



# **Barriers to Breakthroughs:**

## **Women in Nepal's Information and Communication Technology Landscape**



# Barriers to Breakthroughs: Women in Nepal's Information and Communication Technology Landscape

Women in Information Technology

Supported by:



**Disclaimer:** This report does not necessarily represent the views of the UK Government or The Asia Foundation.

# Message from the Chairperson, Women in Information Technology

Women in Information Technology (WIIT) is proud to present the “Barriers to Breakthroughs: Women in Nepal’s Information and Communication Technology Landscape” research report, marking a significant step in the organization’s mission to promote equal representation in Nepal’s rapidly evolving Information and Communication Technology (ICT) sector. This project was made possible through generous support and valuable contributions from numerous professional women and stakeholders.

WIIT was established in 2019 to empower women and girls through meaningful representation in the ICT sector. Guided by the organization’s core pillars—Women empower, Inspire, Innovate, and Technology—we are dedicated to enabling girls and women to reach their full potential and thrive in a technology-driven world. This project aligns with these objectives by offering an evidence-based understanding of the current status, opportunities, and challenges women face in ICT.

Our research analyzes survey responses from 402 ICT companies, 400 ICT-enabled companies, and 430 ICT professional women from across Nepal. Additionally, we conducted eight Focus Group Discussions (FGDs) with representatives from prospective stakeholder organizations and eight Key Informant Interviews (KIIs) with prominent women leaders in the ICT sector. These qualitative engagements provided invaluable insights into workplace provisions, barriers, and opportunities, significantly enriching the depth and scope of this research.

WIIT is fully committed to ensuring that this research is widely shared and used to advocate for policies and initiatives that will improve the working conditions and career prospects for women in the ICT sector. We will actively engage with government agencies, industry leaders, academic institutions, and other stakeholders to translate this research into concrete actions, helping create more inclusive and supportive environments for women in ICT.

On behalf of WIIT, I would like to express my sincere gratitude to everyone who contributed to the success of this project. We extend our heartfelt thanks to the Data for Development in Nepal (D4D) programme, implemented by The Asia Foundation with support from UK International Development for their unwavering engagement. We are deeply grateful to Kathmandu University, Institute of Engineering – Pulchowk Campus’s Center for Information Technology, Tribhuvan University, Nepal Engineering Council, Nepal Women Chamber of Commerce, Confederation of Nepalese Industries, Federation of Nepalese Chamber of Commerce & Industries, and the Department of National Personnel Records (Civil) for generously contributing their time, data, and insights to make this research possible. I would also like to thank the government agencies, academic institutions, public and private sector organizations, professional women, and other individuals whose cooperation and insights have been instrumental in this project’s success. We are indebted for the support of all professionals and stakeholders who participated in the KIIs and FGDs.

Lastly, I would like to commend all the enumerators and researchers, as well as the WIIT project team and staff members, for their dedication, hard work, and passion throughout this journey. Together, we have made significant strides toward empowering women in the ICT sector, and we anticipate continuing our collaborative efforts to achieve transformation and inclusivity in this crucial sector.

We believe this research will serve as a valuable resource for policymakers, industry leaders, and other stakeholders in their efforts to build a more inclusive and equitable ICT sector in Nepal.

Sincerely,



Ms. Gunakeshari Pradhan  
Chairperson, WIIT

## Acknowledgments

We would like to express our profound gratitude to the individuals and organizations that contributed to the successful completion of this research. First and foremost, we extend our deepest appreciation to **Dr. Amrita Sharma** (Digital Landscape Expert) whose guidance, expertise, and valuable feedback have been instrumental in completing this study. Your encouragement and insights helped shape the direction and outcomes of this research.

We are sincerely thankful to **Mr. Pranaya Sthapit, Ms. Sneha Shah, Ms. Aarya Bhandari**, and the entire team at Data for Development for providing necessary funding, resources, guidance, and expertise, as well as valuable feedback throughout the course of this research. We also extend our gratitude to **Prof. Dr. Manish Pokharel** (Dean, School of Engineering, Kathmandu University), **Prof. Bal Krishna Bal** (Professor, Kathmandu University) and the entire Department of Computer Science and Engineering team for providing essential resources and guidance for the completion of this study.

We are deeply grateful to **Prof. Dr. Shashidar Ram Joshi** (Former Dean, Institute of Engineering, Tribhuvan University), **Prof. Dr. Sushil Bajracharya** (Dean, Institute of Engineering, Tribhuvan University), and their teams for their invaluable resources and guidance during this research. We also extend our appreciation to **Dr. Pratima Pradhan** (Director, Kathmandu Engineering College) for her support in constructing the questionnaires and for providing the necessary resources and guidance throughout the research process.

We are thankful to **Mr. Padam Shahi** (Chairperson, Nepal Engineering Council), and Department of National Personnel Records (Civil) for the valuable data that significantly contributed to this research.

We would like to extend our heartfelt thanks to **Ms. Shristi Tripathi** (Director, Nepal Women Chamber of Commerce), **Mr. Razan Lamsal** (CEO, Living with ICT Foundation), **Ms. Sunaina Ghimire Pandey** (President, Computer Association of Nepal), for their assistance in preparing survey documents, coordinating with stakeholders, and conducting trial runs.

We are deeply indebted to all the **data enumerators, WIIT executive members, and project team members** for their invaluable assistance at various stages of this research, including survey document preparation, mock data filling, data collection, analysis, and technical support. Your collaboration has made a significant impact.

We would also like to acknowledge the invaluable contributions of **Nepal Telecom, the Telecom Training and Research Centre team, and Sashi's Art Studio** for providing space and logistical support for the enumerator training, which was crucial to the success of this research. We wish to express our heartfelt gratitude to the **experts from various sectors** for their inspiring discussions and encouragement during the FGDs and KIIs.

Special thanks to **Ms. Gunakeshari Pradhan**, Chairperson of WIIT, for her constant moral support and patience, especially during challenging moments.

The preparation of this report has greatly benefited from the diligent support from **Qualz.ai** for qualitative insights using their AI powered platform, **Mr. Richan Shrestha** for data analysis and **Mr. Rujen Shrestha** for design and layout, for which we are sincerely grateful.

Finally, we would like to express our deepest appreciation to all the **WIIT executive members and members** whose efforts and encouragement were instrumental in the success of this research. To all those who have supported us, directly or indirectly, we are truly grateful for your kindness and generosity. This work reflects your contributions as much as it does our own efforts.

## Project Team Members

1. **Dibyswory Dali**, Project Coordinator, WIIT Executive Member
2. **Minu Pradhan**, Project Manager, WIIT Member
3. **Ratna Tara Tuladhar Baidya**, Project Administrator and WIIT Secretary
4. **Reva Rajbhandary Shrestha**, Data & Finance Officer, WIIT Executive Member

## Research Team Members

1. **Dr. Amrita Sharma**, Digital Landscape Expert
2. **Elisha Rajbhandari**, Lead Researcher and WIIT Member
3. **Kripa Shrestha**, Researcher

4. **Field Researchers**

Adita Maharjan, Bipal Tuladhar, Durgesh Gautam, Gehendra Dangi, Ishika Thapa, Kamala Oli, Krish Maharjan, Kushal Dixit Chhettri, Nirjala Mainali, Nirjana Khadgi, Pragya Aryal, Pooja Ghale, Rabin Oli, Sangya Pokharel, Sanjita Dongol, and Slesha Thapa

# Executive Summary

This research report provides a detailed analysis of the existing state of women's participation, leadership, and involvement in Nepal's ICT sector. The primary objectives of this study are to examine the status of women in ICT, identify the opportunities and challenges they face, and provide actionable recommendations to strengthen women representation and leadership in the ICT sector.

The research employed a mixed-method approach, integrating quantitative data from surveys conducted with 402 ICT companies, 400 ICT-enabled companies, and 430 ICT professional women. Qualitative data was gathered through eight FGDs and eight KIs. Analytical tools, including inferential statistics such as logistic regression and thematic analysis for qualitative data, were used to derive valuable insights.

The research indicates significant gaps in women's representation in Nepal's ICT sector. **Women constitute only 7.88 percent of the workforce in the country's ICT companies, particularly in core technical roles and responsibilities, and 0.51 percent in ICT-enabled companies.** Leadership opportunities for women remain limited, with only 19.55 percent of ICT professional women—among the 7.88 percent—holding managerial or executive positions. This study highlights key challenges for women, including unconscious bias in hiring and promotions, limited mentorship opportunities and role models, financial barriers to accessing education and training, and inadequate work-life balance. However, **the ICT sector appears largely unaffected by Nepal's pay disparity between male and female employees, as 87.9 percent of the surveyed women reported no compensation differences compared to their male counterparts.** While 12.4 percent of companies have comprehensive work policies supporting inclusiveness, work-life balance remains a significant barrier for nearly half of the women surveyed.

The study highlights the competitive advantages, beyond core technical skills, that women bring to the ICT workforce. Women were recognized for their strong ethical professionalism (98.3 percent), effective customer relations (95.7 percent), and innovative thinking (87.1 percent). Furthermore, 71.1 percent of companies acknowledged that the ICT sector is gradually becoming more inclusive for women, signaling progress in addressing disparities in equality.

This study explored recommendations in three key areas to improve women's participation and leadership in the ICT sector.

## Recommendations for Aspiring Young Women in ICT

- Engage in internships, mentorships, workshops, and training programs to gain technical skills and industry exposure.
- Set clear goals, embrace challenges, and remain adaptable in a fast-changing technological landscape to stay competitive.
- Utilize online resources, such as Coursera and LinkedIn Learning, to acquire certifications and advanced knowledge in emerging fields such as Artificial Intelligence, cloud computing, and data analytics.
- Participate in hackathons, industry forums, and mentorship programs to establish meaningful professional relationships.
- Acquire hands-on experience, practical training, and real-world project exposure to bridge the gap between academic knowledge and industry requirements.

## Recommendations for Organizations

- Promote ICT careers among women through outreach programs, media campaigns, and partnerships with schools and colleges. Highlighting success stories of women excelling in companies can inspire young women to pursue careers in the field.

- Provide structured training, upskilling initiatives, and mentorship opportunities to nurture women's talent and confidence.
- Implement and monitor workplace policies that ensure safety, equity, and equal pay. Encourage diversity in recruitment and leadership roles.
- Celebrate and spotlight the achievements of women leaders to inspire and empower future generations.
- Offer scholarships, flexible benefits, and financial incentives to encourage women's participation in ICT careers.

### **Recommendations for the Government**

- Introduce scholarships, vocational training, and ICT-focused school curricula to build foundational skills and reduce barriers for women and girls.
- Revise labor laws to promote workplace safety, flexible work arrangements, and equitable recruitment practices.
- Facilitate mentorship programs, leadership quotas, and networking opportunities to support professional growth.
- Offer tax benefits and incentives to companies with inclusion, and provide grants to companies that promote inclusivity while offering financial aid to women entrepreneurs in technology.
- Challenge stereotypes through national campaigns, showcasing role models and celebrating women's contributions to the ICT sector.

# List of Abbreviations

ADB	Asian Development Bank
BCG	Boston Consulting Group
BPO	Business Process Outsourcing
CBS	Central Bureau of Statistics
CEO	Chief Executive Officer
CIO	Chief Information Officers
CNI	Confederation of Nepalese Industries
CTO	Chief Technical Officer
D4D	Data For Development
DMoSAE	Dutch Ministry of Social Affairs and Employment
FGD	Focus Group Discussion
FNCCI	Federation of Nepalese Chambers of Commerce and Industry
EIGI	European Institute for Gender Equality
GCI	Global Cybersecurity Index
GDP	Gross Domestic Product
GON	Government of Nepal
GSMA	Global System for Mobile Communications
IBM	International Business Machines Corporatio
ICT	Information and Communication Technology
IIDS	Institute for Integrated Development Studies
IOE	Institute of Engineering
ITU	International Telecommunication Union
KII	Key Informant Interview
MoFAGA	Ministry of Federal Affairs and General Administration
MoWCSC	Ministry of Women, Children and Senior Citizens
NASSCOM	National Association of Software and Service Companies
NDRRMA	National Disaster Risk Reduction and Management Authority
NEC	Nepal Engineering Council
OECD	Organization for Economic Co-operation and Development
OPMCM	Office of Prime Minister and Council of Ministers
ROI	Return of Investment
SPSS	Statistical Package for Social Sciences
STEM	Science, Technology, Engineering, and Mathematics
UGC	University Grants Commission
UN	United Nations
WCT	Women in Communications and Technology
WIIT	Women In Information Technology



# Table of Contents

Message from the Chairperson, Women in Information Technology	i
Acknowledgments	ii
Project Team Members	iii
Executive Summary	iv
List of Abbreviations	vi
Table of Contents	vii
List of Tables	x
List of Figures	x
<b>Chapter 01 Introduction</b>	<b>1</b>
Background	2
Objectives	2
Methodology	3
Limitations	5
Operational Definitions	5
<b>Chapter 02 Women in Nepal’s Digital Frontier</b>	<b>7</b>
<b>Women’s Representation in ICT</b>	<b>8</b>
Age Group	8
Level of Position	8
Education	9
District Coverage	9
Ethnicity	10
<b>Workplace Policies and Support Systems in Organizations</b>	<b>10</b>
Recruitment Targets for Women	10
Support for Women Tech Employees	11
Leave Provisions	12
Specific Facilities	13
Access to Electronic Devices	14
Pay Equity	14
<b>Chapter 03 Reality Check for Women in ICT</b>	<b>15</b>
<b>Family Support for Sustained Leadership</b>	<b>17</b>
<b>Work-Life Balance</b>	<b>18</b>
<b>Organizational Support for Women’s Growth</b>	<b>19</b>

Promoting Women in Leadership Roles .....	20
Trends in Inclusive Work Culture .....	21
Importance of Education and Awareness .....	22
Contribution of Mentorship and Networking .....	23
Financial and Institutional Support .....	23
Advocacy for Gender-focused Policies .....	23
<b>Chapter 04 Competitive Edge of Women in ICT .....</b>	<b>25</b>
Ethical Values and Professionalism .....	26
Empathy and Strong Customer Relations .....	26
Enhancing Creativity and Innovation .....	26
Multitasking and Adaptability .....	26
Leadership and Talent Development .....	26
Retention and Organizational Stability .....	27
<b>Chapter 05 Breaking Through Barriers .....</b>	<b>29</b>
Barriers and Bridges: Women in ICT .....	31
<b>Chapter 06 Recommendations .....</b>	<b>37</b>
<b>Aspiring Young Women in ICT: Awareness and Education .....</b>	<b>38</b>
Immersing in the ICT Field .....	38
Pursuing Excellence .....	38
Staying Ahead with Technology .....	38
Leveraging from Online Learning Platforms .....	38
Building Professional Networks .....	38
Acquiring Hands-on Experience .....	38
<b>For Organizations: Support Women in the ICT Field .....</b>	<b>39</b>
Awareness and Outreach .....	39
Establish Training and Internship Programs .....	39
Develop Mentorship and Leadership Platforms .....	39
Invest in Inclusive Workplace Policies .....	40
Promote Pay Equity .....	40
Adopt Inclusive Recruitment Strategies .....	40
Highlight Achievements of Women Leaders .....	40
Enhance Financial Supports and Incentives .....	40
<b>For the Government: Support Women in ICT .....</b>	<b>41</b>

<b>For the Government: Support Women in ICT</b> .....	41
Enhance Educational and Training Opportunities .....	41
Promote Inclusive Workplace Policies .....	41
Facilitate Professional Growth and Networking .....	41
Launch Awareness and Advocacy Campaigns .....	41
Support for Work-Life Balance .....	41
Provide Financial and Institutional Support .....	42
Adapt and Adopt Global Best Practices .....	42
Reduce Discriminatory Policies .....	42
<b>Conclusion</b> .....	42
<b>References</b> .....	43
<b>Annex 1</b> .....	45
<b>Annex 2</b> .....	47

## List of Tables

Table 1. Sample Description of ICT Sectors.....	4
Table 2. Sample Description of ICT-Enabled Sectors.....	4
Table 3. Affirmative Actions to Recruit Women.....	11
Table 4. Reasons for Not Ensuring Specific Target to Recruit Women.....	11
Table 5. Specific Support Target for Women Tech Employees.....	12
Table 6. Paid Maternity Leave.....	13
Table 7. Paid Paternity Leave.....	13
Table 8. Specific Facilities.....	13
Table 9. Facilities Specially for Women.....	14
Table 10. Barrier for Women in ICT.....	16
Table 11. Barrier for Women in ICT.....	17
Table 12. Adequate Support for Women’s Growth in ICT.....	20
Table 13. Organizations Promoting Women to Leadership Roles as Frequently as Men.....	21
Table 14. Women in Leadership Positions.....	21
Table 15. Industry Becoming More Inclusive for Women Over Time.....	22
Table 16. Competitive Advantage of Having Women Employees in the Organization.....	27
Table 17. Barriers and Bridges in Women’s Lives in ICT.....	31
Table 18. Recommendation to Young Women Aspiring to Build Career in Technology.....	39
Table 19. Recommended Actions for Organizations.....	40
Table 20. Recommended Actions to the Government.....	42
Table 21. Registered Engineers in the Nepal Engineering Council.....	45
Table 22. Number of Women in ICT from the Department of National Personnel Records (Civil), 2022/23.....	46

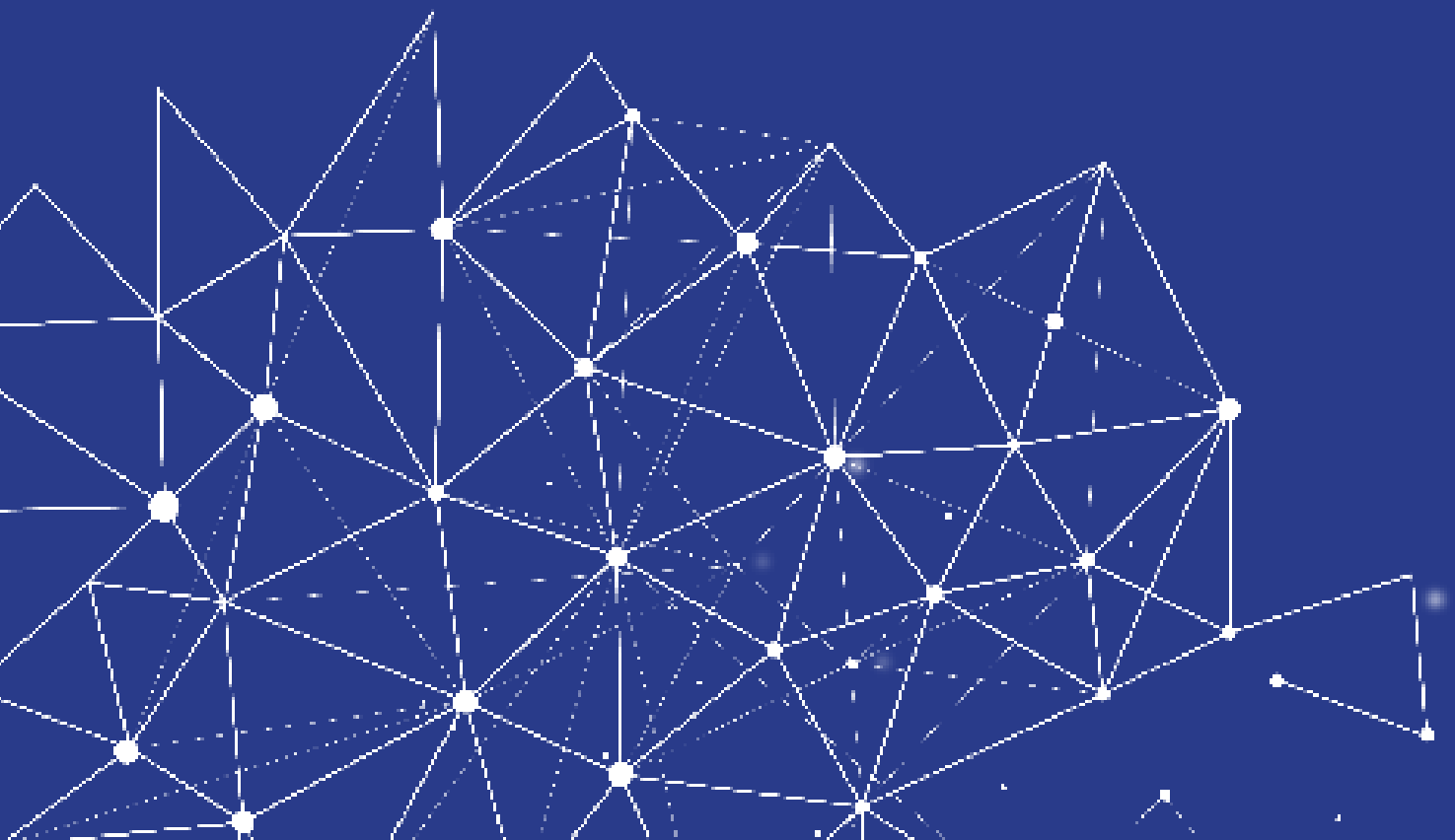
## List of Figures

Figure 1. Overview of Methodology.....	5
Figure 2. Age of Respondents.....	8
Figure 3. Level of Responsibility.....	9
Figure 4. Education of Respondents.....	9
Figure 5. Ethnicity of Respondents.....	10
Figure 6. Workplace Policies and Support Systems in Organizations.....	10
Figure 7. Inclusion of Specific Target to Maintain Gender Balanced Representation.....	10
Figure 8. Inclusion of Specific Support Target for Women Tech Employees.....	11
Figure 9. Inclusive of Leave Provisions.....	12
Figure 10. Electronic Devices Provided for Official Use.....	14
Figure 11. Unequal Pay Compared to Male Counterparts.....	14
Figure 12. Flexible Work Arrangement Improves Work-Life Balance.....	18
Figure 13. Major Barriers to Bring Women Into ICT.....	19
Figure 14. Chi-Square Test.....	28
Figure 15. Journey of a Woman.....	30

---

# Chapter 01

# Introduction



## Background

The ICT sector serves as a cornerstone of modern economies, driving innovation, creating jobs, and enhancing service delivery across multiple domains. In Nepal, this sector offers immense potential to diversify the economy, improve governance, and boost productivity in key areas such as agriculture, health, education, and tourism. A 2021 World Bank study found that a 10 percent increase in broadband internet penetration can result in a 1.38 percent GDP growth in lower-income countries, underscoring the transformative economic potential of ICT. However, despite Nepal's progress in digital development through government initiatives and efforts of the Ministry of Communication Information and Technology, Nepal Telecommunications Authority, and the Ministry of Industry, Commerce and Supplies, the benefits of the ICT sector remain unequally distributed. Gender disparities are particularly concerning, with only 16 percent of the country's IT export services workforce comprising women (IIDS, 2023). Addressing these gaps is crucial to harness ICT's potential to empower marginalized groups, especially women, who remain underrepresented in this transformative sector.

Nepal's ICT landscape is expanding, marked by increasing internet penetration, rising digital literacy, a growing startup ecosystem, and surging export services opportunities. However, digital safety and digital divide remain a significant challenge. Nepal scored just 55 out of 100 in the Global Cybersecurity Index (GCI) 2024, placing it in the "establishing" (Tier 3) category and highlighting vulnerabilities in digital safety and resilience. Furthermore, the GSMA Mobile Connectivity Index 2024 revealed gender-equality disparities, with Nepal scored 67.2 for women's mobile internet access compared to the global average of 76.5. This data emphasize the urgent need for inclusive policies and targeted interventions to bridge digital divides while promoting women's leadership role in ICT, ensuring their meaningful engagement in the sector's decision-making processes. By addressing these systemic challenges, Nepal can promote equity while strengthening its position in the global digital economy, offering inclusive ICT solutions to tackle socio-economic and political disparity in representation.

However, the continued underrepresentation of women in ICT globally—and particularly in Nepal—limits the sector's potential for inclusivity and equitable growth (ITU, 2023). Despite comprising **51.02 percent of Nepal's population (CBS, 2021) and achieving higher university enrollment rates than men, women make up only 0.5 percent of economically active workforce in ICT (GoN-OPMCM, 2024)**. Limited access to technical education, workplace discrimination, challenges in balancing work and life, along with traditional mindset and entrenched socio-cultural norms, disproportionately hold back women's participation and advancement in this field. Addressing these disparities is essential for unlocking the full potential of Nepal's ICT sector, which offers significant opportunities to diversify the economy. Bridging the equity gap would empower women, drive innovation and resilience within the sector, and create a more inclusive digital future for Nepal. **This study identifies the systemic challenges and opportunities for women in ICT, providing a foundation for evidence-based interventions and policies that promote inclusive and sustainable development in Nepal.**

## Objectives

The broader objective of this study is to contribute to the growth of women's participation, leadership, and meaningful engagement in Nepal's ICT sector by offering evidence-based insights and recommendations.

The specific objectives are:

- a. To explore the current status and work provisions of women in the ICT sector
- b. To assess the opportunities and challenges for women in ICT
- c. To provide recommendations to increase leadership and meaningful participation in ICT

## Methodology

This study utilized a mixed-method approach to assess the participation, challenges, and opportunities for women in Nepal's ICT sector, integrating both quantitative and qualitative data. The quantitative data was collected through a structured survey using the KoboToolbox, targeting ICT companies, ICT-enabled companies, and individual ICT professional women.

For the tech-enabled industry population, member lists of CNI and FNCCI were used. For CNI, ICT-enabled companies were identified from the total member list, which included seven province chapters and 350 member companies. For FNCCI, Nepal's largest association, data was collected from 125 district/municipal chapters, 124 commodity associations, and 208,580 member companies (Federation of Nepalese Chamber of commerce and Industries, 2024). Of the 208,580 member companies, ICT-enabled companies were identified from the district/municipal chapters, commodity associations, and associate members using ICT-enabled criterion (companies that leverage ICT tools and systems to perform tasks, optimize operations, and achieve organizational objectives, which enhances efficiency and productivity in services or product delivery). While sorting the companies, the weightage of FNCCI members were taken into consideration—50 percent from district chambers, 30 percent from associate member, and 20 percent from commodity associations. The sample frame of 2,363 companies was created using stratified random sampling.

For the population of ICT companies, data was obtained from enterprises registered under the company registrar office categorized under ICT companies. The Excel sheet contains six codes for the ICT companies, with each code representing the name of the ICT companies. In the list, companies with computer hardware code were assigned the code number 7210; computer software with code number 7220; data processing computing, communication, technology, outsourcing, and all related database companies were assigned with code number 7230; data services of finance, statistical, computer-related, online business, and e-commerce with the code 7240; service and repair companies were given the code number 7250; and other categories were assigned the code number 7290. Finally, a list of 12,380 companies from all six codes was obtained.

The Cochran Formula was applied to determine the appropriate sample size for this study's population, ensuring statistically reliable results while accounting the desired confidence level and margin of error. Simple random sampling was used while selecting samples from the population lists.

For ICT professional women, the criteria included professionals with specialized knowledge and expertise in ICT or Science, Technology, Engineering and Mathematics (STEM) fields, as well as those actively engaged in the design, development, management, and implementation of ICT solutions. The survey link was shared with various network of WIIT members, including government bodies, non-profit organizations, and ICT and ICT-enabled companies.

The study incorporated survey conducted from 28 October 2024 at 10:00 a.m., to 29 November 2024, at 3:00 p.m. The total number of data entries was finalized, and after cleaning the data, [the collected responses and insights were obtained from 402 ICT companies, 400 ICT-enabled companies, and 430 women ICT professionals.](#)

The findings of this study are generalizable to ICT and ICT-enabled companies, as the data were directly obtained from the relevant population within these sectors. By leveraging a comprehensive sample that reflects the composition of ICT and ICT-enabled companies, the study ensures the results accurately represent industry trends, challenges, and opportunities.

The ICT companies were involved in various areas, with the majority of the organizations focusing on software development, web design, mobile app development, and digital marketing. Similarly,

ICT-enabled companies integrate ICT solutions into sectors such as education, manufacturing, healthcare, banking, and finance. A majority of the companies (92.4 percent) belonged to the private sector. The professional women survey found that over half the respondents (59.5 percent) identified themselves as single, while 60.7 percent said they had less than three years of professional experience. [The survey included participants from Nepal's 35 of 77 districts](#), providing a diverse geographical representation of women in the ICT sector.

**Table 1. Sample Description of ICT Sectors**

ICT Sectors	Frequency	Percentage
Telecommunication	3	0.2
Internet service	15	3.7
Software development	226	56.2
Outsourcing and BPO	36	9.0
Web design	205	51.0
Design	115	28.6
Mobile app development	157	39.1
IT services and consulting	104	25.9
E-commerce solutions	53	13.2
Digital marketing	127	31.6
Data service	22	5.5
Data analytics	35	8.7
Cloud services	26	6.5
IT training and education	45	11.2
Cybersecurity solutions	21	5.2
Gaming and animation	16	4.0
Others	58	14.4

Source: (Field survey, 2024)

**Table 2. Sample Description of ICT-Enabled Sectors**

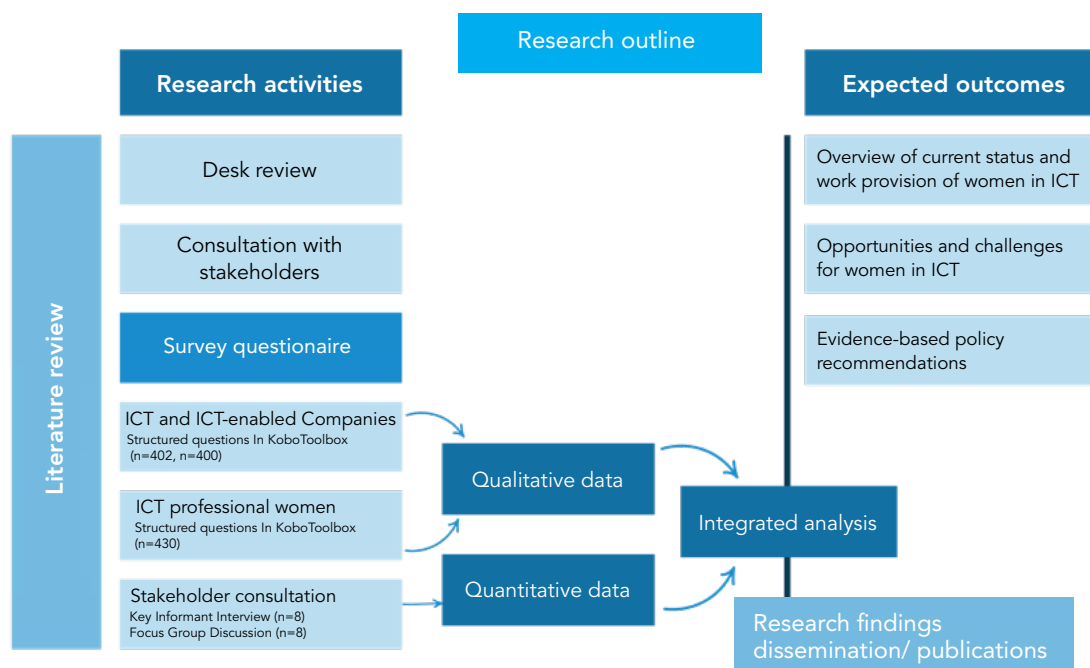
ICT-Enabled Sectors	Frequency	Percentage
Banking & finance	24	8.3
Insurance	7	2.4
Healthcare	31	10.7
Education	63	21.8
Training	12	4.2
Hotels	19	6.6
Airlines	6	2.1
Travel	11	3.8
Food	15	5.2
Energy	5	1.7
Professional services	13	4.5
Manufacturing	50	17.3
Trading	11	3.8
Consumer services	19	6.6
Media and entertainment	10	3.5
Environmental services	3	1.0
Real estate	2	.7
Public services	20	6.9
Others	45	15.6

Source: (Field survey, 2024)

Qualitative data collection involved eight KIIs with prominent women leaders in the ICT sector and eight FGDs comprising diverse stakeholders, including government representatives, ICT professionals, and participants from the education and financial sectors. A pilot survey was conducted to refine the questionnaire, ensuring its clarity and contextual relevance. The final survey design incorporated feedback from literature reviews and consultations with stakeholders and industry professionals. For data analysis, the Statistical Package for the Social Sciences (SPSS) software tool was used for quantitative data, employing descriptive tools, chi-square tests, and logistic regression. Qualitative data was analyzed using tools such as Qualz.ai to minimize biases and ensure accuracy. The priority of the responses was determined based of the saliency provided by the analysis. This comprehensive approach enabled an in-depth exploration of both numerical trends and the nuanced experiences of women in Nepal's ICT sector.



**Figure 1. Overview of Methodology**



## Limitations

This research primarily focused on formal ICT organizations, potentially overlooking non-traditional roles, freelance work, the gig ecosystem, and ICT entrepreneurship. Additionally, the study did not extensively explore the impact of social development initiatives on the empowerment of girls and women, and informal learning opportunities, which plays a vital role on women’s engagement in the ICT sector.

## Operational Definitions

**ICT:** Information and Communication Technology refers to a wide range of technological tools and systems, including hardware—computers, servers, mobile devices—software, digital platforms, and telecommunications infrastructure, which enable the processing, storage, and transmission of information. ICT encompasses internet-based technologies, cloud computing, artificial intelligence, and mobile networks that facilitate communication, innovation, and information management across various sectors.

**ICT-enabled:** This refers to companies that leverage ICT tools and systems in their organizations to perform tasks, optimize operations, and achieve organizational objectives, contributing to enhanced efficiency and productivity in services or product delivery.

**ICT Professionals:** ICT professionals refer to individuals with specialized knowledge and expertise in ICT or STEM fields, as well as those actively engaged in the design, development, management, and implementation of ICT solutions.

**Workplace Policies and Support System:** In this study, workplace policies and support system refer to formal guidelines and practices designed to support women within organizations. They include addressing unconscious bias in recruitment and hiring, implementing inclusive policies, overcoming cultural barriers or resistance, and providing scholarships or funding for ICT education. Additionally, such policies and support system involve offering training programs, facilitating rotational programs across departments for broader exposure, delivering soft skills training—personal development, public speaking, presentation

skills—expanding access to ICT education and training for women, supporting work-life balance through flexible work arrangements, and introducing work-from-home options to accommodate family responsibilities.

**Recruitment Target for Women:** The recruitment target for women in this study focuses on ensuring fairness and equity in hiring practices. Women candidates are prioritized when both male and female applicants are equally qualified, and job advertisements use inclusive language to encourage diverse applicants. Recruitment and promotion practices emphasize equity, along with dedicated initiatives specifically targeting women, and a quota system to promote diversity. Additionally, married women are provided equal opportunities during hiring, and recruitment processes do not impose higher age bars for women than for men, ensuring that all candidates are evaluated regardless of gender or marital status.

**Support for Women Tech Employees:** Support for women in the ICT sector includes providing scholarships or funding for ICT education, presenting work flexibility with an option to work from home, and offering reimbursable training programs for ICT-related courses. Women must be prioritized for opportunities to attend workshops and seminars, receive mentorship by senior women or supervisors, benefit from rotational programs for broader exposure, and be part of in-house knowledge transfer initiatives. Soft skills such as personal development training, public speaking, and presentation skills further supports women's career growth.

**Gender-specific Leaves:** Gender-specific leave policies include flexible schedules during menstruation, paid leave for pregnancy loss, and additional paid time off for women with more than two children. Such leaves should also include paid maternity leave (in varying durations of 45 days or fewer, up to 60 or 98 days, or more than 98 days), and paid paternity leave (in varying duration of fewer than 7 days, up to 15 days, or more than 15 days).

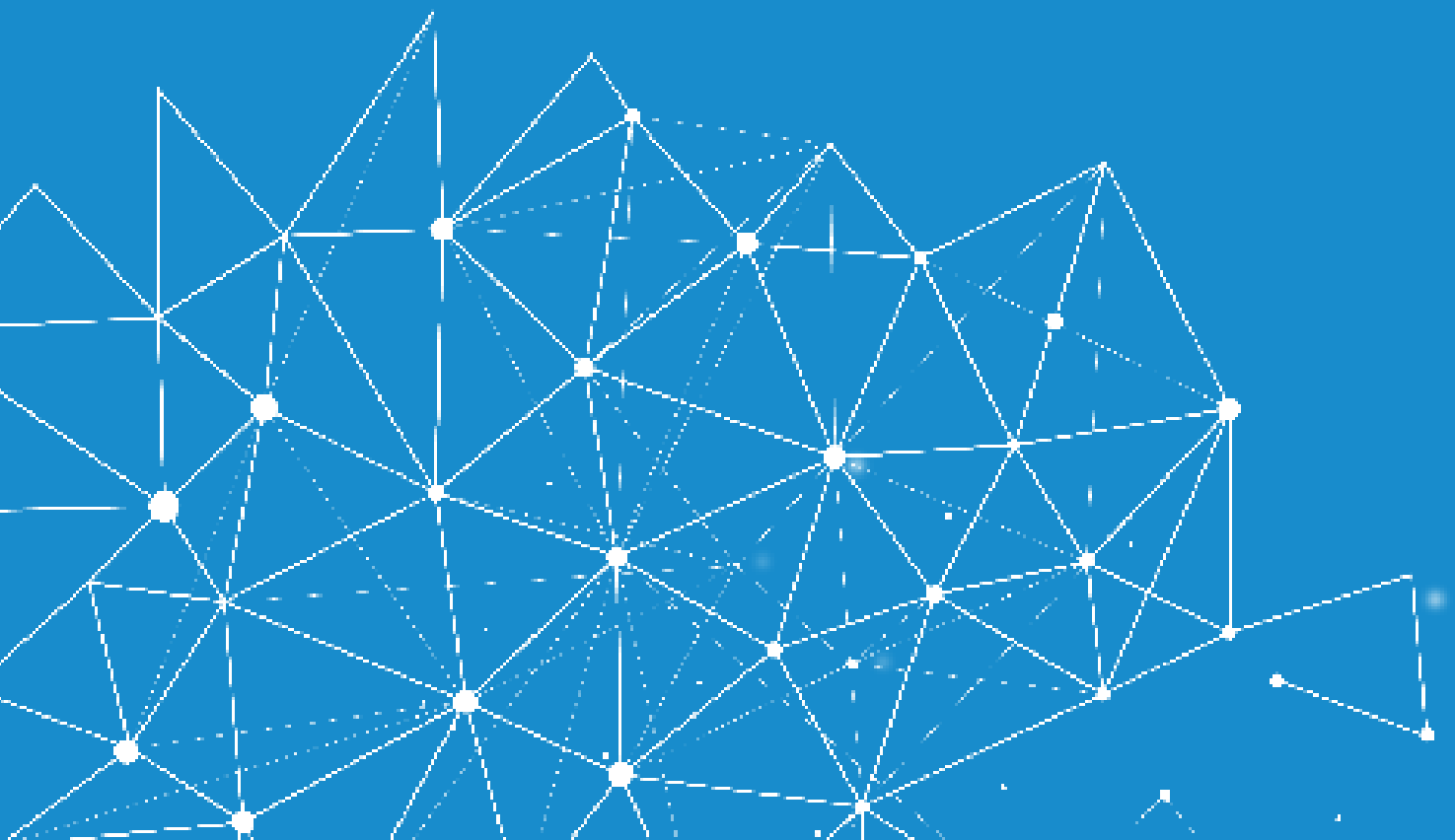
**Special Facilities:** Special facilities for women refer to childcare and breastfeeding rooms, transportation options for women working night shifts, menstrual support—including sanitary pads, hot water bags, and rest rooms—complaint handling mechanism involving work safety, harassment and exploitation, and a support system for mental and spiritual health to ensure overall wellbeing.

**Gender-inclusive Initiatives:** Gender-inclusive initiatives promote equal opportunities, participation, and representation for all genders by eliminating discrimination and ensuring fair access to resources, rights, and leadership roles in the company.

---

Chapter 02

# Women in Nepal's Digital Frontier



# Women’s Representation in ICT

This study found that women constitute only 7.88 percent of the workforce in Nepal’s ICT companies, particularly in core technical roles and responsibilities, and just 0.51 percent in ICT-enabled companies. Among ICT companies with over 100 employees, both ICT and ICT-enabled organizations demonstrate even lower percentages of women professionals, highlighting significant challenges in achieving gender diversity in larger companies. Logistic regression analysis further reveals that the representation of women professionals in ICT-enabled companies is 80.2 percent lower than in ICT companies, and this disparity is statistically significant ( $p < 0.001$ ). This indicates a profound gap in women’s professional participation across ICT and ICT-enabled sectors. When compared to Nepal’s overall female participation in the economy, the disparity becomes even more pronounced. According to the 2021 Census, women outnumber men in Nepal by 2.32 million. Additionally, Nepal’s female labor force participation rate in 2021 stood at an impressive 78.69 percent. (The Kathmandu Post, 2023)

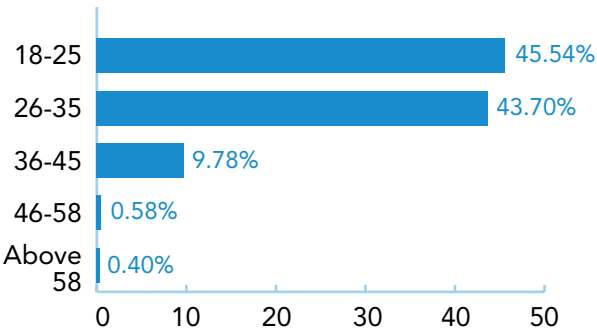
Data from the Nepal Engineering Council (NEC) shows that registered women engineers account for only 13.55 percent in the field of ICT. Meanwhile, the 2022/23 data from the Department of National Personnel Records (Civil) indicates that women constitute of 20.79 percent of the total workforce in Nepal’s provincial and federal governments.

Comparatively, Southeast Asian countries such as Thailand and the Philippines exhibit higher women representation in the technology sector, with women making up approximately 42 percent of the tech workforce. Meanwhile, Indonesia has about 22 percent women’s participation in technology roles (BCG, 2020), while India has about 34 percent of women working in the IT sector (NASSCOM, 2023). These figures suggest that Nepal lags behind some of its regional counterparts in integrating women into the ICT workforce.

## Age Group

The study found that the majority of Nepal’s women ICT professionals falls within the 18-35 demographic, accounting for 89.22 percent of the total ICT workforce. There is a significant decline of women ICT professional aged over 35, often attributed to societal expectations surrounding marriage and child-rearing. However, this trend is not unique to Nepal. Similar patterns are observed in other South Asian countries, where cultural norms and familial responsibilities influence women’s career trajectories, resulting in reduced participation in the workforce as they age.

Figure 2. Age of Respondents (N=430)



Source: (Field survey, 2024)

## Level of Position

In Nepal, women’s employment in senior and middle management roles ranks in the lowest quintile of all economies (World Bank, 2017), including the ICT sector. This study found that only 19.55 percent of these women—7.88 percent of the ICT professional women—hold top-level or managerial positions. Consultations with women professionals highlighted the prevalence of unconscious bias in the industry, where male employees often favor male candidates for high-level tech positions, despite women having the same experience and expertise. However, there are 38 women Joint Secretaries and three Secretaries in public service, indicating a growing presence of women in leadership roles within the Government of Nepal (Department of National Personnel Records (Civil), 2022/23).

Women in leadership positions also reported facing additional challenges, such as limited recognition from individuals outside their organizations, particularly when interacting with high-level government officials or politicians holding preconceived expectations and biases. Globally, this trend is consistent in the ICT sector. For example, Chief Information Officers (CIOs)—who are instrumental in shaping digital business practices—comprise only 11 percent of women worldwide (Gartner, 2020). Similarly, data from individual ICT professionals in Nepal indicate that only 13.5 percent of women hold executive, director, or senior managerial roles, underscoring systemic barriers such as the glass ceiling, unequal access to leadership opportunities, and entrenched societal biases.

Such underrepresentation of women in ICT leadership is also prevalent in the European Union countries, where women account for just 18 percent of ICT specialists, a figure that has been on a declining trend in recent years (EIGI, 2018). Moreover, large technology companies worldwide report that women hold approximately 25 percent of leadership roles, illustrating the persistent global challenge of achieving gender parity in ICT leadership positions (ADB, 2020). Despite these challenges, the presence of women in top-level positions signals progress and serves as a source of inspiration, encouraging hope for future advancements toward greater inclusivity in the sector.

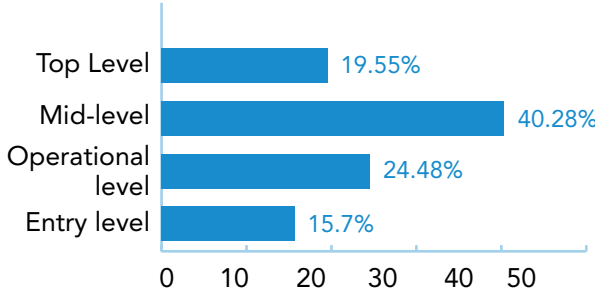
### Education

The educational qualification of women in Nepal’s ICT sector shows that 67.11 percent of the women hold a bachelor’s degree and 20.95 percent possess a master’s degree. In comparison, countries such as Thailand and the Philippines have a higher proportion of women technology graduates, each at 48 percent (BCG, 2020). This contrast suggests that while the educational qualifications of women in Nepal’s ICT sector are substantial, there is still room for improvement in aligning with regional leaders.

### District Coverage

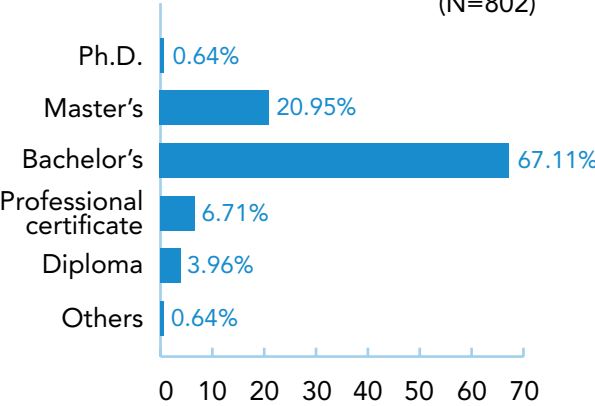
While this study covered 35 of Nepal’s 77 districts, regional disparities in ICT access and employment persist, a common trend in South Asia. Urban centers typically offer more opportunities, leading to a concentration of ICT professionals in these areas, while rural regions remain underrepresented. The urban-rural divide remains a pressing issue, with many countries in the region working to address it through policy interventions and infrastructure development.

**Figure 3. Level of Responsibility (N=802)**



Source: (Field survey, 2024)

**Figure 4. Education of Respondents (N=802)**

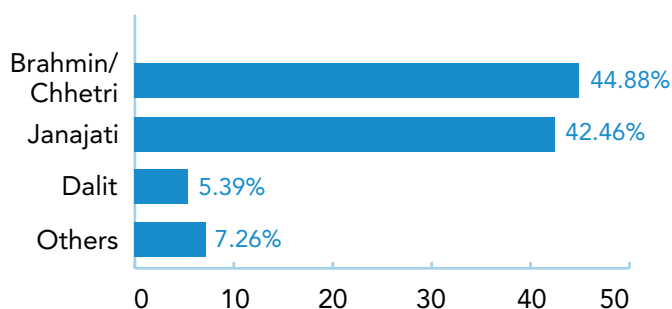


Source: (Field survey, 2024)

## Ethnicity

The ethnic composition of women in Nepal's ICT workforce is predominantly Brahmin/Chhetri (44.88%) and Janajati (42.46%), with Dalit representation at 5.39 percent. Comparable data from neighboring countries indicate that marginalized communities often face systemic barriers to contribute professionally in the ICT sector, resulting in their underrepresentation. Addressing these disparities is crucial for promoting an inclusive and diverse ICT workforce across the region.

Figure 5. Ethnicity of Respondents (N=802)

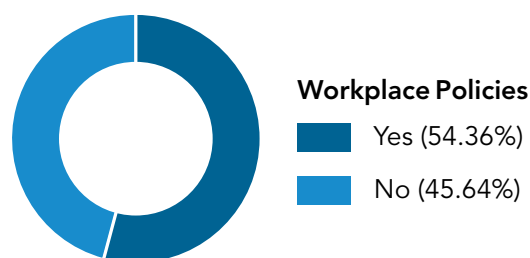


Source: (Field survey, 2024)

## Workplace Policies and Support Systems in Organizations

There are significant gaps in workplace policies and support systems for women in Nepal's ICT sector. Nearly half (45.64 percent) of the surveyed companies lack formal policies or initiatives to support women employees. Larger companies, particularly those with more than 100 employees, were more likely to have structured programs and policies aimed at promoting equal representation. This disparity highlights that larger organizations often possess the resources and capacity to implement gender-inclusive initiatives, whereas smaller companies may lack the focus and means to do so.

Figure 6. Workplace Policies and Support Systems in Organizations

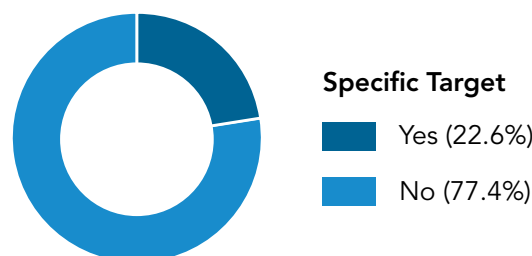


Source: (Field survey, 2024)

## Recruitment Targets for Women

A significant number of companies 77.4 percent of companies do not have specific targets for recruiting women, with only 22.6 percent reporting such goals. Among companies with targets, the majority (76.4 percent) prioritize hiring women under the equal qualification criteria. However, only 37.4 percent of ICT professional women believe that married women have the same hiring opportunities as others. Companies without gender-specific hiring targets often emphasized meritocracy as their guiding principle, with 71.7 percent stating that gender is not a factor in hiring decisions, and 64.1 percent highlighting merit as the primary criterion. While meritocratic hiring is widely accepted, it may overlook the systemic barriers women face in accessing equal opportunities, emphasizing the need for more inclusive recruitment practices. On the contrary, an interesting finding from the consultations showed that some companies in

Figure 7. Inclusion of Specific Target to Maintain Gender Balanced Representation



Source: (Field survey, 2024)

Nepal prefer hiring women over men, citing their stability and quality of work. This preference underscores the sincerity, dedication, and hard work women bring to the workplace.

Comparative studies from countries such as Bangladesh and Vietnam show that structured equity focused recruitment initiatives lead to better representation of women in technology and ICT sectors (UN Women, 2020; Genilo, 2013). Nepal could benefit from adopting such initiatives to bridge recruitment gaps.

**Table 3. Affirmative Actions to Recruit Women**

Specific Target to Recruit Women	Percent
Women candidates are preferred when equally qualified	76.4
Inclusive language and practices in job advertisements	20.3
Hiring and promotion practices focused on gender equity	25.8
Dedicated recruitment initiatives or programs	19.8
Quota system for women during hiring	17.6
Higher age bar for women than men while hiring	3.8
Married women have equal opportunities during hiring	37.4

Source: (Field survey, 2024)

**Table 4. Reasons for Not Ensuring Specific Target to Recruit Women**

No Specific Target to Recruit Women	Percent
Recruitment and hiring are done on a merit basis	64.1
Women did not apply on our previous vacancy	10.2
Gender is not considered in hiring	71.7
Others	1.1

Source: (Field survey, 2024)

## Support for Women Tech Employees

This study found that 65.7 percent of companies do not provide targeted support for women in the tech industry. Companies providing such support offer flexible work-from-home arrangements (61.1 percent), ICT training programs (55.6 percent), and soft skills training (47.3 percent). Other supportive measures, such as workshops and seminars (39.3 percent), contribute to skill development and attaining work-life balance. However, more specialized initiatives, including mentorship from senior women leaders (17.1 percent), in-house knowledge transfer (28.4 percent), and

**Figure 8. Inclusion of Specific Support Target for Women Tech Employees**



Source: (Field survey, 2024)

departmental rotational programs (9.5 percent) remain underutilized, limiting opportunities for growth and career advancement for women in ICT.

Comparatively, in India and the Philippines, leading ICT companies offer comprehensive mentoring and leadership development programs for women in technology, which have been credited with professional growth and improving the retaining women employees (ADB, 2020). Nepal could replicate these practices to address career development challenges.

**Table 5. Specific Support Target for Women Tech Employees**

Specific Support	Percent
Scholarships or funding to pursue ICT degrees/courses	8.7
Flexibility to work from home	61.1
Training program for ICT-related courses	55.6
Opportunities to attend ICT workshops and seminars	39.3
Reimburse training courses upon budget allocation	13.8
In-house knowledge transfer program	28.4
Senior women/supervisors as mentors and role models	17.1
Rotational programs through different departments or projects	9.5
Soft skill training	47.3
Others	2.9

Source: (Field survey, 2024)

## Leave Provisions

This study found that 55 percent of companies offer gender-specific leave provisions, while 45 percent do not provide such flexibility. Among the companies with such provisions, flexible work arrangements during menstruation are the most common (87.5 percent), recognizing the challenges women may experience. However, only 16.3 percent of women reported access to flexible work schedules during menstruation. Providing such flexibility can contribute to a more inclusive and supportive work environment, yet it remains underutilized. Additionally, even fewer companies offer paid leave during pregnancy loss (35.3 percent) and paid time off for women with more than two children (28.1 percent), highlighting a critical gap in addressing women’s unique health and caregiving needs.

**Figure 9. Inclusive of Leave Provisions**



Source: (Field survey, 2024)

Paid maternity leave, another essential support measure for women, varied significantly across organizations. While 38 percent of companies offered 45-60 days of paid leave, 25.7 percent provide fewer than 45 days, and only 5.9 percent adhered to the standard 98-day time off mandated by law (Nepal Law Commission, 2017). In comparison, countries such as Sri Lanka and Bhutan offer more standardized and better-enforced maternity leave policies, with Sri Lanka providing up to 12 weeks of



full paid leave after childbirth (ILO, 2019). Such practices set a benchmark for ensuring equitable and supportive leave provisions for women. Some companies also allow women to use remaining leave days and take advance leave from the upcoming year to support them during maternity leave (KII, 2024).

Paid paternity leave is another gender responsive measure that supports the transformation of traditional gender roles. Data from this research shows that 34.7 percent of the surveyed companies did not provide paternity leave, 34.2 percent offer fewer than 15 days' time off for new fathers, and just 31.1 percent offer a 15-day leave. Nepal's Labor Act provides men 15 days of paid paternity leave (Nepal Law Commission, 2017).

Globally, progressive practices in high-income countries further highlight the gaps in Nepal's leave policies. For example, in Sweden, parents are entitled to 480 days of paid parental leave, with 90 days allocated exclusively for each parent, promoting shared caregiving responsibilities (OECD, 2022). Similarly, Australia offers 18 weeks of government-funded parental leave, emphasizing both maternal and paternal support (Australia Government) and India women are eligible to take 26 weeks maternity leave (Maternity Benefit Act, 2017). Nepal's companies could draw inspiration from these models to strengthen gender-specific leave provisions and align with international best practices. Expanding paid maternity leave and introducing more comprehensive pregnancy loss and caregiving leave policies could considerably improve workplace inclusivity and support for women. As Nepal's ICT sector is still in its early stages, implementing such practices may not yet be feasible for all companies. However, striving toward these standards as the ICT sector and individual companies expand is crucial for creating a supportive and inclusive ecosystem in the long run.

### Specific Facilities

Approximately 59.4 percent of companies reported no specific facilities to support women, such as childcare rooms, transportation for night shifts, or mental health support. Among the few companies that provide such support, flexible work schedules during menstruation (80.8 percent) and complaint-handling mechanisms (55.3 percent) are the most common features. Facilities like childcare and breastfeeding rooms remain rare, with only 15.7 percent and 4.7 percent of organizations providing them, respectively. Comparatively, organizations in Bangladesh and India have started integrating facilities such as onsite childcare and breastfeeding rooms, especially in larger IT corporations, which could serve as a model for Nepal's growing ICT sector (World Bank, 2021).

**Table 6. Paid Maternity Leave**

Paid Maternity Leave	Percent
No	11.4
45 days or fewer	25.7
46-60 days	38.0
61-97 days	19.0
98 days and more	5.9

Source: (Field survey, 2024)

**Table 7. Paid Paternity Leave**

Paid Paternity Leave	Percent
No	34.7
Fewer than 15 days	34.2
15 days and more	31.1

Source: (Field survey, 2024)

**Table 8. Specific Facilities**

Specific Facilities	Percent
Yes	40.6
No	59.4
<b>Total</b>	<b>100.0</b>

Source: (Field survey, 2024)

**Table 9. Facilities Specially for Women**

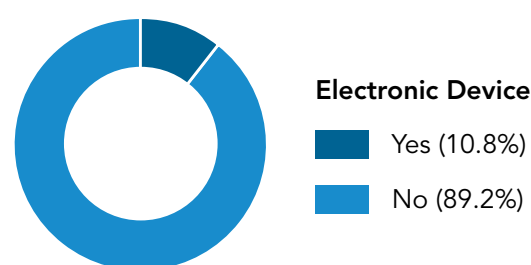
Facilities	Percent
Childcare and breastfeeding room	15.7
Transportation facilities for night shifts women employee	26.7
Menstrual period (flexibility) support	80.8
Complaint handling mechanism for harassment and exploitation	55.3
Mental and spiritual health support system	29.2

Source: (Field survey, 2024)

### Access to Electronic Devices

Only 10.8 percent of companies provide electronic devices such as laptops and mobile phones for official use, limiting the productivity of employees who cannot afford such tools. This gap underscores the need for organizations to provide essential resources to enhance workplace efficiency.

**Figure 10. Electronic Devices Provided for Official Use**

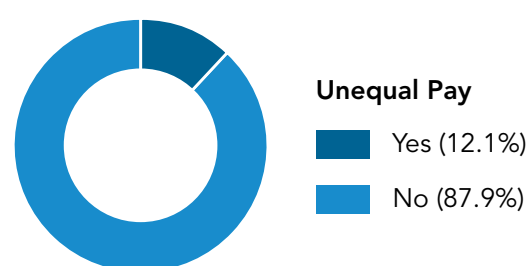


Source: (Field survey, 2024)

### Pay Equity

Nepal has a high female labor force participation but with a severe pay gap (World Bank, 2019). However, this study indicates that **only 12.1 percent of women in the ICT sector have experienced unequal pay**, while 87.9 percent reported that their pay is equitable. Notably, during the consultation, some women mentioned that they never negotiate their salaries, aligning with a global finding that 60 percent of women do not engage in salary negotiations (Stuckman, 2021). This trend might contribute to their overall satisfaction with pay levels despite potential underlying inequalities.

**Figure 11. Unequal Pay Compared to Male Counterparts**



Source: (Field survey, 2024)

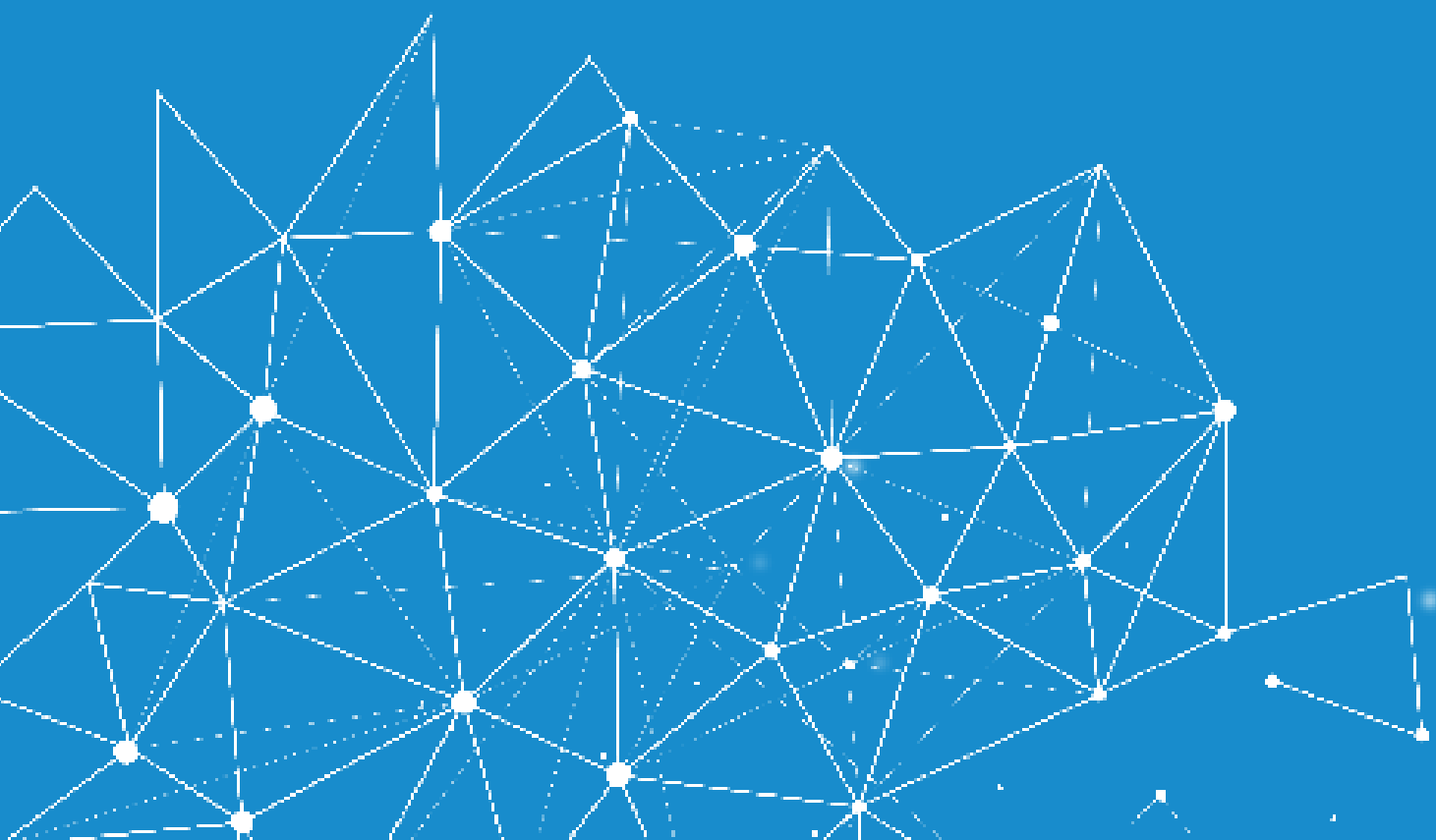
These findings suggest that while pay disparities may not be overtly recognized in Nepal, they may still persist due to discriminatory cultural norms, limited transparency, and a lack of negotiation practices.

In comparison, neighboring countries like India and Bangladesh report more pronounced gender pay gaps in the ICT sector, with women earning 15-20 percent less than their male counterparts (World Bank, 2021). In high-income countries such as the United States and the United Kingdom, while the gap is narrower, it remains at around 10-15 percent in the tech industry (OECD, 2022). These disparities are often mitigated through initiatives, including pay transparency laws, diversity-focused hiring, and structured promotion practices.

---

Chapter 03

# Reality Check for Women in ICT



Nepal has made significant progress in addressing gender inequality through a strong constitutional framework and legislative measures that align with international human rights standards. Over the past two decades, Nepal has enacted various laws aimed at promoting gender equality, preventing discrimination, and empowering women. Key legislative advancements include the National Penal Code (2017), which criminalizes gender-based violence, trafficking, and workplace sexual harassment; the Sexual Harassment at Workplace Prevention Act (2015), and the Right to Safe Motherhood and Reproductive Health Act (2018), which ensures sexual and reproductive rights. Affirmative action policies, such as amendments to the Civil Service Act that reserve 33 percent seats for women in public service recruitment, have contributed to increased women’s representation in leadership roles, with women now comprising 23.6 percent of Nepal’s civil service workforce. These legislative efforts collectively reflect Nepal’s commitment to supporting a gender-inclusive society (GON-MoWCSC, 2020; Nepal Law Commission, 2015). Despite these achievements, disparities persist, especially in male-dominated and technology-driven sectors such as ICT and engineering. Regardless of advancements in women’s representation across sectors, significant gender gaps persist in the ICT and technical education fields. The 2021 National Population and Housing Census shows that women represent just 0.5 percent of economically active individuals in the ICT sector and hold limited decision-making positions, highlighting systemic barriers like societal norms, limited access to technical education, and a lack of mentorship opportunities. Enrollment trends in technical education reveal similar disparities. Tribhuvan University’s undergraduate intake shows 30.28 percent women participation in ICT programs, while other institutions, like Kathmandu University, report as low as 13.55 percent. Meanwhile, women representation decline even further at the postgraduate level, with most programs showing less than 20 percent female enrollment. Data from the Nepal Engineering Council highlights gender imbalances, with male registrations overwhelmingly outnumbering women across ICT-related fields such as computer engineering, software engineering, and IT. These trends indicate barriers to women’s participation in ICT education and careers, limiting their advancement opportunities in the sector (UGC, 2023/24; NEC, 2024).

In this study, the variable barrier average was found to significantly predict the outcome, with the odds of encountering barriers 19 times higher for ICT-enabled sector compared to the ICT sector. This difference is statistically significant ( $p < 0.001$ ) and highlights the pronounced challenges women face in ICT-enabled environments compared to those in the ICT sector. The variability in the barriers faced by women in ICT-enabled companies stood at 7 percent, emphasizing the critical role of systemic challenges in influencing women’s participation and career progression in these fields.

**Table 10. Barrier for Women in ICT**

Classification Table				
	Observed	Observed		
		Organization Sector		Percentage Correct
		ICT	ICT-enabled	
Step 1	ICT	256	146	63.7
	ICT-enabled	160	239	59.9
	Overall percentage			61.8

a. The cut value is .500

Source: (Field survey, 2024)

**Table 11. Barrier for Women in ICT**

**Variables in the Equation**

	B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup> Barrier average	2.945	.463	40.504	1	.000	19.004
Constant	-.714	.129	30.433	1	.000	.490

a. Variable(s) entered on step 1: Barrier average.

## Family Support for Sustained Leadership

Family support was highlighted as the most significant support system, with 47 percent of respondents indicating it as a key source of encouragement. [Support from family serves as a cornerstone for women’s growth and resilience, influencing their ability to overcome societal and workplace challenges.](#) Family support includes emotional backing, shared responsibilities, encouragement to pursue education, career aspirations, and leadership roles. One participant underscored such support as an inspiration for her career growth: *“I was the only woman staff, and one of the barriers I faced from my seniors was their mindset of ‘let’s just give her a small task,’ as male colleagues perceived women were not capable enough to handle bigger tasks. With the support of my family, I started investing more time to prove I am equally competent as my male colleagues. There are challenges in every field. You should have patience, passion, time management, and support from family.”* (FGD, 2024)

Many individual stories underscored the essential role of family support in shaping women’s careers:

“

Support from family can help increase the number of qualified women in the workforce and change societal mindset toward working women. (FGD, 2024)

”

“

I had to quit my job after having a child because it was difficult for me to work in different time zones. We still need support from family despite being competitive. (FGD, 2024)

”

“

Women have to look after the household while fulfilling multiple roles as daughters-in-law, daughters, wives, mothers, and sisters, all while becoming a very good professional at work. This is not possible. Therefore, family support is essential for gender transformation, allowing women to find time for themselves and keep updated so we can become better professionals. (FGD, 2024)

”

“

Family support is the key for a woman’s career growth.” (KII,2024)

”

“

If my in-laws and parents had not supported me to take care of my children, I would not have been able to continue working and focus on my career. (FGD,2024)

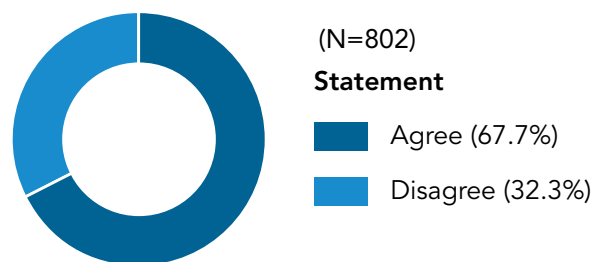
”

These anecdotes highlight the pivotal role of family support in empowering women to balance their personal and professional lives, boosting their confidence and promoting career growth.

## Work-Life Balance

While 67.7 percent of companies provided flexible work arrangements, 32.3 percent of respondents indicated that their organizations do not provide such flexibility. Despite this, work-life balance remains the most significant barrier for women in ICT and ICT support roles, with nearly half of the respondents (49.7%) citing it as a challenge. *Women in Nepal often struggle to reconcile professional demands with family responsibilities, as cultural norms disproportionately place caregiving and household duties on women.* This forces many women to sacrifice career advancements in order to fulfill societal expectations.

**Figure 12. Flexible Work Arrangement Improves Work-Life Balance**



Source: (Field survey, 2024)

Achieving work-life balance remains a significant challenge for women (Bahn, Cohen, & Rodgers, 2020). One participant highlighted this struggle: *“Work-life balance is a challenge for women, as societal expectations often place excessive domestic responsibilities on women.”* (FGD, 2024)

Many women echoed similar sentiments during consultations, emphasizing the importance of flexible working arrangements. An ICT professional said: *“Work-life balance can be improved with supportive workplace policies such as flexible hours and remote work options. This allows women to contribute effectively without compromising their family duties.”* (FGD, 2024)

Several participants reiterated the urgency for workplace flexibility:

“

I had to quit my job because there was no flexibility when I had my child. It felt like I had to choose between work and family. (FGD, 2024)

”

“

Flexible hours shouldn't just be a perk, they're a necessity if we want more women in tech. (KII, 2024)

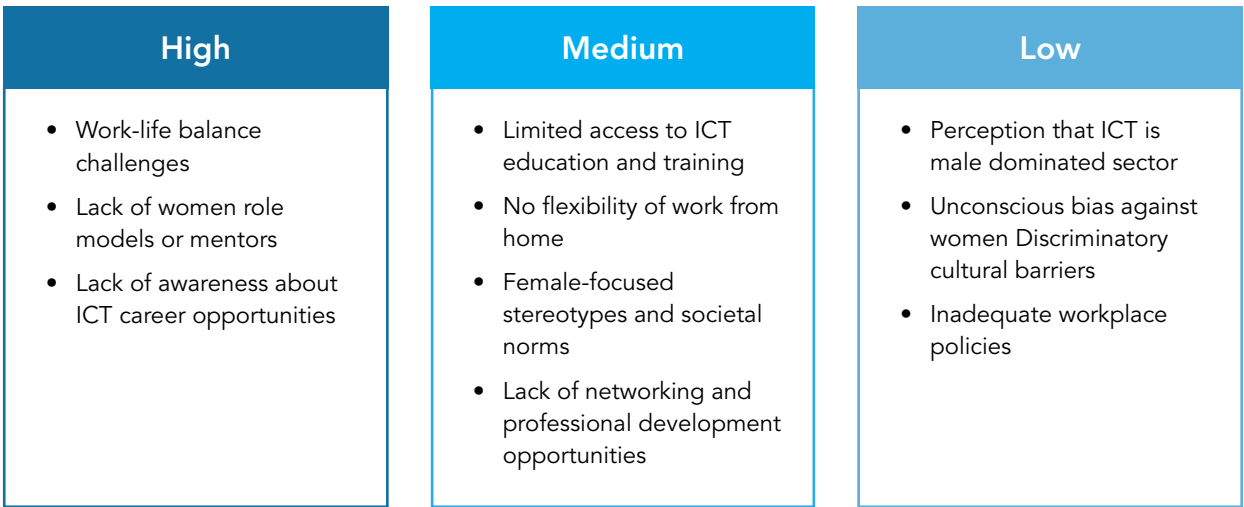
”

The consultations highlighted work-life balance as a critical challenge, affecting not only women contemplating a career in the ICT field but also those attempting to sustain and advance their roles within the industry. Implementing family-friendly workplace policies, such as flexible hours, remote work options, and parental leave, was identified as essential for building a more inclusive and supportive environment for women in ICT. This trend is not unique to Nepal but is reflected across South Asia. In neighboring countries, including India and Bangladesh, caregiving responsibilities significantly restrict women's workforce participation, especially in high-demand fields such as ICT. For example, Indian companies that lack flexible policies often experience higher attrition rates among women employees, particularly after transitioning into caregiving roles (World Bank, 2024). Despite some progress, the region still lacks comprehensive policies to address these issues effectively.

Globally, countries like Sweden and the Netherlands have implemented progressive policies to support work-life balance. In Sweden, subsidized childcare and parental leave policies enable both parents to share caregiving responsibilities, allowing women to maintain their professional careers (Government of Sweden). The Netherlands enforces legal mandates for flexible work arrangements, granting employees the right to request reduced or alternative work hours without fearing discrimination. These measures have significantly restrict women labor force participation rates and serve as benchmarks for other nations (DMoSAE, 2021).

In countries like Nepal, different barriers affect the meaningful engagement of women in the ICT sector. The survey findings were analyzed using the mean and standard deviation of each factor, categorizing them into three levels: high, medium, and low. Additionally, the mean interval of each factor was calculated by dividing the range by three (Polit & Hungler, 1992) to understand the level of barriers in the three categories. The analysis is presented in the figure below:

**Figure 13. Major Barriers to Bring Women Into ICT**



Source: (Field survey, 2024)

## Organizational Support for Women’s Growth

This study indicated that while 64.2 percent of respondents perceive adequate support for women’s growth in ICT careers, a significant portion remains neutral or dissatisfied, highlighting areas for improvement. In Nepal, efforts to support women in ICT often lack structure and consistency, particularly in smaller organizations. *Bias against female workforce remains a persistent issue in ICT workplaces, affecting women’s ability to thrive and advance in their careers.* One participant explained: “Even when women prove their technical competence, there is a lack of trust in their abilities. Male colleagues often doubt whether we can lead effectively.” Another participant shared: “When I returned from maternity leave, I faced resistance in resuming my previous role. Such biases discourage women from staying in the workforce for long run.” Societal stereotypes further exacerbate challenges, making it more difficult for women to participate and grow in the ICT sector (Gawel & Kapsdorferová, 2024).

### Participants’ Perception on Stereotypes Undermining Women’s Capabilities

“When I say I’m a programmer, people assume I’m just ‘helping’ the team, not leading it. (FGD, 2024)



Changing how society sees women in tech is as important as providing them with opportunities. (KII, 2024)



To combat these biases, participants emphasized the need for systemic change in company culture. One participant suggested: *“Workplace culture must change to become more inclusive and supportive, with policies that promote gender diversity at all levels.”* This includes implementing unconscious bias training, establishing diverse leadership, and creating an environment where women feel valued and supported.

This trend also reflects the challenges faced across South Asia, where support mechanisms are predominantly found in larger multinational firms, while smaller companies struggle to implement effective programs. Globally, countries such as Canada and Germany have set benchmarks by institutionalizing mentorship programs, reskilling initiatives, and leadership training to support women’s growth in technology fields. Private sector leaders such as Microsoft and Google have demonstrated the impact of creating inclusive workplace cultures that prioritize professional development and leadership opportunities for women.

**Table 12. Adequate Support for Women’s Growth in ICT** (N=802)

Adequate Support	Percent
High	64.2
Medium	22.9
Low	12.8
<b>Total</b>	<b>100</b>

Source: (Field survey, 2024)

## Promoting Women in Leadership Roles

The study found that 66.2 percent of companies promoted women to leadership roles at the same frequency as men. However, 33.8 percent acknowledged rooms for improvement, indicating the need for a stronger commitment to equal women representation in leadership. Organizations must actively ensure that all employees have equal opportunities to succeed in leadership roles by implementing transparent promotion criteria, mentorship programs, and targeted leadership development initiatives.

Notably, when individual women were surveyed, only 40.7 percent reported frequently seeing women in leadership positions, while the remaining respondents reported that such instances were occasional or rare. The gap between company-reported practices and individual perceptions suggests that while companies may claim to promote equitable representation, the visibility and recognition of women in leadership remain limited. The lack of visible role models in leadership positions further discourages aspiring women professionals in the ICT sector from pursuing higher positions (Banday, Alam, & Kumar, 2022). [Advancing into leadership roles remains a significant challenge for women in the ICT sector, often due to systemic biases and limited opportunities.](#) Participants highlighted that despite their qualifications, women are frequently overlooked for senior positions in favor of their male counterparts.

One participant shared: *“Women aren’t encouraged to take up leadership positions. It’s not about capability, it’s about perception.”* (FGD, 2024). This sentiment underscores the role of entrenched stereotypes that impair women’s progression in leadership.

Another participant remarked: *“Leadership programs that focus on women would be a game-changer in this sector.”* (KII, 2024).

Such responses emphasize the need for initiatives that build confidence, skills, and visibility for aspiring women leaders.



## Participants' Perceptions of Women in Leadership

“

In my organization, women rarely make it to senior positions. Even when qualified, they are often overlooked in favor of male candidates. (FGD, 2024)

”

“

Leadership training programs and quotas for women in managerial roles can help address this imbalance. (KII, 2024)

”

“

We need to take this as an opportunity—being a woman in a male-dominated room can be an advantage. When you speak, your voice is heard. Use that advantage to make an impact. (FGD, 2024)

”

The underrepresentation of women in leadership roles is not unique to Nepal. In South Asia, countries like India and Bangladesh face similar challenges. Despite efforts by multinational companies in South Asia, societal norms and unconscious biases often prevent women's advancement to leadership roles. For example, only 14 percent of senior executives in India's technology companies are women (McKinsey & Company, 2021).

Globally, countries such as Norway and Iceland are pioneers in promoting women to leadership positions due to the implementation of quotas for women and diversity policies. In Norway, legislation requires that women constitute at least 40 percent of board members in publicly traded companies, significantly increasing women representation in leadership. Similarly, companies like IBM and Facebook have introduced mentorship and sponsorship programs aimed at elevating women to senior leadership roles, underscoring that targeted interventions can drive significant progress.

**Table 13. Organizations Promoting Women to Leadership Roles as Frequently as Men** (N=802)

Statement	Percent
Agree	66.2
Disagree	33.8
<b>Total</b>	<b>100</b>

Source: (Field survey, 2024)

**Table 14. Women in Leadership Positions** (N=430)

Statement	Percent
Frequently	40.7
Occasionally	30.9
Sometimes	22.3
Rarely	5.8
Never	0.2
<b>Total</b>	<b>100</b>

Source: (Field survey, 2024)

## Trends in Inclusive Work Culture

This study found that 71.1 percent of companies believe that the ICT industry is becoming more inclusive for women, indicating a positive shift toward inclusivity. However, 28.9 percent of respondents disagreed with the perception of increasing inclusivity, suggesting that challenges persist for certain organizations

or industry segments. **With men holding most decision-making positions, they have more authority to change policies and practices, including work culture.** It was found that men take advantage of their unrestricted mobility, using late nights and smoking breaks as informal networking opportunities with their senior male colleagues (FGD, 2024). However, such networking spaces are either unavailable or inconvenient for women.

In Nepal, initiatives such as WIIT, Women Leader in Technology (WLIT), Girls in Tech, and Shequal Foundation are actively contributing to the movement toward making the ICT sector more inclusive and equitable. In South Asia, efforts for inclusivity in ICT have been gaining momentum, albeit with significant variation across countries. In India, diversity initiatives led by large multinational companies such as Infosys and Tata Consultancy Services have helped increase representation of women in ICT roles. Similarly, Bangladesh has launched national programs like “ShePower” to integrate more women into the tech workforce. However, both countries still face systemic barriers, including limited representation in leadership roles and a lack of inclusive workplace policies, which reflect the challenges seen in Nepal.

Globally, high-income countries such as Canada, Germany, and the Nordic nations have set benchmarks for equitable practices in the ICT sector. In Canada, organizations like Women in Communications and Technology (WCT) actively promote diversity and inclusion by offering mentorship programs, scholarships, and career development workshops for women in ICT. In Sweden and Norway, strong legal frameworks ensure equal opportunities for men and women, supported by policies like leadership quotas for women and parental leave provisions for both parents.

**Table 15. Industry Becoming More Inclusive for Women Over Time** (N=802)

Statement	Percent
Agree	71.1
Disagree	28.9
<b>Total</b>	<b>100</b>

Source: (Field survey, 2024)

## Importance of Education and Awareness

Early exposure to STEM education and targeted scholarship programs are key in attracting more women to the ICT sector. Stakeholders highlighted the **critical need for well-structured programs designed to inspire interest in ICT from an early age, challenging existing stereotypes and encouraging young girls to pursue opportunities in this field.** One educator emphasized: “Integrating ICT into school curricula and offering scholarships for STEM programs can help bridge the equity gap in the field.” Another echoed the importance of practical approaches, saying: “Practical training and vocational education for women are essential to equip them with the skills needed to excel in ICT.” (FGD, 2024)

The consultations provided compelling insights into actionable ways to promote ICT among young women.

“

ICT isn’t just a subject for boys. Girls need to see early on that this field is full of opportunities for them. (KII, 2024)

”

“

We need more initiatives in schools—robotics clubs, coding programs—to make technology exciting for girls. (FGD, 2024)

”



Our courses should be tailor-made to the needs of the country.” (FGD, 2024)



## Contribution of Mentorship and Networking

The absence of women mentors and role models in ICT has been identified as a significant barrier for aspiring women to join or advance in this field. Participants stressed that the absence of visible representation often discourages women from seeing themselves in leadership or technical roles. One participant explained: *“Seeing strong women role models inspired me to pursue my career. Without them, many women hesitate to envision themselves in leadership positions.”* (KII, 2024)

Mentorship programs were recommended as a critical tool to provide guidance and encouragement. Such initiatives can help women navigate challenges, build confidence, and thrive in their careers. As one participant said: *“Having a mentor—someone who has been in your shoes—can make all the difference in navigating this male-dominated field.”* (FGD, 2024)

Another participant highlighted the importance of shifting the mindset. She said: *“Women have a tendency to wait for opportunities rather than asking for them. We need mentors who can teach women to be assertive and seize opportunities.”* (KII, 2024)

Networking opportunities were also highlighted as an essential element for professional growth in ICT. However, participants acknowledged that traditional networking environments can be intimidating for women. A participant from the WIIT members FGD shared: *“Networking feels intimidating for women because it’s often dominated by men. We need safe spaces for women to connect.”* (FGD, 2024)

The majority of the participants added that creating women-focused networking events and platforms providing a comfortable space for women would help build professional relationships and explore collaborative opportunities.

## Financial and Institutional Support

Financial barriers remain a significant challenge for women in ICT, particularly for those in rural areas or underprivileged communities, limiting their ability to pursue higher education or attain certifications crucial for career advancement. One of the participants highlighted this disparity, stating: *“Even with a degree, affording advanced courses or certifications can be out of reach for many women.”* (FGD, 2024). Beyond individual financial constraints, participants stressed the importance of institutional investments tailored toward women’s needs. An ICT professional pointed out: *“If companies invested in women-specific training programs, the ROI (return on investment) would speak for itself.”* (FGD, 2024). These insights underline the urgency for government grants, scholarships, and corporate financial incentives to reduce economic barriers, alongside targeted training initiatives to equip women with the skills required to thrive in ICT roles. By addressing these systemic challenges, both public and private institutions can create pathways for greater inclusion and diversity in the ICT sector.

## Advocacy for Gender-focused Policies

Stakeholders emphasized the critical role of the government in promoting gender equality in the ICT sector, advocating for stronger policies and effective implementation. One of the participants pointedly stated: *“The government needs to step up—not just with policies, but with enforcement. It’s not enough*

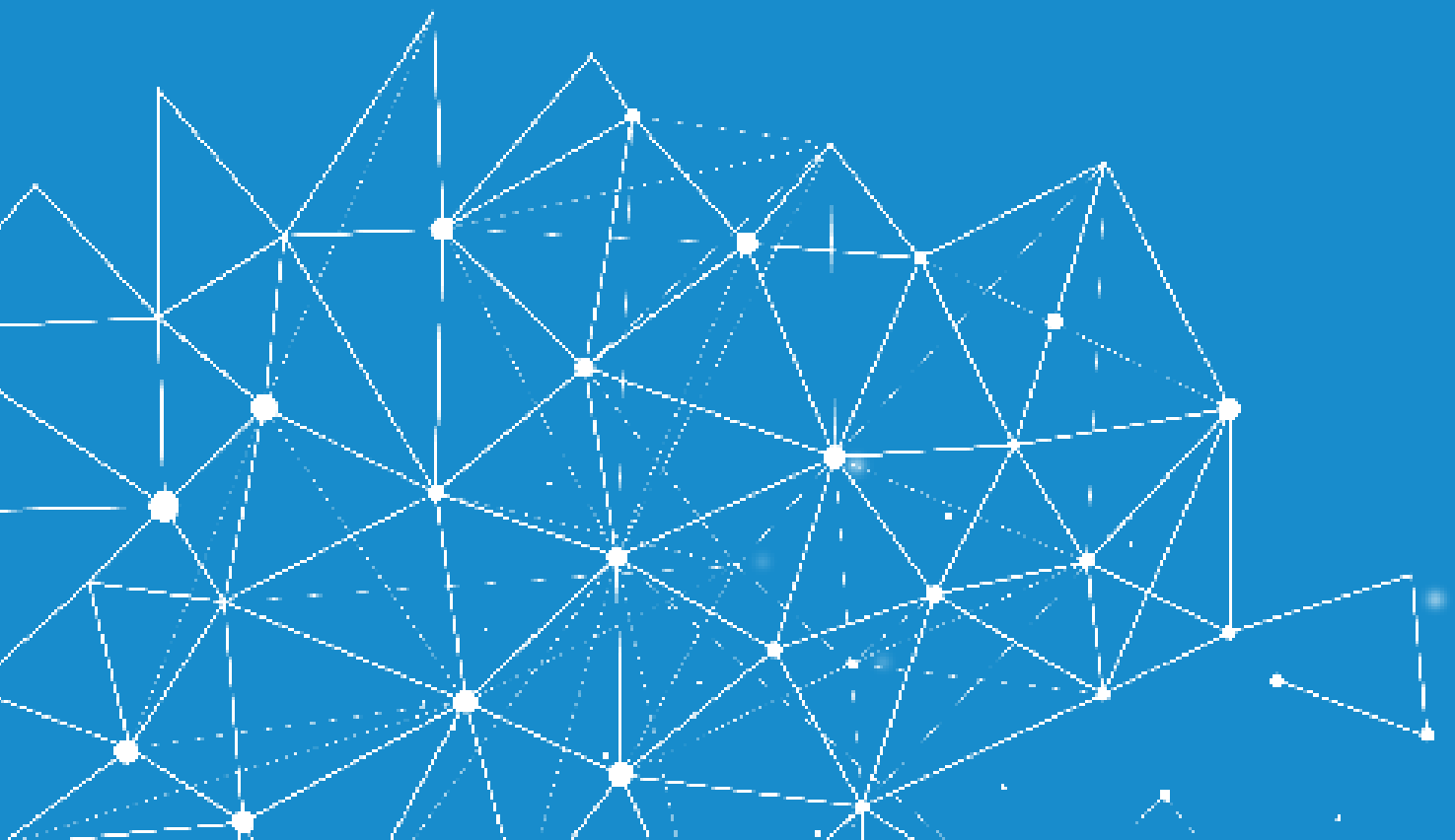
*to write it; we have to live it.*" (FGD, 2024). Another participant highlighted the necessity of transformative policies, saying: "Policies like shared parental leaves aren't just 'progressive', they're essential for equal responsibilities." (FGD, 2024).

Participants also emphasized [on revising Nepal's labor laws to incorporate extended parental leave and inclusive workplace policies](#). Additionally, they proposed regular audits to ensure compliance with equitable mandates, coupled with penalties for non-compliance. Collaboration with the private sector to establish inclusive hiring practices and develop women-focused ICT programs was also highlighted as a strategic approach.

---

Chapter 04

# Competitive Edge of Women in ICT



*“Challenges give me confidence, when you are challenged, you gain the power to overcome it.” (FGD, 2024)*

Women’s inclusion in ICT roles provide organizations with unique competitive advantages (Kurti, Ferati, & Kalonaityte, 2024). Based on insights from 704 participants and additional consultations, this chapter explores the key strengths and contributions of women tech employees, highlighting their indispensable role in the workplace along with the core skills set they bring to the sector.

## **Ethical Values and Professionalism**

The survey identified strong ethics as the most widely recognized strength of women employees, with 98.3 percent of respondents acknowledging this attribute. Women are perceived as disciplined, focused, patient, professional, and detail-oriented—qualities essential for a productive and efficient workplace. Consultations with professional women and company leaders, echoed these observations, describing women as sincere, reliable, and capable of maintaining high standards of productivity. By promoting a professional and dependable work environment, women contribute significantly to an organization’s ability to achieve sustainable growth.

## **Empathy and Strong Customer Relations**

Women’s empathetic communication styles and ability to strengthen strong customer relations emerged as another crucial strength, recognized by 95.7 percent of survey respondents. The consultations highlighted women’s emotional intelligence and unique capacity to connect deeply with clients and colleagues. These are invaluable attributes in the ICT industry, where client satisfaction and team collaboration are key drivers of success. Companies that value women’s interpersonal skills benefit from improved customer engagement and harmonious workplace dynamics.

## **Enhancing Creativity and Innovation**

Women’s diverse perspectives contribute to improved team dynamics, with 87.1 percent of respondents acknowledging this benefit. Further consultations validated that women possess the ability to see the “big picture” and contribute to long-term strategic goals. Women enhance creativity and innovation within teams by bringing fresh insights and promoting inclusive discussions. Diverse organizations are better positioned to solve complex problems and make informed decisions, giving them a competitive advantage in the fast-evolving ICT sector.

## **Multitasking and Adaptability**

A total of 83 percent survey respondents noted that attributes such as multitasking, adaptability, and quick learning make women well-suited for the dynamic and fast-paced nature of the ICT industry. Participants presented women as flexible and creative, capable of managing multiple priorities effectively. These qualities enable women to navigate the challenges of the ICT sector, ensuring that their teams can adapt to changing demands while maintaining high productivity.

## **Leadership and Talent Development**

While 26.8 percent of the respondents recognized women’s leadership potential, participants shared that attributes such as determination and strategic vision are often overlooked due to stereotypes and systemic biases. Despite such underappreciation, women in leadership roles bring invaluable skills to

organizations, including team building and promoting an inclusive culture. Companies that actively promote women to leadership positions benefit from a broader talent pool and improved organizational performance. Examples from key global ICT players, including Google and IBM, show that mentorship and sponsorship programs for women leaders significantly enhance organizational outcomes.

## Retention and Organizational Stability

Women’s contributions to retention and productivity, recognized by 23.2 percent of respondents, reflect their stabilizing presence within organizations. Some participants shared that married women are seen as reliable employees, contributing to long-term stability. Encouraging women to rejoin the workforce after career breaks and promoting inclusive hiring practices not only improve retention rates but also helps in creating a supportive and cohesive work environment.

**Table 16. Competitive Advantage of Having Women Employees in the Organization**

Statement	Percent
Empathetic, strong customer relation and better communicator	95.7
Strong ethics (Disciplined, focused, matured, punctual, tolerant, time management, professional, sincere, humble, and detail oriented)	98.3
Team dynamics (Diverse perspectives)	87.1
Multitasking (Creative, quick learner, flexible)	83.0
Retention and productivity	23.2
Good leader (Better decision-making abilities)	26.8

Source: (Field survey, 2024)

Globally, organizations that prioritize workplace representation and diversity consistently outperform their peers. A 2021 study by McKinsey & Company showed that companies with inclusive leadership teams were 21 percent more likely to experience above-average profitability. In the Nordic countries, proactive policies such as parental leave and women quotas have significantly increased women participation in the ICT workforce. These examples underscore the importance of creating an environment where women’s contributions are recognized and valued.

In South Asia, countries such as Bangladesh and India are gradually addressing gender gaps in ICT. Initiatives such as Bangladesh’s “She Power” project and India’s targeted mentorship initiatives aim to enhance women’s participation and visibility in technology roles. Nepal’s ICT sector can draw lessons from these programs to develop a more inclusive workforce.

### Significant Factors Promoting Women’s Engagement in ICT

This study reveals several significant factors influencing women’s engagement in the ICT sector based on differences across organizational sectors (ICT vs. ICT-enabled companies).

**Figure 14. Chi-Square Test**

**1. Workplace Policies and Support Systems**

- ICT companies are significantly more likely to have women supportive policies (significant at  $p=0.020$ ).
- This calls for sector-specific reforms to ensure such policies are adopted across ICT-enabled companies.

**2. Paternity Leave Across Sectors**

- ICT companies are more likely to offer 15 days or more of paternity leave (significant at  $p=0.001$ ).
- Such policies promote shared caregiving, indirectly supporting women by easing traditional roles for men and women

**3. Specific Facilities for Women**

- Facilities like childcare and transportation are more prevalent in ICT companies (significant at  $p=0.025$ ).
- Expanding these facilities in ICT-enabled companies is essential to support women's needs.

**4. Support for Women's Career Growth**

- ICT organizations provide stronger career support for women (significant at  $p<0.001$ ).
- Best practices from ICT companies should be replicated in ICT-enabled companies, particularly mentorship and development programs.

**5. Flexible Work Arrangements**

- ICT companies are more accommodating with flexible work policies (significant at  $p<0.001$ ).
- Flexibility is key to balancing work and personal life, making it a priority for less progressive sectors.

**6. Industry Inclusivity Over Time**

- ICT companies are perceived as becoming more inclusive for women over time (significant at  $p<0.001$ ).
- ICT-enabled companies need targeted initiatives to ensure consistent inclusivity.

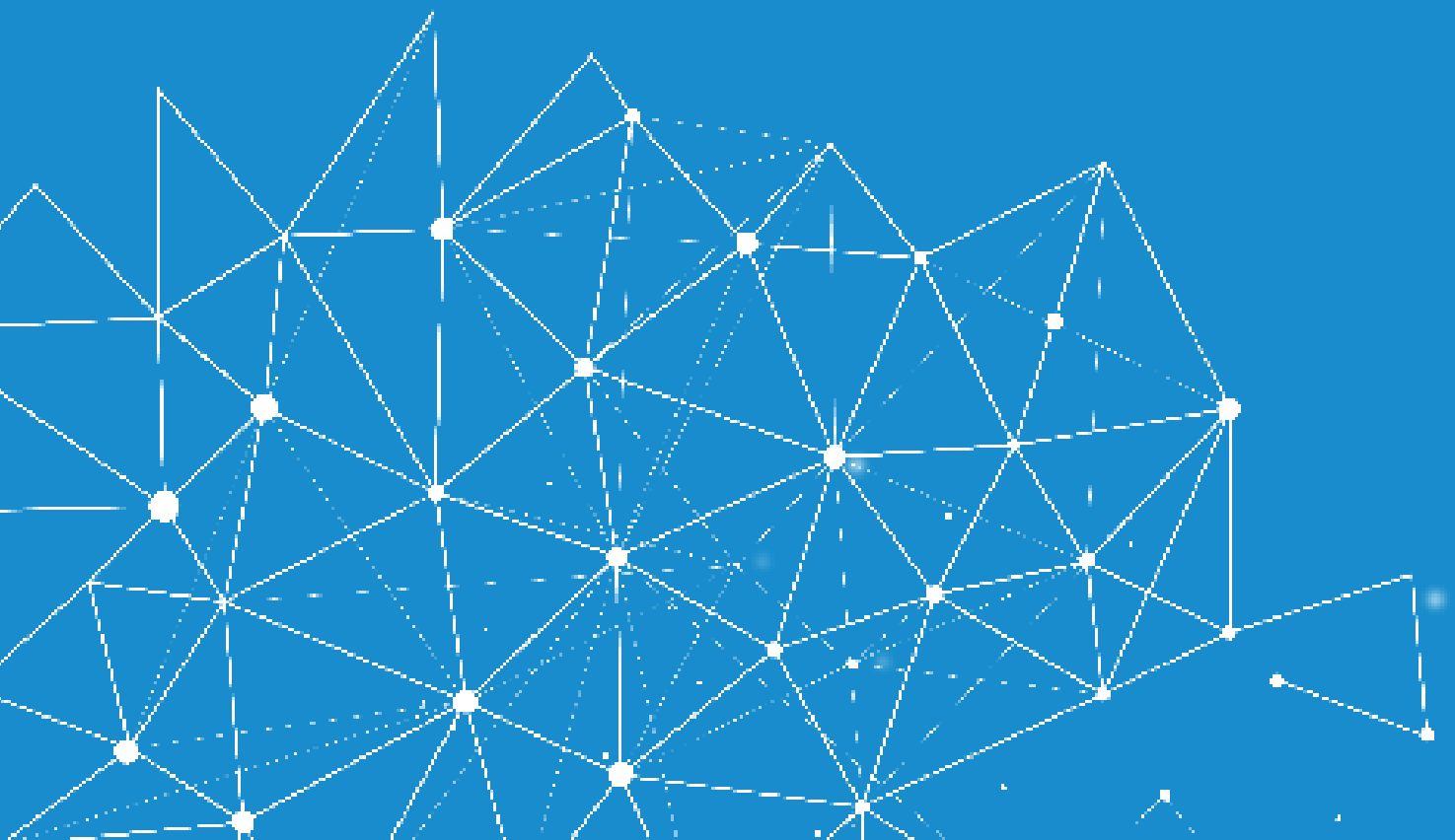
Source: (Field survey, 2024)



---

Chapter 05

# Breaking Through Barriers

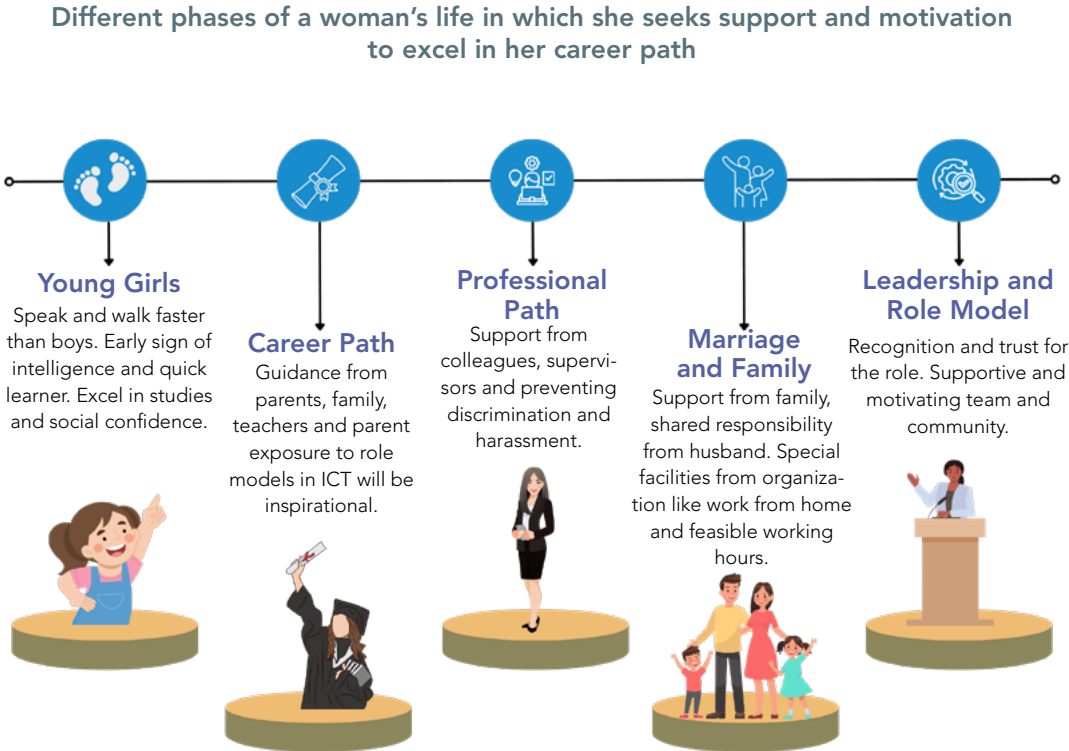


A woman’s journey begins with early signs of intelligence and quick learning. From a young age, girls tend to start speaking and walking faster than boys (Berk, L. E., 2013), excelling in their studies and demonstrating social confidence. However, as girls reach puberty, societal expectations often cause them to become more reserved and self-conscious, especially around their menstrual cycles. The pressure to conform to traditional roles suppresses their ability to express themselves openly, requiring proper guidance during this crucial phase. With the right support, girls can navigate these challenges and start shaping their future.

As teenage girls face physical changes and career choices, guidance from parents, family, and teachers becomes essential. Exposure to inspiring role models in fields like STEM can significantly influence their career paths during this period. Encouragement from mentors and teachers helps young girls understand the opportunities available to them, supporting their aspirations, especially in male-dominated fields like ICT and technology. Despite such support, many girls still experience a high dropout rate in STEM courses due to a lack of encouragement or confidence.

In the workplace, especially within the ICT sector, women often face discrimination and harassment, leading some to leave their jobs. As women marry and start families, they face challenges balancing career growth and household responsibilities. Many women find it difficult to return to work after an extended maternity leave, posing as a significant barrier for career advancement. For those who continue working, breaking into leadership roles remains another significant hurdle. In many cases, women often face skepticism and their ideas are overlooked, even in educated settings, due to their gender. The lack of recognition and support highlights the ongoing challenges women face in pursuing careers and leadership positions (FGD, 2024; KII, 2024).

**Figure 15. Journey of a woman**



# Barriers and Bridges: Women in ICT

**Table 17. Barriers and Bridges in Women’s Lives in ICT**

	Bridges	Barriers
During academic studies (school, college, university)	<ul style="list-style-type: none"> <li>• Support from parents, family, teachers, and peers, focusing on education and financial independence.</li> <li>• Praise for academic performance and encouragement to pursue STEM.</li> <li>• Empowering environments in school and university, building resilience and determination.</li> <li>• Guidance from teachers and mentors to explore career options and areas of interest.</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of guidance and mentorship for ICT careers during school years.</li> <li>• Social norms and unhealthy competition among peers create hurdles.</li> <li>• Struggles when pressured to pursue STEM paths unsuited to personal interests and capabilities.</li> <li>• Harassment and teasing during college, impacting focus and confidence.</li> </ul>
During the start of career	<ul style="list-style-type: none"> <li>• Opportunities to work in pioneering organizations like Nepal Telecom and other IT companies, facilitating learning and career growth.</li> <li>• Supportive work environments with capacity-building opportunities and encouragement from colleagues and mentors.</li> <li>• Flexible work environments and networking with diverse stakeholders.</li> <li>• Motivation from family to balance professional and personal responsibilities.</li> </ul>	<ul style="list-style-type: none"> <li>• Toxic work environment and character assassination due to bias against women.</li> <li>• Challenges in balancing personal and professional life due to societal expectations.</li> <li>• Facing prejudice and ignorance from some individuals during career progression.</li> <li>• Pressure to remain truthful and honest amidst resistance and criticism.</li> </ul>
During promotion phase	<ul style="list-style-type: none"> <li>• Fair and transparent evaluations based on performance, especially in the private sector.</li> <li>• Continued guidance and support from line managers and team members.</li> <li>• Opportunities to shoulder additional responsibilities, learn, and make impactful decisions.</li> <li>• Motivating possibilities for increasing the scope of work and professional growth.</li> </ul>	<ul style="list-style-type: none"> <li>• Challenges as a woman in achieving promotions, especially to senior positions.</li> <li>• Partiality and delays in career progression, often influenced by biases against women. Difficulty in receiving recognition for ICT-related contributions at higher levels.</li> <li>• Disillusionment from lengthy wait period for promotions, despite consistent efforts.</li> </ul>

Source: (Field survey, 2024)

Encouragement plays a pivotal role in personal and professional growth, shaping success at various stages of life. In education, support from parents, teachers, and peers builds resilience and confidence, while academic praise, mentorship, and empowering environments strengthen determination. Opportunities in pioneering organizations, which offered platforms for learning, innovation, and growth, bolstered career advancement. Supportive work environments, skill-building initiatives, and fair promotion systems motivated women professionals to balance personal and professional responsibilities. Meanwhile, leadership roles further encouraged collaborations with motivated teams, inspired mentorship, and created opportunities to lead impactful projects, enhancing fulfillment and purpose.

However, discouragement stemmed from societal and systemic challenges, particularly for women. In education, societal norms, unhealthy competition, and limited guidance in ICT careers created barriers, while harassment during college years tested confidence. Career progression was restricted by toxic work environments, bias against women, and difficulties in balancing societal expectations with professional goals. Promotions were often delayed or biased, with limited recognition for contributions. Leadership roles added challenges such as imposter syndrome, biased perceptions, and resistance from colleagues, including other women.

Despite all challenges, women have demonstrated their leadership qualities required in the ICT sector. The key attributes of successful women leadership who have overcome both professional and social challenges are highlighted through their stories. They are explained in the below section along with some inspiring anecdotes.

## Importance of Resilience and Determination

Successful women leaders demonstrate persistence and determination to prove their competency. They believe in hard work and are sincere toward their responsibilities. Women who believed in their competency had the courage to explicitly claim their contribution and were noticed for their demonstrated leadership role.

### Essentiality Role of Determination in Taking up Leadership Role

“ I am currently working in a reputable telecom company as a director. It has already been 30 years since I started working. I studied electronics engineering, and a woman holding a leadership position was my role model then. I worked closely with her and had the opportunity to learn several things. In ICT, there is no concept of night and day; if there is work, we have to work. But the way men work is different—most of the time, they took breaks, went for tea or coffee, and smoke. However, as women, we were not used to taking such breaks, so it was difficult initially. I got in habitat later though. If we are strong, then men will also support us, but if we portray ourselves as weak, everyone will take advantage.

As long as you are strong, you will have power and determination to do everything. I was the first woman to travel outside the Kathmandu Valley as a director. I was scared and worried about my family. There were unwanted stories on my mind. But if you take the challenge as an opportunity, you will succeed. If you stay disciplined, it forces others to follow the same path. Women are detail-oriented while managing at macro level, ensuring proper planning and documentation. Therefore, women in leadership positions have contributed more in creating examples of participatory and systemic leadership. (FGD, 2024)

”

## Courage to Seize Opportunities, Take Credit, and Show Sincerity

Successful women are often known to tread the less-traveled path. They refused to conform to women-focused stereotypes associated with professional roles. Instead, they were willing to go the extra miles, exploring different career paths, and accepting their failures while embracing the opportunities ahead of them.

### Confidence to Lead and Openness to Learn

“ I am the CEO of one of Nepal’s reputed companies. I have studied Chartered Accountancy, but I am proud to share that I have been leading the IT company for more than 20 years. My journey is different from others, however. I had the privilege of joining a top management position because I was married to the founder of one of Nepal’s top IT companies. I joined aiming to look after the finances but started getting involved in day-to-day operations. I also began leading the technology front. I was not hesitant to take additional roles and work hard to fulfill all these responsibilities. I was also good at managing a team, so they were able to perform their duties well. My confidence comes from my education. It is equally important to understand your comparative advantage. I have found that confident women are provided with good opportunities to make their voices heard, and people also listen to them. It is also essential to update your knowledge and use these insights to prove your points. Your knowledge and education provide you with the courage to take on the leadership roles successfully. (FGD, 2024) ”

Most women who aspire to grow professionally are seen as sincere in their work. Several companies in Nepal have started hiring women for their sincerity, dedication, and quality of work. This trust in women’s capabilities serves as a positive recognition of their potential, yet also highlights the additional workload and expectations placed on them in professional settings. Despite these challenges, women continue to excel, proving their worth in the ICT sector. (FGD, 2024)

### Fulfilling Duties with Sincerity

“ I completed my bachelor’s degree from a reputed engineering college in Nepal and received a scholarship for my master’s degree in Korea. Throughout my educational journey, I always felt my parents had invested immensely in my education, and they expected something in return. Similarly, when the government sent me abroad for further studies, I believed it was my responsibility to give back. This sense of duty led me to pursue a career in the government sector, where I could contribute to the country that supported my growth. (FGD, 2024) ”

Women find it difficult to claim credit for their work and often commend their team for the contributions and achievements. It is equally important for leaders to be aware of the team members who can benefit, ensuring that their hard work is noticed by the line manager.

## Unseen Efforts: The Struggle for Recognition

“ When I was seven-month pregnant, I worked tirelessly in the hardware department of my company while my male colleague wandered leisurely at work. Once, he received a call from our boss and I was resting. But when our boss arrived, he found me sitting while my colleague appeared to be working. This incident affected my appraisal. As women, we often hesitate to communicate with bosses or show our hard work, unlike men, who easily take credit for their contributions. (FGD, 2024) ”

## Men and Boys' Engagement for Promoting Women Leadership

Preliminary efforts to empower women focused solely on building the capacity of women and girls. But it was later found that raising awareness of men and boys was equally important for them to contribute to promoting equitable leadership. In most cases, men still occupy senior leadership positions. Demonstrating the importance of equitable leadership enables these leaders to put additional efforts into creating an enabling environment, both in policy and workplace, to engage women in leadership positions.

## Importance of Women-Friendly Work Environment

“ I have worked in Nepal for 32 years, and it has now been six years since I have retired as a CTO. I studied in a co-education school and have been beaten and bullied by girls, so I always felt that men and women are equal. This initial realization helped me treat women equally in my professional career.

I was considerate on issues women faced. I am the only son in my family, but I have two older sisters and two younger sisters. So, I understand the problems women and girls encounter. I understood that working women faced difficulties in balancing social and work life mainly after marriage. I provided flexible work environment but some of my male colleagues felt uneasy. I advocated for building a women-friendly workplace so that women can continue working without compromising both their professional and social responsibilities.

Women themselves should take charge and lead, but men should also support them so that their leadership journey leads to success. (FGD, 2024) ”

Women and girls should receive family support from an early age to boost their confidence in dealing with failures. Traditionally seen as head of the family, fathers play a crucial role in creating more girl-friendly environment at homes.

## Father's Role in Nurturing a Confident Woman

“ I am currently leading the people management team in one of Nepal's export service companies. The environment I was raised in and the exposure I received has helped me build my confidence. My father is the eldest son, and my sister and I were treated respectfully. My voice was

heard from a young age, which made me comfortable speaking up.

When I got married, things changed, but I understood the importance of maintaining our dignity. I have a four-year-old son, and I want him to learn about equitable relationships based on mutual respect.

My father was a government officer, so I accompanied him to different places and interacted with people, including men. That gave me the skills to talk confidently with men. As women, we should never doubt our abilities and competence.

One thing that boosts my confidence is that I am not ashamed of failure—I am open to it and learn from it. I believe in myself and that belief makes me more confidence. (FGD, 2024)



## Women for Women: Myth or Reality

Many discussions on equality and development suggest that women in power often do not support other women. There are several examples where women, as mothers, have played a significant role in ensuring that their daughters pursue better careers and live dignified lives.

### A Mother's Dream of Breaking Barriers

“ My greatest inspiration has always been my mother. My mother was the first woman in her family to earn a bachelor's degree in commerce. She dreamt of working at a reputed bank in Nepal, especially since my uncle worked there. She believed her educational qualifications would make it easier to secure a job. However, my father felt she should focus on raising her children, as we were still young. Although she was qualified to work, she chose to stay home and raise us instead. Despite being unable to pursue her career, my mother was determined that her daughter (me) would receive proper education and one day work in a bank—a dream she passed on to me. (FGD, 2024)



There are several examples where mothers-in-law and other in-laws have helped share childcare responsibilities, enabling women to continue working professionally without feeling guilty about compromising her responsibilities at home. However, these positive stories are often overshadowed by stories of women not supporting other women.

Outside their homes, professional women also make utmost efforts to create more inclusive work environment. These women leaders are seen as role models and have also taken on the additional role of mentoring and coaching their women staff members.

### Power of Mentoring

“ The principal of an engineering college spoke about the power of mentoring in growth and inclusivity in technical fields. Drawing from her 24-year journey as an educator and leader, she reflected on her pride in mentoring students who have become successful professionals,

underscoring the importance of guidance and collaboration. Despite challenges, including low female participation in the IT sector and societal biases, initiatives such as scholarships, female-led hackathons, and role model sessions have empowered women to break barriers. She highlighted the need for family support, flexible work policies, and capacity-building programs to nurture women's potential in male-dominated fields. Through mentorship, she envisions creating an environment where women can thrive by balancing personal responsibilities and professional aspirations, ultimately contributing to the advancement of the STEM landscape. (FGD, 2024) ”

Women have come together not only to create women leadership but also as a strong force to support each other in addressing challenges of violence against women.

### Supporting a Woman: Standing Up Against Harassment

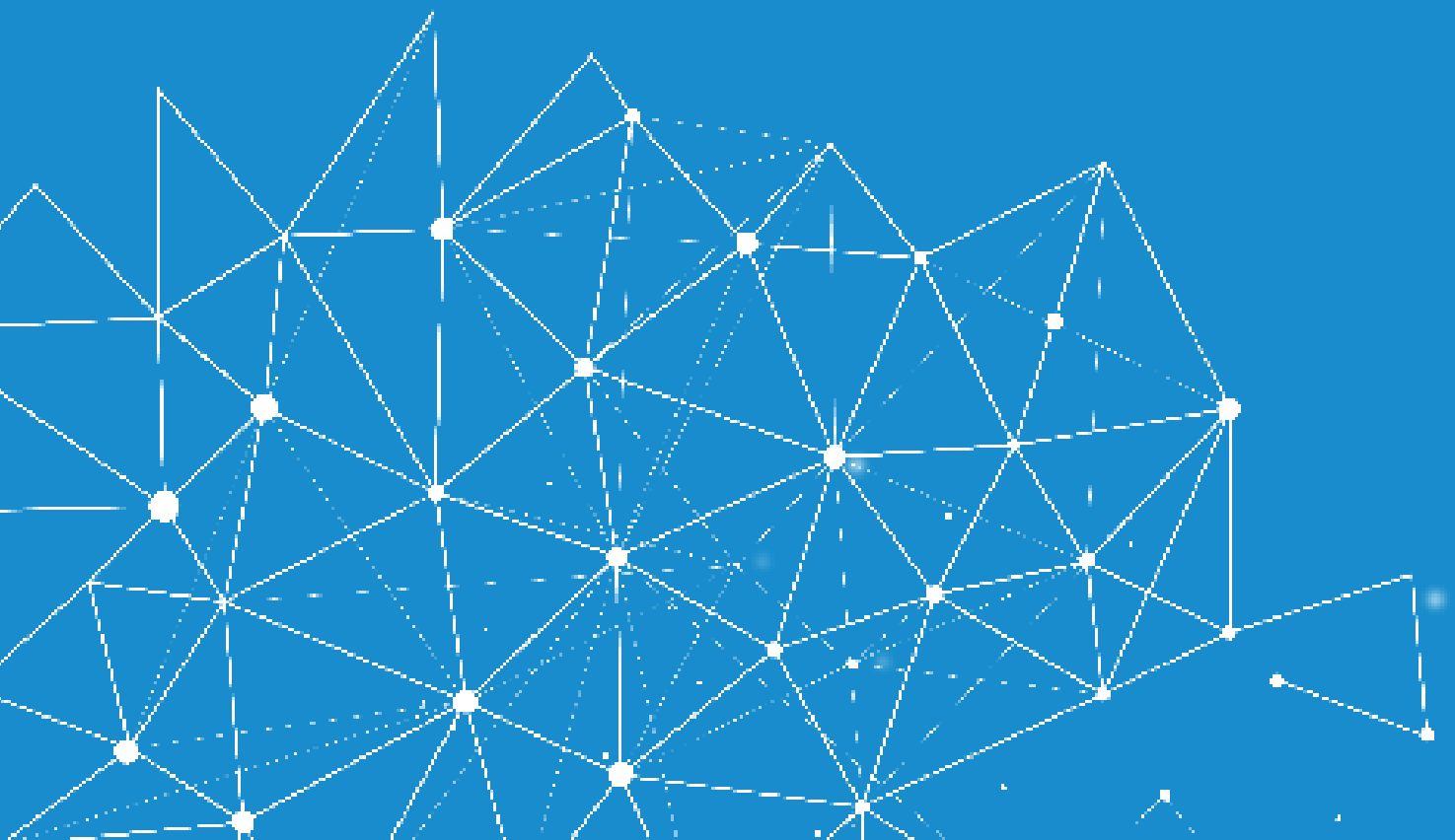
“ One of my students was harassed by her employer after mentioning in her interview that she had no family to support her. He exploited her vulnerability, offering her an assistant role and demanded she follow him wherever he went. Initially, she believed it was just work but soon realized it was harassment. I encouraged her to leave the job, offering to support her financially until she was ready to return to work. Four years later, she still calls to thank me, though she is struggling to find a new job. Her experience serves as a reminder of the importance of standing up for others in difficult times. (FGD, 2024) ”



---

Chapter 06

# Recommendations



# Aspiring Young Women in ICT: Awareness and Education

## Immersing in the ICT Field

Aspiring women in ICT are encouraged to gain valuable experience through internships, mentorship, and participation in industry-focused workshops. These activities provide opportunities to develop technical skills and acquire real-world industry exposure. Practical learning experience enables individuals to deepen their understanding of ICT tools and technologies, giving them with a competitive edge in the sector.

## Pursuing Excellence

Setting clear goals and maintaining self-confidence are crucial for overcoming challenges and seizing opportunities. A commitment to lifelong learning and a proactive mindset in tackling obstacles can help aspiring professionals remain focused and adaptable. This growth-oriented mindset is particularly vital in the ever-evolving ICT landscape. "Pushing beyond the limits" should be the way forward for women to excel their career trajectory.

## Staying Ahead with Technology

Staying updated with technological advancements is key to maintaining relevance in the ICT sector. Encouraging a shift from consumption to production can help the digital generation fully utilize the opportunities and resources in the ICT sector. Following industry news, monitoring market trends, and embracing innovative solutions are essential practices. Exploring emerging areas such as artificial intelligence, cloud computing, and data analytics prepares professionals for competition and future demands.

## Leveraging from Online Learning Platforms

Aspiring professionals can leverage e-learning platforms such as Coursera, edX, and LinkedIn Learning to develop expertise in specialized areas. These platforms offer access to a variety of courses and certifications, enabling individuals to acquire advanced skills and demonstrate their proficiency to potential employers.

## Building Professional Networks

Building strong professional connections is crucial for career advancement. Networking with peers, mentors, and industry leaders, participating in hackathons, and joining professional communities provide opportunities for collaboration and increased visibility. Such engagements build meaningful relationships and open doors to career prospects.

## Acquiring Hands-on Experience

Hands-on experience is essential for translating theoretical knowledge into practical applications. However, Nepal's education system largely lacks such opportunities. Participating in real-world projects and practical training allow individuals to refine their skills and gain confidence. Such experiences not only deepen understanding but also increase employability in the ICT sector.

**Table 18. Recommendation to Young Women Aspiring to Build Career in Technology**

Recommendations to Young Women (N=1,232)	Percent
Explore the ICT sector ( <i>Internship, mentorship, attend workshops, develop skills, training</i> )	74.0
Be competitive ( <i>Focused, keep learning, confident, accept challenges</i> )	77.1
Build supportive network	74.5
Take advantage of online platforms	63.0
Stay up to date with technology	88.3
Gain practical knowledge	61.6

Source: (Field survey, 2024)

## For Organizations: Support Women in the ICT Field

### Awareness and Outreach

Companies can play a pivotal role in promoting the ICT sector among women through outreach programs in schools and colleges. Highlighting success stories of women leaders and showcasing diverse career opportunities in ICT can inspire young women to consider joining the field. Awareness campaigns, focused media exposure, and partnerships with educational institutions can help reshape perceptions and break stereotypes about women in technology. For example, scaling up initiatives highlighting women in ICT and girls in technology, as well as promoting programs such as “Girls Who Code” have proven effective in increasing awareness and early exposure to ICT.

### Establish Training and Internship Programs

Offering structured training programs and internship opportunities helps equip aspiring women with practical skills and industry exposure. Companies can organize workshops, vocational training initiatives, upskilling and reskilling programs, and hands-on projects to bridge the skill gap and prepare women for technical roles. For example, Singapore’s successful government-industry partnerships in providing technical training programs could serve as a model for Nepal.

### Develop Mentorship and Leadership Platforms

Mentorship programs and leadership development initiatives are crucial for guiding women through their ICT careers. Establishing mentorship platforms, networking opportunities, and providing access to inspirational women leaders can help nurture talent and build confidence. Globally, organizations such as Microsoft and Cisco have successfully implemented mentorship initiatives that connect women with industry leaders, providing them with guidance and opportunities for professional growth. Highlighting role models within Nepal’s ICT sector could inspire more women to see themselves in leadership roles.

## Invest in Inclusive Workplace Policies

Creating a safe and inclusive workplace is essential for retaining women in ICT roles. Companies should implement policies to prevent harassment, address biases against women, and promote equality. Inclusive workplace policies and inclusivity emphasize creating a secure and supportive environment. The Nordic countries, with their inclusive and equitable policies and harassment-free workplaces, serve as benchmarks for promoting job satisfaction and increasing productivity.

## Promote Pay Equity

Companies must ensure pay equity by maintaining transparent compensation practices that are free from biases against women. Nepal can be positioned as a country with an excellent framework for implementing fair and equitable pay practices in the ICT sector.

## Adopt Inclusive Recruitment Strategies

Recruitment strategies must be designed to eliminate biases and prioritize diversity. Companies should prioritize bias-free hiring practices that evaluate candidates based on their skills and competencies.

## Highlight Achievements of Women Leaders

Sharing success stories of women in ICT can challenge stereotypes and inspire others. Companies can organize events, publish profiles, and use internal communication channels to celebrate women leaders' achievements. Engaging media outlets to share success stories can empower young women and boost confidence of those already in the field. In Nepal, initiatives like ICT awards for women icons have played a significant role in recognizing their contributions. Similarly, international initiatives like the "Women in Tech Awards" have amplified the voices of women professionals and provided role models for aspiring women globally.

## Enhance Financial Supports and Incentives

Financial barriers often deter women from entering or continuing in the ICT sector. Providing scholarships, flexible benefits, and competitive salaries can attract and retain women in technical roles. For example, Bangladesh's collaboration between the government and industry to fund women's education in ICT has proven highly successful, highlighting the value of financial support in increasing women's participation.

**Table 19. Recommended Actions for Organizations**

Recommended Actions for Organizations (N=1,232)	Percent
Mentorship, internship, and training Programs ( <i>On-the-job training</i> )	96.1
Promote women in ICT education and ICT career ( <i>Scholarship opportunities</i> )	94.5
Strong policies ( <i>Breaking stereotypes, fair recruiting policy, equal pay policy, HR policies, labor policies, workplace security</i> )	94.7
Networking opportunities	75.9
Sharing success stories of women leaders ( <i>Role models</i> )	50.4
Awareness	94.8

Source: (Field survey, 2024)

# For the Government: Support Women in ICT

## Enhance Educational and Training Opportunities

1. Introduce government-funded scholarships and specialized ICT training programs for women and girls to reduce financial barriers and increase access to quality education in ICT. For example, targeted STEM scholarships, vocational training, upskilling and reskilling programs, and capacity-building workshops can equip women with critical skills. The programs can be categorized based on urban and remote areas, addressing the core structure for scholarships and trainings.
2. Integrate ICT-related courses into school curricula to introduce young girls to technology at an early age. Early introduction nurtures interest and builds foundational skills, encouraging them to pursue higher education and careers in the ICT sector.
3. Mandate balanced representation of men and women in all training programs and seminars to promote understanding and collaboration between men and women. This approach will create a more inclusive and supportive learning environment.

## Promote Inclusive Workplace Policies

1. Implement and promote inclusive policies and legal frameworks to increase women's participation in the workforce, emphasizing opportunities in the technology sector.
2. Update labor laws, workplace regulations, and human resource practices to ensure flexible working hours, maternity support, and shared parental leave. Policies should mandate extended paternity leave and quotas for women in private companies to ensure equitable recruitment and promotion opportunities.
3. Require organizations to implement strict workplace anti-harassment policies and provide equality awareness training for employees and managers. Safe workplaces for productivity and inclusiveness.
4. Establish mechanisms to regularly audit and monitor human resource and labor policies to ensure compliance with equitable practices, workplace inclusivity, and pay equity.

## Facilitate Professional Growth and Networking

1. Develop government-led mentorship programs with flexible schedules to connect women with mentors, industry leaders, and peers. These programs can guide women's career growth and provide them with opportunities for professional collaboration.
2. Encourage leadership development for women through training, mentorship, and leadership quotas. Create incentives for organizations that actively promote women to senior managerial and technical roles.

## Launch Awareness and Advocacy Campaigns

1. Conduct national awareness campaigns to highlight the importance of women's participation in ICT, challenging stereotypes that deter them from pursuing technical roles.
2. Create platforms to recognize and celebrate the achievements of women in ICT. Stories of successful women leaders can inspire young girls and create strong role models.

## Support for Work-Life Balance

1. Encourage the development of recreational programs and elderly care support systems to reduce caregiving burden on women, allowing them to focus on their careers.
2. Promote flexible work arrangements, including remote work options and adjusted work hours, enabling women to balance their professional and personal responsibilities.

## Provide Financial and Institutional Support

1. Offer financial incentives, including tax benefits and grants, to companies that hire, retain, and promote women in ICT across entry, mid, and senior levels. Encourage employers to ensure pay equity and provide equal opportunities for career advancement.
2. Enhance access to loans, venture capital, and business incentives for women entrepreneurs in technology. While collateral-free loan provisions exist, they often require extensive documentation, making them inaccessible to targeted women. Government funding and financial aid programs should be streamlined and tailored to promote women-led tech startups, while ensuring such initiatives are truly accessible and impactful.

## Adapt and Adopt Global Best Practices

1. Research and adapt successful global practices, such as shared parental leave in Nordic countries or storytelling initiatives from global campaigns, to inspire and empower women.
2. Collaborate with private-sector leaders to develop initiatives like Singapore's government-industry training programs, which offer hands-on learning and practical skill-building opportunities for women.

## Reduce Discriminatory Policies

1. Ensure taxation policies related to women's employment, benefits, and earnings are equitable.

**Table 20. Recommended Actions to the Government**

Recommended Actions to the Government (N=1,232)	Percent
Amendment of previous policies (Labor Act, inclusive policies, HR policies, work policies, retention policies)	92.2
Provide scholarships to women pursuing ICT education	88.7
Provide training opportunities (Vocational and other IT-related training, promote women leadership)	89.3
Provide mentorship and networking programs	72.5
Introducing ICT curriculum at the school level	77.7
Employment opportunities (Government and private sectors, support startup)	76.4
Provide platform to acknowledge women achievements	55.8
Awareness campaigns	77.9

Source: (Field survey, 2024)

## Conclusion

Addressing inequalities in representation in Nepal's ICT sector is both a key step toward equity and a strategic move to drive innovation and competitiveness in the digital economy. While progress has been made in promoting inclusivity, significant barriers such as biases against women, limited leadership opportunities, and inadequate workplace policies remain. By prioritizing education, mentorship, and supportive policies, Nepal can create an inclusive ICT sector where women are empowered as leaders and innovators. Achieving this transformation will not only benefit women but also strengthen the sector with diverse perspectives, unlocking its full potential and contributing to a more equitable and dynamic digital future for Nepal.

## References

- Asian Development Bank. (2020). Accelerating Digital Inclusion for Women in Asia and the Pacific.
- Australia Government. (n.d.). Parental Leave Pay. Retrieved from <https://www.servicesaustralia.gov.au/parental-leave-pay>
- Bahn, K., Cohen, J., & Rodgers, Y. v. (2020). A Feminist Perspective on COVID-19 and the Value of Care Work Globally. *Gender, Work and Organization*. doi:<https://doi.org/10.1111/gwao.12459>
- Banday, B., Alam, M. J., & Kumar, S. A. (2022). Women Participation in Information and Communication Technology (ICT): Need and Importance. Retrieved from [https://www.researchgate.net/publication/373976535\\_Women\\_Participation\\_in\\_Information\\_and\\_Communication\\_Technology\\_ICT\\_Need\\_and\\_Importance/citation/download](https://www.researchgate.net/publication/373976535_Women_Participation_in_Information_and_Communication_Technology_ICT_Need_and_Importance/citation/download)
- Berk, L. E. (2013). *Child Development* (9th ed.).
- Bhattarai, M. (2021). Information and Communication Technology Scenario of Nepal: Assessing Policy Environment and Challenges. *Nepal Public Policy Review*, 201. doi:<https://doi.org/10.3126/nppr.v1i1.43443>
- Boston Consulting Group (BCG). (2020). Boosting Women in Southeast Asia's Technology Sector. Retrieved from <https://www.bcg.com/publications/2020/boosting-women-in-southeast-asia-tech-sector>
- Central Bureau of Statistics. (2021).
- Dutch Ministry of Social Affairs and Employment. (2021). Flexible Work and Family Life in the Netherlands. Retrieved from <https://www.government.nl>
- European Institute for Gender Equality. (2018). Women and Men in ICT: A Chance for Better Work–Life Balance.
- Gartner. (2020, October 05). What Makes Women in Technology Great CIOs. Retrieved from *smarterwithgartner*: <https://www.gartner.com/smarterwithgartner/what-makes-women-in-technology-great-cios>
- Gaweł, A., & Kapsdorferová, Z. (2024). Women in the ICT Sector in European Union States: Facing Gender Inequalities. *Studia Europejskie – Studies in European Affairs*. doi:10.33067/SE.1.2024.6
- Genilo, J. (2013). Attracting and Keeping Bangladeshi Women in the ICT.
- Go MINT Initiative. (2022). National Pact for Women in STEM Careers. Komm mach MINT. Retrieved from <https://www.komm-mach-mint.de/>
- GON- MoFAGA, Department of National Personnel Records (Civil). (2022/23). Warshik Pratiwedan.
- Government of Nepal Ministry of Federal Affairs and General Administration Provincial and Local Governance Support Programme (PLGSP). (2021, November). Gender Equality and Social Inclusion (GESI) Strategy.
- Government of Nepal, Ministry of Women, Children and Senior Citizen Singhadurbar, Kathmandu. (2020). A Progressive Journey to Gender Equality and Women's Progressive Empowerment.
- Government of Nepal, Ministry of Women, Children and Senior Citizen Singhadurbar, Kathmandu. (2024). Gender Equality in Nepal.
- Government of Nepal, Office of the Prime Minister and Council of Ministers. (2024). National Population and Housing Census 2021 Housing and Household Dynamics in Nepal. National Statistics Office.
- Government of Sweden. (n.d.). Prenatal Leave and Childcare Policies in Sweden. Retrieved from <https://sweden.se>
- GSMA Mobile Connectivity Index . (2024).
- Institute for Integrated Development Studies (IIDS). (2023). Unleashing IT: Advancing Nepal's Digital Economy.

International Labour Organization (ILO). (2018). Care Work and Care for the Future of Decent Work. Retrieved from <https://www.ilo.org>

International Labour Organization. (2019). Maternity and Paternity at Work: Law and Practice Across the Globe. Retrieved from [https://www.ilo.org/global/publications/books/WCMS\\_242615/lang--en/index.htm](https://www.ilo.org/global/publications/books/WCMS_242615/lang--en/index.htm)

International Telecommunication Union. (2023). Handbook on Mainstreaming Gender in Digital Policies.

International Telecommunication Union. (2024). Global Cybersecurity Index.

Kate Bahn, J. C. (2020). A Feminist Perspective on COVID-19 and the Value of Care Work Globally. doi: 10.1111/gwao.12459

Kurti, E., Ferati, M., & Kalonaityte, V. (2024). Closing the Gender Gap in ICT Higher Education: Exploring Women's Motivations in Pursuing ICT Education. *Frontiers in Education*. doi:<https://doi.org/10.3389/feduc.2024.1352029>

McKinsey & Company. (2021). McKinsey Global Surveys, 2021: A year in review.

NASSCOM. (2023). Closing the Gender Gap in Indian Technology Sector.

Nepal Engineering Council. (2024).

Nepal Law Commission. (2015). The Constitution of Nepal.

Nepal Law Commission. (2017). The Labor Act.

OECD. (2022). Family database: Parental Leave Systems. Retrieved from <https://www.oecd.org/els/family/database.htm>

Organization for Economic Co-operation and Development (OECD). (2022). Balancing Work and Family Life: Insights from Parental Leave Policies in Sweden and the Netherlands. Retrieved from <https://www.oecd.org>

Polit & Hungler. (1992).

Status of Women Canada. (2020). Increasing Women's Participation in STEM Fields.

Stuckman, J. (2021). Women and Pay Negotiations in ICT: A Global Perspective. Retrieved from <https://example-link.com>

Sweden's Parental Leave Policies. (n.d.). Parental Leave in Sweden. Retrieved from <https://sweden.se>

The Kathmandu Post. (2023, March 8). Behind the Mask of Happiness.

UN Women. (2019). Progress of the World's Women 2019-2020: Families in a Changing World. Retrieved from <https://www.unwomen.org>

UN Women. (2020). Gender Equality in the Technology Sector: Progress and Challenges in South Asia.

Universal Grants Commission. (2023/24). Education Management Information System.

World Bank. (2017). Gender Data Portal.

World Bank. (2019). Nepal Gender Brief.

World Bank. (2020). Women, Business and the Law: Progressing gender equality in the workplace. Retrieved from <https://www.worldbank.org>

World Bank. (2021). Enhancing Gender Equality in the Workplace: Lessons from South Asia. Retrieved from <https://www.worldbank.org/en/topic/gender/publication/enhancing-gender-equality>

World Bank. (2024). South Asia Development Update .



## Annex 1

The information for registered engineers in Nepal, as provided by the Nepal Engineering Council, is listed as below, along with the number of women in the ICT field according to Department of National Personnel Records (Civil).

**Table 21. Registered Engineers in the Nepal Engineering Council**

Nepal Engineering Council				
Summary of the list of Registered Engineers - Discipline wise (2000/01 to 2022 September)				
SN	Engineering	Men	Women	Total
1	Computer	10,144	2,073	12,217
2	Electrical & Electronics	2,497	274	2,771
3	Electrical	3,482	310	3,792
4	Electronics & Communication	8,437	1,146	9,583
5	Electronics & Telecommunication	133	14	147
6	Electronics	273	18	291
7	Information Technology	1,117	231	1,348
8	Information Technology Telecommunication	14	3	17
9	Software	489	97	586
10	Electronics & Instrumentation	6	0	6
11	Electronics, Communication & Information	120	20	140
<b>Grand Total</b>		<b>26,712</b>	<b>4,186</b>	<b>30,898</b>
<b>Percentage</b>		<b>86.45%</b>	<b>13.55%</b>	

Source: (Nepal Engineering Council, September 2022)

**Table 22. Number of Women in ICT from the Department of National Personnel Records (Civil), 2022/23**

		Gender	Male	Female	Total
<b>Service</b>	<b>Position</b>		208	44	252
Nepal Diverse Service	Computer Officer		1,347	371	1,718
	Computer Operator		94	23	117
	Computer Engineer		1		1
	Computer Coder		3	1	4
	Computer Technician		1		1
	Computer Director		1		1
	Computer Programmer		4		4
	Computer Helper		2		2
	Director (Computer)		14	3	17
	Information Technology Director		8	1	9
Nepal Engineering Service	Electronic Engineer		1	1	2
Federal Parliament Service	Electronic Engineer		2		2
	Computer Officer		10	1	11
	Computer Operator		3	1	4
	Computer Programmer		3	1	4
<b>Total</b>			<b>1699</b>	<b>446</b>	<b>2145</b>

Source: (Nepal Government, Ministry of Federal Affairs and General Administration, Department of National Personnel Records (Civil), 2022/23)

## Annex 2

Women in Information Technology and the project team are grateful for the valuable and detailed information received during the Key Information Interview (KII) and Focus Group Discussion (FGD) for this study.

### KII:

1. Ms. Bandana Sharma, Senior Manager (IT), ISO, Nepal Bank Pvt. Ltd.
2. Ms. Bibha Sthapit, Lecturer/Assistant Professor, Institute of Engineering, Pulchowk Campus
3. Ms. Mona Nyachhyon, Founder, Monal Tech
4. Ms. Munni Rajbhandari, Chief Operating Officer/Information Officer, Nepal Clearing House Limited
5. Ms. Pramila Devi Shakya Bajracharya, Former Secretary, Ministry of Education, Science and Technology
6. Ms. Sabina Maskey Pradhan, Chief Operation Officer, Nepal Telecom
7. Ms. Sunaina Ghimire Pandey, CEO and Managing Director, General Technologies Pvt. Ltd

### FDG:

1. Ms. Adipti Gupta Shrestha, Founder, Usaa Business Solutions Pvt. Ltd.
2. Ms. Anjana Lohani, Nabil Bank
3. Ms. Anju Shrestha, Freelancer
4. Mr. Asgar Ali, Co-founder, eSewa, F1Soft International Pvt. Ltd.
5. Ms. Bandana Bajracharya, Department Head, Information Technology Department, IGI Prudential Insurance Limited
6. Ms. Binita Shrestha, Former CCO, Nepal Telecom
7. Ms. Dakshina Shrestha, Principal / Associate Professor, Sagarmatha Engineering College / Sagarmatha College of Science and Technology
8. Ms. Dibya Tara Shakya, Asst. Manager, Digital Banking Department, Global IME Bank
9. Ms. Dixa Shrestha, Senior Manager, Leapfrog Technology
10. Ms. Ganga Bhandari, IT Specialist, National Disaster Risk Reduction and Management Authority
11. Ms. Ganga Subba, Associate Professor, Sagarmatha Engineering College /Sagarmatha College of Science and Technology
12. Ms. Gayatri Sharma, Computer Engineer, Ministry of Industry, Commerce and Supplies
13. Ms. Janaki Joshi, Director, Devfinity
14. Ms. Jayanti Mala Chapagain, Founder, Spiker Solutions
15. Ms. Jenny Shrestha, Admin, HR & Procurement, Nepal Clearing House Limited
16. Ms. Kalpana Gyawali, Computer Engineer, E-Governance Board
17. Ms. Laxmi KC, Computer Engineer, National Cyber Security Center
18. Mr. Lochan Lal Amatya, Chairperson, Nepal Research and Education Network
19. Ms. Menuka Maharjan, Senior IT Officer, Rastriya Beema Company Limited
20. Ms. Mina Marasini, Senior IT Technician, IT&C Division, General Services & Property Management Department, Nepal Airlines Corporation
21. Ms. Nayana Amatya Rajbhandari, Visiting Faculty, Institute of Engineering, Pulchowk Campus
22. Mr. Nirdesh Dwa, CEO and Co-founder, Veda Software
23. Ms. Palpasa Tuladhar Kansakar, Deputy Manager, Nepal Telecom
24. Mr. Parmeswor Shrestha, Head of Digital Banking, Nabil Bank
25. Mr. Prashant Pokharel, Country Manager, Head of Finance, CloudFactory
26. Dr. Pratima Pradhan, Director, Kathmandu Engineering College
27. Mr. Prayas Rajopadhyaya, HR Manager, InfoDevelopers

28. Ms. Praynita Karki, Assistant Professor, Kathmandu University
29. Ms. Rachana Tuladhar, Senior Developer, InfoDevelopers
30. Mr. Raj Bikram Maharjan, CEO and Co-Founder, Galli Express Private Limited
31. Dr. Rajani Chulyadyo, Assistant Professor, Kathmandu University
32. Ms. Ramila Shrestha, Head Deposit Management Institutional, Sanima Bank
33. Ms. Reena Dangol, Director, Nepal Telecom
34. Ms. Reva Rajbhandary Shrestha, Director, MicroBankers Nepal Pvt. Ltd
35. Ms. Roja Kiran Baskula, Deputy Director, Nepal Telecommunication Authority
36. Ms. Rolisha Sthapit, Vice Principal, Computer Science and Applied Technology Division, Prime College
37. Ms. Salina Dangol, IT Director, Ministry of Education, Science and Technology
38. Ms. Salu Gupta, Technical Director, Axis Investment and Development Pvt. Ltd.
39. Ms. Sampanna Shrestha, Information Security Consultant, Genese Solutions
40. Ms. Sanu Khadka, Director, Information Communication and Technology Section, Securities Board of Nepal
41. Ms. Sarita Pradhanang, Business Development Director, Octacore Solutions Pvt. Ltd.
42. Ms. Sewa Pathak, CEO, Vianet Communications Ltd.
43. Ms. Sheela Kansakar Karki, Vice President, Women in Information Technology
44. Ms. Shikha Shrestha, Country Project Implementation Lead, VSO Nepal
45. Ms. Shova Shedai, QA Engineer, wesionaryTEAM Co. Ltd.
46. Ms. Sonam Priya, Computer Engineer, National Cyber Security Center
47. Ms. Srijana Shrestha, Business Development Director, Cloudlink and Security Enterprises Pvt. Ltd.
48. Ms. Shrilata Wagle, Part time Lecturer, Padma Kanya Campus
49. Ms. Sulochana Tuladhar, Info Developers
50. Ms. Supriya Maharjan, Senior Talent Management Specialist, CloudFactory
51. Ms. Sushma Shrestha, IT Director, Ministry of Home Affairs
52. Prof. Timila Yami Thapa, President, Women's Agency Research Centre, Nepal
53. Dr. Tista Prasai Joshi, Nepal Academy of Science and Technology



Supported By:



 [nepalwiit@gmail.com](mailto:nepalwiit@gmail.com)

 [www.wiit.org.np](http://www.wiit.org.np)

 [facebook.com/wiitnepal](https://facebook.com/wiitnepal)