candidates or white and non-white candidates, and take actions to correct them, improves the employer's brand among underrepresented groups."

- LUISA ALIBONI, PEOPLE SCIENCE COORDINATOR, PIN PEOPLE

"Technology is helping employers understand the successful profiles that generate greater retention, and then, with this info in hand, calibrate their recruitment algorithms. This removes the systemic biases that occur in traditional processes.

Among our clients, this has increased hiring of women by 11%, on average, as well as of other underprivileged groups, such as refugees and transgender people."

- JACOB ROSENBLOOM, CEO, LEVEE

BOX C — The rise of "Diversity & Inclusion Techs"

There is growing use of the term "Diversity & Inclusion⁴⁴ Techs" (D&I Techs). This refers to technology-based companies, usually operating as HRTech and/or EdTech, which offer solutions explicitly created to advance diversity and inclusion (such as reducing unconscious bias, supporting companies to attract and retain a diverse workforce, D&I analytics insights for guiding decision making, building diverse talent pipelines, measuring the success of D&I strategies, among others).

With the development of new technologies (e.g., Al, machine learning, text mining, sentiment analysis, and more), the increased attention on diversity and inclusion, and an eye toward disrupting the stagnant progress to date, a ripe market opportunity has arisen to support leaders to increase diversity⁴⁵.



Facilitating the formalization of women workers. Some HRTechs working in specific fields, such as payroll management solutions, are contributing to formalizing women's employment by streamlining labor regularization processes. With there being a higher concentration of women in the informal sector than men in LAC⁴⁶, these solutions have a positive and disproportionate impact on women.

⁴⁴ For clarity, we are using the acronyms DEI and D&I interchangeably

⁴⁵ Sherman, S. Jackson, C., 2019

⁴⁶ UN Women, 2015



Profile of an HRTech that intentionally addresses gender gaps

NAME:	<u>Symplifica</u> symplifica
TYPOLOGY:	Benefits and recruiting tools
DESCRIPTION:	Symplifica is a platform for formalizing the labor relationship between domestic workers and their employers, with the goal of improving workers' livelihoods and facilitating employers' management of their workers. Operating since 2015, Simplifica helps with documentation, provides advice and education, and calculates payments. Symplifica also works as a platform for extra legal benefits, including health and education services, to improve the quality of life of workers.
GEOGRAPHIC COVERAGE:	Colombia, Mexico
GENDER INCLUSION APPROACH:	Most of the workers on Symplifica's platform are single mothers now accessing formal job benefits, such as maternity leave, for the first time. Symplifica not only guarantees the rights granted by law but also facilitates these women's access to financial, educational, and health services.



Supporting mothers to reenter the labor market. There are examples of talent acquisition HRTechs that are already supporting new parents' (both mothers' and fathers') return to the labor market both by offering job matching systems that allow new parents to engage with job opportunities that fit their needs for work-life balance as well as by facilitating new parents' connections with employers. These solutions are particularly important to address the motherhood penalty, a common bias against mothers in the workforce.



Profile of an HRTech that intentionally addresses gender gaps

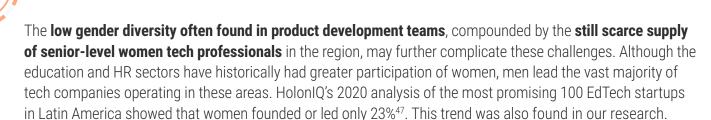
NAME:	The Mom Project THEMOMPROJECT
TYPOLOGY:	Recruitment tool
DESCRIPTION:	The Mom Project (TPM) is an online platform where employers can post full-time, contract, remote, and freelance positions for free. The platform uses algorithms to match jobs with curated women talent. Employers have access to over 400,000 women looking for a job.
GEOGRAPHIC COVERAGE:	USA
GENDER INCLUSION APPROACH:	TPM creates opportunities for women to engage on their terms with companies that need their talent and expertise. TPM also serves as a community for working moms to support each other, connect to career goal support, and gain access to the resources needed to thrive in their personal working parenthood. For employers, the platform provides resources on inclusive workplaces, parental support, and candidate onboarding so companies can understand how to support working parents through innovative policies and improving best practices.

Vast untapped potential

Despite EdTech and HRTech solutions' unique position to be game changers for gender inclusion, we found that most of them are not yet realizing their full potential to do so.

EdTech and HRTech firms' awareness of their potential impact on gender equality is still nascent, and only a few incorporate gender into their business strategy intentionally. Further, most of the EdTechs and HRTechs that participated in this study noted that they have more men than women users, indicating an untapped opportunity for these companies.

When asked about the possibility of taking such action, **tech companies shared a variety of challenges to doing so**. Tech companies we spoke with mentioned it being difficult to identify the specific preferences and requirements of women users and clients, the challenges of reaching women via conventional marketing channels, and that gender diversity has not yet been a priority of their clients.



Finally, regional specialists highlighted that companies do not yet see the women segment strategically as a business strategy for growth and to attract investment.

Some EdTech and HRTech solutions in the market today that are powerfully reducing gender barriers to professional education and employment



Gender norms, roles, & stereotypes

Solutions that support employers to de-bias recruitment processes, conduct affirmative actions, and bring visibility to women candidates' experiences.



Time poverty

Educational solutions that embed flexibility and increase the likelihood of course completion.



Less access to quality internet & devices

Solutions that enable mobile access, require only low bandwidth, allow downloadable content, and address the most underserved women's digital challenges.



Financial exclusion

Solutions that allow users to pay only when they get a well-paid job, provide financial aid, partner with financial services providers, and facilitate formalization of women workers.



Fewer business & professional networks

Solutions that integrate personal/community engagement, provide spaces for networking, and provide connections to employers and professional networks.



Male-dominated STEM sectors

Solutions that enable gender-inclusive reskilling and upskilling and that challenge gender norms from an early age.



Few women role models

Solutions that include more women instructors and feature successful women in leadership positions and male-dominated roles.



Gender-based violence

Solutions that ensure the safety of educational spaces (online and in-person) and offer mechanisms for users to report violence.

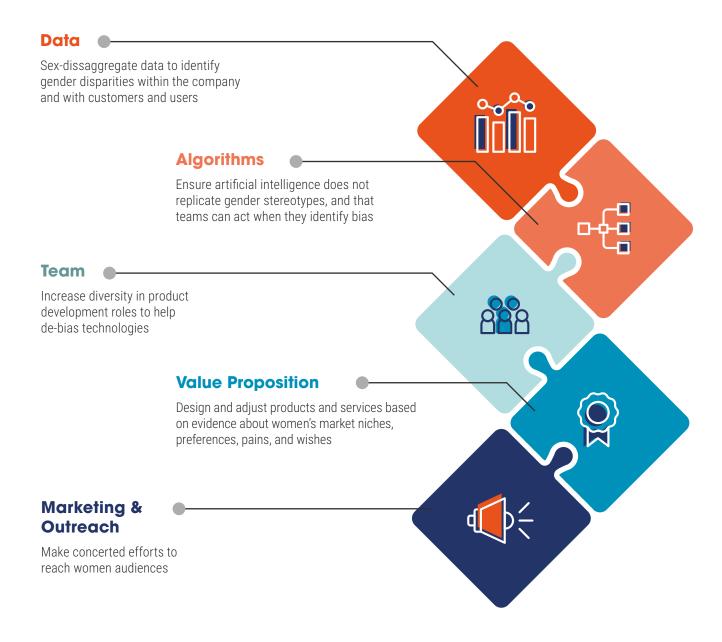
⁴⁷ Woolley, A. ., 2010; Sodexo, 2018



6

FIVE RECOMMENDATIONS FOR EDTECHS & HRTECHS

With gender inclusion generally a new focus area for HRTechs and EdTechs, besides a few notable examples (i.e., solutions at the vanguard), there is much opportunity for HRTechs and EdTechs to do more to support gender equality. But where to start? We offer five recommendations and areas of potential action and detail them in this section:





6.1 Collect and use sex/ gender-disaggregated data











EdTechs and HRTechs generate large amounts of data on their customers and users. However, our research suggests that the collection and use of sex-disaggregated data is not common (for guidance on companies in general how to collect, analyze, and use sex-disaggregated data, see *Appendix 1*). Ensuring that EdTechs and HRTechs collect and use customer and user data in a sex-disaggregated manner and with appropriate regard for privacy⁴⁸ doesn't require platforms moving far from their current operations⁴⁹. Specifically, EdTechs and HRTechs can leverage their sign-up, application, or registration forms to include a couple of questions on gender and other diversity attributes to gain significant information.

Sex-disaggregated data collection and use will enable EdTechs and HRTechs to:

- Assess current reach among women and men;
- Identify gender disparities and patterns in platform use, including satisfaction with the overall platform, content preferences, frequency and time of use, retention, desertion, etc.;
- Learn how women's experience can differ from men's and understand the unique demands of the different groups of women, both in educational and recruitment experiences;
- Validate the business case for implementing strategies focused both on women as platform customers and users;
- Get inputs to develop specific products focused on women or strategies for increasing women participation.

CASE STUDY: COURSERA & THE BENEFITS OF SEX-DISAGGREGATED DATA ANALYSIS

Coursera tracks women's engagement in online learning by collecting and analyzing sex-disaggregated data. This was how the EdTech found out that family obligations and financial considerations affected not only women's initial enrollment in online learning but also their ability to complete courses⁵⁰. Furthermore, the data showed Coursera that approaches that improved women's engagement increased their completion rates.



⁴⁸ For in-depth guidance about privacy considerations when collecting data, see: Personal Data Protection in LatAm: Quick Reference Guide

⁴⁹ Value for Women, 2022

⁵⁰ IFC & Coursera, 2022













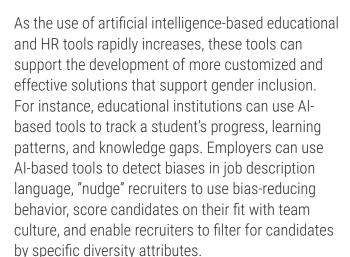


BOX D — Sex vs. Gender⁵¹

- Sex (biological sex) refers to the physical and biological characteristics that distinguish men and women.
- Gender links to social norms and refers to the roles, behaviors, activities, and attributes that a given society at a given time considers appropriate for men and women. Gender identity refers to how one thinks of themselves as a man, woman, nonbinary, etc.

Many firms collect sex and/or gender data on women and men; this disaggregation is an important start. However, companies can be more inclusive in their data collection and decision-making by asking for "gender identity" and including additional gender options (as multiple-choice options or write-ins), such as *nonbinary* and *gender nonconforming*. This allows for recognizing the unique experiences of individuals who do not self-identify with any of the gender spectrums or who self-identify with a gender other than the sex assigned at birth.

6.2 Use inclusive algorithms













EdTechs and HRTechs must ensure these tools do not replicate or reinforce stereotypes. Taking an example from history, one of the initial artificial intelligence (AI) models used to guide hiring was built with historical data, using only men's resumes—which the algorithm interpreted as a preference for hiring men⁵². The likelihood of algorithmic bias against women and other disadvantaged groups further increases as a result of few women within the teams building the AI and a lack of sexdisaggregated data to use as inputs⁵³.

⁵¹ Gender Equality Glossary, UN Women

⁵² Nwankwo, U. & Pisa, M., 2021

⁵³ CBR Staff, 2020



Key considerations for developing inclusive AI for educational and HR solutions are:

- Recruit more diversely to ensure development teams have a greater range of gender identities, ethnic-racial identities, and worldviews.
- Sensitize and train development teams about gender biases and their impact on algorithm creation, so they can both prevent bias and act when they identify bias.
- Bring Diversity & Inclusion experts (external or internal) into algorithm design.
- Conduct algorithmic audits and risk assessments to determine how the predictive tools reach decisions and their potential impact on women and other underrepresented populations.
- Whenever possible, advise the use and/or use artificial intelligence information as one piece of the larger puzzle, rather than as the sole source of information. To do this, consider combining it with other sources and modalities of information to better support decisions.

6.3 Create diverse product development teams











Increasing diversity in tech roles is critical to help de-bias the technologies that make up an ever-present component of modern life and produce more inclusive tech⁵⁴. There is also a business case for this: Research has found a positive correlation between diversity and inclusive leadership models, talent retention, collaboration in and across teams, motivation, and productivity, which ultimately leads

to a better organizational health and financial performance for the companies⁵⁵.

Platforms can promote diversity in their product development teams in the following ways:

Build the pipeline. Companies can encourage applications from women by using inclusive language and images in job ads. Additionally, advertise benefits, flexibility, and workplace perks, stating that the company strongly encourages women to apply. To effectively circulate these job ads, see section 5.5 in this report.

Some tech companies have held lightning talks, community events, and small group meetings for women in tech, as well as published blogs focused on women, to inspire women to enter tech careers.

 Deliver gender-bias training to recruitment staff and tweak the recruitment process.

To reduce bias in the recruitment process for product development roles, ensure panelists, managers, and anyone engaged in the recruitment process are aware of gender biases and the importance of having a diverse team. Additionally, include standardized interview questions and processes and form a diverse hiring committee.

To ensure men and women candidates have equal chances to demonstrate their capabilities, some companies schedule an informal chat with a panel member before the interview, so the candidate feels less intimidated during the interview. Other companies are ensuring an equal number of women and men candidates on shortlists, setting quotas, or giving women additional points in early rounds of the selection process.

⁵⁴ McKinsey & Company, 2022; Nigam, R., 2021

⁵⁵ Castillo, P. & Callegaro, H., 2020



promote diversity in the company. First and foremost, for promoting an inclusive organizational culture, formalize policies and practices to ensure that women feel safe, comfortable, and that they belong. Best practices include conducting regular salary reviews (to avoid potential genderbased disparities), offering women career development opportunities such as capacity building and mentoring (this can play a crucial role in women's decision to stay or leave a company), and ensuring the working model and benefits are adequate for caregivers and employees.

Value for Women's **Gender Smart Nexus** no-cost gender self-assessment helps companies identify gaps in their business operations, including the workplace, and provides recommendations on inclusive policies and practices that the company can implement.

"I am convinced that diverse teams are more productive and innovative, and I mean diversity in all aspects. I've seen this since my first job. And so, at Kuepa, we try to carry out processes where we really know that we are hiring people for their qualities, and we try to identify that there are no biases in the process."

- JORGE GARCÍA, KUEPA

6.4 Develop a value proposition tailored to women customers and users











EdTechs and HRTechs can design and adjust products and services based on evidence about women's market niches, preferences, pains, and wishes from the sex-disaggregated data recommended above and complementary market research (for guidance on conducting this, see Appendix 2). Specific design elements and adjustments are outlined next.

Consider women customers' and users' connectivity and mobility restrictions. This can look like the following:

- Identify connectivity challenges that unserved women face and develop approaches to address them. Benefiting from digital solutions requires a certain level of digital literacy, hardware access, and connection. Use proxies based on national statistics or socioeconomic data to target the most unserved women, including those with low literacy, low incomes, who live in a rural area, or who have a disability⁵⁶. Understand the geographic locations where these women concentrate and their specific needs and limitations in terms of connectivity.
- Support users with lower digital literacy and learners without access to devices. This can look like establishing help desks and creating centers where users can use devices, access a reliable connection, and get support with digital tools⁵⁷.

⁵⁶ GSMA, 2021

⁵⁷ IFC & Coursera, 2022



Prioritize services that enable mobile access, require low bandwidth, and allow downloadable content. In general, women are more likely to access the internet exclusively on mobile phones or shared devices than computers or tablets. They are more likely to face challenges related to the cost of connectivity. Women participating in this study reported using commute time or multiple short time windows to study.

Develop flexible solutions that contribute to addressing the time restrictions women face today, as a stop gap measure for as long as women continue to be responsible for an unequal share of household responsibilities. Such flexible solutions include:

- Offer shorter, mobile-friendly sessions that allow students to complete courses on their timelines. Courses with shorter sessions that make it easier to learn more often but in briefer intervals—make it more feasible for time-constrained learners, especially women, to follow through with their learning. More mobile-friendly options appeal to women and can result in greater engagement.
- Maintain a daily schedule and ensure learners keep up with assignment deadlines. Both are two relevant predictors of course completion and have a more substantial effect on women than men. Supporting learners to keep up to date with assignments through reminder prompts, peer support, and ascending assignment difficulty levels can make it easier for women to complete more tasks, increasing the odds of completing courses.

"In the case of [EdTech] courses, I love that they are asynchronous, and my progress is not lost. I do it when I have time and as I need to."

- COLOMBIAN WOMAN, EDTECH USER

Consider hybrid models & networking in the programs. Some studies have found that women prioritize community building, indicating a preference for blended learning options and networking⁵⁸. Regarding girls' education, there is strong evidence that face-to-face and group learning, which provides opportunities for girls to learn and discuss challenges together, positively impacts girls' empowerment, aspirations, and commitment to study⁵⁹. We share some considerations for EdTechs when developing hybrid models and integrating networking:

- Create offline and online meetups, small group connections among users, and other forms of personal engagement to strengthen women's experiences.
- Options for direct interaction with instructors (e.g., synchronous sessions, Q&A sessions, mentorship opportunities, and forums and group work where women can interact with other learners) can make online platforms less isolating while maintaining the flexibility that women value. However, platforms need to ensure the safety of these spaces and allow mechanisms for women to report online gender-based violence and violence targeting other vulnerable groups.
- Given women's time poverty and mobility constraints, women are more likely to value platforms that **combine blended solutions** digital and face-to-face –as well as more interactive digital solutions.

⁵⁸ IFC & Coursera, 2022

⁵⁹ Unterhalter, E., North, A., et al., 2014



"I took an online course that was very useful, with 15- or 10-minute videos and practical exercises for reflection.

They gave you time for analysis and personal reflection. In addition, from time to time there was a Zoom call with the other people in the program. During these calls, I was able to learn from their different perspectives- maybe in one module I understood things one way, and another person helped me see it a different way. It was very enriching."

- MEXICAN WOMAN. EDTECH USER

Identify women's content preferences/needs and incorporate them into program design. Our research found that most EdTechs are not yet adapting their programs to women's different needs. This is problematic because women we spoke with said that most of the offerings in the market in Latin America do not meet their preferences and needs. Meeting these can increase women's and girls' enrollment, retention, and performance. Studies indicate that group learning, high-engagement learning, real-world learning, and project-based learning, can improve girls' learning in distance education and women's learning on digital learning platforms⁶⁰. Some recommendations for companies to adapt content based on women's preferences include:

Have feedback loops disaggregated by sex to gain a deeper understanding of customers' and users' behaviors, needs, and preferences, and insights on how the programs benefit women and men customers and users. Companies can collect this data through short surveys, semistructured interviews, and focus groups with customers and users.

- Include lively interactions (ex. personalization features, dynamic exercises, cases based on real life, common myths and peers' mistakes by topic). In fact, all the women participating in our focus groups noted how much they value the practical components of the online courses they completed.
- Partner with prestigious educational institutions to co-develop content and provide certificates these institutions validate. Women participating in this study noted that the courses they have valued the most are the ones prestigious universities developed and that provide certificates they can include in their resumes. The women consider that having this type of certificate in their resumes contributed to obtaining jobs.
- Include successful women. Companies like Platzi identified that hearing testimonials from successful women, meeting women role models, and meeting women founders in their community particularly catalyze women's learning, and they have included this type of content.

"For me, the most important thing is to learn by doing. I can find the theory on Google, but what I can't find is how to apply this to practice."

- COLOMBIAN WOMAN, EDTECH USER

⁶⁰ Naylor, R., Gorgen, K., 2020



"I wanted to specialize in translation, and I looked for courses that would give me a certification, but I couldn't find good courses on platforms in Mexico, neither free nor paid. When I finally found a course at the University of San Diego, it was very expensive, and I had to save money to pay for it.... The course was excellent, but I had to spend a lot of money. In the end, as a result of that course I have gotten more work. I include it very prominently on my resume, and it has attracted attention."

- MEXICAN WOMAN, EDTECH USER

Ensure women representativeness and include woman role models in the programs. Role models matter to everyone, but research has shown that they have an amplified benefit for women⁶¹. In a region marked by gender inequalities, role models have a demonstrative effect crucial for women. EdTechs focused on K-12 can include women teachers in solutions since women teachers have been shown to positively influence girls' perceptions, interests, and confidence in STEM subjects⁶².

Women users tend to enroll in more courses in which at least one instructor is a woman, and they rate these courses more highly. Platzi identified that videos with women speakers have more female audiences than videos with men speakers. Coursera has found that representation of women instructors is among the most important contributors to an increase in enrollments from women in its platforms⁶³. In STEM courses, women's enrollment increases by 34% when at least one female instructor is present⁶⁴.

罪







BOX E — Representation in course visual material

A large-scale randomized experiment⁶⁵ found strong evidence that female students respond positively to seeing other women in the course material, inducing higher overall activity and discussion posting behavior in online learning platforms. They subtly altered gendered situational cues in course videos, placing either male or female staff in video backgrounds and using matching male or female aides for tutorial videos. The experiment suggests that subtle personalized alterations of educational environments can influence students' engagement patterns in large-scale digital learning environments.

⁶¹ Lockwood P., Sadler, P., et al., 2004

⁶² UNESCO, 2017

⁶³ Coursera, 2021

⁶⁴ IFC & Coursera, 2022

⁶⁵ Brooks, C., Gardner, J. & Chen, K., 2018



Here is how EdTechs and HRTechs can ensure women's representativeness:

- Include more women instructors in courses.
- Show more women in the programs' audiovisual content.
- Feature women in leadership positions or in male-dominated areas, such as STEM, in their job advertisements.

"The impact of role models is very important. You cannot be what you cannot see; today, the face of the tech sector, and of many tech upskilling programs is still male. That predominant voice makes women feel that it is not a space for them. If women are not there, it is difficult for other women to say, 'I want to be there. I should be there.'"

- GABRIELA ROCHA, CO-FOUNDER & EXECUTIVE DIRECTOR, LABORATORIA

"Since 2020, we have collaborated with more women teachers. The results are impressive, the videos on our YouTube channel with women teachers record 60% more women students."

- JULIANE BUTTI, FORMER HEAD OF PARTNERSHIPS & STARTUPS, PLATZI

Consider different pricing and payment options that meet women's needs. In the EdTech sector, financing emerged as an important barrier to women's learning process and women users are more likely to depend on free courses⁶⁶.

- Review existing databases and reports to understand women-specific financial gaps in the markets where you operate⁶⁷.
- **Explore pricing based on income-sharing schemes**, that, as previously seen, means that students have zero initial cost and pay only when they get a well-paid job. These pricing models can unlock options for cash-strapped, career-focused learners.
- Use geo-pricing to develop differentiated pricing based on geographic-based income data. This way your pricing accommodates middle- and low-income markets.
- Consider providing financial aid or scholarships, when possible.
- Develop partnerships with financial services providers to create financing solutions for women users. EdTech's rich data on its users may be the missing piece financial service providers have needed to develop these financing solutions.

⁶⁶ IFC & Coursera, 2022

⁶⁷ The World Bank's Global Findex Database provides data on global access to financial services (including payments, savings, borrowing) disaggregated by sex











BOX F — Offering increased access to educational finance

ProTalento, a Colombian company that merges HRTech, EdTech, and FinTech solutions, offers **financing plans** to access its comprehensive educational program and personalized professional mentoring (the latter to enhance the chances of getting a job after the course).

Other players operate **innovative payment models**. For example, Escalab and Henry use an Income Sharing Agreement, whereby students have zero initial cost and pay only when they get a well-paid job. To ensure students are successful securing a well-paid job, this model usually also offers coaches to accompany students in their job search and interview preparation.

6.5 Be intentional about gender in marketing & outreach

Our research found that few EdTechs and HRTechs are making targeted efforts to market to women audiences, even when they identify that women's participation is low. There are many practices, however, that can alleviate this. For instance, to reach women more effectively with their existing marketing and outreach, EdTech and HRTech companies can:

- Increase representation of women in your audiovisuals and use inclusive language. Highlighting women role models or instructors in ads and clearly communicating how a solution concretely meets women's needs can also boost applications and enrollment.
- Communicate in channels with greater participation of women. This may include women's professional networks, women's











business associations, and women's university groups, among others⁶⁸. To the contrary, communicating in conventional channels and formats may attract traditional audiences. Even in the case of online learning, women are less likely to discover it through online research.

- Establish partnerships with nongovernmental organizations, foundations, universities, and women's groups, among other organizations that reach and engage women.
- Consider providing scholarships for women. EdTechs and HRTechs such as Platzi, Digital House, and Talently have addressed the gender disparity in their customers and users by implementing this strategy.

⁶⁸ IFC & Coursera, 2022















BOX G — Principles to keep in mind69

As you act on the recommendations above, keep the following principles in mind:

- **Identify low to no-cost actions:** Certain actions may require very little time and no cost and yet bring significant clarity and direction to your gender journey.
- Whenever possible, ingrain gender early on: If your firm cements gender into the core of its corporate strategy, your impact on gender tends to be more fluid and systematic since it gets ingrained in the organizational DNA.
- Look for intersectionalities: Discrimination can occur in many "layers" according to gender, nationality, age, disability, sexual orientation, race-ethnicity, among other diversity variables. Thus, women do not experience learning/recruitment processes based on their race or gender separately; they live their lives at the intersection of these characteristics. For this reason, "one size fits all" diversity approaches leave behind less privileged groups of women, such as women with disabilities, age 50+ women, trans women, and non-white women⁷⁰. Tech firms interested in supporting gender equality must first recognize that women are a heterogeneous group and seek to understand that heterogeneity.
- **Don't try to "pinkify" everything:** Not every topic/product/service can (or should) be reframed as "for women." The point is instead to focus on the differentiated needs, contexts, access challenges, etc. and to solve for those.
- Partner when possible: No one company can do it all. Partnerships within the ecosystem will further boost user employment opportunities. For example, HRTechs can team up with EdTechs to expand the pipeline of candidates in high-demand market sectors by creating certificates, degree programs, and bootcamps, which give employers access to a pool of candidates. Both can connect with social organizations to expand their reach and burst socio-economic-cultural bubbles. FinTechs can support the provision of resources needed to finance specialization courses.

⁶⁹ Value for Women, 2022

⁷⁰ Wullert, K., Gilmartin, S., & Simard, C., 2019

Gender barriers, how they hinder women's professional education and employment, powerful EdTech and HRTech solutions to these, and recommendations

HRTech solutions that:

diversity attributes).

GENDER BARRIER

Gender norms,

roles, and

stereotypes

How this gender barrier can affect women's professional education and employability

Powerful EdTech and HRTech solutions addressing this gender barrier

· Support employers to de-bias recruitment processes (ex. AI that detects biases in job description language, "nudging" of

Bring visibility to women candidates' experiences (ex. automatized candidate experience surveys disaggregated by sex);

Support recruiters to conduct affirmative actions (ex. enhanced search capabilities to filter for candidates by specific

1. DATA

Sex-dissaggregate data to identify gender disparities within the company and with customers and users

Recommendations for

EdTechs and HRTechs





does not replicate stereotypes, and that teams can act when



BEC BEB

2. ALGORITHMS

B2C B2B

B2C B2B

4. VALUE

PROPOSITION

Design and adjust products and services based on

evidence about women's

3. TEAM

Time poverty

their professional education.

Women may be assumed to:

- Be too emotional for a position that requires assertiveness;
- Have family duties that restrict them from taking on positions
- Be uninterested in job opportunities in male-dominated sectors.

Women have less time and shorter time periods to dedicate to

Chronic stress reduces both women's ability to focus and their

creativity and increases their risk of dropping out of training

EdTechs that embed flexibility in solutions and increase the likelihood of course completion, such as by:

recruiters to use bias-reducing behavior, making resumes and interviews "blind");

- Offering shorter, mobile-friendly sessions that allow time-constrained learners to complete courses on their timelines without unnecessary stress;
- Providing a daily schedule and supporting learners to keep up to date with assignments through reminder prompts, peer support, and ascending assignment difficulty.

Less access to

quality internet

and devices

Women have more limited devices and time on devices, bandwidth, and internet access to identify quality job opportunities and access professional education.

Women seek jobs that offer greater flexibility.

Women are likely to use commute time or multiple short time windows to study.

EdTechs that:

- Prioritize services that enable mobile access, require low bandwidth, and allow downloadable content;
- Identify digital challenges that the most unserved women face (eg. digital literacy, hardware, connectivity, income, and disability) and develop solutions to address these, such as establishing help desks and creating centers where users can use devices, access a reliable connection, and get support with digital tools⁷².

Financial exclusion

Financial barriers make it difficult for women to:

- Pay for, and remain in, professional education programs;
- Make long-term plans for career development

EdTechs that:

- Offer income-sharing schemes that allow women/underrepresented users to have zero initial cost and pay only when they get a well-paid job;
- Offer differentiated pricing based on geography-based income data;
- Provide financial aid or scholarships when possible;
- Partner with financial services providers to create financing solutions for women users.

HRTech solutions that:

Facilitate the formalization of women workers.

Fewer business and professional networks

Women have less access to professional information and opportunities than men.

EdTechs that:

- Use hybrid models and integrate personal engagement into programs;
- Provide safe spaces where women feel comfortable to develop networks and develop technical and professional skills;
- Provide learners with connections to employers and professional networks, interview preparation support, and socio-emotional skill building (soft skills).

Male-dominated STEM sectors

Women have fewer skills in STEM and thus reduced job opportunities in this quickly growing sector⁷³, despite having the same innate STEM abilities as men.

- Develop gender-inclusive reskilling and upskilling programs;
- Challenge gender norms from an early age, such as through initiatives with younger students.

Few women

- Women are less influenced by inspirational success cases;
- Unconscious biases often cause leaders to hire/promote people similar to themselves ("affinity bias").

EdTechs that include more women instructors in courses and show more women in the program's audiovisual content. HRTechs that in their job advertisements feature women in leadership positions and male-dominated roles.

role models

- Women learners' mental and physical health is compromised, and their learning hindered;
- Women's performance in a job selection process may be impaired after the occurrence of microaggressions or any other

Solutions that ensure the safety of educational and recruitment spaces (online and in-person) and offer

Gender-based violence

- 71 Deloitte, 2022
- 72 IFC & Coursera, 2022 73 McKinsey & Company, 2022

mechanisms for users to report violence.

5. MARKETING

& OUTREACH



BZC







7 CONCLUSION

By nature of largely being remote and flexible, EdTechs and HRTechs are uniquely positioned to help reduce gender barriers in women's professional education and employment. And because gender inclusion is generally a new focus area for EdTech and HRTech firms, there is much opportunity for them to both land and expand this global trend.

Considering gender throughout one's business model provides an opportunity to simultaneously promote social impact, market expansion, and brand positioning. Solutions at the vanguard of the EdTech and HRTech sectors have proven the viability of this path and are pointing the way forward. However, there is no "right" way to do this. Each company has to define its own way, in alignment with its business challenges and strategy. The important thing is to start— and to start today.

Implications for investors and ESOs

Investors and others are critical for supporting tech companies in Latin America to leverage genderforward approaches.

Investors can both increase capital available to companies committed to reducing gender gaps and influence their portfolio companies to adopt more gender-inclusive practices and strategies.

Accelerators and business hubs and networks have a key role to play in encouraging technology

firms to consider gender throughout their business model. Specifically, they can provide knowledge and technical assistance as well as disseminate best practices by bringing ecosystem players together and sharing successful cases and trends.

Future research needed to continue driving action

Since this is the first study of this kind focused on Latin America, future research can build the case and provide further ideas for HRTechs and EdTechs to contribute to women's employability. Additional research is particularly needed to:

- Identify more case studies and proof points in Latin America, especially those addressing gender in an intersectional way. This includes solutions capable of reaching the most vulnerable women in low-income communities;
- Build the evidence case linking gender diversity to social and business impacts for EdTech and HRTech companies.

In today's technological revolution and changing economic landscape, EdTechs, HRTechs, and their partners can work intentionally to ensure women have equal access to tomorrow's best job opportunities and companies have the large applicant pool and innovative teams they need to thrive.

APPENDICES



APPENDIX 1.

Guidance for companies on how to collect and use sex-disaggregated data⁷⁴

SUGGESTED USER / TARGET AUDIENCE

This tool should be used by the Senior management, Customer-related Insights team, Product Development team, and IT team.

ESTIMATED COST

(TIME INVESTMENT	Medium
	CASH INVESTMENT	Low/Medium

REQUIREMENTS

- Access to any user databases, disaggregated by sex if available;
- Dedicated time for data planning and design of meaningful metrics⁷⁵.

ADDITIONAL EXTERNAL REFERENCES / RESOURCES

Criado-Perez, Caroline. <u>"Invisible Women: Exposing Data Bias in a World Designed for Men"</u>. Forbes. October 22, 2019.

Doss, Cheryl and Kieran, Caitlin. <u>"Three Things You Need to Know About Sex-Disaggregated Data"</u>. CGIAR, May 5, 2014.

Global Banking Alliance for Women (GBA). *The Power of Women's Market Data: A How-to Guide.* New York: GBA, 2015.

Gowerek, Krzysztof. <u>"Best data collection methods for improving your customers base"</u>. Tasil. May 3, 2020.

Mercy Corps. **Gender Transformative Toolkit.** Mercy Corps, 2021.

DESCRIPTION

This note provides guidance to HRTechs and EdTechs on how to collect, analyze, and best make use of sex-disaggregated data to gain a deeper understanding of their customers' and users' behaviors, needs, and preferences as well as insights on how the company is serving its women and men customers and users. Further, HRTech can help their corporate clients improve diversity and inclusion efforts by providing real-time diversity data to decision-makers through automated management tools like DEI dashboards.

This can help HRTechs and EdTechs to:

- Segment users based on diversity profiles to adjust their products and services to a diverse base of clients and end users.
- Address business challenges and opportunities;
- Find new market opportunities;
- Design or adapt products, services, and user experiences to the specific needs and preferences of different user segments⁷⁶;
- Shape communications and marketing messages;
- Track the performance and profitability of products and services for different user segments; and
- Ultimately, better serve women users and customers and tap into opportunities inherent in focusing on the women's market.

⁷⁴ This guidance note was adapted from tool 6 from: Inter-American Development Bank. Gender Smart Green Financing Toolkit: Enabling Financial Institutions to Mainstream Gender-Smart Solutions in Their Green Finance Operations. Washington, D.C.: 2022.

⁷⁵ The time needed will vary significantly based on if they are already collecting sex-disaggregating data or not. On average, planning and designing metrics may take one to two team meetings. Make sure to include here key stakeholders across the company (i.e. senior management and the team members who will implement the new system). Subsequently, the team should meet at least once a year to review and adjust these metrics based on business priorities.

⁷⁶ Customer segmentation, or dividing a diverse market into a number of smaller, more homogeneous markets based on one or more meaningful characteristics, enables companies to better understand their women users and their various needs and wants, which can make the difference between an underutilized service and one that resonates with women and improves their lives.



STEP 1 - Defining Questions for Sex-Disaggregated Data Collection and Analysis

Think about what you want to know about the differences between your women and men customers and users. It may be helpful to think about what you might want to do with whatever you learn from your sex-disaggregated data analysis. For example, if you want to improve your online course offerings to address the unique needs and learning preferences of women, your questions will be about women's usage. If you want to improve marketing strategies to attract more women customers and users, your questions will be about women's brand awareness.

Some important questions that your sex-disaggregated data could assist in answering include:

- The split between the number of men and women customers and users;
- The kinds of products or services women are more likely to use versus men;
- Preferred payment methods, communication channels, etc. of men versus women.

STEP 2 - Defining your Metrics

Metrics should be defined to answer the questions you have now established. It is important to select metrics that are not only feasible to collect but also meaningful and relevant for decision-making. Metrics should be adapted to your companies' business models and priorities.

The following list includes examples of some basic metrics. The list is not exhaustive.



STEP 3 - Identifying the Sources Needed to Fill Identified Data Gaps

For each metric you will use in your sex-disaggregated data analysis, you must identify the source (sometimes called "method") that will be used to collect the data. The most common sources to collect sex-disaggregated customer data are outlined in the table below; these sources reflect best practices.

Note that HRTechs and EdTechs should collect data on customers'/users' sex and other social markers during core business activities (e.g. when a user signs up).

Source	Objective	Data Examples
Internal database of customers/ users	Assess user behavior to improve the offerings based on women's unique needs and preferences.	Products and services usageAttrition rateProfit generated
Social media	Assess the brand awareness to improve marketing strategies to attract more women.	Engagement measured by: Followers Interactions (e.g. reactions, shares)
Satisfaction surveys	Measure user satisfaction and loyalty and take actions based on evidence to retain women customers/users.	■ Net Promoter Score ⁷⁷
Digital platforms	Identify the usage level of digital platforms to improve women's uptake.	■ Time spent in the app

⁷⁷ The Net Promoter Score (NPS) measures loyalty between a business and its customers/users.



STEP 4 - Identifying the System Adaptations Needed

To identify the system adaptations necessary for the automation of regular sex-disaggregated data extraction, HRTechs and EdTechs need to work closely with their IT department. For example, the company may need to modify its data system to include a field to capture customers' and users' sex and other social markers such as age, disability status, race/ethnicity identity, etc.

HRTechs and EdTechs also need to have robust data quality control processes. As a first step to ensure the quality of the customer data collected, the company can establish a user verification policy requiring staff to explicitly document the sex of any new account holder and/or provide a national ID number.

Also, diversity data – such as sex, gender identity, ethnic-racial self-identification, sexual orientation, and more – is considered sensitive data by most data protection laws in Latin America. The use of this information must follow the guidelines of the data protection laws of each country where the information is extracted and it is necessary to be very careful with how the information is used, stored, and protected. The general principle regarding sensitive data is that no person can be forced to provide it and that such data can only be collected and processed when there are reasons of general interest. The use of sensitive data for discriminatory purposes, for example, can lead to serious legal problems and is considered a crime in many Latin American countries. Although each national legislation has its own parameters on data collection, processing, treatment, and storage, some notions regarding data collection are common to most legislation:

- The purpose of data collection must be priorly and transparently expressed, so the data owners are informed about what will be done with their information. Thus, keeping evidence of consent is extremely important to avoid legal risks.
- Sensitive data can only be requested with data holders' prior, free, express, and informed consent. Therefore, the data owners must formally accept the research conditions before providing their data.
- In addition to requesting consent, it is important that sensitive questions be non-mandatory, giving data owners the option of not responding.
- Teams in charge of using the data files must ensure security and confidentiality of personal data, in order to avoid the adulteration, loss, consultation, or unauthorized treatment of these files.

Therefore, it is important that HRTechs and EdTechs develop internal policies for data processing, treatment, and storage according to local data protection law and that they limit access to sensitive individual data only to those people and in those cases in which it is strictly necessary to fulfill the purposes of which the data owners were informed.



STEP 5 - Conducting a Gender Analysis of Data

Once the metrics have been selected, an automated data collection system is in place with the necessary fields, and the data is available, it is time to make sense of the collected information. To do this, consider the following actions:

- Cross-tabulate sex-disaggregated data with other relevant variables. This will highlight differences between sexes, as well as differences within these segments. Better customer segmentation enables the optimal design of strategies targeted toward each of these subsets.
- Analyze the data, identifying relevant differences between the responses of each sex. Data analysis should be impartial and objective. Reports should include all the relevant background information and details about the context and methodology used that have a bearing on the findings. Constraints faced in data collection need to be explained in order to maintain integrity. Details, such as the use of mediators and translators, as well as the language and social barriers faced, need to be described.
- Combine sex-disaggregated data with qualitative data and information for more nuanced gender analysis.

 This will help to understand gender and social norms, gender-based constraints, and gender biases— all of which may not be readily captured or understood through numerical data.

The table below includes some indicators EdTechs and HRTechs can use to understand how well they are serving women customers/users, and what can be learned from each indicator.

Category	Indicator	Definition	Description
Outreach	Women Customers/Users	Women customers/users as a percent of total customers/users	Provides a snapshot of a company's outreach to women.
Outreach	New Women Customers/Users	New women customers/ users as a percent of total new customers/users	Indicates the direction in which a company is moving regarding its outreach to women.
Products	Product Uptake	Product growth by sex	To see whether the product is responsive to women.
Service Quality	Retaining Women Customers/Users	User retention rate by sex	It is much more expensive to acquire a new user/customer than to retain an existing one. As such, loyalty is not something companies can afford to take for granted.
Service Quality	User Satisfaction	User satisfaction score, by sex	Men and women measure and value service quality differently, and it is important to capture this feedback.



STEP 6 - Using Sex-Disaggregated Insights

You now have insights on differences between men and women within your customer/user base. These can feed into strategies to better serve women and increase your impact through products and services that meet their learning or employment needs, as well as to improve the company's business performance.

The insights from the sex-disaggregated data can be used in:

- **Performance dashboards** and forecasting, target-setting, and budgeting activities.
- Identifying gender disparities and patterns in platform use, including satisfaction with the overall platform, content preferences, frequency and time of use, retention, desertion, etc.
- **Tracking the performance and effectiveness** of marketing campaigns and channels.
- Assessing current reach among women and men.
- **Learning how women's experience can differ from men's** and understanding the unique demands of the different groups of women, both in educational and recruitment experiences.
- **Developing KPIs** for employees and targets for the company as a whole.
- **Getting inputs to develop specific products focused on women**, strategies for increasing women's participation, or a value proposition tailored to women customers and users.
- Validating the business case for implementing strategies focused on women as platform customers and users.

Moving forward from here, it is important to **keep tracking data to measure progress and iterate business strategy** and other improvements if needed. Based on the first measurements, and through incorporating the metrics into existing dashboards, companies can establish a desired trend for change, even before setting targets, in order to determine success.



APPENDIX 2.

Guidance for companies on gender-responsive market research⁷⁸

SUGGESTED USER / TARGET AUDIENCE

This tool should be used by the senior management, Customer Insights team, Product Development team, Marketing team, and Data Analysts, among others. If a third party is hired to conduct your market research, this tool should be shared with them

ESTIMATED COST

Ō	Time investment	Medium
	Cash investment	Medium

REQUIREMENTS

- Customer/user database(s).
- A quality team of data collectors. Assembling this team is critical, and the team can include internal marketing staff or use a third party such as a research firm.

ADDITIONAL EXTERNAL REFERENCES / RESOURCES

Criado-Perez, Caroline. "Invisible Women: Exposing Data Bias in a World Designed for Men". Forbes. October 22, 2019.

Doss, Cheryl and Kieran, Caitlin. "Three Things You Need to Know About Sex-Disaggregated Data". CGIAR, May 5, 2014.

Global Banking Alliance for Women (GBA). The Power of

Women's Market Data: A How-to Guide. New York: GBA, 2015.

Gowerek, Krzysztof. <u>"Best data collection methods for improving your customers base"</u>. Tasil. May 3, 2020.

Mercy Corps. **Gender Transformative Toolkit.** Mercy Corps, 2021.

DESCRIPTION

This note guides HRTechs and EdTechs in conducting qualitative market research in a gender-responsive manner. Qualitative research, specifically, will offer a nuanced understanding of existing and potential customer preferences, which will help companies to identify new potential customers/users and opportunities, adapt or design new products and services, improve customer service, and refine marketing messages or channels to increase market size and reach. Ultimately, HRTechs and EdTechs will be able to clearly incorporate customer and user preferences— those of both men and women—into business operations and track impacts.

⁷⁸ This guidance note was adapted from tool 7 from: Inter-American Development Bank. Gender Smart Green Financing Toolkit: Enabling Financial Institutions to Mainstream Gender-Smart Solutions in Their Green Finance Operations. Washington, D.C.: 2022.



STEP 1 - Define Research Objectives & Questions

First, define your overarching research objectives, in other words the specific aspects you want to learn about. For example, in applying a gender lens to your research questions, you may be interested to learn the following:

- How your products/services are perceived by women and men;
- How your products/services are, or would be, used by women and men;
- What women and men need and prefer regarding the products/services provided; and
- How products/services respond to the needs and preferences of women and men.

An extensive list of example research objectives is in the first column of the table below.

Next, develop the specific questions you want to ask to accomplish these research objectives. Examples of questions are included in the second column of the table below.

EXAMPLE RESEARCH FRAMEWORK WITH OBJECTIVES AND SPECIFIC QUESTIONS

Research Objective	Corresponding Questions	
Identify men's and women's perceptions	How satisfied are you with this program/course/service?On a scale of 1-10, would you recommend this program/course/service?	
Understand women's and men's motivations to pick your product/ service	■ What made you decide to choose this program/course/service?	
Identify women's vs. men's sources of information	■ How did you learn about our program/course/service?	
Understand how your products/ services are used by women vs. men	■ What do you use the program/course/service for?	
Identify how to differentiate sales pitches for women vs. men	 What do you see as the 3 key benefits/differentiators of this program/course/service? What do you think would convince your friends/colleagues to use this program/course/service? 	
Identify customer service satisfaction rates and preferences for women vs. men	 How would you rate the company after completing the program/course/service? Which customer support channel is most helpful (i.e. WhatsApp, phone call, online chat, etc.)? 	
Identify the preferred marketing channels for women vs. men How did you first learn about our program/course/se Facebook, Instagram, LinkedIn)? What is your preferred medium for learning about new services?		
Identify pain points for women vs. men	What don't you like about this program/course/service?What would you want to change about this program/course/service?	

You will use the questions you have just developed to populate your questionnaire, your interview, focus group or observation guide, or any other instrument you will use, as defined in Step 2.



STEP 2 - Design Your Research Method

A. ENSURE WOMEN'S EASY AND FULL PARTICIPATION IN YOUR RESEARCH METHOD(S)

Various methods exist for conducting qualitative market research, including surveys, key informant interviews, focus groups, participant observation, and innovative methods inspired by human-centered design. You should select the research method(s) you will use based on the type of information you want to obtain and the time, financial, and human resources available (for more guidance on this, see the Additional external references / resources listed on the cover page of this tool).

In addition to considering in-person methods, EdTechs and HRTechs can collect quantitative and qualitative data from their users through their technology. This includes:

- **User registration:** EdTechs and HRTechs can collect demographic data such as gender, age, occupation, and education level when users sign up to the platform. They can then use this information to create user profiles and customize content for each profile.
- **Usage analytics:** EdTechs and HRTechs can collect sex-disaggregated data on how users utilize the products and services, for how long they use them, and how often they log in. They can then use this data to improve the user experience.
- Online surveys: EdTechs and HRTechs can conduct surveys to collect sex-disaggregated feedback from users on their needs, preferences, and experiences and use the results when designing content and improving user experience of both women and men customers.

Once you have your research method(s) selected, you need to ensure that:

- 1. Women are able to participate relatively easily; and
- 2. Women are able to fully express their perspectives and feedback.

Think about any gender biases inherent in the selected method(s) that may limit your ability to achieve this. For example, in focus group discussions, if men's and women's voices are not equally valued in a community, then women may be hesitant to voice opinions in a mixed-gender group discussion. In surveys, women's time poverty may limit their ability to devote as much time and attention as is desired for in-person surveys, and lower levels of ownership of, and comfort with, electronic devices may limit women's ability to participate in mobile/online surveys and virtual focus groups and interviews. Barriers to women participating and fully expressing their opinions can be overcome through a number of factors.

Factors that <u>promote women's ability to participate in the research activity</u> include:

- **Timing:** Scheduling at a time that does not interfere with the target women's personal and professional responsibilities. Women particularly face time constraints due to care responsibilities (e.g. childcare and meal preparation) falling disproportionately on them.
- **Location:** In case it is not digital, conducting the research at a location at or within walking distance to each woman's home or workplace, or easily accessible via safe and quick transportation. If transportation is required, it is worthwhile to organize transport and/or provide a stipend to cover the cost.
- **Childcare:** If data collection is to take place away from the women's home or workplace, consider providing support for childcare, for instance by subsidizing transport for the young child and a caretaker.



- Incentive: If the data collection takes over 30 minutes (including transportation time), consider providing a cash or gift incentive to reward participation. It is also good practice to provide refreshments in a group data collection setting.
- **Technology:** If data collection is to happen via an online platform and women in your target demographic have access to a suitable device/internet but do not have the necessary technical skills, provide support and/or accompaniment.

Factors that promote <u>women's full expression of their opinions</u> include:

- **Women data collectors:** In some contexts, women are more comfortable freely sharing their perspectives with other women, particularly women of similar backgrounds and/or from the same or nearby communities.
- **Communicate research purpose, data usage, and confidentiality:** Promoting trust is key for women and men respondents alike and can be particularly important for women. Data collectors should explain the purpose of the research, how data is to be used, and whether or not participants can expect any benefits (or not) from the research. This also includes clarifying whether any of the respondent's personal information will be tied to her responses or whether all identifying information will be removed for aggregate analysis (the latter is preferable for promoting trust). Here, the messenger matters; you may want to engage local authorities and/or champions who can speak to respondents to convey the purpose of the research before you arrive.
- Question wording and design: If questions delve into personal or sensitive matters, ideally these would be asked in one-on-one rather than group settings. Additionally, question ordering matters: it is best to start with an easy "icebreaker" question, followed by easy questions (that the respondent can answer without too much thinking), and later in the interaction, once trust is built, ask harder or more personal questions. Lastly, questions are more likely to elicit complete responses if they are clearly worded, free of jargon, and in the respondent's first language.
- **Private space:** For interviews, it is best to interview a woman respondent when others (i.e., family members or friends) are not present, otherwise their presence may influence their responses. This includes limiting the presence of children who are not babies; this may necessitate the provision of childcare and/or an activity for children to do out of earshot. In group research settings (i.e. focus groups), if local cultural norms preclude women from fully expressing themselves with men in attendance then you may want to create all-women spaces.
- Data collector / facilitator skills: The individual(s) collecting data should know techniques for encouraging participation, or it will be necessary to provide them with this training. This is especially important in certain cultural contexts in which women are expected to stay quiet and avoid voicing opinions. For individual interviews, techniques include building rapport with the participant while staying neutral and not biasing responses. For group contexts, such as focus groups, the data collector will need to invite everyone's participation, potentially even going around the room and having people share their opinions rather than relying exclusively on spontaneous responses. In a mixed group of both women and men, it is particularly important to establish ground rules and expectations of everyone's participation.



B. DEFINE YOUR SAMPLE

Finally, you need to define the number of people you will collect data from and who you will include in your sample. Generally, the more people you survey or speak with, the better for extrapolating to your target market. To apply a gender lens to your sampling, ensure that you:

- Speak with both women and men users/customers and potential users/customers: Strive for equal proportions, or strive for more women if you are looking specifically to improve your understanding of women's preferences.
- Reflect in your sample the different subgroups you wish to study. Here, it is important to speak with the different market segments you wish to reach, as each will have different needs and preferences for the products and services themselves and for how you market to them. Understanding these different market segments will help companies effectively target women. For example, women entrepreneurs might be looking for business development programs to help them grow their businesses, while women employees might be looking for capacity-building and coaching programs for their career development. Make sure to speak with several women (or men) representing each sub-group of interest to avoid placing too much weight on one person's individual experience and basing your decision on one respondent's unique situation.

STEP 3 - Assemble a Team

Assembling a quality team of data collectors is critical. This team can include internal staff or use a third party such as a research firm. The team will need to have a supervisor, and ideally include women to collect data from women respondents and/or to co-facilitate alongside men. Ideally as well, members of the team will have previous data collection and/or user or customer-facing experience.

STEP 4 - Create a Study Plan

To ensure that everyone follows through on the plan, it is recommended to create a Study Plan where you put all the steps on paper. The Study Plan at a minimum should include your:

- Methodology
- Research Objectives
- Sample Size and Target Respondents (identifying target participation by women)
- Implementation Plan (including how you will reach target women respondents)
- Timeline (including time for training, piloting, and iteration)
- Appendix: Tools and questionnaires you will use



STEP 5 - Train On & Pilot Your Research Method

With your plan in place and before launching data collection, it is important to train your data collectors on the specific research planned and to pilot the data collection with target respondents.

A. DATA COLLECTION TRAINING

In the leadup to data collection, data collectors—be they internal or external—and regardless of their previous experience, should participate in a training that accomplishes the following:

- Clearly explains research objectives;
- Provides a detailed walk-through of any questionnaires or data collection instruments to be used, intended
 goals of each question in relation to the research objectives, how to administer, and how to classify and record
 responses;
- Reviews the practices you have identified to reach women and to make data collection comfortable for them; and
- Includes dedicated time for practicing data collection and providing feedback.

Even if an external agency has been contracted for the research, this training should be led by your company or have strong participation by your company.

B. PILOT

The objective of a market research pilot is to test the tools and see how they work in the field. In the pilot, you will simulate data collection as closely as possible to the intended data collection, with a smaller group of respondents. Then, based on the experience, you will revise the tools or methodology as needed. To make the best use of the pilot, you should:

- Administer the data collection tools to women and men who are very similar to your target groups of respondents;
- Record observations and notes of what goes well, and what needs to be improved, in terms of the tools and the methodology for administering them (Are women able to participate? Are they comfortable? Do they understand the questions as intended?); and
- If possible, at the end, ask participants to provide feedback about their experience participating in the research, and if they have ideas for improving the experience and/or making the questions clearer and more accessible.

Allow several days between the pilot and the formal launch of data collection to have time to make any adjustments to the study plan or data collection tools, incorporate lessons learned from the pilot, and provide feedback to the data collectors.



STEP 6 - Manage & Analyze Sex-Disaggregated Data

Once you have administered the data collection tools with your full sample, sex-disaggregated data analysis (or "gender analysis") is what you will do to identify what is the same and what is different between women's and men's responses and, thereby, preferences. Both qualitative and quantitative analysis techniques can be used with a qualitative research method.

Please note: Data analysis often requires specialized expertise, and if you don't have relevant experience on your team it may be helpful to hire an external consultant or firm to provide assistance and/or further guidance.

To set the stage for data analysis, you will need to ensure that the data is digitized into a single database (an Excel spreadsheet in the case of quantitative data, such as numerical scales or a set list of response options in a survey; a Word document or similar in the case of qualitative data, such as in-depth responses from focus groups, interviews, or surveys). In the Excel sheet, make sure to include a column indicating the respondent's sex.

Then, implementing the data analysis means doing the following:

- **1. Analyzing as two separate groups women's and men's responses**, and comparing frequencies and averages between the two groups;
- **2. Breaking the data into further subgroups if you are interested**, for instance, to understand the preferences of women and men who are older and younger (i.e., then you would compare the averages of women under 35, women over 35, men under 35, and men over 35);
- **3. Identifying what is consistent between women and men (and/or the sub-groups), and what is different.** Here it is important to not over generalize from a small sample. For instance, if you have interviewed 5 women and 5 men, and find a striking difference that is salient for your business, you could consider extending your research to a broader sample to validate that this difference is material and more generally representative.

Quantitative data analysis: Basic quantitative data analysis will typically include the following calculations:

- Frequencies (i.e., how many women said they were "satisfied" or "not satisfied" with the product or service);
- Averages/means (i.e., average # of times a product or service was used in the last week/month among all women respondents); and
- You may also calculate minimum, maximum, mode (most often-mentioned response), and distribution.

To compare women and men, compare these frequencies and averages between women and men.

Qualitative data analysis: Basic qualitative data analysis is done by noting patterns across respondents. Usually, the analysis is about counting the number of mentions of particular responses and quantifying the intensity of these responses. For instance, you may have asked women and men to reflect on how they use the product/service; and then you might pull from their long-form responses the different ways women report using products/services, and order them from highest to lowest use type.



STEP 7 - Write a Summary Findings Report

Finally, to use your new insights as a springboard for decision-making and improving your product/service, marketing, sales or other business areas, a critical step to conclude the analysis is to write down the key findings. This consists of creating a summary report that identifies the most important similarities and differences between men and women. This report can be shared within the company as a standalone report or embedded in a larger report (e.g., a marketing report, annual performance report).

If, in the course of your analysis, one (or more) of the differences that emerged was surprising or confusing, point this out in the report and indicate that more data collection is needed to dig further into this preliminary finding.



REFERENCES



Abstartup, (2020). *Mapeamento Edtech 2020*. Retrieved Januay 20, 2023, from https://abstartups.com.br/wp-content/uploads/2021/04/M2020_edtechs.pdf

Agbaje, O. S., Arua, C. K., Umeifekwem, J. E., (2021). Workplace gender-based violence and associated factors among university women in enugu, south-east nigeria: An institutional-based cross-sectional study. BMC Women's Health, 21(1). https://doi.org/10.1186/s12905-021-01273-w



Barsh, J., &; Yee, L., (2011, April 1). *Unlocking the full potential of women in the US economy.* McKinsey &; Company. Retrieved February 16, 2023, from https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/unlocking-the-full-potential-of-women

Basco, A., Barral. A., et al., (2021). Una olimpíada desigual. La equidad de género en las empresas latinoamericanas y del Caribe. IDB. Retrieved January 11, 2023, from <a href="https://www.google.com/url?q=https://publications.iadb.org/publications/spanish/document/Una-olimpiada-desigual-la-equidad-de-genero-en-las-empresas-latinoamericanas-y-del-Caribepdf&sa=D&source=docs&ust=1681937179823162&usg=AOvVaw37bZxcBJUudxUAeABA7imM

Bello, A., (2020). Women In Science, Technology, Engineering and Mathematics (STEM) In the Latin America And The Caribbean Region. Montevideo: UN Women. Retrieved January 10, 2023, from https://lac.unwomen.org/sites/default/files/Field%200ffice%20
https://lac.unwomen.org/sites/default/files/Field%20Office%20
https://lac.unwomen.org/sites/default/files/Field%20Office%20
https://lac.unwomen.org/sites/default/files/Field%20Office%20
Women%20UN%20
Women%20
<a href="mailto:Wo

Bolio, E., Ibarra, V., et al., (2022). Women Matter Mexico 2022. Lights and shadows of the pandemic. McKinsey & Company. Retrieved February 3, 2023, from https://www.mckinsey.com/~/media/mckinsey/featured%20insights/diversity%20and%20inclusion/women%20matter%20mexico%202022%20lights%20and%20shadows%20of%20the%20pandemic/women-matter-mexico-2022-lights-and-shadows-of-the-pandemic.pdf

Brooks, C., Gardner, J. & Chen, K., (2018). How Gender Cues in Educational Video Impact Participation and Retention. *International Society of the Learning Sciences, Inc.* [ISLS]. Retrieved February 3, 2023, from https://repository.isls.org/bitstream/1/863/1/509.pdf



Bustelo, M., Díaz, E., et al., (2020). What is The Price of Freedom?: Estimating Women's Willingness to Pay for Job Schedule Flexibility. IDB. Retrieved February 16, 2023, from https://publications.iadb.org/en/what-price-freedom-estimating-womens-willingness-pay-job-schedule-flexibility

Bustelo, M, Frisancho, V. & Viollaz, M., (2020). What is The Labor Market like for Women in Latin America and the Caribbean? IDB. Retrieved January 12, 2023, from https://publica-tions.iadb.org/en/what-labor-market-women-latin-america-and-caribbean



Castillo, P. & Callegaro, H., (2020). Diversity Matters América Latina. Por qué las compañías con un alto grado de diversidad son más saludables, felices y rentables. McKinsey & Company. Retrieved January 12, 2023, from ESP - https://www.prideconnection.cl/wp-content/uploads/2020/08/DiversityMatters-Mckinsey-Company.pdf / PORT - https://www.mckinsey.com/br/our-insights/diversity-matters-america-latina

CBR Staff, (2020, March 12). *Al is failing women. that needs to change.* Tech Monitor. Retrieved Januay 08, 2023, from https://techmonitor.ai/technology/ai-and-automation/ai-is-failing-women

Cecchi-Dimeglio, P., (2017) How gender bias corrupts performance reviews, and what to do about it. *Harvard Business Review*, Retrieved Januay 11, 2023, from https://www.google.com/url?q=https://hbr.org/2017/04/how-gender-bias-corrupts-performance-reviews-and-what-to-do-about-it&sa=D&source=editors&ust=1668125511450568&usg=AOvVaw0ly-c9x9HuQtLctRV51HSP.

CEPAL, (2021, October 15). The burden of unpaid care work on Caribbean women in the time of covid-19. CEPAL. Retrieved Januay 20, 2023, from https://www.cepal.org/en/events/burden-unpaid-care-work-caribbean-women-time-covid-19

Chin, K., (2017). The Power of Procurement: How to source from women-owned businesses. UN Women. Retrieved January 8, 2023, from https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2017/
The-power-of-procurement-How-to-source-from-women-owned-businesses-en.pdf

Clark, S. L., Dyar, C., Inman, E. M., Maung, N., & London, B., (2021). Women's career confidence in a fixed, sexist stem environment. International Journal of STEM Education, 8(1). https://doi.org/10.1186/s40594-021-00313-z

Coursera, (2021). Women and Skills Report. Addressing gender gaps through online learning. Retrieved January 20, 2023, from https://about.coursera.org/press/wp-content/uploads/2021/09/Coursera-Women-and-Skills-Report-2021.pdf



Crompton, H., Chigona, A., et al., (2021). *Inequalities in Girls' Learning Opportunities via EdTech: Addressing the Challenge of Covid-19*. Edtech Hub. Retrieved January 20, 2023, from https://docs.edtechhub.org/lib/D6PWMC4I/download/LNDBFWHV/Crompton%20et%20al.%20-%20 **2021%20-%20Inequalities%20in%20Girls_%20Learning%20Opportunities%20via%20.pdf**



Deloitte, (2022). Women @ Work 2022: A Global Outlook. Retrieved January 12, 2023, from https://www.deloitte.com/global/en/issues/work/women-at-work-global-outlook.html https://wiw-report.s3.amazonaws.com/Women_in_the_Workplace_2022.pdf

Doss, C. & Kieran, C., (2014). *Three things you need to know about sex-disaggregated data*. CGIAR. Retrieved Januay 07, 2023, from https://a4nh.cgiar.org/2014/05/05/three-things-you-need-to-know-about-sex-disaggregated-data/



Eliot, L., (2013). Single-sex education and the brain. *Sex Roles: A Journal of Research*, Vol. 69, No. 7-8, pp. 1-19. DOI: 10.1007/s11199-011-0037-y.

Endeavor & Mastercard, (2021). Whitepaper *La brecha de género en el sector de tecnología, una tarea pendiente en América Latina*. Retrieved April 19, 2023, from https://chicasentecnologia.org/wp-content/uploads/Whitepaper-Women-in-Tech-2021..pdf

Exley, C. & Kessler, J., (2021). *The Gender Gap in Self-Promotion*. National Bureau of Economic Research. Retrieved January 19, 2023, from https://www.nber.org/papers/w26345



Fabrizio, S., Gomes, D. & Tavares, M., (2021). COVID-19 She-Cession: The Employment Penalty of Taking Care of Young Children. IMF. Retrieved January 6, 2023, from https://www.imf.org/-/media/Files/Publications/WP/2021/English/wpiea2021058-print-pdf. ashx

Forbes, (2021, May 7). 3 iniciativas que ajudam as mulheres a conciliarem carreira e maternidade sem culpa. Forbes Brasil. Retrieved January 10, 2023, from https://forbes.com.br/carreira/2021/05/3-iniciativas-que-ajudam-as-mulheres-a-conciliarem-carreira-e-maternidade-sem-culpa/



Gaernier, J. & Pacheco, H., (2021). *Protección de Datos Personales en LATAM: Guía de Consulta Rápida*. Ernst & Young. Retrieved January 20, 2023, from https://www.ey.com/es_bo/law/proteccion-de-datos-personales-en-latam



Gênero e Número & SOF Sempreviva Organização Feminista, (2021). Sem Parar o trabalho e a vida das mulheres na pandemia. Gênero e Número & SOF. Retrieved January 10, 2023, from https://mulheresnapandemia.sof.org.br/wp-content/uploads/2020/08/Relatorio_Pesquisa_SemParar.pdf

Global Findex, (2021). Retrieved January 10, 2023, from https://www.worldbank.org/en/publication/globalfindex/Data#sec3

GSMA, (2021). *The Mobile Gender Gap Report 2021*. GSMA. Retrieved January 10, 2023, from https://www.gsma.com/r/wp-content/uploads/2021/07/The-Mobile-Gender-Gap-Report-2021.pdf

GSMA, (2022). Mobile Gender Gap Report 2022. GSMA. Retrieved January 10, 2023, from https://www.gsma.com/r/gender-gap/

Gupy, (2021). Tudo o que você precisa saber sobre as HR Techs. Retrieved January 16, 2023, from https://www.gupy.io/blog/guia-hr-techs



Halpern, D., Benbow, C., et al., (2007). The science of sex differences in science and mathematics. *Psychological Science in the Public Interest*, Vol. 8, No. 1, pp. 1-51. DOI: 10.1111/j.1529-1006.2007.00032.x.

Hammer, M., (2022, July 13). *Ops 4.0—The Human Factor: The need for speed in building skills*. McKinsey & Company. Retrieved February 3, 2023, from https://www.mckinsey.com/capabilities/operations/our-insights/operations-blog/the-human-factor-in-ops-4-0-the-need-for-speed-in-building-skills

Heath, R. & Jayachandran, S., (2017). *The Causes and Consequences of Increased Female Education and Labor Force Participation in Developing Countries*. National Bureau of Economic Research. Retrieved January 16, 2023, from https://www.nber.org/papers/w22766

Holon IQ, (2021). *144 Women CEOs and Founders leading Global EdTech Startups*. Retrieved January 16, 2023, from https://www.holoniq.com/leaders/2023-edtech-startup-women-leaders

Hyde, (2005). The gender similarities hypothesis. *American Psychologist*, Vol. 60, No. 6, pp. 581-592.





IDB, (2019). El futuro del trabajo en América Latina y el Caribe: ¿Cómo será el mercado laboral para las mujeres? Retrieved January 8, 2023, from https://publications.iadb.org/publications/english/viewer/The-Future-of-Work-in-Latin-America-and-the-Caribbean-What-will-The-Labor-Market-Be-Like-for-Women-Print-version.pdf

IFC, (2021). Women and E-commerce in Africa. Retrieved February 16, 2023, from https://www.ifc.org/wps/wcm/connect/47361305-6ebe-431a-8dd9-db2290919823/202105-digital2equal-women-and-e-commerce-africa.pdf?MOD=AJPERES&CVID=nCGRGTr

IFC & Coursera, (2022). Women and Online Learning in Emerging Markets.

Retrieved January 8, 2023, from https://www.ifc.org/wps/wcm/connect/

Topics_Ext_Content/IFC_External_Corporate_Site/Gender+at+IFC/Resources/

Women+and+Online+Learning+in+Emerging+Markets

ILO, (2019). Women in the world of work. Pending Challenges for Achieving Effective Equality in Latin America and the Caribbean. *Thematic Labour Overview*. Lima: ILO. Retrieved February 16, 2023, from https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/documents/publication/wcms_736930.pdf

ILO, (2020). *Panorama Laboral 2020*. Lima: ILO. Retrieved January 16, 2023, https://www.ilo.org/wcmsp5/groups/public/---americas/---ro-lima/documents/publication/wcms_764630.pdf

ILO, (2022, March 3). More than 4 million women have not been able to return to work in Latin America and the Caribbean. Retrieved February 16, 2023, from https://www.ilo.org/caribbean/newsroom/WCMS_838549/lang--en/index.htm

IMARC Group, (2022). Latin America Human Resource (HR) Technology Market: Industry Trends, Share, Size, Growth, Opportunity and Forecast 2023-2028. IMARC Group. Retrieved January 6, 2023, from https://www.imarcgroup.com/latin-america-human-resource-technology-market

INCAE & Impact Hub, (2020). Accelerators as Drivers of Gender Equality. A Guide to Gender Lens Acceleration. Retrieved January 11, 2023, from https://genderlensacceleration. impacthub.net/

IUS (2021). UNESCO. Retrieved January 12, 2023, from http://data.uis.unesco.org/.



J

Jordan, K., & Myers, C., (2022). EdTech and Girls Education in Low- and Middle-Income Countries: Which Intervention Types Have the Greatest Impact on Learning Outcomes for Girls? EdTech Hub. Retrieved February 16, 2023, from https://docs.edtechhub.org/lib/?page=1&page-len=1&sort=hub_desc&id=M9L6E934

L

Lazarte M., (2021). Finanzas para todas. Experiencias e iniciativas innovadoras para la inclusión financiera de las mujeres y una recuperación con lentes de género en América Latina. América Latina y el Caribe. UN Women. Retrieved January 18, 2023, from https://lac.unwomen.org/es/digiteca/publicaciones/2021/12/finanzas-para-todas

Lockwood P., Sadler, P., et al., (2004). To Do or Not to Do: Using Positive and Negative Role Models to Harness Motivation. Retrieved January 8, 2023, from https://www.researchgate.net/publication/247838950_To_Do_or_Not_to_Do_Using_Positive_and_Negative_Role_Models_to_Harness_Motivation

Lowe, M., Rinne, U. & Sonnabend, H. (2022). Gender role models and early-career decisions. *Applied Economics Letters*. DOI:10.1080/13504851.2022.2066618

Lustosa, C., Yaacov, B., et al., (2021). *Education Technology in Latin America and the Caribbean*. IDB Lab & Holon IQ. Retrieved January 12, 2023, from https://publications.iadb.org/en/education-technology-latin-america-and-caribbean



Machado, C. & Neto, P., (2016). The Labor Market Consequences of Maternity Leave Policies: Evidence from Brazil. Retrieved January 10, 2023, from https://portal.fgv.br/files/the_labor_market_consequences_of_maternity_leave_policies_evidence_from_brazil.pdf

McKinsey & Company, (2022, March 1). Repairing the broken rung on the career ladder for women in technical roles. Retrieved February 3, 2023, from https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/repairing-the-broken-rung-on-the-career-ladder-for-women-in-technical-roles

Mohr, T.S., (2014). Why Women Don't Apply for Jobs Unless They're 100% Qualified. HBR. Retrieved February 11, 2023, from https://hbr.org/2014/08/why-women-dont-apply-for-jobs-unless-theyre-100-qualified

Montilla, E., (2020). *Top Three Reasons We Need More Women In Tech*. Forbes. Retrieved February 11, 2023, from https://www.forbes.com/sites/forbestechcouncil/2020/03/10/top-three-reasons-we-need-more-women-in-tech/?sh=1c8fb04f15fb



Morgan Stanley Research, (2016). *A framework for gender diversity in the workplace*. Retrieved February 3, 2023, from https://www.eticanews.it/wp-content/uploads/2016/04/morganstanley_SUSTAINABLE_20160331_0000.pdf



Naylor, R., Gorgen, K., (2020.) Overview of emerging country-level response to providing educational continuity under COVID-19. What are the lessons learned from supporting education for marginalised girls that could be relevant for EdTech responses to COVID-19 in lower- and middle-income countries? Education Development Trust. Retrieved January 15, 2023, from https://edtechhub.org/wp-content/uploads/2020/05/marginalised-girls.pdf

Nicks, L., Gesiarz, F., et al., (2022). Gender differences in response to requirements in job adverts. The Behavioural Insights Team. Retrieved January, 13 2023, from https://www.bi.team/wp-content/uploads/2022/03/Gender-differences-in-response-to-requirements-in-job-adverts-March-2022.pdf

Nigam, R., (2021, april 28). *We Need to Keep Women in Technology.* Information week. Retrieved January 9, 2023, from https://www.informationweek.com/team-building-and-staffing/we-need-to-keep-women-in-technology

Nwankwo, U. and Pisa, M., (2021). Why the world needs more women data scientists. Retrieved January 9, 2023, from https://www.cgdev.org/blog/why-world-needs-more-women-data-scientists



Oxfam GB & Unilever, (2019). Business Briefing on Unpaid Care and Domestic Work: Why unpaid care by women and girls matters to business, and how companies can address. Retrieved January 18, 2023, from https://policy-practice.oxfam.org/resources/business-briefing-on-unpaid-care-and-domestic-work-why-unpaid-care-by-women-and-620764/



Postles, C, Moore, K., et al.,(2013). Girls' learning: investigating the classroom practice that promote girls' learning. Plan International UK; London. [Online]. Retrieved February 4, 2023, from https://plan-international.org/publications/girls-learning-investigating-classroompractices-promote-girls-learning



Robinson, R., Molenda, M., & Rezabek, L., (2016) *Facilitating learning*. Retrieved January 4, 2023, from https://www.aect.org/web/20150922040507/http://www.aect.org/publications/EducationalTechnology/ER5861X_C002.pdf



Ruigrok, A., Salimi-Khorshidiet, G., et al., (2014). A meta-analysis of sex differences in human brain structure. *Neuroscience & Biobehavioral Reviews*, Vol. 39, pp. 34-50. DOI: 10.1016/j.neubiorev.2013.12.004.

Riegle-Crumb, C., King, B., et al., (2012). The more things change, the more they stay the same? Prior achievement fails to explain gender inequality in entry into STEM college majors over time. *American Educational Research Journal*, Vol. 49, No. 6, pp. 1048-1073. DOI: 10.3102/0002831211435229.



Sassler, S., Glass, J., et al., (2017). The Missing Women in STEM: Assessing Gender Differentials in the Factors Associated with Transition to First Jobs. *Social Science Research* (63): 192-208. Retrieved January, 13 2023, from https://doi.org/10.1016/j.ssresearch.2016.09.014

Serrano, J., Gasparini, L., et al., (2018). *Economic Cycle and Deceleration of Female Labor Force Participation in Latin America*. IDB Gender Lab. Retrieved January 11, 2023, from https://publications.iadb.org/en/economic-cycle-and-deceleration-female-labor-force-participation-latin-america

Sherman, S. Jackson, C., (2019). *Diversity & Inclusion Technology: The Rise of a Transformative Market*. RedThread Research & Mercer. Retrieved January 15, 2023, from https://redthreadresearch.com/wp-content/uploads/2020/07/RedThread_DI_Report_Reduced_Final-1.pdf

Sling Hub, (2021). *Crédito pra quem está mudando o RH*. Retrieved January 15, 2023, from https://classic.exame.com/wp-content/uploads/2022/04/EX1239_DIGITAL_MAT-BENEFICIOS_QUADROS_v12.jpg?quality=70&strip=info

Sodexo (2018). Sodexo's Gender Balance Study 2018: Expanded outcomes over five years. Sodexo Operations, LLC. Retrieved January 15, 2023, from https://www.diariosustentable.com/wp-content/uploads/2018/03/
GenderBalanceStudy_2018_final-draft.pdf

Spearman, J., & Watt, H., (2013). Perception shapes experience: The influence of actual and perceived classroom environment dimensions on girls' motivations for science. *Learning Environment Research*. DOI:10.1007/s10984-013-9129-7



The Mom Project, (2019). Building a better workplace. 10 Drivers for Women's Success at Work. Retrieved January, 13 2023, from https://work.themomproject.com/hubfs/ WerkLabs_BuildingaBetterWorkplace_2018_Final.pdf



Tsuchihashi, D., Torres, N., (2021, September 16). *Gender, Regional Trade & Inclusive Growth in the Fourth Industrial Revolution*. IDB Invest. Retrieved January 11, 2023, from https://idbinvest.org/en/blog/gender/gender-regional-trade-inclusive-growth-fourth-industrial-revolution



UNESCO, (2016). Out in the open: education sector responses to violence based on sexual orientation and gender identity/expression. Retrieved January 11, 2023, from https://unesdoc.unesco.org/ark:/48223/pf0000244756

UNESCO, (2017). Cracking the code: Girls' and women's education in science, technology, engineering and mathematics (STEM). Retrieved January 8, 2023, from https://unesdoc.unesco.org/ark:/48223/pf0000253479/PDF/253479eng.pdf.multi

UNESCO, (2021a). Women in higher education: has the female advantage put an end to gender inequalities. Retrieved January 8, 2023, from https://unesdoc.unesco.org/ark:/48223/pf0000377182.

UNESCO, (2021b). UNESCO Science Report: The race against time for smarter development Retrieved January 8, 2023, from https://www.unesco.org/reports/science/2021/en/download-the-report

UNESCO Institute of Statistics (UIS), (2021). Retrieved January 8, 2023, from http://data.uis.unesco.org/

UNESCO, (2023). Gender-based violence in and around schools prevents millions of children worldwide from fulfilling their academic potential. Retrieved January 11, 2023, from https://www.unesco.org/en/articles/gender-based-violence-and-around-schools-prevents-millions-children-worldwide-fulfilling-their

UN Women, (2015). Progress of the world's women 2015–2016: Transforming economies, realizing rights. Retrieved January 8, 2023, from https://www.unwomen.org/en/digital-library/publications/2015/4/progress-of-the-worlds-women-2015#:~:text=%E2%80%9CProgress%20of%20the%20World's%20Women%20 2015%E2%80%932016%E2%80%9D%20brings%20together,make%20women's%20 rights%20a%20reality.

UN Women, (2020, July 1). *Intersectional feminism: what it means and why it matters right now.* Retrieved January 11, 2023, from https://www.unwomen.org/en/news/stories/2020/6/explainer-intersectional-feminism-what-it-means-and-why-it-matters

UN Women, (n.d.). Gender Equality Glossary. Retrieved January 11, 2023, from https://trainingcentre.unwomen.org/mod/glossary/view.
php?id=36&mode=letter&hook=S&sortkey=&sortorder=asc



Unterhalter, E., North, A., et al., (2014). Interventions to enhance girls' education and gender equality. Education Rigorous Literature Review. Retrieved January 8, 2023, from https://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaries/Girls'%20education%202014%20Unterhalter%20report.pdf?ver=2015-12-08-165815-117



Value for Women, (2022). A Journey Not a Destination: How Entrepreneurial Intermediaries and Investors Can Overcome 5 Common Stumbling Blocks in Becoming More Gender Inclusive. Retrieved February 13, 2023, from https://www.v4w.org/resources/a-journey-not-a-destination-how-entrepreneurial-intermediaries-and-investors-can-overcome-5-common-stumbling-blocks-in-becoming-more-gender-inclusive

Value for Women and Caribou Digital,(2022). *Gender-forward business practices for digital platforms:* A supply-side exploration. Retrieved February 13, 2023, from https://www.v4w.org//uploads/documents/GFBP-for-Digital-Platforms-July-2022.pdf



Webb, D., Barringer, K., et al., (2020). *Girls' Education and EdTech: A Rapid Evidence Review*. EdTech Hub. Retrieved January 20, 2023, from https://docs.edtechhub.org/lib/czbrw85

WEF, (2022). Global Gender Gap Report 2022. Retrieved January 7, 2023, from https://www.weforum.org/reports/global-gender-gap-report-2022/

WEF, (2016). The Industry Gender Gap Women and Work in the Fourth Industrial Revolution. Retrieved January 7, 2023, from https://www3.weforum.org/docs/WEF_FOJ_Executive_Summary_GenderGap.pdf

Williams, M. (2017). *Numbers Take Us Only So Far*. HBR. Retrieved February 12, 2023, from https://hbr.org/2017/11/numbers-take-us-only-so-far

Woolley, A. et al. (2010). Evidence from a Collective Intelligence Factor in the Performance of Human Groups. Science 330.6004 (2010): 686-688. Retrieved January 8, 2023, from http://science.sciencemag.org/content/330/6004/686.long.

World Bank, (2020). Retrieved February 13, 2023, from https://datos.bancomundial.org/ indicator/SL.UEM.TOTL.FE.NE.ZS?locations=ZJ

World Bank, (2021). Retrieved February 13, 2023, from https://www.worldbank.org/en/results/2021/05/05/the-gendered-impacts-of-covid-19-on-labor-markets-in-latin-america-and-the-caribbean



World Bank, (2021). The Gendered Impacts of COVID-19 on Labor Markets in Latin America and the Caribbean. Retrieved January 7, 2023, from https://documents1.worldbank.
org/curated/en/675641612934705667/pdf/The-Gendered-Impacts-of-COVID-19-on-Labor-Markets-in-Latin-America-and-the-Caribbean.pdf

World Bank's Gender Data, (2022). Retrieved February 13, 2023, from https://genderdata.worldbank.org/data-stories/flfp-data-story/

Wullert, K., Gilmartin, S., & Simard, C., (2019). *The Mistake Companies Make When They Use Data to Plan Diversity Efforts*. HBR. Retrieved February 12, 2023, from https://hbr.org/2019/04/the-mistake-companies-make-when-they-use-data-to-plan-diversity-efforts





