



**ANALYZING GENDER GAPS IN ORGANIZATIONAL DESIGN –  
CASE STUDY: IT SECTOR IN INDIA**

by

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**ABSTRACT****ANALYZING GENDER GAPS IN ORGANIZATIONAL DESIGN –  
CASE STUDY: IT SECTOR IN INDIA**

Uma Srinivasan  
2023

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**Directed by: Dr Sasa Petar**

It is a known fact that women are inherently viewed as home makers with the core responsibility of rearing children and taking care of homes and families. With industrial revolution, the last couple of decades have seen a seismic shift in the role of women in the society. Women have paved their way into active workforce over the last five decades or so in developed nations and for about three decades in developing nations. This relatively delayed entry into active workforce has seeded in differences in the way women are treated at work and while women are rubbing shoulder to shoulder there in an inherent gap—called the gender gap. The purpose of this study is to explore the genesis of this gap and how it manifests itself across organizations in various processes. This article aims to funnel down the gender gap and gender pay gap to the IT industry in India and correlate it to organization design, impact to organizations and contribution of women themselves to creating this gap.

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## CHAPTER 1

### INTRODUCTION

#### 1.1 Introduction

**Gender Gap** is defined as the differences between women and men, especially as reflected in social, political, intellectual, cultural, or economic attainments or attitudes. (World Economic Forum, 2017).

(European Institute of Gender Equality, 1998) defines gender gap as any area between women and men in terms of their levels of participation, access, rights, remuneration or benefits.

According to (Norrande, 1999), scholars and journalists first noticed the gender gap in connect with 1980 presidential election. Subsequent explanation for gender gap turned to issue areas where men's and women's position diverged such as use of force at home, compassion issues, varying economic position and differences in weighing economic factors like voting issues.

Tracing history, one of the earliest references which alludes to emergence of women's rights movement is a book titled "A Vindication of the Rights of Woman with Strictures on Political and Moral Subjects by (Wollstonecraft, 2017a) in 1792. In the book, Wollstonecraft says---"In the context of fighting for the rights of women, my main

argument is built on this simple principle: If woman isn't fitted by education to become man's companion, she will stop the progress of knowledge because they raise the children and are essential to the nation".

It's interesting to read how history has unfolded to get women into mainstream.

In the United States of America, Susan B. Anthony, was a social reformer and a women's right activist in mid-19<sup>th</sup> century and played a pivotal role in the Women's suffrage movement. Anthony was prevented from speaking at a conference because she was a female, and this let her to initiate the American Equal Rights Association which campaigned for equal rights for women and African Americans (Anthony, 1820).

("Woman Suffrage," n.d.)1848 saw the first women's rights convention- The Seneca Falls Convention, organized by women with 300 attendees, fought for the social, civil and religious rights for women. 68 women and 32 men signed the Declaration of Sentiments, eventually leading to the passage of the 19<sup>th</sup> amendment, granting women the right to vote.

The first women's suffrage law in the U.S. was passed in Wyoming in 1869. The state became the first to grant women the right to vote in all elections in 1890. It wasn't until 1920 that the 19th Amendment was ratified, granting women the right to vote in elections throughout the country.

In the labour and economic sector, the first minimum-wage law was enacted in Massachusetts in 1912. The legislation was written to help 15,000 women facing severe

poverty who were earning low pay for long hours. The 1938 Fair Labour Standards Act later established a federal minimum wage without regard to sex.

The Equal Pay Act of 1963 mandated equitable wages for the same work and the amendment in 1972 mandated equality in education.

The above is a testimony to the fact that even in a developed country like US, equality in education and equitable wages for women have just been around for about 4 decades.

World War I's impact on women's role in society was immense. As hordes of men headed to war, women were driven to fill empty jobs left behind by male service men take on "untraditional" jobs like manufacturing and agriculture. Others provided support on the front lines as nurses, doctors, ambulance drivers, translators and, in rare cases, on the battlefield. Russia, Bulgaria, Romania and Serbia were amongst the first countries to allow women to serve as combat troops. The best known of these soldiers was Maria Bochkareva, the founder of the Russian "Women's Battalion of Death." The first woman to lead a Russian military unit.

World War I also saw women join the army as noncommissioned officers, replacing men who were deployed in Europe. During the same period, with an aim to improve communications on the Western front between the Allied Forces, General John J. Pershing called for the creation of the Signal Corps Female Telephone Operators Unit. The unit recruited women who received physical training, observed strict military protocol, wore identity discs, and worked very close to the front lines. However, upon their return to the

United States after the end of the war, the women in this unit did not receive veteran status or benefits. It wasn't until 1977, when President Jimmy Carter signed legislation, that the few surviving women telephone operators received recognition of their veteran status. This goes to show the prevalence of disparity in treatment of men and women. By World War II, women proved that they could do men's work and could do it well. With demands of the war increasing, many more men went away to serve the military, resulting in more jobs opening for women which upped their earning power. Government figures show that women's employment increased during second world war from about 5.1 million (26%) in 1939 to about 7.25 million (36%) ("World War II: 1939-1945 | Striking Women," n.d.) Yet women's employment was only encouraged as long as the war was on.

The issue of equal pay dates to WWII. The entry of women into occupations which were regarded as highly skilled and as male preserves, for example as drivers of fire engines, trains and trams and in the engineering, metal and shipbuilding industries, renewed debates about equal pay. The trade unions were once again concerned about the impact on men's wages after the war when men would once again be working in these jobs. But the government's priority was the recruitment of workers to service industries and the war effort. Some limited agreement on equal pay was reached that allowed equal pay for women where they performed the same job as men had 'without assistance or supervision'. Most employers managed to circumvent the issue of equal pay, and women's pay remained on average 53% ("World War II: 1939-1945 | Striking Women," n.d.) of the pay of the men they replaced. Semi-skilled and unskilled jobs were designated as 'women's jobs' and were exempt from equal pay negotiations.

Another way in which women were discriminated against during WWII concerned the level of settlements offered to women by the Personal Injuries (Civilians) Scheme 1939. Women received 7 shillings less than the 21 shillings a week that men received (“The Personal Injuries (Civilians) Scheme 1983,” n.d.) Women were actively deployed in civil defense schemes as overnight fire watchers in factories, ambulance drivers, air raid wardens, members of first aid parties and messengers. Such women were at risk from bombing but were entitled to lower compensation for injuries compared to men. Trade unions, campaigners and some women parliamentarians took up this issue and despite initial government opposition to this demand, equal rates were introduced in April 1943.(national WWI Museum and memorial, n.d.).

Following the devastation of World War II, the United Nations was formed in 1945 to foster international co-operation. Its charter enshrines gender equality. It is one of many steps the UN takes to lay a foundation for women’s rights. In 1946, the Commission on the Status of Women becomes the first global intergovernmental body exclusively dedicated to gender equality; and in 2010, UN Women becomes the first UN agency to champion exclusively for women’s rights.

In the inaugural session of the UN General Assembly in 1946, American Eleanor Roosevelt famously reads an "open letter to the women of the world", urging for their increased involvement in national and international affairs.

Dubbed as a "Women’s Bill of Rights", the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) is the most comprehensive

international instrument to protect the human rights of women. Adopted in 1979, the convention legally binds signatory governments to end all forms of discrimination against women in public and private life, including in the family, and aim to achieve substantive equality between women and men — not just in laws, but also in reality on the ground.

Through the 21<sup>st</sup> century, various parts of the world witness many a movement. From the Arabian Peninsula to the capitals of North Africa, streams of women vigorously protest for their rights as part of a broader uprising. The outcry thrusts women into the global limelight, challenging perceptions of them as passive. This determination is not new though: In Morocco, tribal *Soulaliyate* women continue to fight for land rights; in Tunisia, activism propels gender equality being enshrined in the nation's constitution; and in Lebanon, campaigning leads to a controversial rape law being scrapped. As late as January 2017, an estimated 3.5-5.5 Mn people attended the women's march to express solidarity of women's rights. ("UN Women | Timeline: Women of the world, unite!," n.d.) It's one of the largest in the decade with many countries participating. Digital world has taken women's voice to a new level worldwide. Women want a world free of violence and a world where they are treated equally. The hashtags say it all--# HeForShe, #YesAllWomen, #WomenShould to name a few.

According to statistics by UN, today 1 in 3 women experience violence in their lifetime, only 1 in 4 parliamentarians worldwide are women and it will be 2086 before

we close the gender pay gap if the present trends continue with no action.(UN Women, 2022)

With all that's been done, it's a long ladder to the top.

Its more than a century since the women's suffrage movement begins and decades of vigorous activism later, women in a vast number of the world's countries can vote by the 1980s. In contrast, women are still fighting to take on leadership positions today. How far have we come?

As per UN Women (UN Women, 2022), there are 28 countries where 30 women serve as Heads of State and/or Government. Just 13 countries have a woman Head of State, and 15 countries have a woman Head of Government.

At the current rate, gender equality in the highest positions of power will not be reached for another 130 years.

## **1.2 Research Problem**

There has been numerous research studies and journals published focusing on the topic of gender gap and gender wage gap across industries and countries. To name a few, the authors mentioned below have allude to various theories in their research papers.

(Bericat and Sánchez Bermejo, 2016; Berlin Gretchen et al., 2020; Bleiweis, 2020; Catalyst, 2020a; Eurostat, 2022; Goldin, 2006; International Trade Union Confederation, 2011; Olivetti Claudia and Barbara Petrongolo, 2014; Tejani and Milberg, 2016; World Economic Forum, 2021).

However, studies relating to gender gap and gender wage gap specifically in the IT sector in India is far and few and very difficult to find. With the IT industry slated to grow to a \$220 bn over the next decade, improving women participation is a low hanging fruit to which will fulfill the talent gap (Ramanujam, 2022). While the Industry recognizes this, something is amiss. This paper is an attempt to research to find out the reasons for the gap.

### **1.3 Purpose of Research**

**Objectives:** The focus of this research is to study extensively the perception of employees and employers of IT Industry in India towards gender gap

1. To study if the employees believe there is a gender gap in the IT Industry in India.
2. To study what causes the gender gap in the IT Industry in India.
3. To evaluate if the existing practices to minimize gender gap are effective in IT Industry in India.
4. To recommend the steps that can be adopted to reduce the gender gap in the IT Industry in India.

### **1.4 Significance of the Study**

It is an established fact that men and women differ in their attitudes and responsiveness to a situation in general and at workplace (Sialino et al., 2022).

However, this should not lead to discrimination when empowering employees to undertake responsibilities in relation to their jobs. The main purpose of this research is to obtain an insight into the current perceptions about gender gap in the IT sector in India with attention to organization design.

The results of this research study will enable the organization to introduce several processes related and procedural improvements that will increase gender diversification by creating equal career opportunities for female employees, which will, in turn, help the company to grow. This will guide management in formulating future management strategies for their Human Resources department as well as for other areas related to career progression in the organization. The researcher, a female employee in the IT sector in India, who stands for equity, considers this research to be a source of great encouragement to existing female employees towards improving their careers by promoting a better and fairer work environment while attracting talented female employees to the organization from outside.

Based on the above, the following hypotheses are formulated:

*H0 = "Gender gap exists in Indian IT companies"*

*H1 = "Organizations are doing interventions to address the gender gap issues within their organizations especially at leadership levels"*

*H2="Women need to do their bit to reduce the gender gap"*

## **1.5 Research Purpose and Questions**

The following are some broad-based questions.

**Does** Gender gap exist in Indian IT Industry?

**What** causes gender inequality?

**What** are the organizational practices and interventions that reinforce equality?

**Are** these practices effective?

**How** do they influence organizational design and business results?

**Why** are these dynamics so persistent and prevalent across different organizations and domains of activity?

**What** can be done to reduce gender gap?

## **CHAPTER 2:**

### **REVIEW OF LITERATURE**

#### **2.1 Introduction**

In recent decades, differences between men and women have blurred in many social dimensions, including levels of educational attainment or access to the labour market. However, this increase in equality has not been reflected in a proportional reduction in the gender gap. This paper evaluates the extent of gender differences in different arenas and studies it across industries. There has been a lot of awareness and the uproar in organizations on gender gap and gender wage gap, many affirmative actions have taken yet the gap seems to be stubborn.

**Gender Gap** is defined as the differences between women and men, especially as reflected in social, political, intellectual, cultural, or economic attainments or attitudes. (World Economic Forum, 2017).

(European Institute of Gender Equality, 1998) defines gender gap as any area between women and men in terms of their levels of participation, access, rights, remuneration or benefits.

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Setting the National Stage for Women's Suffrage | AP US History Study Guide from The Gilder Lehrman Institute of American History," n.d.)

The first women's suffrage law in the U.S. was passed in Wyoming in 1869. The state became the first to grant women the right to vote in all elections in 1890. ("Woman Suffrage," n.d.)

It wasn't until 1920 that the 19th Amendment was ratified, granting women the right to vote in elections throughout the country.

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The Equal Pay Act of 1963 mandated equitable wages for the same work and the amendment in 1972 mandated equality in education.

The above is a testimony to the fact that even in a developed country like US, equality in education and equitable wages for women is just been around for about 4 decades.

Concern with gender again came to the forefront of public debate in 1970s the First International Women's Conference was held in Mexico City in 1975 (United Nations, 1975), The United Nations designated 1976 to 1986 as indicated in the 1990s women's issues continue to receive attention from policymakers in national governments and international organizations.

Gender equality is a fundamental human right and it is explicitly recognized as such in article 23 of the Charter of Fundamental Rights of the European Union (European Union, 2000). However, the solemn declaration of a right is not the same as its actual achievement even after 20 plus years after drafting the charter.

Due to the great differences that often exist between words and deeds, between public statements and reality, and between the ascription to social values and their actual realization, it is essential in this case, as it is in many others, to know, objectively, precisely and with adequate detail, the level of gender equality that exists across the countries and industries as well as its recent evolution.

## **2.2 Gender Gap Definition**

The term “gender” refers to the different roles men and women play in a society or a community. **Gender Gap** is defined as the differences between women and men, especially as reflected in social, political, intellectual, cultural, or economic attainments or attitudes. (World Economic Forum, 2017).

(European Institute of Gender Equality, 1998) defines gender gap as any area between women and men in terms of their levels of participation, access, rights, remuneration or benefits.

. Ferrant et al., 2014), in their article summarize Gender gap analysis as the important aspect for bringing about gender equity and improving the quality of life. India is ranked 131 out of 153 countries with a score of 0.488 for the Gender Inequality Index for 2020 (WHO, 2020) .India is the second largest country in the world in terms of population, most

of whom are young adults and citizens of working age. These roles are determined by cultural, social and economic factors and differ within and between cultures and countries. Gender roles are different from sex differences in that sex differences are biological, and for the most part, unchangeable. Gender roles which are learned, change over time and vary widely within and between the evolution of a society and life time of an individual.

### **2.3 Gender Gap- Previous Studies by Various Industries**

There are considerable studies that has been conducted by various researchers by Industry and skills. (Olivetti and Barbara, 2014) , in their paper mention that when they compared, gender biases in labour demand using micro data across countries, they find that these tend to be larger and display more pronounced cross-country variation for the unskilled than for the skilled. Between industry forces, data reflects differences in sectoral composition of the economy, where different jobs have different skills and gender intensities based on work in that industry. Industries like manufacturing, mining, forces (army/navy/airforce), transportation etc have larger gender gaps due to the “heavy” nature of the job. There are social acceptances as well vis a vis gender and jobs. Example, some jobs are more women oriented, like teaching, child care, nursing etc and some are male dominated like the ones spoken above.

In the next few pages, we have attempted to review existing literature and study the gender gap by industry.

#### **2.3.1 Gender Gap in Politics**

According to (Fraile, 2021), a study confirms the existence of a substantial gender gap in internal political efficacy in contemporary European democracies with survey evidence from the ESS08 and 09 waves. This gap is rooted in gendered patterns of socialization according to which men are more likely than women to be socialized in ways that emphasize psychological traits such as assertiveness, predisposition to risk, competition, or self-promotion. Findings show that those who perceive themselves as ready to take risks are more likely to feel able to play an active role in politics. The article further mentions that part of the gender gap in internal political efficacy is a result of the lower inclination of women to take risks in comparison to men. These findings confirm the masculine character of the political realm. A realm that is often perceived by citizens to be more in line with gender stereotypes about men.

The literature has found abundant evidence across countries of women stating that they are less interested in politics than men (Fraile. M and Gomez, 2017).

Another paper states that the average declared interest in politics is 16% lower for women than for men in Europe. Notwithstanding the improvement in gender equality in political power and resources in industrialized democracies (Bericat and Sánchez Bermejo, 2016), women appear to know less about and seem to be less interested in politics than men (Burns Nancy et al., 2001). This uneven distribution of political interest between men and women raises a number of normative concerns. This gap remains even after controlling for differences in men's and women's educational attainment, material, and cognitive resources. Drawing on the newly developed European Institute for Gender Equality's (EIGE) and on the European Social Survey (ESS)-fifth wave, we show that promoting

gender equality contributes towards narrowing the magnitude of the differences in political interest between men and women. However, this effect appears to be conditioned by the age of citizens. More specifically, findings show that in Europe gender-friendly policies contribute to bridging the gender gap in political engagement only during adulthood, suggesting that childhood socialization is more strongly affected by traditional family values than by policies promoting gender equality.

According to (Fraile. M and Gomez, 2017), this uneven distribution of political interest between men and women raises a number of normative concerns. If women systematically have lower levels of political interest than men, this may result in a clear disadvantage in women's capacity to voice their political wants and needs, and thus to influence the political decision-making process. Strengthening women's political engagement may have fundamental implications for society as a whole, not least because the incorporation of women's voices is associated with better democratic outcomes and a higher degree of development.

(Rothschild, 2020) says that even in developed nations like US, up and down the ballot, women are under-represented by their government. 100% of American Presidents have been male, and 2016 was the first time a major party nominated a female candidate for President. In the current Congress, women make up 23.2% of the House and 26% of the Senate.<sup>5</sup> In 2020, 28.9% of state-wide elected positions are occupied by women. There are 9 female Governors, 15 female Lieutenant Governors and 66 women who hold other state-wide positions, such as Attorney General and State Auditor. 29.1% of state legislature offices are held by women, and 20.8% of major American cities have female mayors. These

are some of the highest levels of female representation in American history, and yet women still struggle to come close to equal representation with men.

According to Global Gender Gap Report (World Economic Forum, 2021), the gender gap in Political Empowerment remains the largest of the four gaps tracked, with only 22% closed to date, having further widened since the 2020 edition of the report by 2.4 percentage points. Across the 156 countries covered by the index, women represent only 26.1% of some 35,500 parliament seats and just 22.6% of over 3,400 ministers worldwide. In 81 countries, there has never been a woman head of state, as of 15th January 2021. At the current rate of progress, the World Economic Forum estimates that it will take 145.5 years to attain gender parity in politics.

This suggests that at least part of the documented gender gap in general political interest might be because when prompted to think about politics, women disregard their own specific interests and instead focus on the dominant, male-oriented definition of it.

### **2.3.2 Gender Gap in Sports**

Gender inequality can be observed in sports, specifically concerning two aspects: media coverage and physical appearance.

According to (Uyar et al., 2022), Sports is a field strongly affected by gender disparities, especially concerning the media's portrait of athletes and sports news coverage. Media still frame some sports as masculine (such as football and basketball) and some others as

feminine (e.g., gymnastics and figure skating). In this manner, the achievements of women in feminine sports and male achievements in masculine sports are emphasized, disregarding the results of women in masculine sports and vice versa.

Notably, females encounter more barriers than males, since sports reveal to be an exclusionary environment characterized by discriminatory practices towards men, women, and gender-diverse people. Moreover, apart from their performance, women in sports are judged based on their physical appearance, their attractiveness, and their status of motherhood. Specifically, media attention on female athletes is often focused on their bodies and their attractiveness. Even concerning physical advantages, the general attitude is different in the case of male and female athletes. For example, the American swimmer Michael Phelps has a greater wingspan than his height, where usually these two measures should be equal, representing a greater advantage of the action of pulling in water. Caster Semenya is a female athlete who has, similarly to Phelps, a genetic advantage. In 2009, she improved her record times in track and field thanks to her body that, according to media, looks “too masculine”. After 2009, she underwent a gender verification test proving that she is a woman, while in 2019, the Swiss Court ordered that she reduce her testosterone levels.

(Mohd Sofian and Rozita Abd-Latif, 2010) ,in their article mention the participating for the young Arabic Muslim woman in sport is seen as a challenge to the boundaries of their ethnic identities. The young Arabic Muslim women who position themselves clearly within the framework of their ethnic identities are not interested in sport because doing sport is not seen as a respectable femininity. Perhaps, these Arabic Muslim women who challenge

their ethnic identities by participating in sport have experienced being harassed because they participate in sport.

However, things seem to be changing. Women's sports have been gaining ground despite roadblocks. Women participation and media influence does seem to be improving. According to a report by Deloitte(Lee Paul et al., 2020), TV rights and sponsorship deals for most women's sports, where they exist, are worth at most millions of dollars, with the majority below this value. In 2021, we predict women's sports revenues will be well under a billion dollars—a fraction of the global value of all sports (men's, women's, and mixed), which in 2018 reached US\$481 billion, an increase of 45% over 2011 (Lee Paul et al., 2020). In short, women's sports are ripe for greater monetization—if certain key elements fall into place. The challenge in 2021 and beyond will be for women's sports to pull in substantial TV and stadium (as permitted) audiences consistently across multiple sports. Then, the value to sponsors will be self-evident, which in turn should raise marketing spend and awareness. But for this to happen, the entire sports industry—spanning federations, leagues, teams, sponsors, and regulators—needs to invest on a sustained basis in creating more opportunities for women's sports to prove its commercial worth.

### **2.3.3 Gender Gap in Healthcare**

Analysis by McKinsey reveals signs of progress and reason for optimism: women in healthcare have demonstrated initial progress in moving up the organization and continue to report high job satisfaction. Women account for 66 percent of all entry-level healthcare employees and showing an increasing trend—compared with 49 percent across all US

industries. While the share of women declines in more senior roles, moving to 30 percent of C-suite positions, healthcare still outperforms all industries.(Berlin et al., 2021)

Despite the obstacles to advancement, women in healthcare have a relatively positive outlook on their careers: nearly 75 percent of women report being happy with their careers compared with around 69 percent of men. Moreover, organizations are taking action at the top to increase female representation. The external hiring of women rose in the C-suite across healthcare organizations, from 33 percent in 2017 to 42 percent in 2018, a significant year-on-year increase.(Berlin et al., 2021)

Nursing is another stream in health care that has historically been predominately a female profession.

Back in the 1960's, only 2 percent of males worked as nurses. Today, that number is approximately 13 percent with steady growth. The American Association for Men in Nursing (AAMN) projects a 20% increase in the number of male nurses in the workforce by 2020.

It would be incomplete of us to not mention the contributions of Florence Nightingale to Health care especially, nursing. (Selanders Louise, 2022), Nightingale was a British nurse, social reformer and statistician best known as the founder of modern nursing. Her efforts to reform healthcare greatly influenced the quality of care in the 19 and 20 centuries. Her efforts to formalize nursing education led her to establish the first scientifically based nursing school—the Nightingale School of Nursing, at St. Thomas' Hospital in London (opened 1860). She also was instrumental in setting up training for midwives and nurses in workhouse infirmaries.

(World Economic Forum, 2021) Global Gender gap Report shows a positive trend in health care with 96% of this gender gap has been closed.

#### **2.3.4 Gender Gap in Manufacturing**

According to (Tejani and Milberg, 2016), The link between international trade expansion and the feminization of labour is a historical one. The unprecedented mobilization of women workers in export-related production in manufacturing in developing countries in the 1960s and 70s, particularly evident in the high share of female employment in export-processing zones, spawned an entire literature that attempted to explain the phenomenon. It was argued that globalization led to the feminization of labour because export growth exposed firms to greater international competition and raised the demand for women's labour due to their lower wages and presumed disinclination to join labour unions. Thus, women served as a source of competitive advantage for firms in the export market.

In fact,(Standing, 1989), argued that trade openness and rising international competition had led to a “global feminization of labour” in which women were being substituted for men across employment categories as they provided cheap and flexible labour.

A review of the latest available gender gap literature shows various studies have found that over time the female workforce's presence in export- oriented manufacturing industries has increased (Tejani and Milberg, 2016). Studies over time also indicate the participation of female labour in manufacturing industries has been particularly low (International Trade Union Confederation, 2011).

Going into the annals of history, it is interesting to note that a tobacco factory in Pula, Croatia, way back in 1929, employed as many as 1006 women and only 150 men(Orlovic David, 2022).

### **2.3.5 Gender Gap in Information Technology (IT)**

As the world transitions to an increasingly digital economy, many low- and middle-income countries face an obstacle: most emerging economies lack qualified people to fill critical information and communication technology (ICT) jobs, a shortage that is exacerbated by the low representation of women in these industries. The gap between the demand for ICT workers and the supply of job seekers with the necessary technical skills threatens the ability of those countries to participate in a powerful driver of growth in the twenty-first century—the digital economy. Increasing the participation of women in the ICT labour force would help bridge this gap, but women are not yet able to take full advantage of this growing sector. While a degree in computer science or engineering is necessary for most professional-level careers in ICT, the share of women graduates in these fields is slipping in many parts of the world(Powell and Chang, 2016).

According to a report by Women and Information Technology(National center for women and information technology, 2022) , the information technology (IT) field faces a skills shortage. Out of the 4.7 Mn computing related job openings by 2030, only 20% of these jobs that could be filled by U.S. computing bachelor’s degree recipients by 2030. And only 26% of professional computing occupations in the 2021 U.S. workforce held by women. This inadvertently shows the huge gap that exists.

(Ramanujam, 2022), president NASSCOM says “to support the current demand environment for the \$220 billion Indian IT industry over the next decade will be key. Taking skill and job opportunities to millions of women as well as people across tier II and tier III cities will help the sector grow. The current gap between demand and supply of talent is about 21% in India. Despite this high number, the country is actually in a far superior position than any other economy. In addition, with almost 21% (Kulkarni, 2022), women in the Indian IT industry, Ramanujam said improving women’s participation in this workforce is a “low hanging fruit which will be a big push in filling the talent gap. According to (Ministry of Electronics and Information Technology, 2022), women employees account for 36% share of the industry

## **2.4 Gender Wage Gap**

According to (Olivetti and Barbara, 2014), in US and UK, and other countries in Northern Europe, gender wage gap is seen to be raising with levels of education, whereas in southern Europe, gender wage penalties are largest amongst the unskilled. Within the unskilled segment, the gap seems to be larger than the skilled.

### **2.4.1 Gender Wage Gap in Sports**

Gender wage gap inequality has been a hotly debated topic since the middle of last century, (Moawad Jad, 2019). This segment explains the major inequalities between men and women in the sports industry today. Although some progress has been made over recent decades, women are still discriminated against, undervalued and underpaid in many areas

of sport. For instance, some Spanish basketball and football players risk termination of contract without compensation when pregnant. Many players accept and sign such contracts without reporting this oppressive clause or complaining because they fear to lose their careers (Arribas, 2017)

According to (Moawad Jad, 2019) women still face formidable obstacles in sports, and these can differ from one country to another. The inequality in wages ranges from local to international competitions. For example, in international competitions the German men's football team, who won the world cup in 2014, earned 44 times more than the Japanese women's team earned by winning the world cup in 2011.

So is the case with basketball. According to (Berri David, 2017), the WNBA players are not being treated the same as their counterparts in the NBA. When we look at WNBA revenues and salaries, the league's players are receiving less than 25% of the revenue where as men receive 50% of their total league's revenue. Such inequality not only affects the well-off athletes, but many women also abandon their sports careers in search of better paid employments. Hence, women are disadvantaged in their sports careers compared to men and are rendered incapable of achieving their aspirations.

#### **2.4.2 Gender Wage Gap in Healthcare**

According to (British Medical Association, 2021), there is a gender pay gap of 18.9% for hospital doctors, 15.3% for GPs and 11.9% for clinical academics (once adjusted for differences in working hours). The total non-adjusted gender pay gap is 24.4% for hospital doctors, 33.5% for GPs and 21.4% for clinical academics. These figures are higher than

those above because a significant amount of the gender pay gap can be explained through women, on average, working fewer contracted hours.

### 2.4.3 Gender Gap Statistics by Countries

According to World Economic Forum (World Economic Forum, 2023), Iceland is the most gender-equal country in the world for the 12th time. Below is the list of top 10 countries which are most gender equal

1. Iceland — 89.2%
2. Finland — 86.1%
3. Norway — 84.9%
4. New Zealand — 84.0%
5. Sweden — 82.3%
6. Namibia — 80.9%
7. Rwanda — 80.5%
8. Lithuania — 80.4%
9. Ireland — 80.0%
10. Switzerland — 79.8%

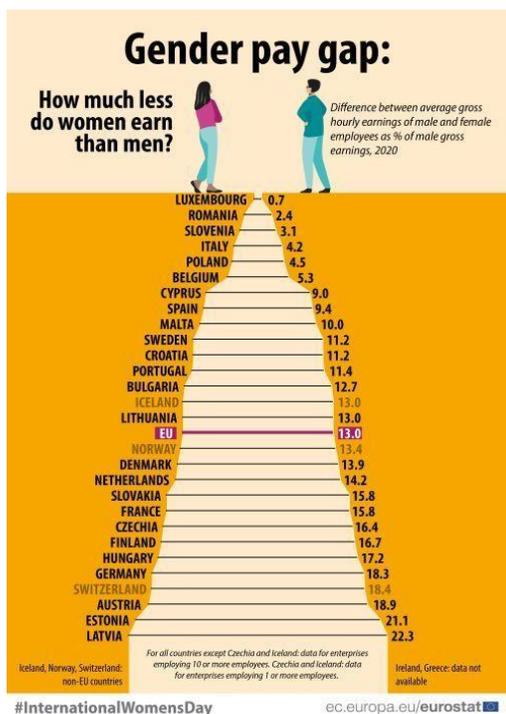
World Economic Forum (World Economic Forum, 2023) also highlights significant disparities across and within various geographies. Western Europe remains the region that has progressed the most towards gender parity (77.6%) and is further progressing this year. North America is the second-most advanced (76.4%), also improving this year, followed

by Latin America and the Caribbean (71.2%) and Eastern Europe and Central Asia (71.1%). A few decimal points below is the East Asia and the Pacific region (68.9%), one of the most-improved regions, just ahead of Sub Saharan Africa (67.2%) and surpassing South Asia (62.3%). The Middle East and North Africa region remains the area with the largest gap (60.9%).

At the current relative pace, gender gaps can potentially be closed in 52.1 years in Western Europe, 61.5 years in North America, and 68.9 years in Latin America and the Caribbean. In all other regions it will take over 100 years to close the gender gap: 121.7 years in Sub-Saharan Africa, 134.7 years in Eastern Europe and Central Asia, 165.1 years in East Asia and the Pacific, 142.4 years in Middle East and North Africa, and 195.4 years in South Asia.

(EUROSTAT, 2022), in its latest report, mentions women's gross hourly earnings were on average 13.0 % below those of men in the EU. cross Member States, the gender pay gap varied by 21.6 percentage points, ranging from 0.7 % in Luxembourg to 22.3 % in Latvia. The report provides a brief overview of gender pay gap (GPG) statistics, including the unadjusted gender pay gap used to monitor imbalances in earnings between men and women. The unadjusted gender pay gap is defined as the difference between the average gross hourly earnings of men and women expressed as a percentage of the average gross hourly earnings of men. It is calculated for enterprises with 10 or more employee.

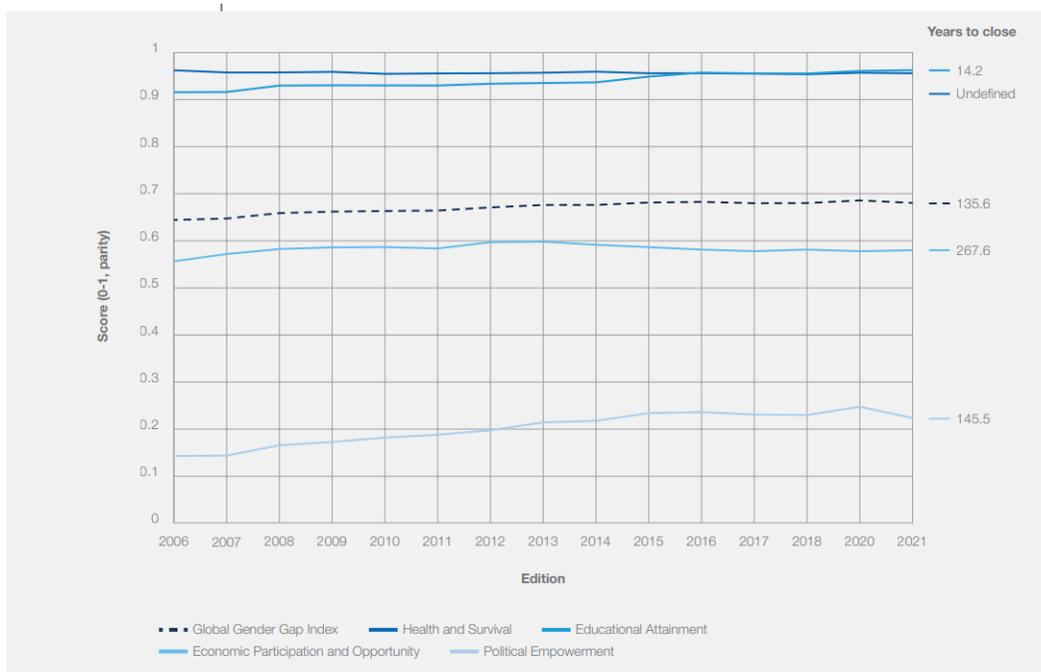
**Figure 1: How Much Less do Women Earn than Men**



Source: [Europa.eu/eurostat](https://ec.europa.eu/eurostat)

The graph below shows the evolution of Global Gender Gap Index and the sub-indexes over the last 15 year:

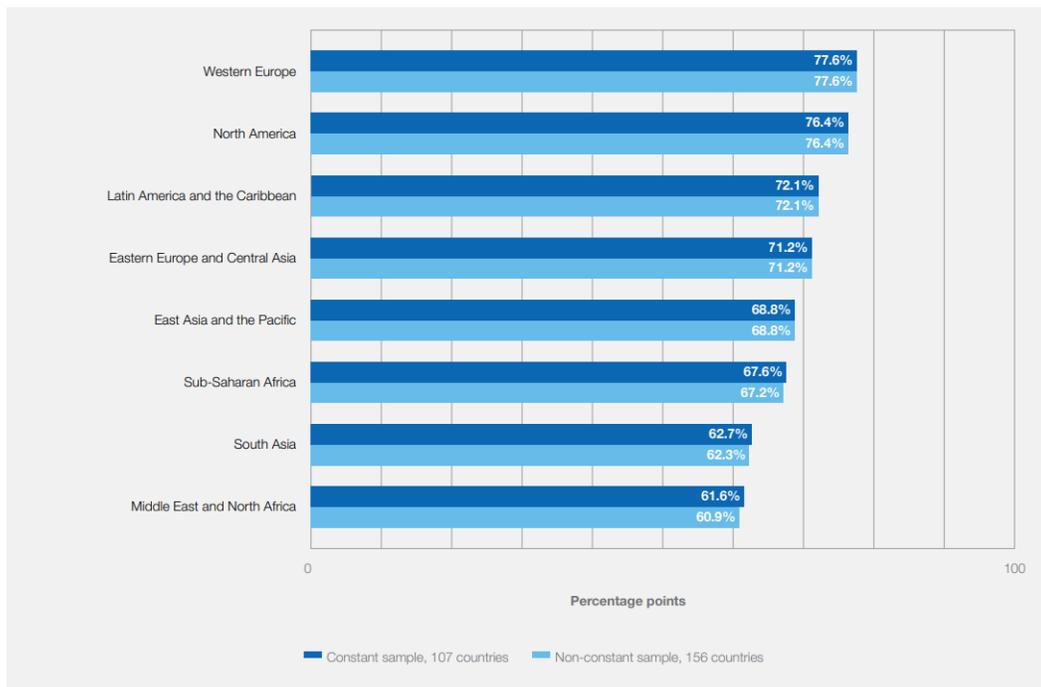
**Figure 2- Gender Gap Parity Index**



Source: World Economic Forum, Global Gender Parity Index, 2021

We have also looked up the Gender gap closed by region

**Figure 3- Gender Gap by Region**



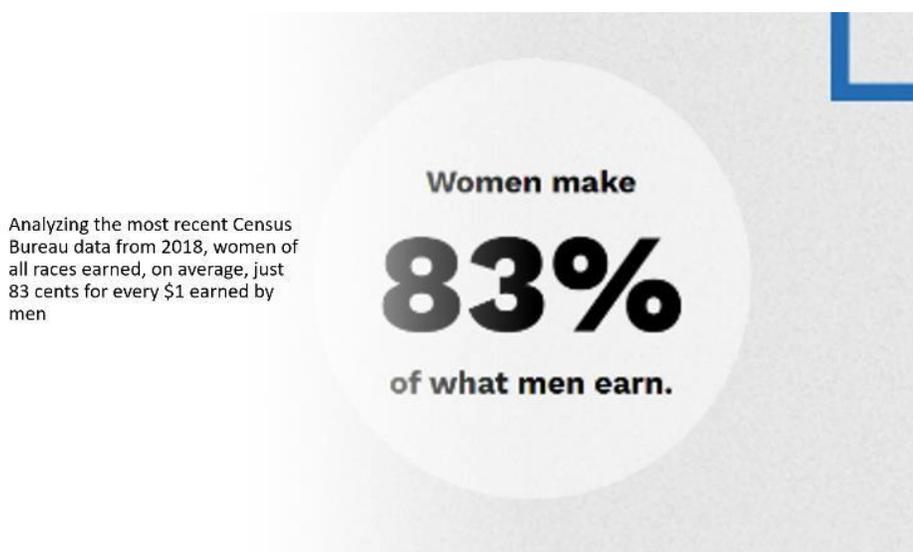
*Source: World Economic Forum, Global Gender Parity Index, 2021*

India's score is 62.50%, with scores of 32.60% in economic opportunity, 96.20% in education, 93.70% in Health and 27.60% in Political power. In India only 22.3% of women participate in the labour market, translating to a gender gap of 72% (World Economic Forum, 2021)

#### **2.4.4 Gender Pay Gap in The United States**

Analyzing the most recent Census Bureau data from 2018, women of all races earned, on average, just 83 cents for every \$1 earned by men.

*Figure 4- Gender pay Gap in US*



*Source: US Census Bureau Data*

As per a report published by (Bleiweis, 2020), American progress on the reasons cited for gender wage gap is as follows:

- a. **Differences in industries or jobs worked:** By calculating a wholistic wage gap, researchers can see effects of occupational segregation, or the funneling of women and men into different types of industries and jobs based on gender norms and expectations. So-called women's jobs, which are jobs that have historically had majority-female workforces, such as home health aides and child care workers, tend to offer lower pay and fewer benefits than so-called men's jobs, which are jobs that have had predominantly male workforces, including jobs in trades such as building and construction. These gendered differences are true across all industries and most occupations, at all levels, from frontline workers to midlevel managers to senior leaders.
- b. **Differences in years of experience.** Women are disproportionately driven out of the workforce to accommodate caregiving and other unpaid obligations and thus tend to have less work experience than men
- c. **Discrimination.** Gender-based pay discrimination has been illegal since 1963 but is still a frequent, widespread practice. It can thrive especially in workplaces that discourage open discussion of wages and where employees fear retaliation. Beyond explicit decisions to pay women less than men, employers may discriminate in pay when they rely on prior salary history in hiring and compensation decisions; this can enable pay decisions that could have been influenced by discrimination to follow women from job to job.

(Bleiweis, 2020), lists the below as some of the major drivers of the gender wage gap. Other factors, meanwhile, help narrow the gap between women's and men's earnings. For

example, increased educational attainment by women—particularly when women have more education than men—can help narrow the gap. Unionization can also help narrow the gap because workers collectively often have greater leverage to push for workplace changes, combat discriminatory practices targeting specific groups of workers, bargain for better working conditions and wages, and more. However, the cumulative effects of factors such as these are not large enough to close the gap entirely.

This article by Bleiweis talks about the cumulative impact of the gender wage gap on all women working full time in the United States. Collectively, more than 55 million full-time working women earned an estimated \$545.7 billion less than their male counterparts in 2019. If the gender wage gap had been closed entirely, this would have meant an additional \$545.7 billion in the pockets of working women and their families—about \$9,613.13 per woman—to cover student loan payments, mortgage payments, child care costs, prescription costs, groceries, emergency expenses, and more. Without updated and comprehensive equal pay reform, the gender wage gap has only closed by 4 cents in more than a decade.

## **2.5 Factors Effecting Gender Pay Gap**

### **2.5.1 Part Time vis-à-vis Fulltime Employment**

Pay gaps can also be analyzed from the perspective of part-time or full-time employment. In 2020, the gender pay gap for part-time workers varied from -5.1 % in Italy to 22.0 % in the Netherlands. (EUROSTAT, 2022). A negative gender pay gap means that, on average, women's gross hourly earnings are higher than those of men. This is often due to a selection

bias, especially when the employment rate is lower for women than for men: women engaging in the labour market may have comparatively higher skills and education levels than men. For full-time workers, pay gaps varied also widely in the EU Member States, ranging from -1.6 % in Italy to 24.1 % in Latvia.

## 2.5.2 Gender Pay Gap by Employee Age

The gender pay gap is generally much lower for new labour market entrants and tends to widen with age. However, those differences over age groups can have different patterns across the countries (Figure 5). The gender pay gap might increase with age as a result of the career interruptions women may experience during their working life.

**Figure 5- Gender Pay Gap by Age**

The unadjusted gender pay gap by age (%), 2020

	< 25 years	25 - 34	35 - 44	45 - 54	55 - 64	65 years +	
Belgium(*)	0.4	3.4	4.9	4.7	8.9		:
Bulgaria	8.6	14.6	17.6	15.0	5.1		-14.0
Czechia(*)	5.7	11.2	21.1	19.6	9.8		8.5
Denmark	4.4	10.9	14.2	17.2	16.6		9.6
Spain	-3.0	1.0	7.6	12.2	15.7		32.5
France	3.2	10.3	12.7	18.4	21.2		25.9
Croatia	5.7	10.3	14.1	19.8	9.9		6.6
Italy	4.5	4.3	3.3	5.9	8.9		14.9
Cyprus	17.0	4.0	6.6	12.7	9.1		23.0
Latvia	11.8	21.2	23.8	19.0	15.9		13.1
Lithuania	13.6	14.0	17.5	11.0	8.9		7.6
Hungary	7.1	14.8	22.2	18.3	12.7		19.5
Malta	7.4	5.8	12.3	12.4	9.3		14.2
Netherlands	1.9	1.7	8.0	18.6	20.1		14.5
Poland	8.2	7.2	9.4	5.5	-6.8		9.1
Portugal	7.8	9.3	11.5	15.0	9.9		25.6
Romania(*)	5.4	8.1	4.4	-1.2	-5.4		-17.8
Slovenia	3.8	5.4	6.5	5.8	1.3		3.9
Slovakia	6.9	11.5	20.1	17.7	13.1		12.7
Finland	5.9	9.9	16.5	19.8	19.7		24.3
Sweden	5.6	7.0	11.4	14.8	14.3		10.3

(\*) not available

Source: Eurostat ([earn\\_gr\\_gpgr2ag](#))

### 2.5.3 Gender Pay Gap by Industry/Sector

A breakdown for the different sectors of the economy also reveals interesting patterns (Figure 6). In all EU Member States where data is available, except Belgium and Spain, the gender pay gap in financial and insurance activities is higher than other industries studied. In 2020, the gender pay gap in financial and insurance activities varied from 6.4 % in Belgium to 38.9 % in Czechia. Within the business economy as a whole, the lowest gender pay gap was recorded in Slovenia (7.4 %) and the highest in Latvia (23.1 %).

(World Economic Forum, 2021) Global Gender Gaps report also shows that gender gaps are more likely in sectors that require disruptive technical skills. For example, in Cloud Computing, women make up 14% of the workforce; in Engineering, 20%; and in Data and AI, 32%. While the eight job clusters typically experience a high influx of new talent, at current rates those inflows do not re-balance occupational segregation, and transitioning to fields where women are currently underrepresented appears to remain difficult. For example, the current share of women in Cloud Computing is 14.2% and that figure has only improved by 0.2 percentage points, while the share of women in Data and AI roles is 32.4% and that figure has seen a mild decline of 0.1 percentage points since February 2018.

**Figure 6- Gender pay Gap by Economic Activity**

The unadjusted gender pay gap by economic activity (%), 2020

	Business economy (B to N)	Manufacturing (C)	Electricity, gas, steam and air conditioning supply (D)	Water supply; sewerage, waste management and remediation activities (E)	Construction (F)	Information and communication (J)	Financial and insurance activities (K)	Real estate activities (L)	Professional, scientific and technical activities (M)
Belgium	9.5	10.2	5.7	11.6	6.8	10.8	6.4	9.6	5.0
Bulgaria	13.2	22.6	6.1	8.5	-15.5	22.5	32.5	-10.2	9.0
Czechia(*)	12.8	23.4	17.7	3.6	9.4	30.4	38.9	10.3	20.6
Denmark	14.1	9.8	14.9	2.6	7.5	15.8	18.1	10.4	18.0
Germany	21.6	21.8	19.8	2.4	10.9	23.5	23.3	15.5	27.5
Estonia	23.0	22.8	11.5	7.9	8.7	26.2	31.1	9.6	14.3
Spain	15.0	14.7	12.7	8.0	-6.1	8.6	13.2	13.8	20.5
France	13.0	13.0	9.7	-3.7	-10.9	14.7	30.8	14.1	22.3
Croatia	12.8	21.5	1.0	-3.3	-17.2	12.7	24.7	2.2	16.6
Italy	13.8	13.2	11.0	1.3	5.0	14.8	22.9	13.3	26.2
Cyprus(*)	16.4	22.8	0.1	-18.0	-1.0	15.5	20.5	-40.3	29.0
Latvia	23.1	25.2	6.5	17.9	12.7	33.4	35.1	19.7	30.5
Lithuania	15.9	24.1	8.8	10.9	-1.8	28.8	33.8	12.0	15.9
Luxembourg(*)	10.5	10.8	:	0.3	-11.4	16.4	23.8	16.3	21.6
Hungary(*)	15.2	23.0	20.1	2.3	-3.0	25.4	36.8	12.7	22.6
Malta(*)	13.7	23.8	:	20.2	3.2	15.5	24.3	29.7	22.2
Netherlands	19.9	17.1	10.6	-1.3	8.6	15.7	25.1	16.1	20.2
Austria	20.7	20.1	12.9	7.7	8.0	20.1	27.2	27.7	26.2
Poland	12.4	16.6	3.3	-1.2	-9.6	27.0	30.4	6.2	18.4
Portugal	15.1	23.4	3.3	-13.6	-10.6	15.3	21.0	17.1	15.4
Romania(*)	10.1	20.8	1.6	2.0	-15.9	21.2	30.0	1.5	-1.8
Slovenia	7.4	10.9	0.6	-24.6	-27.1	19.5	24.2	0.8	10.3
Slovakia	18.1	24.7	9.8	-2.8	8.0	27.3	31.0	16.3	12.9
Finland	16.5	9.1	17.3	5.1	1.4	12.0	27.3	17.3	14.9
Sweden	7.9	1.7	5.2	-5.6	-3.5	9.1	25.0	5.2	12.4

(: ) not available

Source: Eurostat ([earn\\_gr\\_gpgr2](#))

### 2.5.4 Gender Pay Gap Higher in Private Sector

In 2020, the majority of the EU countries (for which data are available) recorded a higher gender pay gap (in absolute terms) in the private sector than in the public sector. This might be due to the fact that, in most countries, pay in the public sector is determined by transparent wage grids that apply equally to men and women. The gender pay gap varied in the private sector from 8.5 % in Belgium to 22.6 % in Germany, and in the public sector from -0.6 % in Poland to 18.4 % in Latvia (EUROSTAT, 2022).

As per Global Gender Gap Report by (World Economic Forum, 2021), globally, the average distance completed to parity is at 68%, a step back compared to 2020 (-0.6

percentage points). These figures are mainly driven by a decline in the performance of large countries. On its current trajectory, it will now take 135.6 years to close the gender gap worldwide.

## **2.6 Genesis of Gender Disparity at Work**

While the gender gap with respect to educational level is shrinking rapidly, the gap in labour participation has not shown much improvement (Becker, 1981). He looked at the family as an economic concept which has undergone changes in the last 200 years in Europe. Some other literature considers the reasons for the gender division at work reflects the gender division at home (Baxter, 1997). Namely, the gender disparity in the family is mirrored in the workforce in society. One argument for this phenomenon is that efficiency gains arise from the gender-based division of labour as it clearly demarcates the life role of each gender, a notion subscribed to by many developing and underdeveloped economies around the world (Becker, 1981). (Bhalla and Kaur, 2011) suggested that one's socio-economic background or the caste system in India is a decisive factor in women's workforce participation.

Nevertheless, there is plenty of evidence, for example the Human Development Index (United Nations, 2022a) showing that in countries where there is a small gender gap, female mortality figures are low, there are higher figures for health, education, workforce participation and the quality of overall life is better. In this context, it is becoming imperative to analyze female workforce participation when there is a huge gender disparity.

A team of economists and data scientists from LinkedIn (LinkedIn, 2022a), unearth the most interesting insights. In analyzing women's paths to leadership in countries across the globe, LinkedIn researchers found that women's best chances of securing a leadership position at work is in the 10-year window at the beginning of their careers.

A Study by (Kimbrough, 2022) is interesting and provides pertinent statistics. Though women have continued to make steady gains, across the board, men still make it to leadership more than women in all countries. In the 20 countries that LinkedIn (LinkedIn, 2022a), looked at, the share of women in leadership doesn't reach 50% in any of them. Sweden (37%), the U.S. (36%), and France (31%) are the countries that come closest. For the women who do make it to the top, their window is narrower to get there: women's chances for advancement start to plummet beyond the first 10-year window of their career. During the first decade of their career, for every 1 woman that makes it into leadership, nearly twice (1.8) as many men make it. This gap between women and men further increases with work experience, and for every 1 woman that makes it to the top after 20 or more years, 2.2 men reach the top. Our findings show this is not just playing out in one country, but is a fairly consistent global phenomenon.

According to (World Economic Forum, 2021), The median presence of women in senior positions across all countries assessed by the index is 33%, and only 22 countries have closed at least 80% of the gap in managerial roles. Among them are a few countries where women are 50% or more of all managers, including the Philippines, Cote d'Ivoire, Colombia, Burkina Faso, Jamaica, Togo, Botswana and Lao PDR. At the same time, there are another 20 countries where gender gaps in managerial positions are still as large as 80%

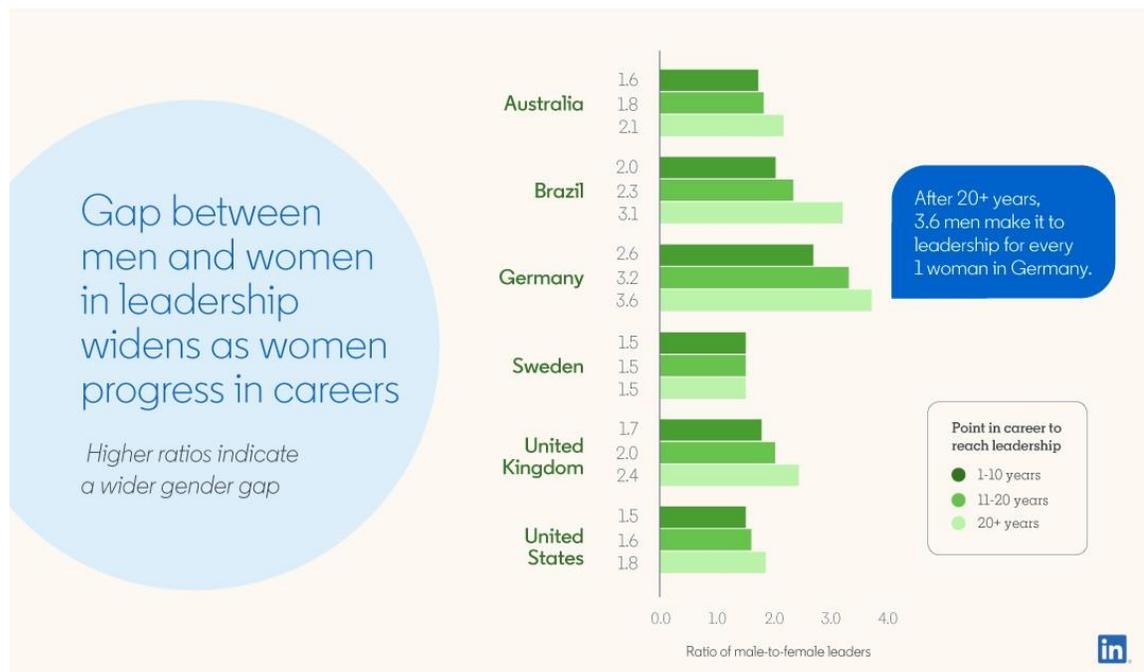
of more. Women make up 14.7% of all managerial positions across all 20 countries, corresponding to a gap of 83%. In Morocco the share is 13% (85% gap); in Bangladesh, 11% (88% gap); in Egypt, 7.4% (92% gap); in Saudi Arabia, 6.8% (93% gap); in Pakistan, 5% (95% gap); and in Yemen, 4.1% (96% gap).<sup>6</sup> In addition, the limited presence of women in senior roles shows a persistent ‘glass ceiling’ is still in place even in some of the most advanced economies. For instance, in the United States, women are in just 42% of senior and managerial positions; in Sweden, 40%; in the United Kingdom, 36.8%; in France, 34.6%; in Germany, 29%; in Italy and the Netherlands, 27%; in Korea, 15.6%; and in Japan, 14.7%. Some countries, however, do report strong progress on this front. For instance, Lao PDR has improved its score by over 53 percentage points.

(World Economic Forum, 2021) point to other differences as well. Beyond inequality in access to labour force opportunities, financial disparities continue to represent a major area of concern for working women and their dependents. Despite some progress this year, the wage gap (the ratio of the wage of women to that of men in a similar position) is still approximately 37% and the income gap (the ratio of the total wage and non-wage income of women to that of men) remains close to 51%.

When it comes to wages for similar positions, gaps remain even among the best-performing countries, including Iceland, 1st overall on this indicator, where 86% of the gap has been closed; Rwanda, 5th globally (80.9% of gap closed); and Finland, 9th (79.7% of gap closed). Conversely, in Ethiopia, India, El Salvador, Bolivia and Lesotho only 46%–49% of this gap has been closed to date (World Economic Forum, 2021).

Estimated earned incomes are at parity only in a handful of developing countries, including Burundi, Timor-Leste and Liberia, while among advanced economies, the best-performing country, Sweden, still has an approximately 18% gap between the incomes of men and women. Other examples of advanced economies with a significant income gap to bridge include Denmark (38%), France (39%), Germany (30%) and the United States (35%). In a sense, what we're seeing is that women who don't "sprint" early on in their career to reach the top ranks become less and less likely to reach leadership positions as they get older. And notably, this drop-off in leadership opportunities after 10+ years coincides with the time at which many working women are starting families and taking on additional childcare responsibilities. And of those women, nearly half (48%) said they felt they had to choose between prioritizing career over their kids. Interestingly, data also shows that the career choice of working in child care is also showing a steep downward trend leaving half a million families in US alone stranded without childcare (World Economic Forum, 2021).

**Figure 7- Pay Gap Widens as Women progress in Careers**



Source: LinkedIn survey

**Career breaks are common, especially for women.** A survey by (LinkedIn, 2022) provides the statistics below.

- The majority of women (64%) have experienced a career break at some point in their career with top reasons including parental leave (22%), medical leave (17%) and mental health reasons (14%).
- In January 2022 on LinkedIn, 70% of career break-related searches and 67% of career break-related posts globally came from female members.
- Women are taking longer to re-enter the workforce. In the US, there was a 39% increase in the length of time women in the US took a career break.

Additionally, corporates make it difficult for women to even express their situation without a nagging sense of insecurity. (LinkedIn, 2022) data shows that:

- Of women who noted their last career break was due to parental leave: 48% say they felt they have had to choose between prioritizing their career over their kids and 59% worry they don't spend enough time with their children because of their career.
- 41% of women say they found it difficult to tell their employer they were taking a career break to have children and 60% of women say they were nervous about returning to work after taking a career break to have children.

From a wage parity stand point, 48% of hirers think the biggest mistake candidates make when discussing their career breaks is undervaluing themselves in terms of compensation or seniority of role. This might be another reason for the gender parity.

## **2.7 Women and GDP**

(Rothschild, 2020), in his paper says: women bear a disproportionate amount of the economic burden that has been put upon working people. 63% of minimum wage workers are women, and women are overrepresented in many industries which pay their workers the least, like childcare, cleaning services and restaurants. In the last several decades, more women have entered the workforce and increased the number of hours they work outside the home significantly. (Chao and Rones, 2007) have done a study on finding the relationship between age of women, full time employment rate and GDP. From 1979 to 2007, the full-time employment rate of women aged 26-65 increased by 12%, and the number of hours women worked nearly doubled from 1979 to 2007. It is estimated that the

increase in women's work during this time increased America's GDP by 11%, or \$1.7 trillion. This is comparable to annual spending on Social Security, Medicare and Medicaid, combined. Though women are working more and contributing to GDP growth, their wages have not properly reflected it. Men make more than women in every industry, and in 2018 women earned 83 cents for every dollar man made (with significant disparities between wages of white women and women of color).

In contrast, the CEOs of the top 350 US firms have seen explosive salary growth. A study of this group saw a 997% increase in the CEO's salaries since 1978 (Mishel and Wolfe, 2019). The vast majority of Fortune 500 companies are managed by men; just 5% of these companies' CEOs are women. Further, women are vastly underrepresented in Wall Street's leadership. Some of America's largest investment banks such as Morgan Stanley, Goldman Sachs and Citi have 87%, 78% and 72% male representation in executive leadership, respectively (Afsharipour, 2023). These statistics reflect a larger trend that men are the majority of top earners despite women making up an almost equal share of the formal working force. Furthermore, these statistics do not reflect unpaid and household labour which is often taken care of by women. As note, wealth is allocated among Americans even more inequitably than incomes are. According to (Wolff, 2021), 40% of America's wealth belonged to just 1% of the population. He further states that like the gender wage gap, the gender wealth gap exists in connection with racial disparities; women of color own less wealth than the average white woman. Additionally, women have less savings for retirement than men. The median retirement savings for men is \$123,000, while it is just \$42,000 for women.

## **2.8 Economic Theories of Feminization**

Why is globalization associated with a rising female share of employment in the literature?

The main explanation lies in the heightened competitive pressures of exporting and thus the need to use cheap and flexible labour as much as possible. There are orthodox and heterodox economic models of this, but both predict that in the presence of a gender wage gap, greater trade openness will raise the female share of employment.

The orthodox explanation for the link between trade and the rising female share of employment is based on the Stolper–Samuelson theorem of the Heckscher–Ohlin theory of international trade. In this model, trade liberalization between developed (relatively high-skill abundant) and developing countries (relatively low-skill abundant) benefits the relatively abundant factor in that country. If it is assumed that women are relatively low skilled, then the lifting of trade barriers should increase the demand for women's labour in developing countries, leading to feminization and a rise in women's relative wages. The heterodox explanation is based on the theory of competitive (that is, absolute) advantage of trade in which firms compete for export market share on the basis of unit costs and prefer women's labour because it is relatively cheaper owing to the gender wage gap.

Concern with gender came to the forefront of public debate in 1970s the first international women's conference was held in Mexico City in 1975 and the United Nations designated 1976 to 1986 as indicated in the 1990s women's issues continue to receive attention from policymakers in national governments and international organizations like in 1995 occurrence the impact of the fourth world conference on women beating China reflects the increasing attention according to gender issues throughout the world.

(Goldin, 2006) in her paper "The Quiet Revolution that Transformed Women's Employment, Education and Family" identified four phases going back to the late 19th century that shaped women's role in the US economy. She found the first three phases to be "evolutionary," identifying them as "independent female worker," up to the 1920s; "easing the constraints on married women in the labour force," 1930s–1950s; and "roots of the revolution," 1950s–1970s. Then came the "quiet revolution" starting in the late 1970s.

While important advances were made through the evolutionary phases, women in those periods were more likely to view their working lives as intermittent and a means to put food on the table, Goldin wrote. Women also had limited control over key decisions affecting their employment. By contrast, women of the quiet revolution generally viewed their careers as a significant part of their personal identity and made their own decisions about their working lives. Goldin found that this latest phase was triggered mainly by increased availability of contraceptives and a rising divorce rate.

(World Economic Forum, 2021) Global Gender Gap Report states that the gender gap in Economic Participation and Opportunity remains the second-largest of the four key gaps tracked by the index. According to this year's index results 58% of this gap has been closed so far. The gap has seen marginal improvement since the 2020 edition of the report and as a result we estimate that it will take another 267.6 years to close.

The slow progress seen in closing the Economic Participation and Opportunity gap is the result of two opposing trends. On one hand, the proportion of women among skilled professionals continues to increase, as does progress towards wage equality, albeit at a slower pace. On the other hand, overall income disparities are still only part-way towards

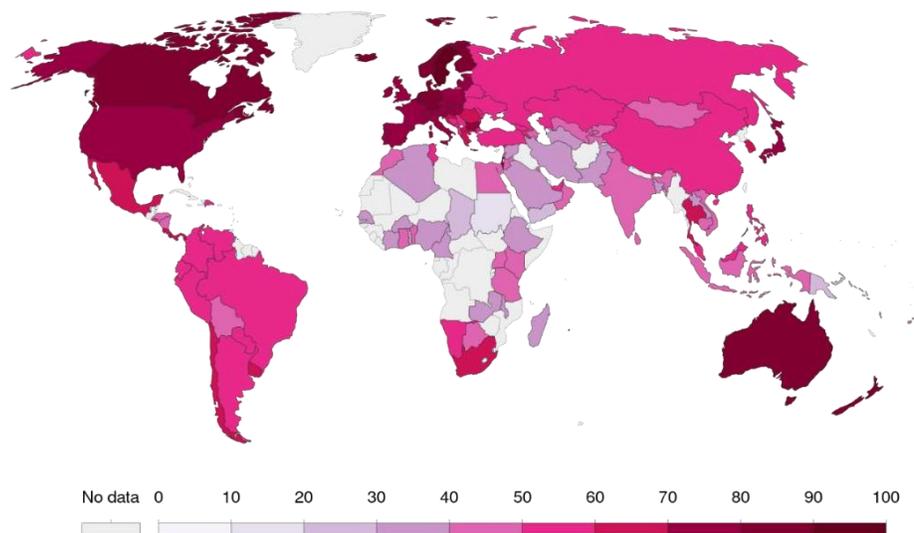
being bridged and there is a persistent lack of women in leadership positions, with women representing just 31% of all manager positions. In India it is a meager 10% (Catalyst, 2022)

Women's Economic Opportunity Index, is an index compiled by the Economist Intelligence Unit that measures the enabling environment for women's economic participation in 128 countries. The Economist Intelligence Unit's Women's Economic Opportunity Index is based on 29 indicators that measure a country's laws, regulations, practices, customs and attitudes that allow women to participate in the workforce under conditions roughly equal to those of men, whether as wage-earning employees or as owners of a business. The index was first produced in 2010, with an updated index produced in 2012, the figures are as below:

***Figure 8- Women's Economic Opportunity Index***

**Women's Economic Opportunity Index, 2012**

This index is based on five underlying indicators: Labor policy and practice; Access to Finance; Education and training; Women's legal and social status; and the General business environment. Scores are scaled 0-100, where higher values denote more economic opportunities for women.



Source: Women's Economic Opportunity 2012 - Economist Intelligence Unit (2012)

*Source: Women's Economic Opportunity- Economic Intelligence Unit (2012)*

Women's economic empowerment is a complex social process that demands the determination and collaboration of all societal actors. When women are given equal access to education and economic decision-making, they are a key driving force against poverty. Access to paid work raises household incomes. According to Asian Development Bank Report,(OECD, 2022) ,the evidence shows that when women have greater control over resources, investment in children's health, education and nutrition increases, which yields long-term benefits for future generations.

There are two dimensions: ability to advance economically, and the power to make and act on economic decisions.

OECD-DAC Network on Gender Equality adopts a broader definition of enhancing women's "capacity to participate in, contribute to and benefit from growth processes in ways that recognize the value of their contributions, respect their dignity and make it possible to negotiate a fairer distribution of the benefits of growth"

Over the past two decades, pregnancy and childbirth-related maternal deaths have dropped by 45% globally (World Health Organization, 2019). Women have made gains in access to jobs and livelihoods, and more countries than ever guarantee equal rights in property and marriage. The gap in gender parity for primary education has closed in almost all countries. The gender gap in secondary education is also closing in most countries. These achievements, however, do not automatically translate into improved labour market outcomes.

We have referred to unpaid work by women in earlier chapters. According to (Ferrant and Thim, 2019), unpaid care work by women is 14% in South Africa and Canada, 23% in Argentina, France and New Zealand, and 33% in China. This paper further mentions that education does not guarantee a reduction in unpaid care work for women. Only women with higher education are likely to see a decrease in routine housework, due to increasing income and opportunities to substitute these responsibilities with market services.

Higher levels of economic development do not automatically lead to a more equal redistribution of unpaid care work between women and men, due to the persistence of restrictive gender norms which place the responsibility for domestic work and childcare on women.

Gender gaps in unpaid care work begin at an early age for girls and boys, increasing for women at marriage and childbirth. For men, however, marriage may actually decrease their time spent on unpaid care work: married men spend less time on routine housework than single men do, if all other factors stay the same (e.g. number of children, location, age).

At the same time, evidence continues to mount on how increasing women's labour force participation and economic opportunities can drive sustainable and inclusive growth: eliminating discriminatory social institutions could benefit women's education and labour force participation and add USD 12 trillion to the global economy, representing 16% of the global GDP in 2011 (Ferrant and Kolev, 2016) [https://www.oecd.org/development/gender-development/SIGI\\_cost\\_final.pdf](https://www.oecd.org/development/gender-development/SIGI_cost_final.pdf).

**Figure 9- Income Losses Associated with Gender Discrimination**



Notes: This figure presents the regional income losses associated with current levels of gender-based discrimination in social institutions. Income losses are measured in terms of 2011 real income at current PPP. The regional classification excludes OECD countries, which are represented as a stand-alone group.

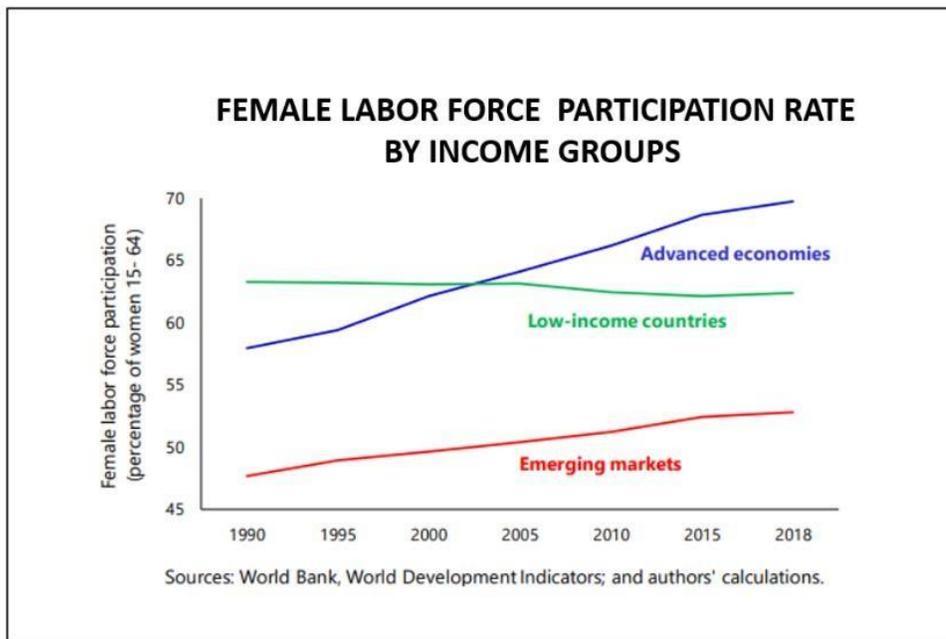
Source: Ferrant and Kolev (2016).

(Ferrant and Kolev, 2016) further state that gradually reducing discrimination in social institutions could lead to an annual average increase in the world GDP growth rate of 0.03 to 0.6 percentage points by 2030.

The first step to fully benefit from gender parity is to tackle discriminatory social institutions, the root causes of gender inequality. Discriminatory social institutions – formal and informal laws, social norms and practices restricting women’s rights and access to opportunities.

Despite their catalytic impact on achieving gender equality and women’s rights, discriminatory social institutions have been overlooked in development policies and programme.

**Figure 10-Female Labour Force Participation by Income Groups**



*Source: World Bank*

A world free of discriminatory social institutions could generate substantial macroeconomic gains benefiting all. This equal world would not only improve women's rights and empowerment but also increase countries' monetary living standards, as measured by their income per capita. (Ferrant and Kolev, 2016) mention in their research paper that gender parity in social institutions could yield substantial economic benefits, leading to an annual increase in the world GDP growth rate of 0.6 percentage points by 2030. In other words, the world GDP per capita in 2030 is estimated at USD 8378 without a reduction in gender-based discrimination in social institutions, compared to USD 9142 if discriminatory social institutions were totally eradicated. This is an impressive gain of USD 764 per capita.

(Ferrant, 2015) in this paper suggests that gender inequality may be one explanation of development gaps as a determinant of economic and human development. Results show

that gender inequalities reduce long term income per capita by 3.4% and the human development index by 4.6%. These results are mainly driven by inequalities in the identity dimension and in the access to economic activity for economic development, and by inequalities within the family and in the access to education for human development.

## **2.9 Gender Inequality and Productivity**

Gender inequality reduces productivity first by reducing the level and quality of human capital. A number of studies prove that gender equality stimulates long term productivity growth. The combined effect of gender wage gap on work force participation result in decline in economy wide productivity in the long run (Seguino, 2008).

(Dollar and Gatti, 1999a) provides the following logic: given a similar distribution of innate abilities between girls and boys, gender inequality in education means giving educational opportunities to boys who are less able than some girls.

Finally, gender inequality affects productivity through the efficiency of asset allocation. For example, (Keyser et al., 2015), claims that equal access to fertilizers and other inputs would increase maize yields by almost one-sixth in Malawi and Ghana; equal access to economic activity could increase labour productivity by as much as 25 percent in some countries by improving female workers' access to certain sectors or occupations.

Moreover, if we consider that men and women in developing countries carry out separate activities, inequality means less physical accumulation for female activities, producing a

lower quality capital stock and lower productivity. With gender inequality women's activities are under-capitalized and men's overcapitalized. This misallocation of resources creates distortions that reduce the aggregate yield and technological progress. Lower production can also come from the misallocation of resources between men and women within the household.

There was a study conducted by (Staniscuaski et al., 2021) on impact of COVID and remote work on men and women. The intersection between race, gender and parenthood was analyzed considering how respondents self-reported the impact of remote work on their productivity. The majority (69.4%) of respondents stated that they had felt a negative impact on their productivity, while only 16.2 and 14.4% reported positive or no impacts, respectively.

(Staniscuaski et al., 2021) also showed a significant difference between the way men and women perceived the impact of the pandemic on their productivity during the social isolation period. The study observed a statistically significant positive association of men and the perception of no impact in productivity, and between women and a negative impact in productivity. There was a significant difference between men and women who perceived a positive impact. Parenthood influenced the way respondents perceived the impact of remote work on their productivity. There was a positive association between women with children and a negative impact, but this association was not observed for men with children. This brings back the point that women carry the burden of work and managing home and it is perhaps not equally distributed between the men and women.

## 2.10 Gender Inequality and Governance

Gender inequality could affect growth via political decisions and governance. We have discussed earlier on men seeming to be more involved in politics than women. we do have evidence regarding women and corruption. In general, women are more likely than men to show generosity and altruism and have a greater sense of belonging to a community(Eckel and Grossman, 2008).

According to an article by (Habersshon, 2021), Women are less likely to adopt to dishonest and corrupt means to achieve goals. Another paper suggests that women leaders invest more time in developing productive infrastructure which in turn promotes growth.

The study results of (Forsberg and Olsson, 2021) prove that support for women's status being important for understanding a society's capacity to handle conflict nonviolently. They also mention in their paper that Societal capacity, where the explanation is that gender equality implies a higher investment in women, which entails higher levels of social networks and resources, which enables the society to handle conflicts more peacefully.

However, some studies appear to rather focus on key elements of gender inequality that entail an unequal distribution (to men's advantage) of power and other material and immaterial resources. In previous research, a more equal distribution is seen as a sign of a higher societal capacity that can explain a more peaceful society. The study also suggests that in highly patriarchal societies, where children grow up seeing women being dominated and controlled by men, they are provided with a template where violence and domination

is considered normal. A cornerstone of this line of thinking originates in feminist research—that these norms build on patriarchal structures and standpoints. In its most extreme form, patriarchy entails “a fundamental dichotomization between “us” and “them,” namely between men and women, and a hierarchical power relationship privileging men. The othering of women means that they are devalued, deprived of privileges, and controlled, relative to men.

### **2.11 Pandemic and Gender Gap**

Projections for a select number of countries show that gender gaps in labour force participation are wider since the outbreak of the pandemic. Globally, the economic gender gap may thus be between 1% and 4% wider than reported (World Economic Forum, 2021). ILO offer a timely analysis of the impact of the COVID-19 pandemic on gender gaps in economic participation. (ILO, 2021a) states in its paper that early projections from ILO suggest 5% of all employed women lost their jobs, compared with 3.9% of employed men. The pace of decline was the highest in the Americas (9.4%), followed by the Arab states (4.1%) and the Asia/Pacific region (3.8%). Female employment fell at a faster pace than male employment in most of the major world economies in the first half of 2020, when the pandemic’s impact on the labour market was the harshest. In the United States, female employment fell by 17.9% between February and April 2020 compared to a 13.9% decline in male employment.

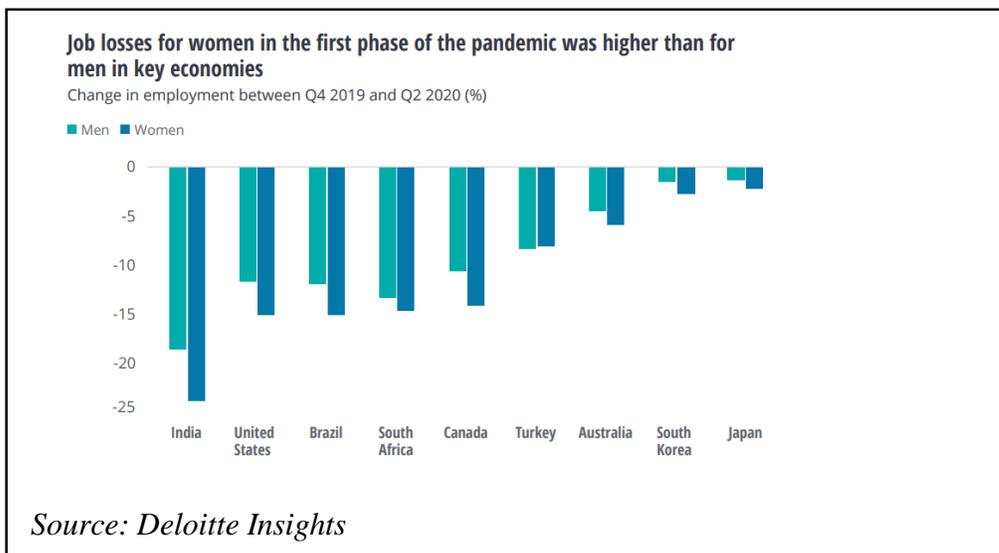
(ILO, 2021b) data further states that of the 23.6 million jobs for women that were lost at the worst moment of the crisis in the second quarter of 2020, at the end of 2021 some 4.2

million were still to be recovered. In the case of men on the other hand, the 26 million jobs lost at that time had already been almost completely recovered.

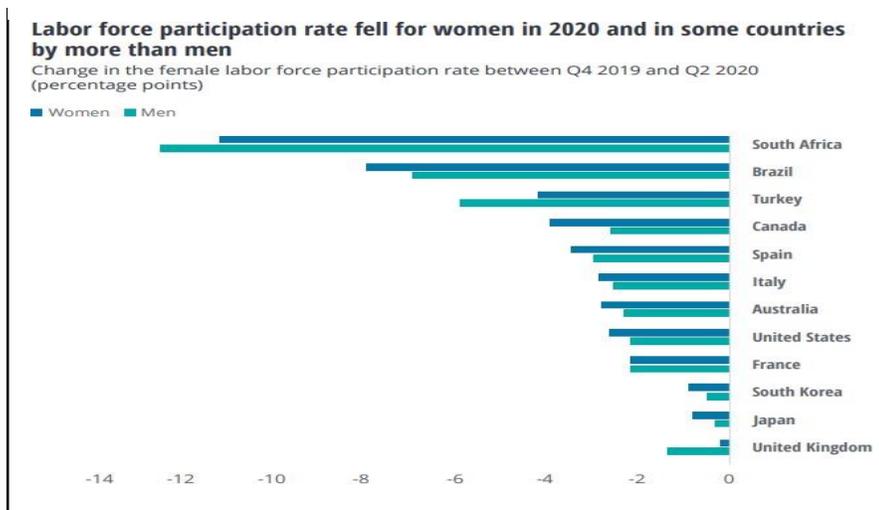
In India, female employment fell by 23.8% between Q4 2019 and Q2 2020, which is far higher than the 18.5% decline in male employment.

There are two key reasons women bore the brunt of the pandemic in 2020 to a greater degree than men. In most economies, women are more likely to dominate sectors such as hospitality, food services, and personal care. Unfortunately, these sectors turned out to be some of the most affected ones in the first half of 2020 when strict social distancing measures and consumers' concerns about health dented sales and employment. Second, as people moved indoors to stay safe from the virus and many businesses turned to remote work, women generally took up a greater share of household chores than men. And with child care facilities—a critical enabler of careers of mothers—barely available during that period and schools moving online, child care duties fell predominantly on women. According to a report by (Pesce et al., 2021), women in the European Union spent more hours in child care (62 hours per week) compared to men (36 hours) in 2020; women also logged more hours per week on housework than men. Further this report says that women earn 6.5% less than men due to personal and job-related characteristics which are less remunerative the labor market. Surprisingly in this study, child care and elderly care were not among the main determinants for gender pay gap. (Akrur, 2021) provides these interesting figures on the impact of COVID on men and women by country.

**Figure 11-Job Losses for Women During COVID 19**



**Figure 12- Women Participation in Work Force During COVID 19**



(Kimbrough, 2022), an economist from LinkedIn, in her paper suggests that data further shows a marked decline of women's hiring into leadership roles, creating a reversal of 1 to 2 years of progress across multiple industries. While industries such as Software and IT Services, Financial Services, Health and Healthcare, and Manufacturing are countering this trend, there is a more severe destruction of overall roles in industries with higher participation of women, such as the Consumer sector, Non-profits, and Media and Communication. Additionally, Ipsos data from January 2021 (Ipsos, 2021), shows that a longer "double-shift" of paid and unpaid work in a context of school closures and limited availability of care services have contributed to an overall increase of stress, anxiety around job insecurity and difficulty in maintaining work-life balance among women with children. The COVID-19 crisis has also accelerated automation and digitalization, speeding up labour market disruption.

Inclusive business has great potential to improve the lives of women and raise their status in society.

Among low-income people, women remain far behind men in terms of access to and control of resources and economic opportunities as well as overall well-being, including health and education. In addition, women face greater hurdles in securing their rights and exercising decision-making power in families and society alike. Within low-income communities in particular, women's economic empowerment is most urgently needed. Inclusive business targets low-income people and incorporates them into the value chain in many different capacities. Financial services and ICT increase women's access to information and control over financial resources. Inclusive businesses strive to provide

better pay and working conditions in economies where women are disadvantaged, due to pay gaps, discrimination, workplace violence, and long working hours combined with household and childcare responsibilities.

Inclusive business respects low-income people as business partners and emphasizes their ability to make economic choices. These goals dovetail with those targeted by women's economic empowerment efforts cultivating the capacity of women to make and influence economic decisions affecting themselves, their families and communities. These businesses can have women as implicit and explicit beneficiaries.

But inclusive business does not automatically empower women. For one, inclusive businesses can have women as implicit beneficiaries when the business model addresses issues specific to poor women's lives. By providing access to clean water in or close to the house, for example, a utility can relieve women of having to retrieve water from far-away sources. By purchasing carpets woven by women, a textiles or retail company creates economic opportunity. Though this approach creates tangible benefits for women, it does little to empower them directly as economic decision-makers and has little transformative impact on social structure.

In addition, inclusive businesses can have women as explicit beneficiaries. They can pursue activities that address women specifically, take into account gender-related barriers, and create economic opportunity.

These business models can include providing access to goods and services specifically designed for the needs of women, such as reproductive care or financial services for

women's businesses. Inclusive businesses of this type can also involve recruiting women as distributors, designing career paths for women, or creating a woman-friendly work environment. These approaches can be transformative, as they consciously aim to improve the status of women in society. But they can fall short of this ambition if they are not accepted and fail to achieve scale.

## **2.12 Gender Inequality and Impact on Next Generation**

Gender equality affects economic development in a long-run way by influencing the well-being of the next generation. A broad literature has provided evidence on the key role of mothers on children and development outcomes, namely education and health.

There is enough and more literature available that provides evidence on the key role of mothers on children and development outcomes, namely education and health (Kwauk, 2020).

Gender inequalities in employment and income reduce female bargaining power, so women have less power in decision-making within households. This translates to less say in household matters, which in a way percolates to the next generation in multiple dimensions- psychologically, financially, and socially.

This literature also highlights an interesting element. Work is unidimensional whereas gender inequality is multidimensional. That means, gender inequality impact various aspects of the entire ecosystem.

According to (Dollar and Gatti, 1999b), economic development may reduce gender inequality. This paper says that if discrimination against women involves increasing costs as the country develops, which is an incentive to reduce it. Growth and globalization create market employment opportunities in less-developed countries, which supports women.

Economic growth and globalization promote gender equality both directly and indirectly (Rees and Riezman, 2012). They create market opportunities. Second, if the latter are for women, this reduces fertility and increases human-capital formation, which in turn promotes equality. Finally, globalization that produces job opportunities for women increases growth which produces a long-run steady state with higher per capita consumption than would prevail either without globalization, or with globalization that creates jobs only for men.

There is considerable work done by World Bank on gender equality. World bank mentions that even if economic development reduces gender inequality, income growth by itself is not sufficient. Gender equality also depends on how markets and formal/informal institutions have evolved, how growth has played out, and how all these factors have interacted through household decisions. Economic development is one way of promoting gender equality by loosening constraints, improving market opportunities, promoting market mechanisms, and so on. Economic development itself contributes to gender equality, as households have more resources available. Empirical evidence indicates that if women, instead of men in the same household, gain more economic resources, there will

be movement towards women's empowerment and equality. This suggests that economic opportunities have the potential to break down even the most deeply ingrained cultural practices keeping women in subordinate positions.

In conclusion, there is enough literature and study out there that prove that there is a multi-dimensional relationship between gender in equality and economic development. There potentially is a vicious cycle between the two that creates a situation to further deteriorate the situation. Besides other factors, culture, organizational design does have a huge impact on gender in equality. (Alesina et al., 2013) their paper also allude those limited opportunities and inequality may be outcomes of women themselves.

### **2.13 Organization Design**

Organizational design is a step-by-step methodology which identifies dysfunctional aspects of workflow, procedures, structures and systems, and realigns them to fit current business realities/goals and then develops plans to implement the new changes. The process focuses on improving both the technical and people side of the business.

For most companies, the design process leads to a more effective organization design, significantly improved results (profitability, customer service, internal operations), and employees who are empowered and committed to the business. The hallmark of the design process is a comprehensive and holistic approach to organizational improvement that touches all aspects of organizational life, so you can achieve:

- Excellent customer service

- Increased profitability
- Reduced operating costs
- Improved efficiency and cycle time
- A culture of committed and engaged employees
- A clear strategy for managing and growing your business

By design we're talking about the integration of people with core business processes, technology and systems. A well-designed organization ensures that the form of the organization matches its purpose or strategy, meets the challenges posed by business realities and significantly increases the likelihood that the collective efforts of people will be successful.

As companies grow and the challenges in the external environment become more complex, businesses processes, structures and systems that once worked become barriers to efficiency, customer service, employee morale and financial profitability.

Organizational design is a common phenomenon which has been extensively addressed by many researchers worldwide due to its importance to the organization. According to (Chineme et al., 2017), organizational commitment has been linked to the performance of organizational constituents, their loyalty, organizational citizenship behavior, counterproductive behavior, employees' aggression, job satisfaction, and other individual and group constructs. The same authors have also categorized the impact of organizational design into four groups; organizational factors, including leadership, culture, structure and processes; individual factors, including personality traits, emotional quotient, intellectual quotient, and spiritual quotient; job factors, including job characteristics, and remuneration systems; and environment factors, including social relationships and physical environment.

Organization design consists of measures that are put in place in order to get employees to pursue the goals set by the organization's principals. The practices include allocation of decision-making to different employees (and thus the creation of a hierarchy), provision of diverse forms of pay and incentives, monitoring of employees by their supervisors or peers, hiring and firing procedures and rules, and much more. Contrary to the assertions most of the times organization fails to find out the nature of relationship between organizational structure and job design on employee performance (Chineme et al., 2017)

However according to (Bree, 2021), organization design is a relatively young field such as organization development. One of the aspects that set organization design apart is its focus on formalizable elements such as structures, processes, and roles and a claim that we can design or redesign those elements to achieve intended outcomes.

(Daft, 2007), in his book has quoted examples of the structure and design of multiple organizations and how they performed in various economic cycles.

Irrespective of the theories behind Organization design, (Fuchs, 1968)the relation between structural transformation and women's involvement in labour market has been noted as far back in 1968. The idea is that production of goods and services is more intense in use of "brawn" than the "brain" and men and women differ in these factors.

## **2.14 Gender Gap in India**

Recently, the World Economic Forum (WEF) ranked India at 135 out of 146 countries in its Global Gender Gap (GGG) Index for 2022 (World Economic Forum, 2022)

A report by (Catalyst, 2020), gives the following data:

India will be the most populous country in the world by 2050.

**The gender population gap** starts at birth. For every 100 boys born nationally, 91 girls are born

- Women constitute 48.1% of the population.
- As of 2020, there are 50,337,879 fewer women than men across India

### **Women Are Closing the Higher Education Gap**

Among graduates in 2018-2019, women represented:

- Undergraduate degrees: 53.0%
- MPhil degrees: 69.6%
- PhDs: 41.8%

### **The Labour Force Participation Rate for Women Is Declining**

India's economy is growing, with an increasing GDP and a working-age population expected to climb to over 800 million people by 2050.

*Despite this growth, less than one-quarter (20.3%) of women aged 15 and older participate in the labour force as of 2020 (compared to 76.0% of men).*

- Women account for only 19.9% of the total labour force in India.
- India's low labour force participation rate for women is due in part to restrictive cultural norms regarding women's work, the gender wage gap, an increase in time spent for

- women continuing their education, and a lack of safety policies and flexible work offerings.
- Recent job stagnation and high unemployment rates for women, exacerbated by the Covid-19 pandemic, also keep women out of the labour force.
  - Rural women are leaving India's workforce at a faster rate than urban women.

***Increasing women's labour force participation by 10 percentage points could add \$770 billion to India's GDP by 2025***

### **Many Workers in India Are at Risk of Job Displacement Due to Automation**

The agriculture industry employs approximately 60% of working women in India but is expected to be heavily impacted by job losses due to automation.

- ***12 million women may be displaced by automation by 2030.*** This is equivalent to approximately 10% of women's employment in India.
- Women are underrepresented across sectors, which encompasses infrastructure-related sectors like oil and gas (7%); automotive (10%); pharmaceutical and healthcare (11%); and information technology (28%).

While we see all these statistics with respect to women, the IT industry in India is growing at an unprecedented pace. According to (India Brand Equity Foundation, 2022), the India's IT business is projected to reach US\$19.93 bn by 2025. According to gartner estimates, IT spend in India was forecasted to be at US\$81.89 bn in 2021 and further increase to US\$101.8 bn in 2022. Indian IT firms have delivery centers across the world. The computer software and hardware sector attracted FDI (foreign direct investment) of US\$88.94bn

between April 2020-June 2022. The government introduced STP scheme, which is 100% export oriented to scheme to support development and export of computer software, and export of professional services.

### **2.14.1 Women in Leadership in India**

The Share of Women-Led Companies in India Has Stagnated

(Banerjee, 2021) states the following statistics in her paper: *Only 3.7% of CEOs and Managing Directors of NSE-listed companies were women in 2019*, a number that has increased just slightly from 3.2% in 2014.

- 8.9% of firms have women in top management positions.
- As of 2019, just 29 companies (5.8%) on the Fortune India 500 list had women in executive roles.
- Women make up only 31% of Chief Human Resources Officers (CHROs), a role overrepresented by women in other countries such as the US and South Africa.

Women account for only 13.8% of board directors from listed companies in India.

A Record Number of Women Were Elected to India's Parliament.

In 2019, India elected women to fill 78 of the 542 seats in the lower house of parliament, a record high. However, at only 14.4%, the country remains far from parity.

### **2.14.2 Gender Pay Gap in India**

## India Has a High Gender Pay Gap.

Based on hourly wages, *women earn, on average, 65.5% of what their male colleagues earn* for performing the same work. (Barroso and Brown, 2021)

According to ILO (International Labour Organization, 2022), despite notable progress in closing the gender pay gap over time in India, the gap remains high by international standards. Indian women earned, on an average, 48% less compared to their male counterparts in 1993-94. Since then, the gap declined to 28% in 2018-19 as in the labour force survey data of the National Sample Survey Office (NSSO). The pandemic reversed decades of progress as preliminary estimates from the (Ministry of Statistics and Programme Implementation, 2021) show an increase in the gap by 7% between 2018-19 and 2020-21. The data further suggests that faster decline in female wages during the pandemic contributed to this decline, compared to a faster growth in male wages, which requires urgent policy attention.

While individual characteristics such as education, skills or experience explain part of the gender pay gap, a large part of the gender pay gap can still be attributed purely to discrimination based on one's gender or sex. Gender-based discriminatory practices include lower wages paid to women for work of equal value; undervaluation of women's work in highly feminized occupations and enterprises, and motherhood pay gap — lower wages for mothers compared to non-mothers.

India has taken several steps in the legislative sphere to close the gender pay gap, especially at the low-end of the wage distribution. In this regard, it was one of the pioneering countries

to enact the Minimum Wages Act in 1948 and followed by the adoption of the Equal Remuneration Act in 1976. In 2019, India carried out comprehensive reforms in both the legislation and enacted the Code on Wages.

Evidence shows that the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in 2005 benefited rural women workers and helped reduce the gender pay gap, both directly and indirectly. Directly, by raising the pay levels of women workers who participated in the programme, and indirectly, benefits accrued to women involved in agricultural occupations through higher earnings, as MGNREGA contributed to the rapid rise in overall rural and agricultural wages in the country.

In 2017, the Government amended the Maternity Benefit Act of 1961, which increased the ‘maternity leave with pay protection’ from 12 weeks to 26 weeks for all women working in establishments employing 10 or more workers. This is expected to reduce the motherhood pay gap among mothers in the median and high-end wage earners working in the formal economy.

### **2.14.3 Male to Female Ratio**

The female-to-male ratio on the country level for labour force participation is only 0.35, which signifies inequality. This ratio is even worse for several states when individual states of India are considered.

India ranks 132 out of 199 countries in 2021/2022 Human Development Index. Human Development - a measure of a nation’s health, education, and average income. India’s Human Development Index (HDI) value for 2022 is 0.633. HDI measures progress on 3 key dimensions of human development - a long and healthy life, access to education, and

a decent standard of living. It is calculated using 4 indicators – life expectancy at birth, mean years of schooling, expected years of schooling, and the Gross National Income (GNI) per capita.

This HDI value rose between 1980 and 2020 from 0.362 to 0.645, an overall increase of 68.1% or average annual growth of about 1.54% (United Nations Development Programme., 2022). However, female participation remains very low in the labour market at 27.7 %, compared to 57.1 % for men (United Nations Development Programme., 2022). It is interesting to note per the UNDO 2022 report that the Labor Force Participation Rate (LFPR) for women in rural India is 27.7% as against 18.6% in urban India. As the Indian economy is opening, huge employment opportunities are being created for its citizens, thus making it imperative to explore the reasons for such inequality and assess possible ways to mitigate the issues involved. Hence, the study's purpose is to establish what is creating the gender gap in the manufacturing workforce, determine its outcomes and suggest best practices for attaining gender parity in that workforce to leverage the benefits it would provide.

### **2.15 What Have Women Done to Get their Share of the Pie?**

The book “The No Club: Putting a stop to women’s Dead-End Work” (Babcock and Peyser, 2022), reveals how their subsequent groundbreaking research uncovered that woman everywhere are unfairly burdened with “non-promotable work,” a tremendous problem we can—and must—solve. All organizations have work that no one wants to do: planning the office party, screening interns, attending to that time-consuming client, or

simply helping others with their work. From office housework to important assignments that inevitably go unrewarded, a woman, most often, takes on these tasks. The authors document that women are disproportionately asked and expected to do this kind of work. This imbalance leaves women overcommitted and underutilized as companies forfeit revenue, productivity, and top talent. walks you through how to make small, yet significant, changes to your own workload and empowers women to make savvy decisions about the work they take on. At the same time, the authors illuminate how lasting change calls for organizations to reassess how they assign and reward work to level the playing field.

In the paper titled *Women Rising: The Unseen Barrier*, (Ibarra et al., 2013) says that gender bias is absent from these women's work lives. Second-generation bias does not require an intent to exclude; nor does it necessarily produce direct, immediate harm to any individual. Rather, it creates a context— akin to “something in the water”—in which women fail to thrive or reach their full potential. Feeling less connected to one's male colleagues, being advised to take a staff role to accommodate family, finding oneself excluded from consideration for key positions. The author further alludes to the Women's lack of access to networks and sponsors which she needs to constantly work on. Women cite as a major barrier to advancement their lack of access to influential colleagues. Moreover, the connections women do have tend to be less efficacious.

We find that when women recognize the subtle and pervasive effects of second-generation bias, they feel empowered, not victimized, because they can take action to counter those effects. They can put themselves forward for leadership roles when they are qualified but

have been overlooked. They can seek out sponsors and others to support and develop them in those roles. They can negotiate for work arrangements that fit both their lives and their organizations' performance requirements. Such understanding makes it easier for women to "lean in."

In an interview with members of Hillary Clinton's press corps, a veteran reporter noted, "The story is never what she says, as much as what we want it to be. The story is always how she looked when she said it." Clinton says she doesn't fight it anymore; she just focuses on getting the job done.

## **2.16 Gender Diversification, Organizational Performance and Organization Design**

Women's economic opportunity (Women's Economic Opportunity Index, WEOI) is defined "as a set of laws, regulations, practices, customs and attitudes that allow women to participate in the workforce under conditions roughly equal to those of men" (Economist Intelligence Unit, 2012). However, there is a drastic difference between the economic opportunities available in developing countries when compared to those in developed countries (Ritter-Hayashi et al., 2019).

According to (Ritter-Hayashi et al., 2019), there are four benefits of gender diversity for innovation in organizations.

The first benefit as stated in this research is that different attributes, perspectives and knowledge in gender diversified organizations, for positive innovation when men and

women share their experience and career trajectories in similar positions but with different viewpoints in accordance with their genders as men and women.

The second benefit of gender diversity can be identified as the increased and diversified knowledge pool outside the organization that gender diversity provides access to and contributes to, and the contacts made with different networks, through which the organization can sustain a rich pool of external information. Further, gender diversification helps to identify diverse customer needs and market trends which foster an organization to develop new strategies in line with customers' expectations.

The third one is cognitive abilities, and it is believed that the genders are different as far as their cognitive abilities are concerned. Cognitive conflict and expression of viewpoints are inherently different in men and women when they face unexpected situations or complex problems at work.

Fourthly, women are more comfortable in an open and flexible work atmosphere that includes an open-door policy focusing on interpersonal relationships to share ideas and knowledge than men, and this will benefit the interactive nature of the organization. This open-door policy is more apparent in the leadership styles of female managers than in their male counterparts, and this reveals the inner transformational leadership style of women.

### **2.17 Equalities Final Frontier**

All that has been said and done has not narrowed the gender wage gap. (Goldin, 2006), in her paper "A Grand Gender convergence: Its last chapter", identified narrowing the gap as one of the final challenges for workplace gender equality in the United States and other

advanced economies. That is where Goldin's research broke new ground and moved the discussion beyond explanations built on sexism. She showed that most of the wage gap the high cost of "temporal flexibility"- or women working fewer or more flexible hours to allow them to raise a family. Consequently, narrowing the gap will depend on restructuring jobs to incorporate greater flexibility for all workers, thus reducing the costs associated with flexibility. While such a fundamental change may sound like a tall order, organizations need to do this because it will benefit men and women alike and impact organizations positively.

"If it's only the women who are putting pressure on firms to provide more flexible jobs in a less expensive manner, not that much is going to happen," Goldin says. Melinda Gates in her autobiography says If you want to lift a society up, you need to stop keeping women down.

There are multiple organizations that have campaigned for equal pay, however looking at literature, it appears there is much to be desired.

## **2.18 Summary of Literature Review**

This literature demonstrates that in all societies, whether industrialized or developing, the division of labour along gender lines, both at home and at work, places women on an equal footing vis a vis man. Despite over two decades of awareness, evidence of gender inequality remains prevalent throughout the world. By and large women's status is shaped by society's cultural heritage, economic development and social institutions. Thus, the

gender division of labour permeates across all facets of economic and social life and affects one's self worth, status and power in society. The chapters the above literature review looked at these issues, examining women's status for different industry, different countries and regions of the world, both developing and industrialized, from an economic perspective in which the issues social political dimensions are recognized. The topics include the labour force participation of women, occupational segregation, earning inequality, non-market environment, and cultural constraints on women.

While most large organizations today have Equal Employment Opportunity Policies in place. Equal employment opportunity (EEO) refers to practices that are designed so that all applicants and employees are treated similarly without regard to protected characteristics such as race and sex.

However, there often exists a gap between implemented and intended policies, leading to reduced organizational performance (-Ul-Ain et al., n.d.)(Wagenvoort, 2014).

The difference between the intended and implemented HR system is due to the different HR stakeholders and multiple actors like HR expert, Line manager and worker (Bondarouk et al., 2016). This difference leads to the certain perception of its employees that has an effect on the performance of the company. The other observation is organizations not changing and adapting its policies to the changing workforce landscape (Wagenvoort, 2014).

On another paradigm, there large organizations have a D&I (Diversity and Inclusion) unit to sensitize, promote, bring in policies and instill a discrimination free eco system of Diversity and Inclusion across the board. Being able to measure inclusion is therefore key in helping enterprises identify the actions they can take to further improve and reap the benefits of D&I. Yet only a third of survey respondents say that progress on D&I is measured where they work and used to identify future priorities and actions (ILO, 2022).

The IT industry in India is relatively new, about 3 decades old and is slated to grow at a very fast pace. As mentioned earlier by (Ramanujam, 2022) in a NASSCOM conference, the IT industry is slated to be \$220 bn in the next decade and the current talent gap is between demand and supply is 21%. Employing women is a low hanging fruit to fulfill this gap. This paper strives to research on the intrinsic and extrinsic factors that leads to a gender gap in the context of the IT Industry in India.

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1 Research Methodology**

The key focus of this study is to determine if there is a gender gap in the IT industry in India and if yes, what needs to do done to minimize it. This descriptive research will be conducted to gain better understanding of any biases and reasons for existence of those biases. Once the root cause of such bias(es) is determined, it will possibly allow to find appropriate solution(s) to those concerns

This chapter presents the research philosophy, method and procedures to be used in the study, which consists of the following sections: research approach & strategy, study population and sampling, data collection methods & instruments, data analysis methods, research study period, trustworthiness and ethical considerations.

The most often used research methodology are Observation, surveys, interviews, focus groups, experiments, secondary data analysis and mixed methods. For my research, I used mixed methods consisting of surveys, secondary data analysis, observations, and some informal interviews.

Qualitative and Quantitative data approach was used for this research. Through this research, I was trying to find measurable data, I was also wanting to find attitudes and behaviors. To get these insights, I had open-ended questions in the survey that was administered to the participants. This thesis is descriptive research in the sense that it

incorporates surveys and other fact-finding methods. This research is a factual reporting of the data collected and the researcher cannot control the involved variables and can only report factual data as it is taking place. Descriptive research approach was used to be able to decipher trends and inputs from the survey results. This paper in some sense also comes under the realm of applied research because the thesis aims at studying the current trend in the given scope and was undertaken to uncover potential solutions to the issues.

### **3.2 Research Approach & Strategy**

A qualitative approach is a naturalistic, interpretative approach concerned with understanding the meanings which people attach to phenomena (actions, decisions, beliefs, values, etc.) within their social worlds (Ritchie and Lewis, 2003). The choice to deploy the descriptive approach was since this research will attempt to collect information from or about people to describe, compare, or explain their feelings, knowledge, values and behaviors. (Doyle et al., 2020). To explore the research questions, Mixed Methods Methodology will be adopted. Mixed-methods studies where qualitative data can explain quantitative findings in explanatory studies, be used for questionnaire development in exploratory studies and validate and corroborate findings in convergent studies. There has also been an increase in the use of qualitative descriptive research embedded in large-scale studies, which can serve a number of purposes including identifying participants' perceptions of why an intervention worked or, just as importantly, did not work and how the intervention might be improved (Doyle et al., 2020). Using qualitative descriptive research in this manner can help to make the findings of intervention studies more

meaningful and will help achieve a balance between generality and particularity, and quantitative and qualitative research.

### **3.3 Study Population and Sampling**

The population of interest for this study will be employees (men and women) and employers (policy makers, HR) of Indian IT industry. The approach taken was probability sampling (Ader and Mellenbergh, 1999), as it allows for random selection of participants which is a representation of the sample audience. This helps eliminate the researchers bias allowing generalization of findings that can be applied to a larger population and considered valid (Chambers and Dunstan, 1986).

For this research, I used stratified sampling. Stratified random sampling is a process of dividing respondents into distinct but predefined parameters. In this method, respondents do not overlap but collectively represent the entire population. My target audience for the survey was men and women in the Indian IT industry.

For this study, two types of sampling techniques were adopted. Deliberate, critical, or judgmental sampling: In this type of sampling the researcher judges and develops his sample on the nature of the study and the understanding of his target audience. Only people who meet the research criteria and the final objective are selected.

Snowball Sampling: As a snowball speeds up, it accumulates more snow around itself. Similarly, with snowball sampling, respondents are tasked with providing references or recruiting samples for the study once their participation ends.(Goodman, 1961) .I leveraged

my initial connects for the survey and solicited their support socializing with their network for more respondents.

The sample size comes to approx. 385 samples, assuming a 95% confidence level, .5 standard deviation and a margin of error (confidence level) of +/- 5% (Qualtrics, n.d.).

The sample chosen for this study was men and women primarily in the Indian IT sector, with a few from other sectors, with experience from 2 years to 21+years. I got my initial survey respondents from my connects in the IT industry and got a wider penetration and 450+respondents using the snowballing technique. I selected my respondents based on the industry they were working in closed in on those working in the Indian IT industry. I also ensure I had an even distribution of men and women in my survey.

Considering the size and scope of research study, the mixed sampling methods will be used. The recruitment of participants will be through convenience sampling and through referrals (snowball sampling). The survey results will be recorded and will be shared with the respondent if asked. After surveys are concluded, abductive approach will be applied to derive the conclusions and valuable insights.

The survey was framed on a word document as a draft. Once approved by the mentor, it was uploaded on Google forms. Prior to the survey being rolled out, I tested out the form with a sample audience to check understanding, understanding of the context of the thesis, to check if the questions were logical and captured all facets and to see the outcomes of completed survey in data form. The feedback from this exercise was incorporated to further finetune the survey. Once I had reasonable belief that the questionnaire was good, it was

rolled out to a larger audience. The survey was open for 12 weeks, from September 2022 to Nov 2022. The survey was closed when I got 447 responses as against the initial; sampling target of 385 respondents.

The respondents had the flexibility to take the survey at their convenient time. Not having to schedule a time and not having to travel were described as advantages of the self-sampling. The other feedback was the survey being simple and broken into sections that made the objective very clear and transparent.

### **3.4 Data Collection Methods and Instruments**

The preferred data collection method was standardized, structured survey and documentation. The surveys had structured questions, open-ended, closed-ended and Likert-type questions, and will provide objective quantifiable data including participant's demographic data, participant's affiliated/ employer organization(s) data without revealing the organization name, questions on the participants take on approach to gender diversity in their organization and some questions introspecting on their own initiative to counter gender bias. The survey instrument to be used in this research study will be an updated version of a survey instrument previously used in several studies by (ETUCE, 2008; United Nations, 2014; Walt, 2019;) Jagiellonian University in Krakow and University of Oslo, 2015)

The survey was distributed via various electronic means to a random sample of employees. The survey consisted of 6 sections comprising questions on scale, Likert scale and open-

ended questions. The questionnaire has open ended and closed ended questions which was best suited for this kind of research (Krosnick and Presser, 2009).

Enough time was allocated in the entire research methodology for data collection. Data was collected over a period of 4 months from July 2022 to Oct 2022. This allowed for substantial follow up and rigor to collect data.

The documentation that will be used during research study survey forms and profiles of participants was sourced from various sources. The open-ended questions will allow not only the study participants to allow responses to be fully probed and explored for the researcher to draw conclusions.

### **3.5 Validity and Reliability**

The content and structure of the survey questionnaire was validated by the research supervisor. Additionally, the survey questionnaire was also shared with 5 people to check if the questions reflect the topic being studied. Reliability test was conducted by doing a pilot of the survey with 8 participants. This was done to ascertain a) the participants understanding of the questions and them being relevant; b) to ensure data is captured in the format that is required for this study.

### **3.6 Data Analysis Methods**

The data collected from the surveys will be transferred to Microsoft Excel for statistical analysis. The data collected from open ended questions will be transcribed either manually

or through suitable transcribing software and imputed in Microsoft Excel spreadsheets for further analysis. Then, thematic analysis using abductive approach will be used to identify, analyze, and report themes within the data. The content analysis will be used to examine the keyword frequencies, common phrases and related keywords which will be used to create categories and identify recurrent themes. It will then be used to derive the conclusions and valuable insights.

From a point of which statistical tool to deploy, I had deliberated on a few. A one-way ANOVA analysis is used to compare means of more than two groups, while a chi-square test is used to explore the relationship between two categorical variables. The closest competitor to chi square test is Fishers Exact test, however I chose chi square test because I had a large data size with arbitrary dimension, unlike a 2\*2 matrix which is used in Fisher's test (Döring Matthias, 2018).

There are three main types of Chi-square tests, tests of goodness of fit, the test of independence, and the test for homogeneity. All three tests rely on the same formula to compute a test statistic.

According to (University of Utah, n.d.), a chi-squared test (also chi-square or  $\chi^2$  test) is a statistical hypothesis test used in the analysis of contingency tables when the sample sizes are large. In simpler terms, this test is primarily used to examine whether two categorical variables (two dimensions of the contingency table) are independent in influencing the test statistic. The primary use of the chi-square test is to examine whether two variables are independent or not. What does it mean to be independent, in this sense?

It means that the two factors are not related. Typically, in social science research, we're interested in finding factors that are dependent upon each other—education and income, occupation and prestige, age and voting behavior. By ruling out independence of the two variables, the chi-square can be used to assess whether two variables are, in fact, dependent or not. More generally, we say that one variable is "not correlated with" or "independent of" the other if an increase in one variable is not associated with an increase in the another. If two variables are correlated, their values tend to move together, either in the same or in the opposite direction. Chi-square examines a special kind of correlation: that between two nominal variables. It compares the observed frequencies of the two variables in a contingency table (a table showing the frequencies of different combinations of the two variables) to the expected frequencies if the two variables were independent. It calculates a chi-square statistic, which is used to determine the probability that the observed frequencies are due to chance alone. If the probability is low (usually less than 0.05), then we can conclude that there is a significant association between the two variables. In plain English, it is a test to see if two categorical variables are related or not.

The test is valid when the test statistic is chi-squared distributed under the null hypothesis. In the standard applications of this test, the observations are classified into mutually exclusive classes. The purpose of the test is to evaluate how likely the observed frequencies would be assuming the null hypothesis is true.

Further the researcher asked probing questions like 'What is going on here?' and 'What is this about?' while reading answers by respondents. The researchers identified patterns, form each of these sections and correlated them. Respondents' answers to open ended

questions were noted and reflected during the data analysis were taken into consideration in the analysis. emerging themes were interpreted through a ‘clinical lens’, based on researcher’s background and the objective type free text responses.

### 3.7 Research Study Period and Activity Schedule

The entire research study from concept paper to thesis writing was over a period of 14 months. The data collection was over a period of 4 months that allowed the researcher to be able to gather enough data as per research plan. The table below, shows the research activities and the planned duration to complete those.

*Table 1- Research activities*

Research Activities	Duration
Questionnaire Finalization	1 month
Sample collection and consent	2 weeks
Data collection	3 months
Analysis and Interpretation	6 weeks
Thesis Writing	2 months
Presentation	2 weeks

### 3.8 Ethical Considerations

Prior to commencing the research, all necessary pre steps were completed ie submission of the concept paper, literature reviewed research proposal. Each of these steps were approved

by researcher's mentor. The researcher further researched to ensure this topic has not been studied by other scholars. The researcher duly informed the participants on the nature of the study and that the data will be collected will be used for academic purposes only. In order to maintain ethical practices within this study, the participation will be kept completely voluntary, and respondents can discontinue participation at any time. Neither a participation will lead to incentive, nor a discontinuation of participation will lead to penalty. The anonymity and confidentiality of respondents for survey purposes will be protected at all times.

## CHAPTER 4

### RESULTS

#### 4.1 Empirical Results

##### Descriptive statistics

To emphasize again, the definition of IT sector for the purpose of this study was IT (hardware, software and services), IT enabled services and consulting firms. This survey was open to men and women across corporates in the IT sector in India. For this study, a total of 453 respondents ( $N=453$ ), had taken the survey of which 86.2% were from the target industry of this study, ie IT (hardware, software and services), IT enabled services and consulting firms in India.

The survey participation had 48.6% women and 51.4% men.

#### 4.2 Research Questions, Findings and Discussion

*The survey had six sections.*

1. Participant profile
2. Your Organization details- The objective of this section is to understand the size and nature of the participants organization
3. Gender Equality in my organization- This section aims to understand your perspective on gender equality in the participants organization
4. Self-Evaluation- This section encourages the participant to look inside and introspect

5. Gender gap and economy (with reference to business and organizations)- This section aims to get a perspective from the respondents on impact gender inequality and impact on business.
6. My actions as a manager- This section asks hard hitting questions to the respondents on their actions as a manager

### **Section 1 and 2: Participant profile and Organization details**

From a Gender perspective, mentioned above, we had almost an equal participation of men and women, as was desired for this study to get both perspectives. The participation was 48.6% women and 51.4% men.

The second variable that was considered was education. There is enough study and literature published that correlates and drives home the point that education significantly (Alesina Paola Giuliano Nathan Nunn et al., 2013; Dollar and Gatti, 1999b; Rees and Riezman, 2012)

Education was added as a key variable to ensure we can get information from our survey. In our respondent distribution, 60% had a master's degree, 29.4% had bachelors, 2.4% had a doctorate degree and the remaining had a high school degree. 63% of the women respondents had educational qualification of masters and above.

The third critical variable is Total Work Experience. Existing research has provided enough evidence on gender gap getting narrower in leadership levels and sensitivity to gender related issues and differences getting prominence with increased work experience.

(Acheson and Collins, 2021; Francis Jayne Osgood Jacinta Dalgety Louise Archer, n.d.; “Gender equality in recruitment and career progression | European Institute for Gender Equality,” n.d.; “Gender equality in the workplace: going beyond women on the board | S&P Global,” n.d.; Ortega-Sánchez et al., 2022; Rosa and Clavero, 2022).

The idea of incorporating this variable was to see the impact work experience has on gender gap. Of the respondents, 36% had greater than 21 years of experience, 34.2% had 16-20 years of experience, 15.9% had 11-15 years of experience and the rest less than 10 years.

The fourth variable taken into consideration was role. The idea of incorporating that variable was to identify differences in perspective as a team member, team leader and as an employee in the HR function.

In our respondents, 62% were managers in decision making roles, 21.6% were team members, and 6% were in Human Resources.

*Table 2- Data Description***Data description**

Characteristic	FemaleN = 219 (49%)	MaleN = 228 (51%)
<b>Education</b>		
Bachelors	61 (28%)	71 (31%)
Doctorate	6 (2.7%)	4 (1.8%)
Masters	132 (60%)	136 (60%)
Undergraduate	20 (9.1%)	17 (7.5%)
<b>Work Experience</b>		
<= 5 years	15 (6.8%)	11 (4.8%)
> 21 years	69 (32%)	93 (41%)
11-15 years	36 (16%)	34 (15%)
16-20 years	75 (34%)	77 (34%)
6-10 years	24 (11%)	13 (5.7%)
<b>Current Role</b>		
HR	17 (7.8%)	9 (3.9%)
Manager (in this context, a role where you are a decision maker)	122 (56%)	155 (68%)
Others	30 (14%)	15 (6.6%)
Team member	1 (0.5%)	0 (0%)
Team member (in this context, part of a team, tenure/seniority/role within the team doesn't matter)	49 (22%)	49 (21%)
<b>Organization Sector</b>		
All of the above	107 (49%)	96 (42%)
Consulting	22 (10%)	18 (7.9%)
IT	24 (11%)	35 (15%)
IT Enabled Services	19 (8.7%)	27 (12%)
None of the above	30 (14%)	32 (14%)
Two of the above	17 (7.8%)	20 (8.8%)
<b>Size of the organization</b>		
<=1000 employees	26 (12%)	31 (14%)
>100,001 employees	134 (61%)	133 (58%)
10,001- 50,000 employees	19 (8.7%)	21 (9.2%)
1001-5000 employees	20 (9.1%)	23 (10%)
50,001- 100,000 employees	9 (4.1%)	11 (4.8%)
5001-10,000 employees	11 (5.0%)	9 (3.9%)
<b>Gender Ratio of the Organization</b>		
<10%	4 (1.8%)	15 (6.6%)
>41%	42 (19%)	39 (17%)
11-20%	15 (6.8%)	17 (7.5%)
21-30%	29 (13%)	34 (15%)
31-40%	89 (41%)	104 (46%)
I don't know	40 (18%)	19 (8.3%)

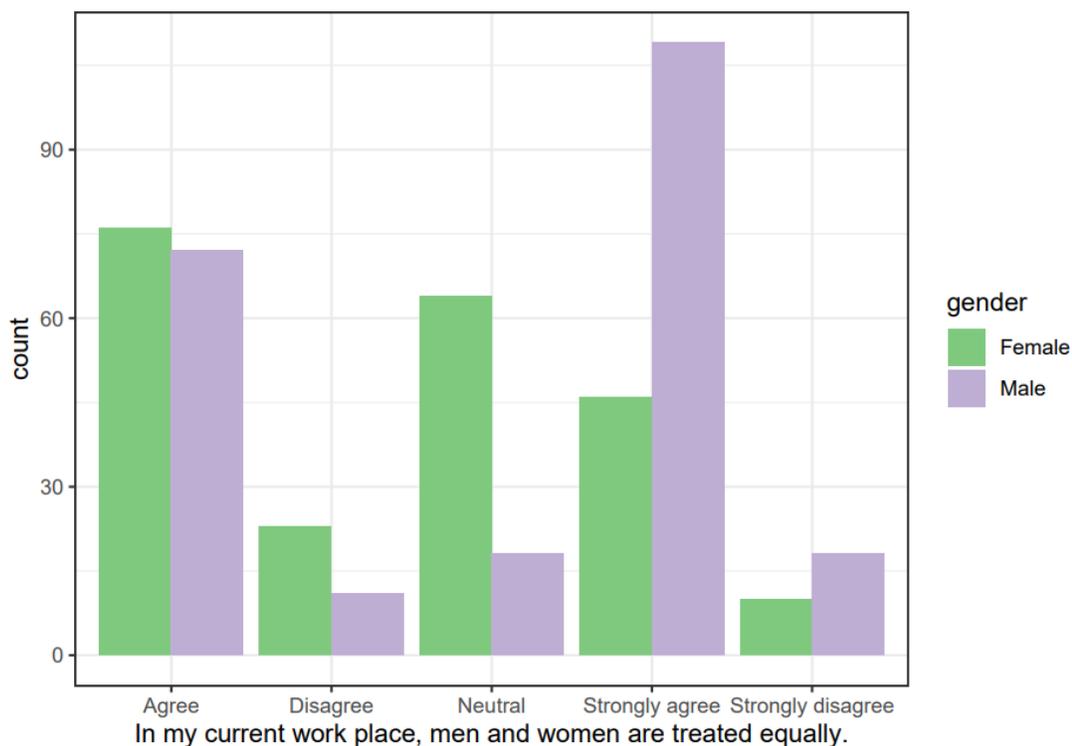
*Source: Authors' research*

### **Section 3: Gender Equality in my Organization – This section aims to get the respondents perspective on gender equality in their organization**

At the outset, we were wanting to find out if the respondent thought men and women in their organization were treated equally.

1. There is a strong relationship between the participants gender and their experience in responding to the question “In my organization man and women are treated equally”.

*Table 3-In my organization man and women are treated equally*



*Source: Authors' research*

## Number of cases in table: 447

## Number of factors: 2

## Test for independence of all factors:

## Chisq = 57.88, df = 4, p-value = 8.076e-12

Inference- Since the p-value is less than 0.05, we reject the null hypothesis for the Chi-square test of independence. This means that there is a significant relationship between the

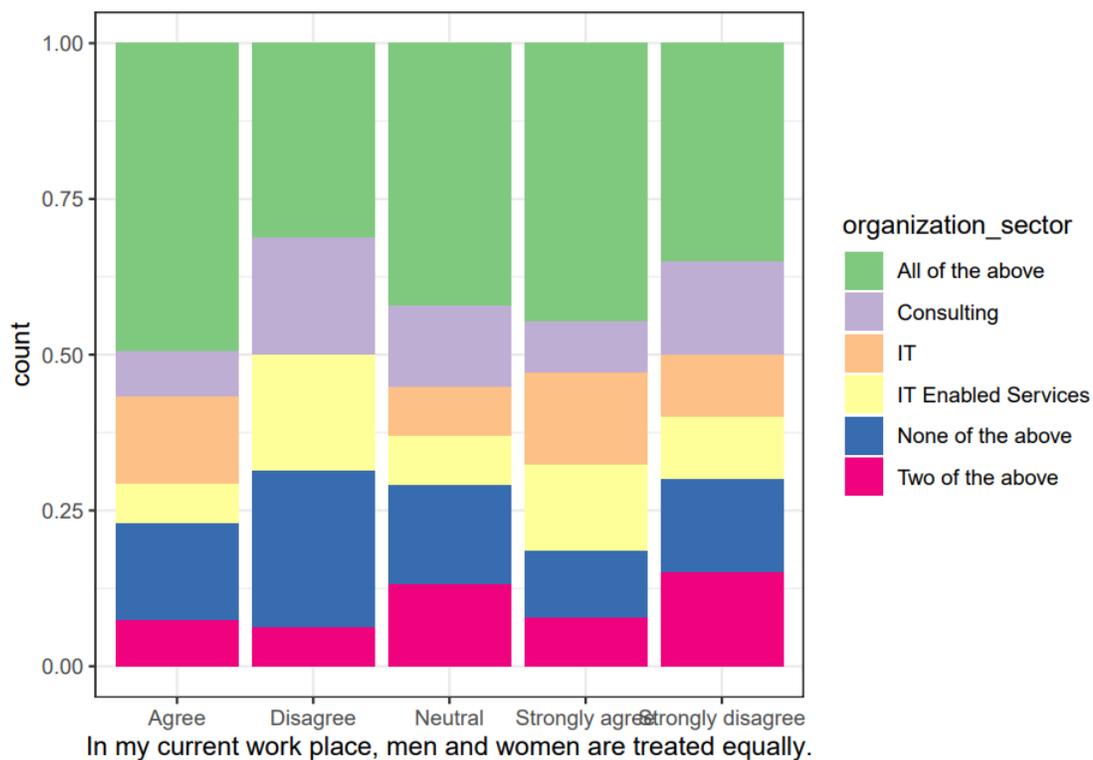
gender and their perception of equal treatment at their workplace. As seen in the table above, on 47 of the 219 women respondents believe that men and women are treated equally. That translates to a meager 21% where as 47% of the men believe the treatment is the same. Additionally, 30% of women have chosen neutral as answer as against 8% men. Only 27% from the HR respondents strongly agree to equality in treatment of men and women.

Respondents might choose either a neutral or unsure response because they do not want to exert the cognitive effort to form an opinion. (Krosnick and Presser, 2009) termed this satisficing because the respondent picks the first acceptable option rather than trying to decide on the most appropriate option. It has been observed that respondents who are not willing to answer a particular question put a check on Neutral. It is just like an escape for those respondents.

Of the respondents who disagreed and strongly disagreed, 84% had greater than 10 years' experience and 53% were women.

The Table below shows that there was no significant difference in the type of organization and official policies to support gender equality.

*Table 4-In my current work place, men and women are treated equally*



*Source: Authors' research*

## Number of cases in table: 447

## Number of factors: 2

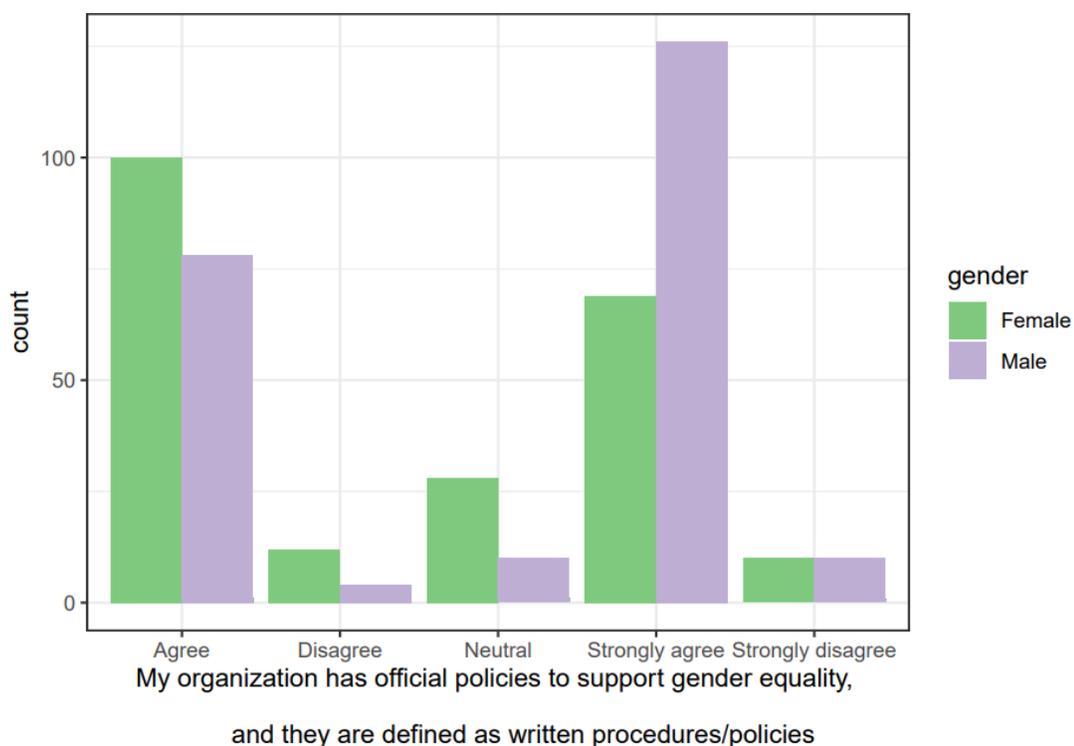
## Test for independence of all factors:

## Chisq = 22.011, df = 20, p-value = 0.3399

## Chi-squared approximation may be incorrect

2. We further delved to find out if organizations have policies and well-defined procedures to support gender equality. The findings were interesting.

*Table 5-My Organization has official policies to support gender equality and they are defined and well written policies*



*Source: Authors' research*

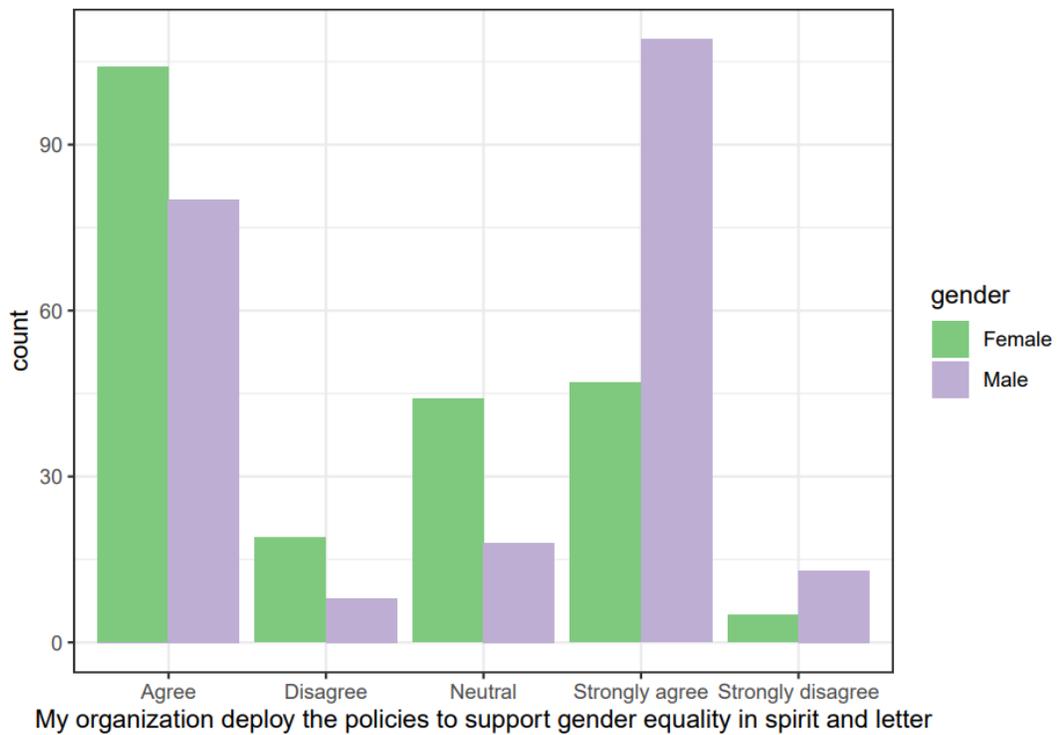
According to the table above, a significant number of more men compared to women “strongly” believe that their organization has official policies to support gender equality. 54% of respondents who are men feel there are strong written policies, whereas only 32% of women experience that. Interestingly, only 31% of the HR respondents strongly agree that there are written procedures to support gender equality.

8% of the respondents disagreed/strongly disagreed. 83% disagreement out of total 8% has come from employees with >10 years tenure in corporate work culture out of which 60% are women employees.

3. Having established some facts on existence of policies and procedures in organizations, we further wanted to delve on deployment of those policies and procedures in spirit and letter.

The findings in table 5

*Table 6-My Organization deploy the policies to support gender equality in spirit and letter*



*Source: Authors' research*

## Number of cases in table: 447

## Number of factors: 2

## Test for independence of all factors:

##  $\text{Chisq} = 46.55$ ,  $\text{df} = 4$ ,  $\text{p-value} = 1.893\text{e-}09$

There is a significant relationship between the participants' gender and their response to "My organization deploy the policies to support gender equality in spirit and letter". 47% men believe that policies are implemented in spirit and letter, whereas only 21% women feel so. On the other hand, 6% of men said they strongly disagree to policies being implemented in spirit and letter whereas that was 2% for women. 38% of HR respondent answered this question with a neutral, disagree and strongly disagree.

4. There is enough literature and read available on correlation between a women's career, marriage, and arrival of a baby (Desai and Waite, 1991; Eads, 1915; Harkness, 2019; Knop Brian, 2019; Parker Kim, 2015)

A survey by (Linkedin, 2022a), shows that majority of women (64%) have experienced a career break at some point in their career with top reasons including parental leave (22%), medical leave (17%) and mental health reasons (14%). 70% of career break-related searches and 67% of career break-related posts globally came from female members. 41% of women say they found it difficult to tell their employer they were taking a career break to have children and 60% of women say they were nervous about returning to work after taking a career break to have children.

Companies in the Information Technology space is burgeoning claim to support women during their key life transitions like marriage, childbirth etc. These companies also have the tools and methods available to enable remote working and flexible working.

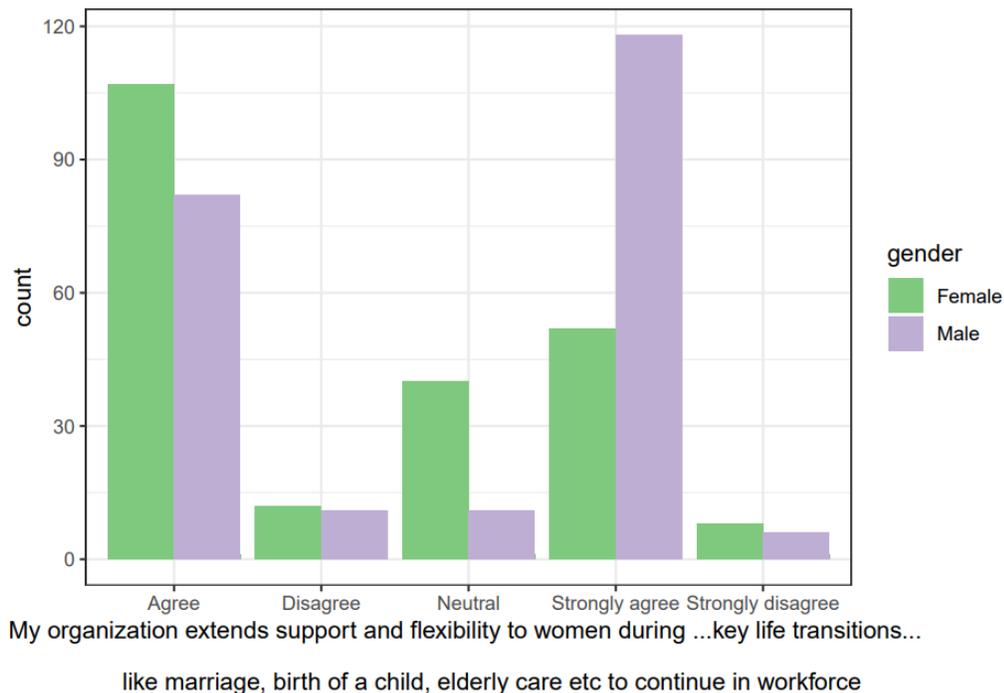
We wanted to find out via this research if the companies do support women. The responses were astounding.

50% of men feel their organization extends support and flexibility to women during ...key life transitions... like marriage, birth of a child, elderly care etc to continue in workforce, however only 24% of women feel that way

On the contrary, 49% women agree that organization extends support and flexibility to women during ...key life transitions... like marriage, birth of a child, elderly care etc to continue in workforce.

Table 6 shows our respondents answers to the question if they feel their organizations provide support and flexibility during key life transitions, however, to make it effective and impactful, there is a huge calling to do more. 8% of the respondents disagreed/strongly disagreed. 61% of them were women.

***Table 7-My organization extends support and flexibility to women during key life transitions like marriage, birth of a child, elderly care etc to continue in workforce***



*Source: Authors' research*

## Number of cases in table: 447

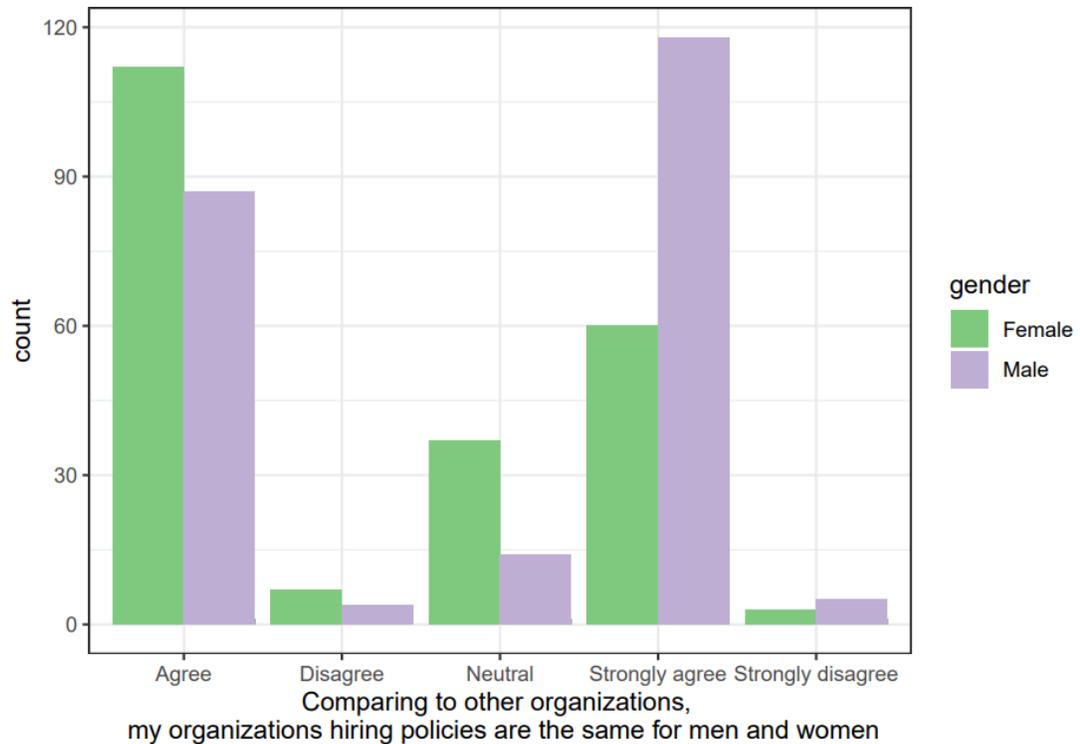
## Number of factors: 2

## Test for independence of all factors:

## Chisq = 45.59, df = 4, p-value = 3.002e-09

5. From support related questions, I delved into hiring policies. I wanted to find if the hiring policies are the same for men and women. Table 7 shows the result. 50% men strongly agree that the hiring policies are the same whereas only 27% women strongly agree. 17% women marked as neutral as against 6% men. 51% women agree that the hiring policies are the same across men and women as against 37% men. 19% HR respondents allude to the hiring policies not being the same.

*Table 8-Comparing to other organizations, my organizations hiring policies are the same for men and women*



*Source: Authors' research*

## Number of cases in table: 447

## Number of factors: 2

## Test for independence of all factors:

## Chisq = 33.56, df = 4, p-value = 9.16e-07

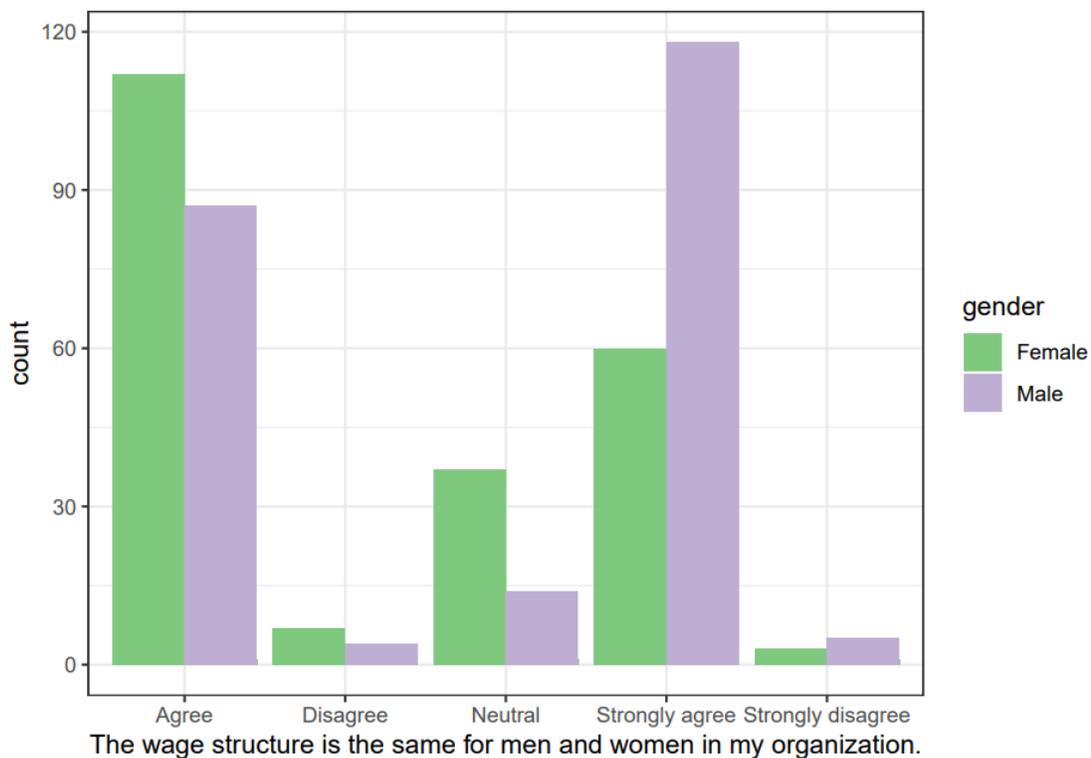
This data goes to show that while in principle, hiring policies are the same, the perceived notion is that the hiring policies is not the same. In an earlier study by (-Ul-Ain et al., n.d.) , this is captured as actual HR and perceived HR. Actual HR is HR policies as implemented by line managers, perceived HR is HR practices as perceived by employees. This comes

from the higher percentage of women staying neutral and not strongly agreeing to this question.

6. From Hiring Practices, I wanted to find out if the wage structure was the same for men and women assuming all other parameters are the same- education, experience, technical know-how etc). The results show that 52% men believe the wages are the same, whereas 21% women believe wages to be the same. Moreover 22% women have chosen to be neutral to this question against 9% men. While the number of respondents who agree are 39% women and 34% men, the high number of neutral and not strongly agree respondents amongst women show there is a room to look at this metric. 8% respondents have disagreed on “Similar wage structure for Men & Women” out of which 85% are Women. As per survey data, Difference in wage structure mostly comes after 3 years of work experience within the organization.

Earlier studies in the field of gender bias in hiring indicate that there is a major under representation of women in science, technology, engineering and mathematics (STEM). Men are employed twice as much than women in STEM. Gender disparities in transitions to STEM jobs are common in computer science and engineering even when women have degrees in these fields (Bird and Rhoton, 2021), (Landivar, 2013), (Schwerter and Ilg, 2019). (Friedmann and Efrat-Treister, 2022), in their research found that there was a perceived bias in hiring women specifically pertaining to the ability to work long hours rather than on problem solving capability. My study showed similar trends. Table 8 gives a representation on what our respondents had to say.

*Table 9-The wage structure is the same for men and women in my organization*



*Source: Authors' research*

## Number of cases in table: 453

## Number of factors: 2

## Test for independence of all factors:

## Chisq = 33.56, df = 4, p-value = 9.16e-07

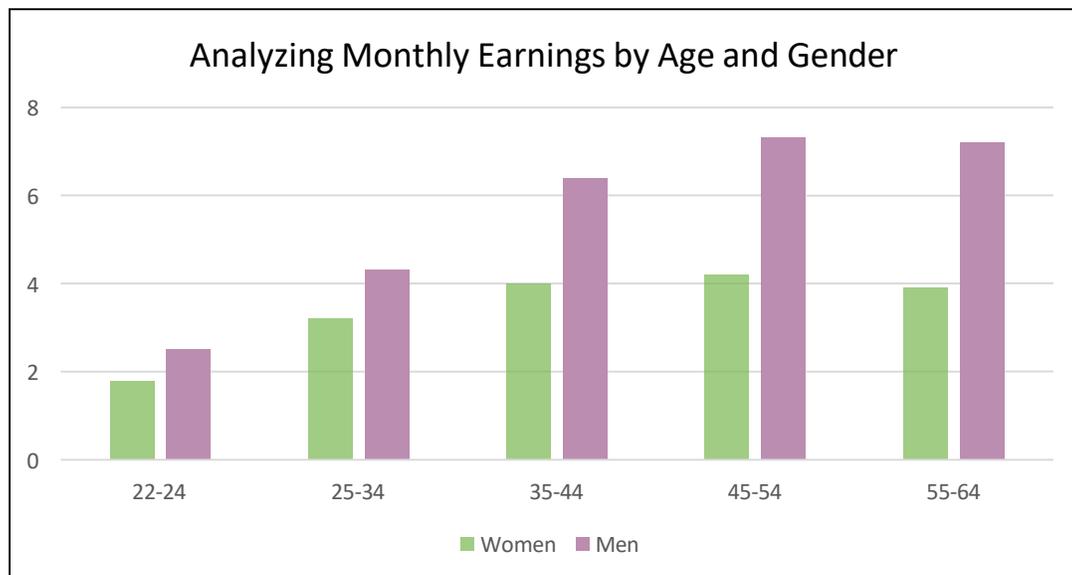
In our earlier write up in this study, we have cited studies showing existence of gender pay gap (United Nations, 2022b); (EUROSTAT, 2022) ; (OECD, 2022); (AAUW, 2020) (Barroso and Brown, 2021).

The data obtained from this survey as a part of this research is no different. The respondents also opine that the wage there is variance in wage structure.

7. Having established that the wage structure is not the same, I wanted to find out where does it start from, where/when does the difference start building up. 39% women responded saying the gap builds up from anywhere after 3-5 years of experience. The data also shows that the differences maximize at mid leadership level approx. after 3 years of experience.

The below data obtained from US Census Bureau reflects the same.

**Figure 13-Analyzing Monthly Earnings by Age and Gender**

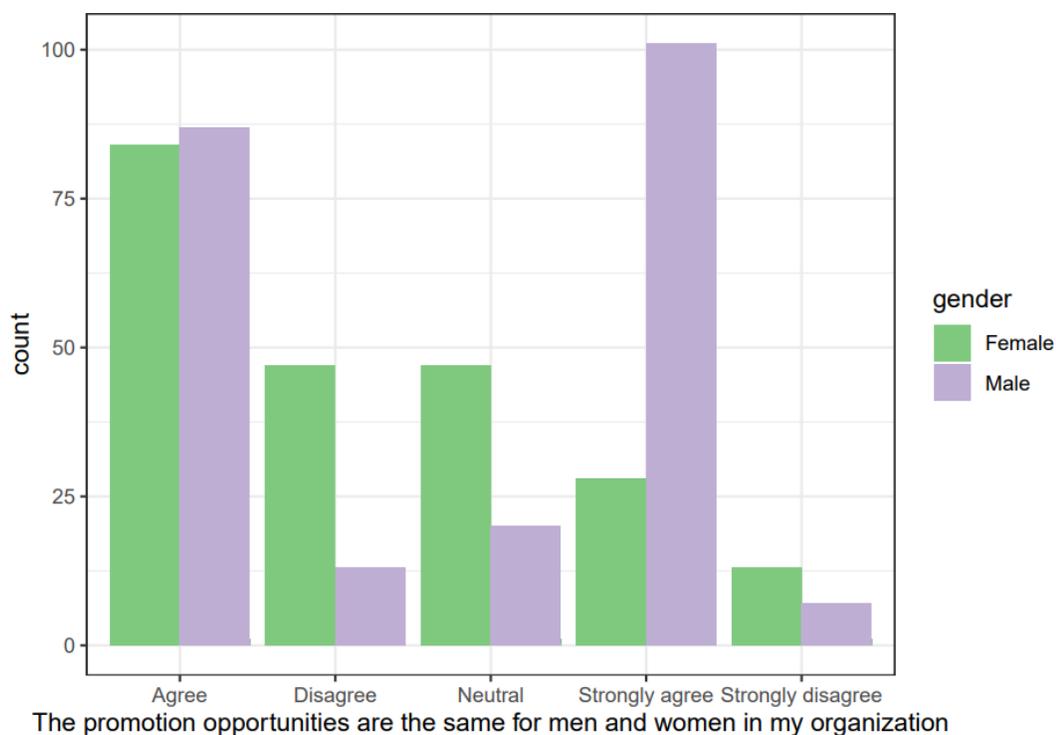


*Source: US Census Bureau(<https://www.census.gov/library/stories/2022/01/gender-pay-gap-widens-as-women-age.html>)*

8. The next question in the survey was on career advancement. There are existing studies on this topic (Ahyia et al., 2017; Chen et al., 2010; “OECD Employment Outlook 2022,” 2022). In this research I wanted to further delve into career advancement in the Indian IT industry. The question asked in the survey was “the promotion opportunities are the same for men and women in my organization”. 27% women’s responses range from disagree to

strongly disagree. The data showed a huge variation between men and women on strongly agree. 13% women strongly agreed as against 43% men who strongly agreed. In addition, there was 21% women who were neutral. Again, neutral respondents are the ones who shy away from providing a conclusive answer. 10% respondents have disagreed on “Equal promotion opportunities for Men & Women” out of which 75% are Women respondents. More than 60% of total 10% disagreement have come from highly qualified, tenured participants as well as they are on decision making roles.

*Table 10-The promotion opportunities are the same for men and women in my organization*



*Source: Authors' research*

## Number of cases in table: 447

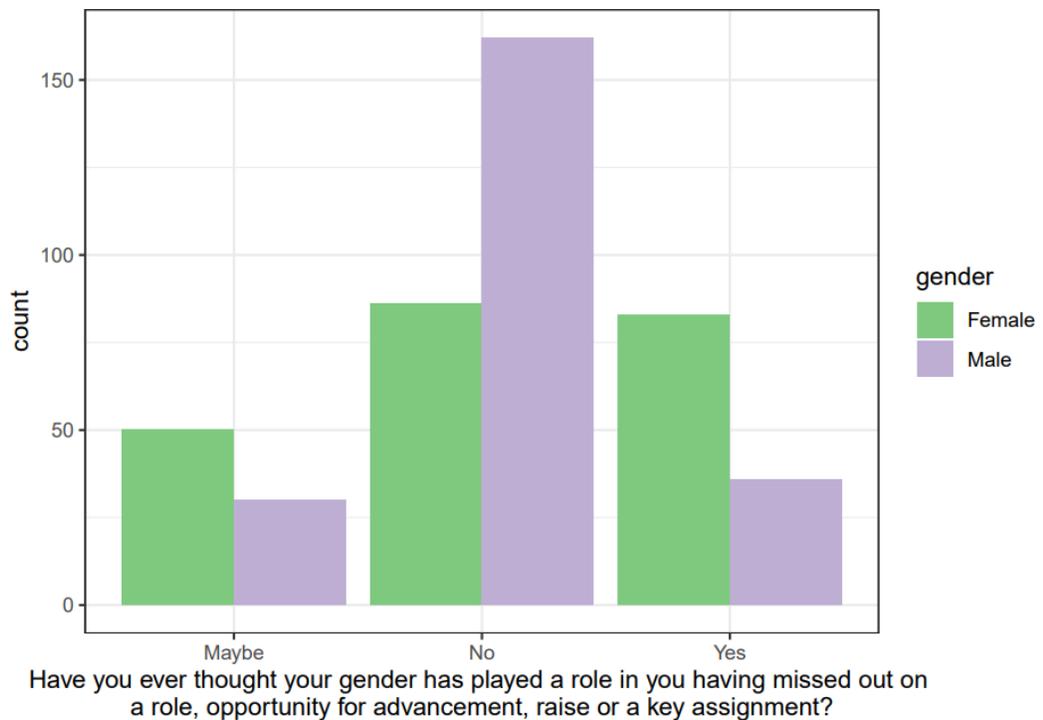
## Number of factors: 2

## Test for independence of all factors:

## Chisq = 73.16, df = 4, p-value = 4.884e-15

9. The next question was to ascertain if the respondents ever thought your gender has played a role in you having missed out on a role, opportunity for advancement, raise or a key assignment? A whopping 69% men said no against 39% women. 38% women mentioned yes, straight away, as against 15% men. 23% women said maybe of which 63% are women. 86% of total disagreement has come from people with <10 years' work experience in multiple business domain. Table 10 shows the results

***Table 11- Have you ever thought your gender has played a role in you having missed out on a role, opportunity for advancement, raise or a key assignment?***



*Source: Authors' research*

## Number of cases in table: 447

## Number of factors: 2

## Test for independence of all factors:

## Chisq = 46.69, df = 2, p-value = 7.264e-11

On further probing if it was it due to official policies, organization design or was it an act of the individual (e.g., your manager did not support you, or you decided not to pursue ahead), the answers were a mixed bag. Some inputs were hinting at organization design, like preconceived notions about who fits into a role, which gender fits better, unfair ask and expectations like attending a late-night meeting, onsite opportunities not providing right ecosystem for women to work, travel flexibility.

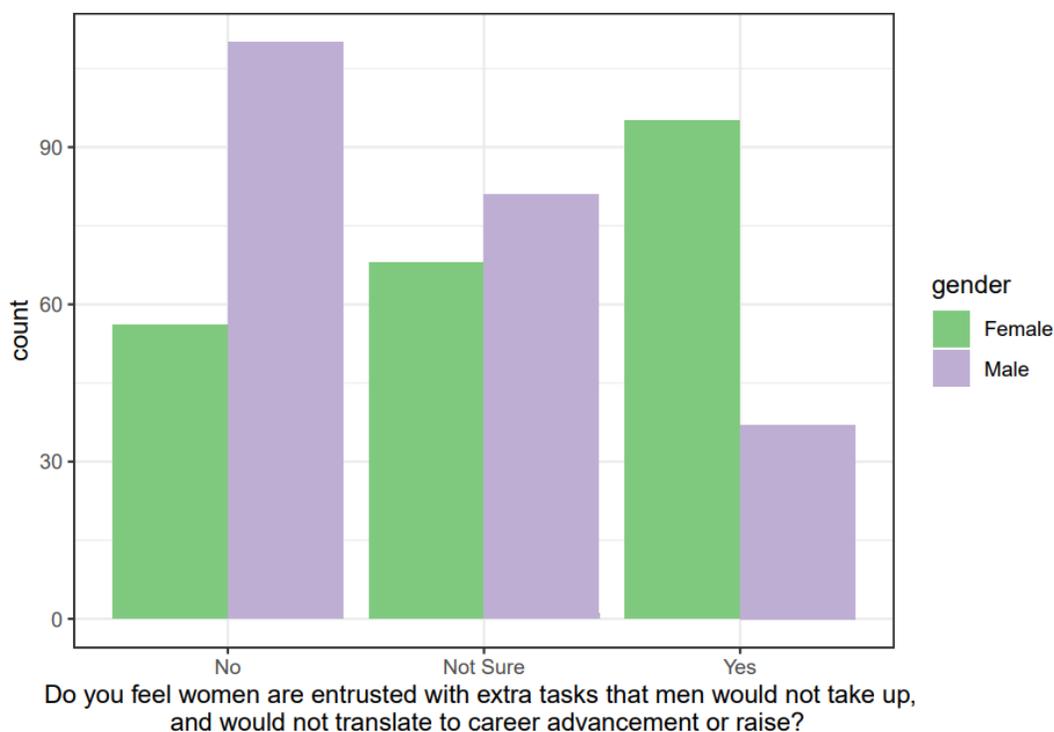
15% of the women respondents mentioned its individual decision and 19% mentioned their managers not supporting. Some men also thought they lost opportunities because women got an opportunity to meet diversity goals.

10. Most of the larger companies in the IT sector have a diversity and inclusion chapter. The D&I chapter aims to sensitize the organization towards diversity and has programs and interventions to support diversity. on asking if the D&I chapter need to do more, 52% women opined there is more to do, 55% men responded it's just enough. Women mentioned there is more to be done on flexibility, work from home, child care initiatives, providing opportunities and support, enable women in leadership roles and extend support for them to be successful, negate stereotypes. On asking if the interventions done by that

D&I chapter effective to promote diversity, 53% women said yes, and 40% women said not sure. Like mentioned earlier, these are the respondents who are shying away from giving a confirmative opinion.

11. The next question was Do you feel women are entrusted with extra tasks that men would not take up, and would not translate to career advancement or raise? 43% women felt they are being given extra tasks that don't translate to career advancement. Table 11 shows the answers from the respondents

*Table 12-Do you feel women are entrusted with extra tasks that men would not take up, and would not translate to career advancement or raise?*



*Source: Authors' research*

## Number of cases in table: 447

## Number of factors: 2

## Test for independence of all factors:

## Chisq = 44.02, df = 2, p-value = 2.759e-10

**Section 4: Self-evaluation- this section of the survey aimed to get the respondents to introspect on themselves**

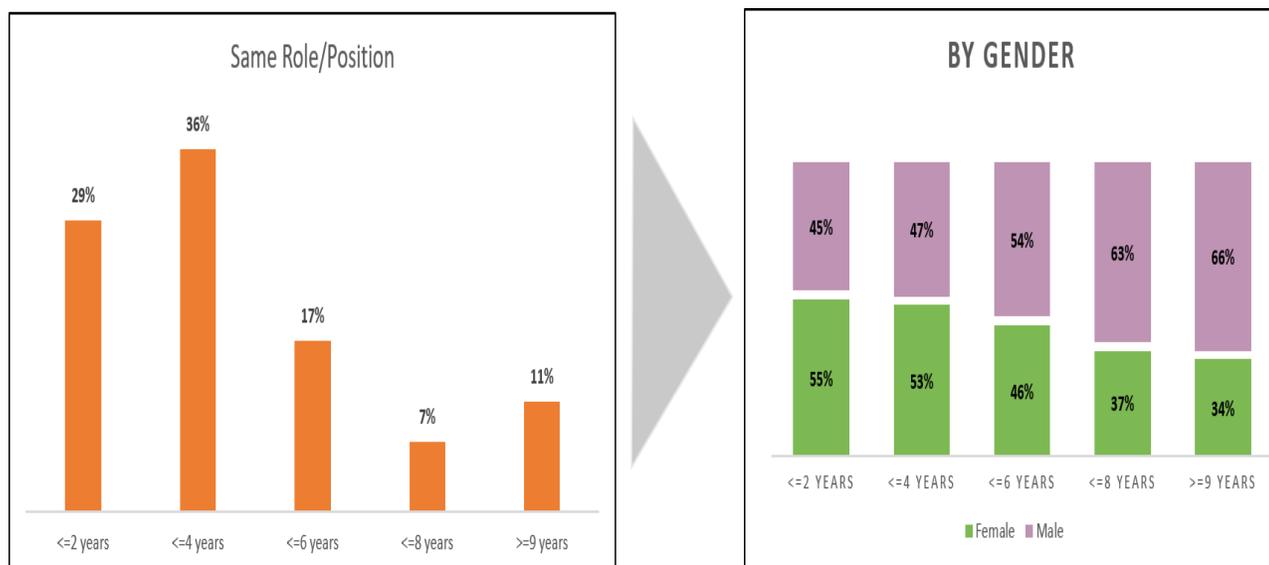
12. Through this research, I was trying to find out if women have a seat at the table. An equal number of men and women feel women do have a seat at the table and 77% women did mention they voice their opinion.

The following quote is interesting: “if they don’t give you a seat at the table, bring your folding chair” (Chisholm, n.d.)

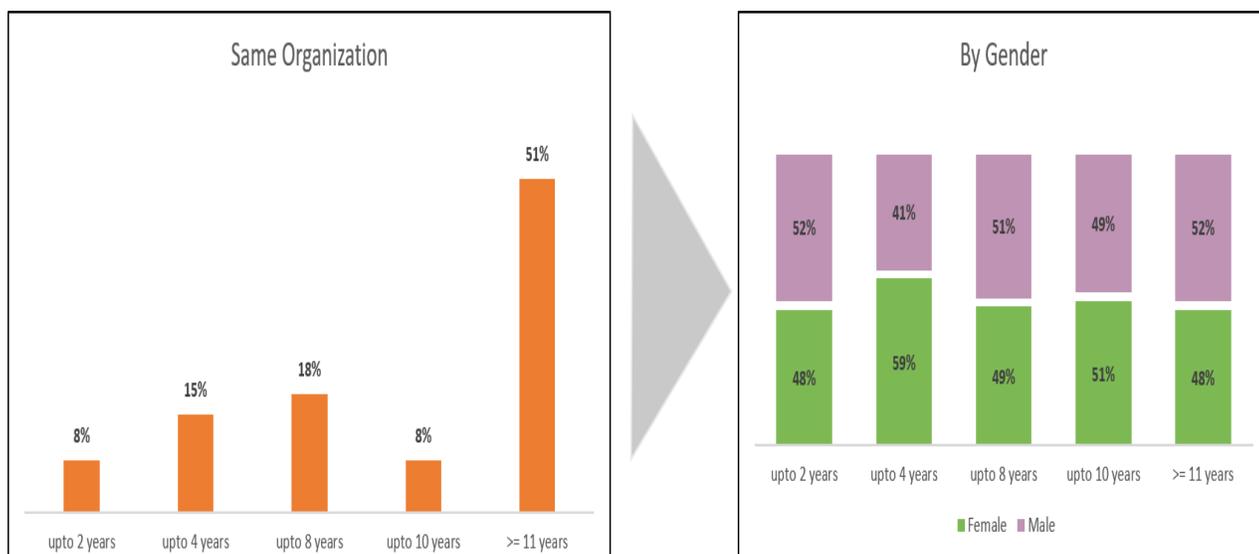
13. I was also wanting to find how long an employee continues to work in the same role and if that has any correlation to career advancement. It was interesting to find that almost twice the number of men seem to stay in a role for 9 years or more compared to women. This could be because as women continue in the role, they might be going through life transitions and therefore changing roles. The other factor that might influence this is that in my survey respondents, 53% men have been with one organization for greater than 11 years compared to 49% women. The factor that was interesting that came in the survey

was that 76% men invest in themselves to acquire latest skills/technologies compared to 66% women.

**Table 13-How long have you been in the same role/position?**



**Table 14-How long have you been in the same organization?**



*Source: Authors' research*

14. The next question was a probing question on self-limiting factors and having withheld pursuing an opportunity/role because of self-limiting factors? (eg, not feeling confident, not wanting to explore new roles, not feeling prepared enough etc). The responses were stark. 37% women answered in affirmation against 27% men. On the other hand, 57% men answered in negative compared to 46% women.
15. The ownership of highlighting and arresting gender discrimination lies as much with individuals in an organization as with the organization itself. To get a sense on this perspective, a question was asked Have you stood up to talk about gender discrimination when you experienced or observed with someone else? 43% men answered they didn't experience or observe as against 25% women. 23% women mentioned they might have voiced sometimes, which means the ecosystem within the organizations are still not conducive to express discrimination freely. on a subsidiary question on whether they have stood tall to uplift women, both men and women came strongly supporting that action.

**Section 5: Gender gap and economy- This section was aimed to gather information from respondents on impact of gender gap on business outcomes and economy**

On employing women and better business outcomes, the men and women respondents were equanimous on the answers supporting or not supporting. Both the gender by nature possesses diff strengths and weaknesses. Diversity helps in capitalizing of the strength of both and managing the weakness of both genders, help organizations spot and seize new

opportunities. Women have better emotional quotient and adversity quotient when compared to men and hence trusted with better judgement and are better decision makers. Some respondents answered that there is no impact on having more women than men. 33% respondents believed that women bring unique skills to the table that promotes better engagement amongst team members leading to improved productivity. Almost an equal percentage, 31% remained neutral, and 29% strongly agreed. The reasons provided on why women help deliver better business results, the answers were- --Women by nature are creative, intuitive, holistic and capable of bringing the best out of others, which on turn translates to improved team productivity. They have good managerial abilities, multitasking ability, and E.Q which can help in team building & productivity. Additionally, women can make new connections easily with people. They are creative thinkers hence they come up with different approaches to deal with problems. Women have great persuasive skills, are good in identifying risk, are known for valuing relationships which can result in team building that contributes towards getting the job done.

16. I wanted to find out if bridging gender gap would boost economy. 65.2% of the respondents replied between agree and strongly agree. 29% were neutral and only 5.4% disagreed. the rationale given for this was interesting. Gender biasness can limit the development of women from many aspects - access to information, jobs, assets, networks, etc., and this impacts economic growth. Women working in the family brings culture shift in the personal and society. There will be more heads and hands to contribute to work and business which will definitely lead to completing activities quicker and accomplishing more things, which will surely lead to more revenue and hence a big boost to economy

overall. There will more money in the household resulting in better buying capacity. Family's accessibility to various opportunity increases. There will be less poverty, less hunger, more well-fed people, less malnourished children, less pain, and suffering which will result in less violence too.

**Section 6: This section aimed to probe at individual biases as managers in various practices.**

62% of the respondents mentioned they have never been biased in practices like hiring, promotions, wages, new roles/assignments, salary raise. The results from the segment who choose neutral and strongly disagree was stark. The data in the table below distinctly says that a higher percentage of women strongly disagree to not being biased and there is a similar significant neutral respondent.

*Table 15-As a manager, I have never been biased in the following practices (assuming all other parameters like education, experience, skills etc are the same between candidates.*

Have you NEVER been biased in the following practices basis gender (assuming all other parameters like education, experience, skills etc. are the same between candidates)															
A	Strongly Agree			Agree			Neutral			Strongly Disagree			Does not apply		
	M	F	Total	M	F	Total	M	F	Total	M	F	Total	M	F	Total
Hiring	56%	44%	64%	40%	60%	26%	38%	62%	6%	100%	0%	<0.5%	47%	53%	4%
Promotion	56%	44%	65%	43%	57%	23%	36%	64%	6%	44%	56%	2%	53%	47%	4%
Wages	55%	45%	62%	42%	58%	22%	43%	57%	7%	38%	62%	2%	53%	47%	7%
New Role	56%	44%	62%	41%	59%	26%	40%	60%	7%	40%	60%	2%	60%	40%	3%
Salary Raise	55%	45%	64%	39%	61%	20%	50%	50%	6%	38%	62%	2%	53%	47%	7%

*Source: Authors' research*

### 4.3 Survey Conclusion

The gender gap between male and female workers from a work force participation has narrowed in most labor markets of developed countries over the past few decades, thanks to female workers enhanced human capital and labor market commitment. In the developing countries, the work force participation has significantly improved, however has to catch up with the developed nations. India, like other developing countries, has exhibited a narrowing gender wage in terms of women participation in workforce for a few decades. Although the work force participation has increased, the gender wage gap in India is substantially high between men and women. Also, what is observed is the significantly lower participation at senior leadership levels. While some countries like Finland, Denmark etc have taken affirmative actions to narrow the gender gap in all aspects- employment, leadership, pay etc, the convergence between male and female wages is very high in India.

Analyzing previously done studies on this subject in other industries and countries, and my study, my findings suggest that the unexplained gender wage gap takes a larger share of total gender wage gaps, which means that a substantial share of the gender wage gap in cannot be explained by measured labor market characteristics during this period. Furthermore, the unexplained wage gap over the wage distribution in 2020 was greater than the explained gap, which implies that COVID impacted more women than men across the globe. This also drives home the point the possibility of glass ceiling effects in India. Lastly, my paper suggests the average effects of marriage and the presence of children on wages, hours of work, and labor force participation. Full-time female workers who are married or have children are more likely than male workers to leave their jobs. Even if they

continue to work after marriage or giving birth, average full-time female workers experience decreases in their wages on average. The event study approach identifies the negative impact of childbirth on females' wages, hours of work, and labor supply. The dynamic paths of labor market outcomes between full-time male and female workers are found to diverge after they have children. These findings help to explain the larger gender wage gaps in India relative to those in other developed countries.

The gender wage gap may dampen females' motivation or incentive to enter and actively work in the labor market. The government of India has implemented various policies to reduce gender inequality in the labor market, such as increased maternity leaves and policies for equal employment among males and females.

As described against each of the questions, the results are hard hitting. The results demonstrate significant differences between gender variables. Meaningful outcomes were derived in each of the sections. In summary, nurturing and advancing women is more than a check in the box.

These results connect back to the literature assimilated the earlier chapters and provide the basis for future research in this field. Future research can be carried out within an organization to map the effectiveness of their human resource policies and diversity and inclusion chapters, studies can be done to get a perspective of employees experience with these policies against what human resource think they are accomplishing. There can be further research in organization that don't have a global presence and their focus on diversity and importance given to this subject.

## **CHAPTER 5**

### **LIMITATIONS AND CONCLUSION**

#### **5.1 Limitations and Further Study Agenda**

While this brings out significant data and insights into gender gap in Indian IT Industry, it does have limitations. Firstly, the respondents were from different organizations and gave a perspective of their organization. Another study that will be interesting will be to do research within the same organization. It will be interesting to take survey respondents with employees with varying experience and tenure and map it to the responses from the human resources function in that organization. This stems from the fact that while human resources/diversity and inclusion department states they are doing a lot to promote gender diversity, it will be a significant study to evaluate the impact and effectiveness of those interventions by employees.

Secondly, majority of the participants in this survey were from organization with an employee strength of  $\geq 100,000$ . Organizations larger than this or smaller than this may have different processes and approaches to diversity. In this study and even otherwise, it is generally observed that large organizations have well established human resource practices to support diversity. Larger organizations also have a diversity and inclusion chapter that does meaningful interventions to support women. As a part of this study. It was also observed that companies that have global presence focus more on diversity and inclusion than those that have local presence. Thus, I also suggest we examine those organizations.

Thirdly, the data collection method used for this study. The study used self-reported data, without interference, participation from the researcher. Self-answered questions may have bias in the absence of the researcher to guide the conversation (Reynolds, 1982). Further the survey used the Likert scale and this approach there is a tendency for the respondents to take the middle ground and select the middle of the scale. Therefore, there is a possibility of respondents giving an answer that they think will look good, rather than give answers that is a true representation of their ideology. During this study, while interacting with respondents, I also observed that there was a hesitation to do interviews. While the survey was anonymous and the interview would have been anonymous too, the participants had hesitation being identified as a respondent when interview was suggested. That leads me to think that while there is substantial focus from organizations on diversity, there is still “fear of being identified” by employees and fear of marginalization to speak openly on the subject.

Fourth, while there was a question in the survey if diversity in other organizations was better than theirs, the result was not conclusive. Therefore, I suggest that future research be done comparing the industry best in gender diversity to establish differences and best practices. The other approach to do this would be to take the top 5 companies which has a good gender diversity percentage and study them to identify practices and organizational design that help them keep a healthy gender diversity percentage.

Fifth, it is an established fact that gender diversity thins at leadership levels. There is a possibility of research focusing just on leadership. As mentioned by an industry leader, the IT industry in India is slated to grow exponentially and that would translate to more

employment for women. It would be a strategic study to explore what needs to be done to have more women in the leadership level.

Lastly, this study focused only on gender diversity. There are other elements to diversity- race, ethnicity, age, sexual orientation etc. There is a significant opportunity to do a research study on these aspects of diversity too.

## 5.2 Conclusion

In this section, I would want to once again bring the questions I asked in chapter 1, section 1.3- purpose of this research.

1. To study if the employees believe there is a gender gap in the IT Industry in India.
2. To study what causes the gender gap in the IT Industry in India.
3. To evaluate if the existing practices to minimize gender gap are effective in IT Industry in India.
4. To recommend the steps that can be adopted to reduce the gender gap in the IT Industry in India.

I also state the hypothesis with which I started my research.

*H0 = "Gender gap exists in Indian IT companies"*

*H1 = "Organizations are doing interventions to address the gender gap issues within their organizations at leadership levels"*

*H2="Women need to do their bit to reduce the gender gap"*

This study was focused on gender gap in Indian IT Industry. The study results broadly state that gender gap does exist in the IT industry in India. However, the intensity of the gap is gauged differently by men, women and HR. The causes are multifold, lack of flexibility in work environment, inherent biases, life transitions, willingness of women associates to accept role change, location change and practices by the organization. This study's results state that gender diversity has a significant positive effect on organizations performance and can have significant productivity and economic gains. Most organizations in the study had policies and procedures in place to support diversity, however the women employees felt there was much to be desired in terms of implementation and execution of the policies in spirit and letter. There was also a strong ask in terms of flexibility so as to enable women to have fulfilling careers while managing other roles ie, that of a mother, wife, daughter etc. Most of the companies have a diversity and inclusion chapter which was making inroads, the women respondents felt there could be more done. On upskilling, women fell short of men by a huge margin. What also come up clearly was that having diversity does improve productivity and contributes to economy

This study with its limitations may not be the right base to evolve policies for organizations to bridge gender gap, make sweeping changes to organization design or drive interventions. Having said that, the data does present some thought-provoking reality.

But major gender inequalities persist. According to a recent study by World Bank (World Bank, 2022), almost 90% of 147 countries surveyed by the World Bank on women and legal frameworks have at least one legal restriction that gets in the way of women's economic opportunities. In as many as 80 countries, laws restrict the types of employment available to women. In addition, women are overrepresented as unpaid family workers. In South Asia, 60% of employed women work in family enterprises but do not get paid. Women are, on average, 14% less likely to own a mobile phone than men. In regions such as South Asia, this figure is as high as 38%.

First, Gender inequality is one of the key challenges of the twenty first century. Gender equality is one of the sustainable development goals (SDGs) and getting a more equal society is increasingly seen as supporting the achievement of the other SDGs. At the same time, the question remains: how to support gender equality in practice?

Second, Gender inequality has two aspects: inequality of opportunities and inequality of outcomes. The first one suggests that inequalities due to circumstances beyond the control of individuals, in the context of this study, organization design, and differ from inequalities resulting from preferences and choices. If gender differs in their attitudes, preferences and choices, differences in outcomes cannot be solely attributed to differences in opportunities. The second one suggests that these differences in attitudes, preferences and choices as learned, internalized by individuals in their socialization.

Third, very evidently proved from this study and earlier studies, such models can contribute to women's economic empowerment (an intermediate indicator toward gender equality)

directly by addressing barriers to women's participation in workforce, or indirectly by involving them as implicit beneficiaries where such businesses provide services or products in circumstances where women face constraints such as poor access to inputs. In a study done by (Salmon et al., 2018) there is a reference to tradeoffs between different goals of sustainability, economic growth, social and gender equity, and environmental concerns.

Fourth, according to Asian development bank (Development Bank, 2016), although companies clearly see the benefits of empowering women, there are barriers within the system. These barriers are rooted in the underlying gender norms. Finding ways to engage women in a company's value chain that incorporates an awareness of gender-based constraints creates mutual benefit for firms and women alike. The results of this study also showed similar patterns.

The global fuel, food and financial crisis are hitting everyone hard. But they are hitting women and girls the hardest.

Inequality in accessing resources and pervasive discrimination have led to a renewed recognition of the importance of gender equality at a global level (UN Women).

However, all is not lost. In partnership with market research company, Statista, Forbes set out to identify the top 400 companies in the world excelling in championing women at work (FORBES, 2022) .

## REFERENCES

- AAUW, 2020. The Simple Truth about the Pay Gap [WWW Document]. URL <https://www.aauw.org/resources/research/simple-truth/> (accessed 11.25.22).
- Acheson, J., Collins, M., 2021. The gender pay gap in Revenue. Administration 69, 45–75. <https://doi.org/10.2478/ADMIN-2021-0020>
- Ader, H., Mellenbergh, G., 1999. Research Methodology in the Social, Behavioural and Life Sciences: Designs ... - Google Books [WWW Document]. URL [https://books.google.com.sa/books?hl=en&lr=&id=XFGM3QfFCrMC&oi=fnd&pg=PP1&dq=mellenbergh+research+methodology&ots=RhEeR69394&sig=hPnDS0YRC4Lt2R--Jpb7xOrm0OE&redir\\_esc=y#v=onepage&q=mellenbergh%20research%20methodology&f=false](https://books.google.com.sa/books?hl=en&lr=&id=XFGM3QfFCrMC&oi=fnd&pg=PP1&dq=mellenbergh+research+methodology&ots=RhEeR69394&sig=hPnDS0YRC4Lt2R--Jpb7xOrm0OE&redir_esc=y#v=onepage&q=mellenbergh%20research%20methodology&f=false) (accessed 2.18.23).
- Afsharipour, A., 2023. Investment Bankers and Inclusive Corporate Leadership – The FinReg Blog [WWW Document]. URL <https://sites.duke.edu/thefinregblog/2023/02/09/investment-bankers-and-inclusive-corporate-leadership/> (accessed 2.17.23).
- Ahyia, A., Oppong, A., Kendie, S.B., 2017. Gender and Career Advancement in the Workplace: An Assessment of the Experiences of Women in Higher Education Management. Int J Humanit Soc Sci 7.
- Akrur, B., 2021. Gender equality dealt with a blow by COVID 19. Deloitte.
- Alesina, A., Giuliano, P., Nunn, N., 2013. ON THE ORIGINS OF GENDER ROLES: WOMEN AND THE PLOUGH. Q J Econ 128, 469–530. <https://doi.org/10.1093/qje/qjt005>
- Anthony, S.B., 1820. Meetings for Learning-Resources-History and Testimonies.
- Arribas, C., 2017. Why female athletes in Spain are banned from getting pregnant. El Pais.
- Babcock, L., Peyser, B., 2022. The No Club: Putting a Stop to Women’s Dead-End Work.
- Banerjee, P., 2021. The Future of Women@Work | LinkedIn [WWW Document]. URL <https://www.linkedin.com/pulse/future-womenwork-papiya-banerjee/> (accessed 2.18.23).
- Barroso, A., Brown, A., 2021. Gender pay gap in U.S. held steady in 2020 [WWW Document]. PEW RESEARCH CENTER. URL <https://www.pewresearch.org/fact-tank/2021/05/25/gender-pay-gap-facts/> (accessed 11.25.22).
- Baxter, J., 1997. Gender Equality and Participation in Housework: A Cross- National Perspective. Journal of comparative family studies vol 28 (3), 220–247.
- Becker, G., 1981. A Treatise on the Family. Harvard University Press.
- Bericat, E., Sánchez Bermejo, E., 2016. Structural Gender Equality in Europe and Its Evolution Over the First Decade of the Twentyfirst Century. Soc Indic Res 127, 55–81. <https://doi.org/10.1007/s11205-015-0949-y>
- Berlin, G., Darino, L., Groh, R., Kumar, P., 2020. Women in healthcare: Moving from the front lines to the top rung. McKinsey.
- Berlin, G., Darino, L., Groh, R., Kumar Pooja, 2021. Women in healthcare | McKinsey [WWW Document]. McKinsey. URL

- <https://www.mckinsey.com/industries/healthcare/our-insights/women-in-healthcare-moving-from-the-front-lines-to-the-top-rung> (accessed 2.17.23).
- Berri David, 2017. Basketball's Growing Gender Wage Gap: The Evidence The WNBA Is Underpaying Players.
- Bhalla, S.S., Kaur, R., 2011. Labour Force Participation of Women in India: Some facts, some queries.
- Bird, S.R., Rhoton, L.A., 2021. Seeing Isn't Always Believing: Gender, Academic STEM, and Women Scientists' Perceptions of Career Opportunities. *Gender and Society* 35, 422–448. <https://doi.org/10.1177/08912432211008814>
- Bleiweis, R., 2020. Quick Facts About the Gender Wage Gap.
- Bondarouk, T., Trullen, J., Valverde, M., 2016. Special Issue of International Journal of Human Resource Management: Conceptual and empirical discoveries in successful HRM implementation. *The International Journal of Human Resource Management* 27, 906–908. <https://doi.org/10.1080/09585192.2016.1154378>
- Bree, V.J., 2021. What Is Organization Design?, in: *Organization Design*. Springer International Publishing, pp. 7–27. [https://doi.org/10.1007/978-3-030-78679-3\\_2](https://doi.org/10.1007/978-3-030-78679-3_2)
- British Medical Association, 2021. BMA commentary on Mend the Gap: The Independent Review into Gender Pay Gaps in Medicine in England. British Medical Association.
- Burns Nancy, Schlozman kay, Verba Sidney, 2001. *The Private Roots of Public Action: Gender, Equality, and Political Participation*. Harvard University Press.
- Catalyst, 2022. Women Business Leaders: Global Statistics [WWW Document]. URL <https://www.catalyst.org/research/women-in-management/> (accessed 2.18.23).
- Catalyst, 2020. Women in the Workforce: India (Quick Take) POPULATION By 2050, India Will Be the Most Populous Country in the World.
- Chambers, R.L., Dunstan, R., 1986. Estimating distribution functions from survey data. *Biometrika* 73, 597–604. <https://doi.org/10.1093/biomet/73.3.597>
- Chao, E.L., Rones, P.L., 2007. *Women in the Labor Force: A Databook*.
- Chen, Z., Roy, K., Crawford, C.A.G., 2010. Examining the Role of Gender in Career Advancement at the Centers for Disease Control and Prevention. *Am J Public Health* 100, 426. <https://doi.org/10.2105/AJPH.2008.156190>
- Chineme, O.B., Nebo, O.E.S., Nwosu, O., 2017. Effects of Organizational Design on Employee Performance in the Manufacturing Industry.
- Chisholm, S., n.d. *Your Seat at the Table Project Guide*.
- Daft, R.L., 2007. *Organization theory and design* 620.
- Desai, S., Waite, L.J., 1991. Women's Employment During Pregnancy and After the First Birth: Occupational Characteristics and Work Commitment. *Source* 56, 551–566.
- Development Bank, A., 2016. HOW INCLUSIVE IS INCLUSIVE BUSINESS FOR WOMEN? EXAMPLES FROM ASIA AND LATIN AMERICA ASIAN DEVELOPMENT BANK.
- Dollar, D., Gatti, R., 1999a. Gender Inequality, Income, and Growth: Are Good Times Good for Women? GENDER AND DEVELOPMENT Working Paper Series, No. 1 Gender Inequality, Income, and Growth: Are Good Times Good for Women?
- Dollar, D., Gatti, R., 1999b. Gender Inequality, Income, and Growth: Are Good Times Good for Women? GENDER AND DEVELOPMENT Working Paper Series, No. 1 Gender Inequality, Income, and Growth: Are Good Times Good for Women?

- Döring Matthias, 2018. Testing Independence\_ Chi-Squared vs Fisher's Exact Test - Data Science Blog\_ Understand. Implement. Succeed\_. Data science blog.
- Doyle, L., McCabe, C., Keogh, B., Brady, A., McCann, M., 2020. An overview of the qualitative descriptive design within nursing research. *Journal of Research in Nursing* 25, 443–455. <https://doi.org/10.1177/1744987119880234>
- Eads, M., 1915. *The Modern Working Woman and Marriage* 23, 409–417.
- Eckel, C., Grossman, P.J., 2008. Men, Women and risk aversion: experimental evidence.
- EIGE, 2018. Gender equality in recruitment and career progression | European Institute for Gender Equality [WWW Document]. URL <https://eige.europa.eu/gender-mainstreaming/toolkits/gear/gender-equality-recruitment-and-career-progression> (accessed 11.23.22).
- ETUCE, 2008. ETUCE SURVEY on gender equality in the education sector, the teaching profession and within teacher trade unions Aims and scope.
- European Institute of Gender Equality, 1998. Gender Gap [WWW Document]. URL <https://eige.europa.eu/thesaurus/terms/1178> (accessed 2.22.23).
- European Union, 2000. Charter of Fundamental rights of European Union.
- Eurostat, 2022. Gender pay gap statistics.
- EUROSTAT, 2022. Gender pay gap statistics.
- Ferrant, G., 2015. GENES ADRES How Do Gender Inequalities Hinder Development? Cross-Country Evidence How Do Gender Inequalities Hinder Development? Cross-Country Evidence. *ANNALS OF ECONOMICS AND STATISTICS NUMBER* 118, 313–352. <https://doi.org/10.15609/annaeconstat2009.117-118.313>
- Ferrant, G., Kolev, A., 2016. The economic cost of gender-based discrimination in social institutions.
- Ferrant, G., Pesando, M., Nowacka, K., 2014. Unpaid Care Work: The missing link in the analysis of gender gaps in labour outcomes.
- Ferrant, G., Thim, A., 2019. Measuring Women's Economic Empowerment: Time Use Data and Gender Inequality.
- FORBES, 2022. The World's Top Female-Friendly Companies 2022 [WWW Document]. URL <https://www.forbes.com/lists/female-friendly-companies/?sh=5d0c45504dcd> (accessed 12.4.22).
- Forsberg, E., Olsson, L., 2021. Examining Gender Inequality and Armed Conflict at the Subnational Level. *Journal of Global Security Studies* 6. <https://doi.org/10.1093/jogss/ogaa023>
- Fraile, M., 2021. (PDF) Risk and the gender gap in internal political efficacy in Europe [WWW Document]. *West Eur Polit.* <https://doi.org/DOI:10.1080/01402382.2021.1969146>
- Fraile, M., Gomez, R., 2017. Title: Bridging the enduring gender gap in political interest in Europe: the relevance of promoting gender equality, *European Journal of Political Research.* <https://doi.org/DOI:10.1111/1475-6765.12200>
- Francis Jayne Osgood Jacinta Dalgety Louise Archer, B., 2005. Gender equality in work experience placements for young people Occupational segregation Working Paper Series No. 27. EOC Working paper Series.
- Friedmann, E., Efrat-Treister, D., 2022. Gender Bias in Stem Hiring: Implicit In-Group Gender Favoritism Among Men Managers. *Gender and Society.* <https://doi.org/10.1177/08912432221137910>

- Froehlicher, marie, Griek, L.K., Nematzadeh, A., Hall, L., Stovall, N., 2021. Gender equality in the workplace: going beyond women on the board | S&P Global [WWW Document]. S&P Global. URL <https://www.spglobal.com/esg/csa/yearbook/articles/gender-equality-workplace-going-beyond-women-on-the-board> (accessed 11.23.22).
- Fuchs, V., 1968. The Service Economy. National Bureau of Economic Research.
- Goldin, C., 2006. The Quiet Revolution That Transformed Women's Employment, Education, and Family.
- Goodman, L.A., 1961. Snowball Sampling. *The Annals of Mathematical Statistics* 32, 148–170. <https://doi.org/10.1214/aoms/1177705148>
- Habersshon, A., 2021. Gender and corruption: The time is now [WWW Document]. World Bank Blogs. URL <https://blogs.worldbank.org/governance/gender-and-corruption-time-now> (accessed 11.19.22).
- Harkness, S., 2019. How women's employment changes after having a child | Understanding Society [WWW Document]. URL <https://www.understandingsociety.ac.uk/2019/10/22/how-womens-employment-changes-after-having-a-child> (accessed 11.25.22).
- Ibarra, H., Ely, R.J., Kolb, D.M., 2013. Women Rising: The Unseen Barriers. *Harvard Business Review*.
- ILO, 2022. Transforming enterprises through diversity and inclusion Executive Summary.
- ILO, 2021a. An uneven and gender unequal COVID 19 recovery: update on gender and employment trends.
- ILO, 2021b. An uneven and gender-unequal COVID-19 recovery: Update on gender and employment trends 2021.
- India Brand Equity Foundation, 2022. Information Technology India, Top IT Companies in India - IBEF.
- International Labour Organization, 2022. OpEd\_ The gender pay gap, hard truths and actions needed.
- International Trade Union Confederation, 2011. Living with economic insecurity: women in precarious work.
- Ipsos, 2021. Ipsos Update - January 2021.
- Jagiellonian University in Krakow, University of Oslo, 2015. GENDER EQUALITY AND QUALITY OF LIFE SURVEY QUESTIONNAIRE.
- Keyser, J., Eilitta, M., Dimithe, G., Ayoola, bolagade, Sene, L., 2015. Towards an Integrated Market for Seeds and Fertilizers in West Africa [WWW Document]. World Bank. URL <https://documents1.worldbank.org/curated/ar/886471468119063004/pdf/936300REVIS00REVISED0FINAL0TO0DC.pdf> (accessed 2.18.23).
- Kimbrough, karen, 2022. Women's Path to Leadership [WWW Document]. LinkedIn. URL <https://www.linkedin.com/pulse/womens-paths-leadership-start-narrow-after-10-years-karin-kimbrough/> (accessed 2.17.23).
- Knop Brian, 2019. Among Recent Moms, More Educated Most Likely to Work. US Census.
- Krosnick, J.A., Presser, S., 2009. Question and Questionnaire Design.

- Kulkarni, R., 2022. Women in technology: Key trends India report [WWW Document]. People matters. URL <https://www.peoplesmatters.in/article/culture/women-in-technology-key-trends-from-skillsofts-india-report-33399> (accessed 2.25.23).
- Kwauk, C., 2020. The US role in advancing gender equality globally through girls' education [WWW Document]. URL <https://www.brookings.edu/essay/the-uss-role-in-advancing-gender-equality-globally-through-girls-education/> (accessed 11.19.22).
- Landivar, L.C., 2013. Disparities in STEM Employment by Sex, Race, and Hispanic Origin American Community Survey Reports.
- Lee Paul, Westcott kevin, Wray Izzy, Raviprakash Suhas, 2020. Women's sports revenue and monetization \_ Deloitte Insights. Deloitte Insights.
- LinkedIn, 2022a. A new way to represent career breaks on LinkedIn.
- LinkedIn, 2022b. A new way to represent career breaks.
- Ministry of Electronics and Information Technology, G. of I., 2022. Employment Generation [WWW Document]. Ministry of Electronics and Information Technology. URL <https://www.meity.gov.in/content/employment> (accessed 2.25.23).
- Ministry of Statistics and Programme Implementation, 2021. Periodic Labour Force Survey (PLFS) Government of India Ministry of Statistics and Programme Implementation in GoIStats GoIStats goistats.
- Mishel, lawrence, Wolfe, J., 2019. CEO compensation has grown 940% since 1978: Typical worker compensation has risen only 12% during that time | Economic Policy Institute [WWW Document]. Economic Policy Institute. URL <https://www.epi.org/publication/ceo-compensation-2018/> (accessed 2.17.23).
- Moawad Jad, 2019. Fair Play Gender Inequality in Sports, Jad Mowad.
- Mohd Sofian, P., Rozita Abd-Latif, P., 2010. The Perspective of Arabic Muslim Women toward Sport Participation. *Journal of Asia Pacific Studies* 1, 364–377.
- National center for women and information technology, 2022. Report by Women and Information Technology.
- National WWI Museum and memorial, n.d. Women in WWI.
- Norrander, B., 1999. The Evolution of the Gender gap.
- Norrander Barbara, 1999. *The Evolution of Gender Gap*. Oxford University Press.
- OECD, 2022. OECD Employment Outlook 2022. OECD Employment Outlook. <https://doi.org/10.1787/19991266>
- Olivetti, C., Barbara, P.N., 2014. Gender Gaps across Countries and Skills: Demand, Supply and the Industry Structure \*.
- Orlovic David, 2022. Glas Istre.
- Ortega-Sánchez, D., Sanz de la Cal, E., Ibáñez Quintana, J., Borghi, B., 2022. Editorial: Gender Equality and Women's Empowerment in Education. *Front Educ (Lausanne)*. <https://doi.org/10.3389/feduc.2022.833977>
- Parker Kim, 2015. Women more than men adjust their careers for family life | Pew Research Center [WWW Document]. Pew Research center. URL <https://www.pewresearch.org/fact-tank/2015/10/01/women-more-than-men-adjust-their-careers-for-family-life/> (accessed 11.25.22).
- Pesce, F., Samek, M., Torchio, N., Lomazzi, V., 2021. Gender inequalities in care and consequences for the labour market Beijing Platform for Action. European Institute for Gender Equality (EIGE). <https://doi.org/10.2839/509>

- Powell, C., Chang, A.M., 2016. Women in Tech as a Driver for Growth in Emerging Economies.
- Ramanujam, K., 2022. More women in IT workforce can help bridge talent gap:
- Rees, R., Riezman, R., 2012. Globalization, gender, and growth. *Review of Income and Wealth* 58, 107–117. <https://doi.org/10.1111/j.1475-4991.2011.00483.x>
- Reynolds, W., 1982. Development of reliable and valid short forms of the Marlow-Crowne Social Desirability Scale. Article in *Journal of Clinical Psychology*. [https://doi.org/10.1002/1097-4679\(198201\)38:13.0.CO;2-I](https://doi.org/10.1002/1097-4679(198201)38:13.0.CO;2-I)
- Ritchie, Jane., Lewis, J., 2003. *Qualitative research practice : a guide for social science students and researchers*. Sage Publications.
- Ritter-Hayashi Id, D., Vermeulen, P., Knobens, J., 2019. Is this a man’s world? The effect of gender diversity and gender equality on firm innovativeness. <https://doi.org/10.1371/journal.pone.0222443>
- Rosa, R., Clavero, S., 2022. Gender equality in higher education and research. *J Gend Stud* 31, 1–7. <https://doi.org/10.1080/09589236.2022.2007446>
- Rothschild, L.E., 2020. *The Gender Gap in American Politics: How Money in Politics Affects Female Representation*.
- Salmon, G., Teufel, N., Baltenweck, I., van Wijk, M., Claessens, L., Marshall, K., 2018. Trade-offs in livestock development at farm level: Different actors with different objectives. *Glob Food Sec*. <https://doi.org/10.1016/j.gfs.2018.04.002>
- Schwerter, J., Ilg, L., 2019. Gender differences in the labor market entry of STEM graduates: Does fertility play a role? *Work in Progress*.
- Seguino, S., 2008. *Gender, Distribution, and Balance of Payments Constrained Growth*.
- Selanders Louise, 2022. *Florence Nightingale \_ Biography & Facts \_ Britannica*. Britannica.
- Sialino, L.D., Picavet, H.S.J., Wijnhoven, H.A.H., Loyen, A., Verschuren, W.M.M., Visser, M., Schaap, L.S., van Oostrom, S.H., 2022. Exploring the difference between men and women in physical functioning: How do sociodemographic, lifestyle- and health-related determinants contribute? *BMC Geriatr* 22. <https://doi.org/10.1186/s12877-022-03216-y>
- Standing, G., 1989. Global Feminization through Flexible Labor. *World Dev* 17, 1077–1095.
- Staniscuaski, F., Kmetzsch, L., Soletti, R.C., Reichert, F., Zandonà, E., Ludwig, Z.M.C., Lima, E.F., Neumann, A., Schwartz, I. v.d., Mello-Carpes, P.B., Tamajusuku, A.S.K., Werneck, F.P., Ricachenevsky, F.K., Infanger, C., Seixas, A., Staats, C.C., de Oliveira, L., 2021. Gender, Race and Parenthood Impact Academic Productivity During the COVID-19 Pandemic: From Survey to Action. *Front Psychol* 12. <https://doi.org/10.3389/fpsyg.2021.663252>
- Tejani, S., Milberg, W., 2016. Global Defeminization? Industrial Upgrading and Manufacturing Employment in Developing Countries. *Fem Econ* 22, 24–54. <https://doi.org/10.1080/13545701.2015.1120880>
- The Personal Injuries (Civilians) Scheme 1983, n.d.
- The Seneca Falls Convention: Setting the National Stage for Women’s Suffrage | AP US History Study Guide from The Gilder Lehrman Institute of American History [WWW Document], n.d. URL <https://ap.gilderlehrman.org/history-by-era/first-age->

- reform/essays/seneca-falls-convention-setting-national-stage-for-women%E2%80%99s-su (accessed 2.17.23).
- Ul-Ain, N., Muhammad, H., Akhtar, W., Ahmad, J., n.d. Intended-Implemented HRM-GAP effect on Organizational Performance: Moderation of HR-Uncertainty and Employee Participation. <https://doi.org/10.22547/BER/10.3.5>
- UN Women, 2022. Facts and figures\_ Women's leadership and political participation \_ What we do \_ UN Women – Headquarters.
- UN Women | Timeline: Women of the world, unite! [WWW Document], n.d. URL <https://interactive.unwomen.org/multimedia/timeline/womenunite/en/index.html#/2000> (accessed 2.17.23).
- United Nations, 2022a. Human Development Index (HDI) by Country 2022.
- United Nations, 2022b. Closing gender pay gaps is more important than ever | UN News [WWW Document]. URL <https://news.un.org/en/story/2022/09/1126901> (accessed 11.25.22).
- United Nations, 2014. GENDER EQUALITY CAPACITY ASSESSMENT TOOL Tool for assessment of capacity in promoting gender equality and the empowerment of women for the UN System and other partners.
- United Nations, 1975. First International Women's Conference.
- United Nations Development Programme., 2022. Human development report 2021/2022 : Uncertain times, unsettled lives : shaping our future in a transforming world.
- University of Utah, n.d. Chi-Square - Sociology 3112 - Department of Sociology.
- Uyar, Y., Gentile, A., Uyar, H., Erdeveciler, Ö., Sunay, H., Mîndrescu, V., Mujkic, D., Bianco, A., 2022. Competition, Gender Equality, and Doping in Sports in the Red Queen Effect Perspective. *Sustainability* 2022, Vol. 14, Page 2490 14, 2490. <https://doi.org/10.3390/SU14052490>
- Wagenvoort, A., 2014. Explaining the gap between actual and perceived performance management: the impact of the Big Five personality traits on co-implementation of employees.
- Walt, M., 2019. Gender Equality Survey Nevada Commission for Women.
- WHO, 2020. Gender Inequality Index 2020.
- Wolff, E., 2021. Wealth Inequality in the United States | NBER [WWW Document]. National bureau of Economic Research. URL <https://www.nber.org/reporter/2021number2/wealth-inequality-united-states> (accessed 2.17.23).
- Wollstonecraft, M., 2017a. A Vindication of the Rights of Woman with Strictures on Political and Moral Subjects.
- Wollstonecraft, M., 2017b. A Vindication of the Rights of Woman with Strictures on Political and Moral Subjects.
- Woman Suffrage [WWW Document], n.d. . Natl Geogr Mag. URL <https://education.nationalgeographic.org/resource/woman-suffrage/> (accessed 2.17.23).
- World Bank, 2022. Nearly 2.4 Billion Women Globally Don't Have Same Economic Rights as Men [WWW Document]. URL <https://www.worldbank.org/en/news/press-release/2022/03/01/nearly-2-4-billion-women-globally-don-t-have-same-economic-rights-as-men> (accessed 2.18.23).

- World Economic Forum, 2021. Global Gender Gap Report The analysis presented in the Global Gender Gap Report 2021.
- World Economic Forum, 2023. Gender Equality by Country 2023 [WWW Document]. URL <https://worldpopulationreview.com/country-rankings/gender-equality-by-country> (accessed 1.21.23).
- World Economic Forum, 2022. Global Gender Gap Report.
- World Economic Forum, 2021. The Global Gender Gap Report -2021.
- World Economic Forum, 2017. What is the gender gap (and why is it getting wider)\_ \_ World Economic Forum.
- World Health Organization, 2019. Maternal mortality [WWW Document]. WHO. URL <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality> (accessed 2.18.23).
- World War II: 1939-1945 | Striking Women [WWW Document], n.d. URL <https://www.striking-women.org/module/women-and-work/world-war-ii-1939-1945> (accessed 2.17.23).

## APPENDIX A

### Survey Cover Letter and Informed Consent

# ANALYZING GENDER GAPS IN ORGANIZATIONAL DESIGN – CASE STUDY: IT SECTOR IN INDIA

Greetings,

I am Uma Srinivasan, pursuing Doctor in Business Administration from Swiss School of Business and Management, Geneva.

I am a researcher on the topic mentioned above and invite you to participate in my research study. This will not take more than 10 mins of your time and I thank you in advance for your participation

This survey comprises of 6 sections. Each part has a clearly defined objective and provides guidelines to answer the questions. Please answer the questions as honestly as possible. Your answers will be completely confidential, there is no requirement to mention the organization you work for and participation is strictly voluntary. By answering the survey, you are providing the consent and agreeing to participate in this study.

I thank you for taking the time to support me in my educational pursuit. If you have any questions regarding the survey, please contact me at [uma1@ssbm.ch](mailto:uma1@ssbm.ch)

[Sign in to Google](#) to save your progress. [Learn more](#)

**APPENDIX B****Evaluation Sheet**

1. How long did it take you to complete the questionnaire?

2. Are there any questions that you did not understand well?

Yes  No

If yes, please specify which questions where they: \_\_\_\_\_

---

3. Are there any other questions you think should be included?

Yes  No

If yes, please specify: \_\_\_\_\_

---

*Thank You in Advance*

## APPENDIX C

### Survey Questionnaire

# ANALYZING GENDER GAPS IN ORGANIZATIONAL DESIGN – CASE STUDY: IT SECTOR IN INDIA

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\* Required

#### Section 1: Participant Profile

1. Please fill in your gender \*

- Male
- Female

2. Please fill in your education details \*

- Bachelors
- Masters
- Doctorate

3. What is your work experience \*

- <= 5 years
- 6-10 years
- 11-15 years
- 16-20 years
- > 21 years

4. What is your current role? (You are encouraged to take the entire survey twice if \* you are playing more than one role listed below)

- Team member (in this context, part of a team, tenure/seniority/role within the team doesn't matter)
- Manager (in this context, a role where you are a decision maker)
- HR
- Others

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### Section 2: Your Organization Details

The objective of this section is to understand the size and nature of your organization

1. Your organization provides services/products in: \*

- IT
- IT Enabled Services
- Consulting
- None of the above
- All of the above
- Two of the above

2. The size of your organization by employee strength is \*

- <=1000 employees
- 1001-5000 employees
- 5001-10,000 employees
- 10,001- 50,000 employees
- 50,001- 100,000 employees
- >100,001 employees

3. The current gender ratio (women employees) in your organization is \*

- <10%
- 11-20%
- 21-30%
- 31-40%
- >41%
- I don't know

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### Section 3: Gender Equality in my Organization

This section aims to understand your perspective on gender equality in your organization. There is no reference to your name/identity or your organizations name/identity anywhere in the survey

1. In my current work place, men and women are treated equally. \*

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

2. My organization has official policies to support gender equality, and they are defined as written procedures/policies \*

- Agree
- Neutral
- Disagree
- Strongly agree
- Strongly disagree

3. My organization deploy the policies to support gender equality in spirit and letter \*

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

4. Comparing to other organizations, my organization has better (higher quality) \* policies to support gender equality

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree
- I don't know

5. My organization extends support and flexibility to women during "key life transitions", like marriage, birth of a child, elderly care etc to continue in workforce \*

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

6. My organizations hiring policies are the same for men and women \*

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

The wage structure is the same for men and women in my organization. \*  
(Assuming all other parameters are the same- education, experience, technical know-how etc)

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

If the wage structure is not the same, where does the difference START to build up with experience as a key parameter (assuming all other parameters like education, technical know-how, performance is the same) \*

- At entry level hiring (0-2 years experience)
- At supervisory level (3-10 years experience)
- At mid leadership level (11-17 years experience)
- At senior leadership level (> 18 years experience)
- Not Applicable - (If the answer in the previous question is strongly agree, agree, or neutral)

The promotion opportunities are the same for men and women in my organization (assuming performance and other criteria are at par) \*

- Strongly disagree
- Disagree
- Neutral
- Agree
- Strongly agree

Have you ever thought your gender has played a role in you having missed out on a role, opportunity for advancement, raise or a key assignment? \*

- Yes
- No
- Maybe

Was it due to official policies, organization design or was it an act of the individual \*  
(e.g. your manager did not support you, or you decided not to pursue ahead).  
Please, explain

Your answer

Do you think your organization should be doing more to increase gender diversity, \*  
doing less or is just about enough

- Do more
- Do less
- Just about enough

Please, explain and/or suggest what your organization is doing or can do more \*  
of?

Your answer

Does your organization have a Diversity and Inclusion chapter? \*

- Yes
- No

Are the interventions done by that D&I chapter effective to promote diversity? \*

- Yes
- No
- Not Sure

Do you feel women are entrusted with extra tasks that men would not take up, \*  
and would not translate to career advancement or raise?

- Yes
- No
- Not Sure

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Self Evaluation

This section aims to introspect and look inwards

Do you ensure you have a "seat at the table"? \*

- Yes
- No
- Sometimes
- Not Applicable

Do you express your views and opine in meetings? \*

- Yes
- No
- Sometimes
- Not Applicable

Reflecting on your career, on an average, how long have you been in the same role? \*

- <= 2 years
- <= 4 years
- <= 6 years
- <= 8 years
- >= 9 years

Reflecting on your career, on an average, how long has been your tenure with one organization? \*

- upto 2 years
- upto 4 years
- upto 8 years
- upto 10 years
- >=11 years

Have you invested in yourself to acquire the latest skills/be aware of latest technologies to stay relevant and competitive? \*

- Yes
- No

Have you withheld pursuing an opportunity/role because of self limiting factors ? \*  
(eg, not feeling confident, not wanting to explore new roles, not feeling prepared enough etc)

- Yes
- No
- Maybe

Have you withheld pursuing an opportunity/role because it required change of city/ country, working hours etc? \*

- Yes
- No
- Maybe

Have you stood up to talk about gender discrimination when you experienced or observed with someone else? \*

- Yes
- No
- Sometimes
- Didn't experience or observe

Have you helped uplift women in your team /your peers? \*

- Yes
- No
- Didn't have an opportunity

## ANALYZING GENDER GAPS IN ORGANIZATIONAL DESIGN – CASE STUDY: IT SECTOR IN INDIA

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### Section 5: Gender Gap and Economy

This Section aims to get your perception on impact of bridging gender gap on Organization's outcomes and Economy in general.

Do you believe employing equal number of men and women in workplace brings about better business outcomes for the organization? \*

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

If the answer to the above question is agree/ strongly agree, please explain and/or suggest how employing equal number of men and women in workplace brings about better business outcomes for the organization. If the answer to the above question is strongly disagree/ disagree/ neutral, please write NA \*

Your answer

Do you believe women bring unique skills to the table that promotes better engagement amongst team members leading to improved productivity? \*

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

If the answer to the above question is agree/ strongly agree, please explain and/or suggest what unique skills do women bring to the table for better engagement amongst team members leading to improved productivity. If the answer to the above question is strongly disagree/ disagree/ neutral, please write NA \*

Your answer

Do you believe bridging gender gap will help boost economy? \*

- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

If the answer to the above question is agree/ strongly agree, please explain and/or suggest how employing equal number of men and women in workplace helps boost economy. If the answer to the above question is strongly disagree/ disagree/ neutral, please write NA \*

Your answer

## ANALYZING GENDER GAPS IN ORGANIZATIONAL DESIGN – CASE STUDY: IT SECTOR IN INDIA

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\* Required

Section 6: My actions as a manager

This section attempts to bring out your actions as a manager

As a manager, I have NEVER been biased in the following practices basis gender \*  
(assuming all other parameters like education, experience, skills etc are the same between candidates)

	Strongly Agree	Agree	Neutral	Strongly Disagree	Does not apply
Hiring	<input type="checkbox"/>				
Promotions	<input type="checkbox"/>				
Wages	<input type="checkbox"/>				
New roles/assignments	<input type="checkbox"/>				
Salary raise	<input type="checkbox"/>				