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## A STUDY ON IMPORTANCE OF WOMEN IN TECHNOLOGY AND EMPOWERING THEM

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**Abstract:** Inequality between men and women has existed and it still exists in almost all aspects of living. One which presents almost the biggest gap between men and women is the inequality in tech industry. Tech industry is the sector which divides men and women in the workplace. Lesser women are employed in tech industries. Most of the ruling tech companies are led by men. This phenomenon has been ongoing globally for almost whole time, but, different schemas has been taken in order to increase the gender diversity in tech industries.

Even though women have had noticeable influence in technology since the beginning but yet their numbers are less in the industry. Women used to have important roles in tech companies and they were inventors of some major things in technology but in present they make the least percentage of involvement in the tech industries. The reasons behind less number of women in tech industry varies. It can be anything, from choice of owner of tech companies in employment to women having barriers and difficulties in taking part in tech companies and to chances not taken by women.

As women are needed in every other aspects of living, their need is noticeable in tech industry also. Obviously women who make half of the society, their involvement in tech would give a boost to the industry. It is agreeable that if two different persons are working on a same project, it will result in betterment since it would be seen from two different aspects. The best will be the result if two different mindset and opinion are gathered together. Hence, in order to have to different mindsets, women are needed as much as men in tech industry and for that, different plans must be implemented to equalize gender diversity in the industry.

**Keywords:** Tech Industry, Gender Diversity, Different Mindsets.

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**Introduction:** Since the beginning of human life, there have never been exact equality among men and women, and it is an ongoing worldwide phenomenon. Comparatively women and men make the almost equal population, but the bitter truth is that women are considered inferior in almost every aspect of living. One of those aspects is technology. Women are not considered to be influential in technology though they have done a lot in it and the numbers are improving as the time passes.

In the current state, diversity of gender in tech industry is getting equaled than before. Some women are having key positions in tech companies which are ruling. And in recent years, in order to bring diversity in technology and tech industry, many ways are being implemented. Firstly, education in technological fields are being provided since the first stages. Before, it was that men were even paid more than women even if they were doing the same task but as of now in companies, women are put as priority to be given the chances in being employed than men. Before being employed they would even receive trainings in the related field to make their tasks easier. Hence, this way it has worked for equaling the gender diversity but it is a slow process which would take a long period of time to be completely implemented. Hence, patience is the key to reach such a valuable success.

**Gender Inequality in Tech Industry:** People in the technology industry should be setting the best example when it comes to gender equality. The most rotten thing in technology is the gender inequality. The data backs up the imbalance of women working in technology. According to a recent Reuters study, 30% of 450 technology executives said that their groups had no women in leadership positions. According to a study by Stack Overflow, reveals that only 5.8 percent of developers are women worldwide, and beside that it says that men takes most of the part in engineering field as well. The

reason behind lack of women in technology could be either they are not given the opportunity or they are showing less interest to become involved in it. The reason of women not being employed or involved in technology differs in places. Some are having the idea that women are inferior in brain than men which results on not giving opportunities to women whilst in some other places different barriers comes across women's way which prevents them from getting a part in technology such as insecurity, prevented or being discouraged by family, or even it can be the money gap. It is well known that in almost everywhere, women are paid less than men for the same tasks.

Without a doubt, Tech leaders and owners of companies require best and most intelligent people working for them no matter their color, sex, religion, or nationality. Owners of companies understand that it is the service and products which leads their business and their only goal is to get the right people appointed so as to produce possible better finish lines. Therefore, this leads to increase in gender inequality. But the thing is that best service and product would come with the diversity in opinions.

### **Why Do We Need Women in Tech Industry?**

Answers for that question may differ from person to person, one even might say that we don't even need women. But, if technology is designed for everyone, wouldn't it be even better to be designed by everyone?

As a fact, we all know that brains differ from person to person. The mindset of a man and woman are completely different with each other. Everything becomes better when diversity exists in it. Technology could have gone far away if we had diversity of thought, mindset and approaching to solving problems throughout past years. If something is about to be produced and it is only designed by a man and it is tend to be used more by a woman, it may lack the features a woman wants in it for example a VR(virtual reality) which is now ruling the technology generation, if it is used by a woman it would clean out the makeup put by her, hence, it could be designed the way that it should not affect anything, and so it is applied to many other aspects.

**Influential Women in Technology:** Warren Edward Buffett is an American business man who is chairman and CEO of Berkshire Hathaway and is third richest man as of 2018. He had said that "What a waste of human talent – 50% of the population was pushed off into the corner for 200 years." regarding women not being involved in the technology but he also says that we have come this long with 50% of the population, it can't be imagined if 100% gets into action.

Those words said by Warren Buffett could be accepted in some cases but not at all. It is not that women have never been into technology. There have been influential women who had done the most valuable services, for example;

Ada Lovelace was the first person to publish an algorithm intended to be executed by the first modern computer, the Analytical Engine created by Charles Babbage. Because of this, she is often regarded as the first computer programmer.

Hedy Lamarr, she played a key role in the invention of spread-spectrum technology; specifically, by conceptualizing the idea of frequency hopping, which is a method of sending radio signals from different frequency channels, this technology originally was developed to help the Navy remote controls, and by the passage of time her work, spread-spectrum has got revived and plays a major role in modern wireless technologies such as Bluetooth and Wi-Fi.

Grace Hopper, called queen of software, was the first person to create a compiler for a programming languages and played major role in creating programming languages.

Dr. Erna Hoover, at the Bell Laboratories, she invented a program that kept phones functioning even being under loads for examples receiving many calls at a time which is now more improved in smart phones.

Adele Goldberg, she was one of the seven programmers that developed Smalltalk in the 1970s, one of the first object-oriented programming languages.

Susan Kare, was the designer who helped bring the Apple computer to life with her sophisticated typography and iconic graphic design skills. Working alongside Steve Jobs, she shaped many of the now-common interface elements of the Mac, like the command icon, which she found while looking through a book of symbols. Now owns digital design firm in San Francisco.

As well as that, women have been influential and has made up their part in technology, we still have women on noticeable positions in ruling companies around the world. For example,

Sheryl Sandberg Facebook COO

Susan Wojcicki YOUTUBE CEO

Meg Whitman HP CEO

Ginni Rometty IBM CEO

And Marissa Mayer who was president and CEO of Yahoo.

**How to Increase Gender Diversity in Tech Industry:** Most companies might have realized importance of having women in their squads as most of them are giving more opportunities to women rather than men. Globally women have been put as priority for most of companies, hence, as of now, it is easier for women to get the jobs related to technology than men. A company is enriched with different mindsets and ideas, without a doubt, it is the new and different ideas which leads to success, so, obviously that is what owner of tech companies has realized and are implementing it by giving priority to women.

Different communities exist to lessen gender inequality in different aspects of society. One is communities which helps lessen gender inequality in tech. One to be named is The European Center for Women and Technology has partnership of more than 130 organizations that support women in tech from all over Europe. There are many others as well as 'Girls in tech', 'women who code', 'women in tech' and so on.

There are many ways to be implemented to increase involvement of women in tech by numbers. Obviously above all, interest of women is the major point but encouraging them is the one method to be used. For example, the idea of introducing and well defining technology to women must be a proper and easiest way of generating interest in women. Technology should be included in educational system so it would attract people in its field. The other way can be encouraging women to change and start having new roles, as of now, most jobs are divided for men and women, so, a shift in the roles would do change to world.

Lessening of gender inequality in tech industry requires effort of both men and women, alone by one of them, it sounds to be impossible. In the organizations where men dominate the power circles, particularly they should bring changes in the position and roles. Women should be given positions to lead the teams or departments or even leadership of companies. Surely if the skills required for those positions can't be seen in women, it would be a hard task to accomplish but for women, they are also demanded to put effort since the beginning, from getting educated in technology until being employed and to leading organizations, therefore the effort put by both sides would result in success.

**Conclusion:** Last but not least, to completely sum it up, women are needed in technology, from being employed to leadership positions in tech industry. The inequality between men and women can be lessen by effort of both men and women. If more success and achievements are demanded in the technology, then, diversity of thought, mindset and opinion is needed.

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