Women's Career in the IT Industry: An Empirical Study

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ABSTRACT:
In today's worldwide environment, women prioritize employment. Jobs previously reserved for men are their goal. the nation's female workforce has grown. IT employs a surprising number of women. The present research examines computer science female entry, promotion, and professional growth barriers. Employment choice, position, offers, professional growth plan, evaluation, departures, and effort to attract women will be examined in this study. Women are interested in technology-related careers, and career-minded women pick it, based on the research. Employment allow women to shine and prove themselves and to advance faster, employees mustperform.

Keywords: - Women's, careers, IT business, sector, roles etc
DOI Number: 10.48047/NQ.2022.20.13.NQ88532 Neuroquantology 2022; 20(13):4373-4387

1. Introduction

Women are career-conscious in the globalized world. They desire jobs previously reserved for men. Work engagement by Indian women has grown. Information technology has a stunning number of women. This industry offers rich careers and global exposure. Family, society, and the corporate world previously underestimated women's professional potential. However, the environment and career guidance at institutes or elsewhere assist individuals choose a lucrative job. Given their background, women are learning core and domain employability abilities. The IT industry welcomes them.

Career growth is as crucial as entry. It builds their confidence, which is crucial for career growth. Women compare their careers to men's and improve their skills to compete with them. This industry values talents, thus women are aware of upgrading themselves. Employee career progression depends on company growth. Employees want a better-rated company, so turnover is inevitable.

Sometimes attrition is necessary for professional progress. Given their social role, women may experience this differently. Additionally, companies pursue measures to retain great staff. Offering professional progression and competitive pay may help. Such employees bond with the company and help it expand.

The society has given women special roles. Such responsibilities often hinder growth. Family duties like childrearing and home management may hinder career growth. They must take a break from employment to execute these responsibilities, which may be career-ending. Women are tied to their husbands' locations and must sometimes sacrifice their careers for the family. Although careerists, they may be reluctant to accept offsite assignments that are crucial to their development. Organizations are sometimes reluctant to give women high-ranking positions, which might hinder their professional progress. The glass ceiling in women's career progression is unavoidable.

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1.OBJECTIVE

The main objective of the present paper is to understand the Issues involved at Entry level and in Career Development by women in IT industry

2.REVIEWOF LITERATURE

Dinesh (2011) explored how Kerala women used information and communication technology jobs to empower themselves economically. This report presents findings from Kerala's ICT park and Kudumbashree ICT unit. This study investigates how ICT affects women's employment, income, social roles, and empowerment, especially disadvantaged women. This study found that gender-blind ICT activities in a globalized competitive framework with enhanced market role and flexibility perpetuated gender inequality. Aggarwal (2005) examined women's role in information technology. The survey found that IT Enabled Services are growing. This non-discriminatory industry gives men and women equal chances. Women work in IT in Bangalore, Poona, Chennai, Delhi, Hyderabad, and Bombay. Southern women make up 41% of professional hires, compared to 6% in the East. Women can work from home and have flexible hours because to IT. Tele-tech India, a joint venture between Tele-tech and the Bharti Group, offers four-day weeks instead of five, hourly wages with a minimum number of hours each week.

Shankar (2008) examined the "new identity" of Indian women in ICT. The study evaluated women's employment in this new economic sector and its effects on domestic and social development. The survey found that women network less with coworkers than males, who use it to advance their careers. The Information and Communication Technology Industry has many direct benefits for women, yet educated women still live under patriarchal standards. This study found that women's work in India's ICT industries is temporary, with governmental emancipatory powers but not private ones. Saundarya and Ekambaram (2013) evaluated modern women IT workers' careers. This study examines why women take professional breaks. This report illuminates women's IT career progress. And discover the issues that impede their careers. The survey found that women's IT career advancement is uneven. Culture, social, institutional, personal, and role-specific issues keep individuals from their career goals.

3.RESEARCH METHODOLOGY

This study uses primary and secondary data. Pune, an industrial powerhouse, is the study area, and 400 women employees from 20 IT companies were sampled. Their firms employ these women in various roles. The sample is chosen randomly without prejudice. Personal interviews with a pretested questionnaire obtained respondent data. Qualitative analysis uses Chi-square. Findings are presented using percentages to simplify comparisons.

4.SURVEY RESULTS

Entry in Information Technology Industry

Entering the business world, especially for women, is difficult. Women aspirants and the organization fear choosing each other. Despite following hire and dismiss policies, the company worries about employee liability. Additionally, employees who choose a company are unsure if they made the appropriate choice. Thus, women's corporate, especially IT, admittance takes several forms. The survey of IT women examines such manifestations.

Enhancing IT Career

IT is a major global industry. Additionally, this industry is gender neutral because its labor can be done by either gender. This industry attracts women technocrats and professionals with its usual traits. This sector pays well and offers promising careers. International experience and offshore travel give employees better prospects. These aspects were examined with sampled women employees. The findings are in table 1.1.

Table-1.1-Reason for choosing Profession

Reason	Frequency
InternationalExposure	12 (03)
CareerAmbitious	152(38)
InterestinIT Career	207 (51.75)
LucrativeSalary	29 (7.25)
Total	400 (100)

As mentioned, IT employment profiles are gender neutral. Thus, ladies are always interested in IT. Table 1.1 indicates that 51.75 percent of women express interest in IT careers. This has become the most significant factor in choosing IT. Information technology offers promising careers for women, so they may be interested. Career-minded women may pursue IT careers. According to the poll, 38% of women chose IT for job advancement. This did not establish that a high pay is a major motivation for choosing IT as a career. Only 7.25 percent of women chose IT for this reason. According to relevant research, international exposure of this profession attracts people to it as a vocation.

This did not apply to IT women. Only 3% of sampled women cite foreign exposure as a factor for choosing IT.

CareerChoice

Career choices for women are influenced by many factors. They may pick this career themselves or be influenced by family or culture. Marital status affects professional choice. Private companies can hire staff without following any laws. References from respected persons may clique. This industry may be knowledge-based, thus meritorious people are unlikely. ignored. These aspects were examined from 400 IT women and provided in table 1.2. Table 1.2 shows that women in IT pick their careers regardless of marital status. Almost equally, married and unmarried women report choosing their own careers at 94%. This happened in a male-chauvinistic society. Information technology women come from educated families and choose a career before marriage. Therefore, the appropriate field is evident.

Table-1.2–Issue of selecting job

Relevant Career Issue↓	Married		Unmarried		Total	
	Yes	No	Yes	No	Yes	No
1. Self Choice of Profession	225 (95.34)	11 (4.66)	151 (92.08)	13 (7.92)	376 (94)	24 (06)
2. Relative working in The same Profession	201 (85.17)	35 (14.83)	51 (31.10)	113 (68.90)	252 (63)	148(37)
3. Any Relative Necessary in IT to be In ITIndustry	08 (3.39)	228 (96.61)	05 (3.05)	159 (96.95)	13 (3.25)	387 (96.75)

The role of same-profession acquaintances on career choice is also examined in table 1.2. This is largely reflected in employment choices. According to 63% of sample women, they have a relative in this field. Married women are more prone to this. This industry is skill-oriented and applicant merit matters, therefore "any relative necessary in Information Technology to be in Information Technology Industry" has been contradicted by the survey results.

First Placement and Qualification

First placement or career break has a big impact on employee career. First-time job hunting is challenging without work experience. Someone else must guarantee the person's potential performance. Campus selection and referrals by other employees are important here. Additionally, the person's qualification, which indicates capability and employability, affects the first placement. The association between qualification and first placement is also unclear. Qualification is positively correlated withand first place. Table-1.3 shows information from women in IT about these topics.

Table 1.3 illustrates that initial placement advertising is limited. Only 12% of studied women got their first job through company ads. The most common first placement method was campus placement.

Table-1.3-Placement and Qualification

FirstPlacement→ Qualification↓	Campus Selection	Employee Referral	Advertisement	Total
B.Tech	73 (18.25)	145 (36.25)	26 (6.50)	244(61)
M.Tech	83 (20.75)	01 (0.25)	08 (2.00)	92 (23)
MBA/MSc.(IT)	14 (3.50)	17 (4.25)	09 (2.25)	40 (10)
MCA	14 (3.50)	05(1.25)	05 (1.25)	24 (6)
Total	184 (46.00)	168 (42.00)	48 (12)	400 (100)

Employee referral follows. Of the 400 women studied, 45.75 percent were placed through campus selection and 42.25 percent through employee referral.
distinct qualifications show distinct trends. M.Tech. graduates dominate campus hiring. For 82 of 91 M.Tech graduates, campus selection was their first placement. B. Tech. graduates dominated employee referrals for initial jobs. Of 244 B. Tech. graduates, 145 were hired through employee referral and 73 through campus selection. No conclusion was reached for M.Sc (IT), MBA, and MCA degree holders' first placement routes.

Career Development

Women get a chance to prove themselves once they start working. This eventually affects career growth. Pay, promotion, position/designation, skill, learning by doing, etc. are career growth factors. Promotions swiftly reflect skill. Additionally, they must create professional development strategies based on existing literature. For job advancement, they must pass a rigorous evaluation. To quickly advance, employees are required to perform.

This section examines women's IT career advancement.

Current position and credentials

After the initial placement, the person can perform and prove herself. She can find a job based on her basic and gained skills. Her experience can help her improve despite her qualifications. Some enter an organization and stay for a long time, while others seek other opportunities. Table-1.4 shows the findings of examining these issues for women in IT.

Table-1.4-Current Job and Qualification

PresentJob→ Qualification ↓	Campus Selection	Employee Referral	Advertisement	Total
B.Tech	132(33)	16 (04)	96 (24)	244(61)
M.Tech	-	01 (0.25)	91(22.75)	92 (23)
MBA/MSc.(IT)	06 (1.50)	01 (0.25)	33 (8.25)	40 (10)
MCA	15 (3.75)	02 (0.50)	07 (1.75)	24 (06)
Total	153 (38.25)	20 (05)	227 (56.75)	400 (100)

Women may find their next jobs through advertising once they settle in the business. Advertising dominates job search. Table 1.4 shows that 56.75 percent of women got their current work via responding to ads. Some good companies can retain talent, so first-round picks stay. 38.25% of the 400 campus-selected employees stayed with the company. Note that employee recommendation has dropped to 5%. Thus, once a woman is established in the industry, employee referral becomes negligible. The role of campus selection and employee referral has been eliminated for M. Tech graduates. B. Tech graduates still use similar tactics.

Career growth through promotion

Everyone in the company wants to further their careers. Promotions demonstrate career growth. The organization must follow promotion and retention policies to survive. Under the subtheme of promotion as career development, staff promotions and promotion speeds have been sought. Table 1.5 presents survey findings.

Table-1.5-Promotions

NumberofPromotionsReceivedso far	Frequency
Never	96 (24)
1-2Times	212(53)
2andAbove	92 (23)
Total	**400 (100)**
AveragePeriodtoReachtheNextPosition	**Frequency**

1 year	44 (11)
1-2 years	168(42)
Morethan2 years	188(47)
Total	**400 (100)**

Table 1.5 shows that 24% of 400 women never received a promotion. 53% advanced career 1-2 times. Only 23% received promoted more than twice. The table suggests the IT industry has a "glass ceiling." One or two promotions are easy for women in IT, but beyond that it's challenging.

Promotion speed also indicates career growth. It also shows employee skill. Capable people deserve speedy promotions. Table 1.5 shows that this industry requires qualified personnel. Average promotion time is short. 11 percent of women were promoted in a year. 42 percent wait one to two years for advancement. The rest must wait over two years to further their careers. The lower section of the table shows that women in IT are promoted quickly.

Career development strategies

Even if the relevant literature states that domain skills are crucial to career growth, designing career development plans is part of the game. Information technology and women may not be unique. Career development tactics may include gender, lobbying,Improve talents, socialize, recognize significant people in the organization, etc. Sometimes these methods work, but sometimes they undermine career advancement. Table 1.6 shows results from women's IT career development plans.

Table-1.6-strategies for Employment

Strategy	Yes	No	Total
DoestheGenderMatterforPromotions?	28 (07)	372(93)	400 (100)
DoyouhaveCareerDevelopment Strategy?	216(54)	184(46)	400 (100)
AreyouUpgradingyourSkills?	244(61)	156(39)	400 (100)
IsLobbyingtoGetPromotionNecessary?	52 (13)	348(87)	400 (100)
WhetheryouarePartofanyLobby?	07 (1.75)	393 (98.25)	400 (100)

Information technology is gender neutral, hence gender-based career strategies may fail. This was confirmed when 93% of women disputed the question 'does the gender factor for promotion?' Promotion cannot be based solely on gender, since 7 percent of women said yes.

Every employee, regardless of gender, has career development strategies. Some smart people may carry out such tactics covertly. Additionally, students develop their skills for career advancement. 54% of women claim to follow a career development strategy. Thus, the career development strategy has yielded mixed results.

As mentioned, job progression requires skill upgrades. Most women work to improve their domain skills. For, 61% of IT women try to enhance their abilities (Table 1.6). Learning by doing is important even for those who replied no.

Though lobbying is crucial for advancement or job development, women in the IT industry lack it. 87 percent of women did not realize promotion required lobbying (Table 1.6). This supports our past findings that the IT industry values talent. If lobbying is unimportant, women employees don't join lobbying groups.

Rating and evaluation

Employee performance is usually assessed by every company. This technique generates management information for the organization. Such appraisals assist the company identify and develop individuals. Ratings vary for employees. After learning about ratings, staff may seek to improve them. This is a great tool for companies to monitor staff. This mechanism may also extend the organization's lifespan. Table 1.7 summarizes the sampled women's feedback on the organization's appraisal system.

Table-1.7-Appraisal

Particulars	Yes	No	Total
Companyrateperformanceon'bellcurve'	400 (100)	0	400 (100)
Womenqualitiesarenotconsideredfor Rating	398 (99.50)	02 (0.50)	400 (100)
Femalememberintheappraisal Committee	390 (97.50)	10 (2.50)	400 (100)
Menfinddifficultiesinreportingto womenbosses	88 (22)	312(78)	400 (100)

Table 1.7 shows that all the sampled women's organizations have inbuilt appraisal mechanisms and rate women's performance using the bell curve. Additionally, IT organizations do not consider gender when grading employees.

Women are not rated differently; performance is. Despite women being evaluated, this is true. Most women claimed they did not seek or get support from the appraisal team lady. This shows that assessment does not consider gender. When asked 'whether men have difficulties in reporting to female boss', three quarters of women said no. Thus, women bosses are as effective.

Some may fail and others succeed if rating mechanism is in place. In this perspective, women in IT are examined for rating failure. Results are mixed. Only 24% of sampled women avoided failing owing to low rating (Table 1.8). Others haveanswered 'sometimes' or 'most of the times' for failures. Failure due to poor rating is typical.

Table-1.8-Failure

HowOften	Frequency
Sometimes	136(34)
MostoftheTime	168(42)
Never	96 (24)
Total	400 (100)

Attrition and Career Development

The role of attrition in career advancement is debated. Some prefer attrition to advance their careers, while others prefer staying in strong companies and growing. Does it apply to IT women? The polled IT women stated that attrition is necessary to professional progression. Table-1.9 shows that 95.25 percent of women choose attrition for career progression.

Table-1.9-Attrition Essential for Career Growth

Yes	No	Total
381 (95.25)	19 (4.75)	400 (100)

Attrition is considered necessary for career growth. Is it required for all ranks? We expect higher-level roles to have less attrition than junior positions. Attrition rates for women in IT are seen in table 1.10. Additionally, attrition and designation have been examined for a correlation.

Table-1.10-Relationship between Attrition and Designation

CompanyChanged → Designation↓	Never	Once	Twice	Morethan Twice	Total
SoftwareEngineer	51 (12.75)	54 (13.50)	19 (4.75)	0	124 (31)
AssociateSoftwareEngineer	17 (4.25)	101 (25.25)	18 (4.50)	0	136 (34)
SeniorSoftwareEngineer	38 (9.50)	04 (01)	67 (16.75)	03 (0.75)	112 (28)
TechnicalLeader	01 (0.25)	0	26 (6.50)	01 (0.25)	28 (07)
Total	107 (26.75)	159 (39.75)	130 (32.50)	04 (01)	400 (100)
ChiSquareStatistic(χ^2)=428.06(p=0.00)-Significant					

Only 26.75% of respondents never changed jobs, according table 1.10. Attrition has occurred in 72% of sampled women. Information Technology Industry saw moderate female attrition. Designation attrition is highest for ‘associate software engineer’, ‘senior software engineer’, and ‘technical leaders’. Out of 136 "associate software engineers," 119 have suffered attrition, while 74 of 112 "senior software engineers" have faced organizational change twice or more. Technical leaders have changed the company almost entirely (Table-1.10).

The table shows a strong correlation between designation and attrition. The Chi-Square statistic is noteworthy. We rejected the no-relationship hypothesis.

Promotions and marital status

Does marital status affect women's IT career advancement? Many believe married women must sacrifice their careers to balance their roles at work and at home level. This was not supported by our sample results. Table 1.11 shows that 230 of 236 married women in the sample reported career promotions. This ratio is quite low for unmarried women.

Why these facts? Increased age benefits married women in promotions. Marital status in the IT industry has little impact on women's job progress.

Table-1.11-Association between Marital Status and Promotions

Promotions→ MaritalStatus ↓	Never	1-2	More than2	Total
Married	06 (1.50)	139 (34.75)	91 (22.75)	236 (59)
Unmarried	90 (22.50)	73 (18.25)	01 (0.25)	164 (41)
Total	96 (24)	212 (53)	92 (23)	400 (100)

Retention

IT firms depend on their employees' talent and skill. Thus, the company must retain productive workers. Old personnel feel connected to the company and work with feel. Help the company flourish. The hire-and-fire policy may fit the company, but it may discredit it and make it hard to hire good individuals. Why is it good to keep women in IT? Women tend to be more disciplined and avoid trade unions. In addition, IT job does not differentiate by gender. Retention is covered in this chapter.

Company facilities

Company may offer staff facilities as part of its retention or general policy. The groups offer subsidized cafeterias. They give staff laptops, internet, and phones so they may work from home. The shuttle facility is for staff convenience. Such amenities' availability and utilization by Table-1.12 shows responses from IT women employees.

Table-1.12-CompanyFacility

Facility	**Frequency**
Cafeteria	23 (5.75)
Laptop&Internet	149 (37.25)
MobilePhone	02 (0.50)
Transport	226 (56.50)
Total	400 (100)

Table 1.12 shows that sampled women use transport most. 56.5 percent of 400 respondents used this facility most. This facility suits women workers. They prefer corporate cabs because they feel safer. Internet and laptops are IT staples. Company employees have laptops and internet in addition to PCs. 37.25 percent of women use the company's laptop and internet most. Company women rarely use mobile phones. In the previous chapter, we learned that IT women work 8-10 hours a day. Organizations must have cafeterias. This facility is not popular with IT women.

Attracting Women Initiatives

As mentioned, women workers are more disciplined and resilient in union operations. Women are as efficient in IT, thus firms may have policies to attract and keep them. Companies may offer work-from-home, flexible hours, medical insurance, and security to attract women. This study's survey examines how sampled women view these programs. The results are in table 1.13.Women workers must combine work and life. The best work schedule for women is flexible. This facility is meant to recruit women to the organization. 53% of women sampled havereported that their companies offer flexible hours (Table-1.13). Information technology does not require office job. Women's family issues or tiny children may deter them from working. If their circumstances prevent them from working in the office, several companies enable women to work from home. 18% of selected women said their company offers telecommuting. The ideal facility to lure women to the organization may be this. We can conclude that corporations recruit women.

Table-1.13-Company's Special Initiatives

Initiative	Frequency
WorkfromHome	72 (18)
FlexibleHours	212(53)
MedicalInsurance	84 (21)
Security	32 (08)
Total	400 (100)

Conclusion

This chapter discusses women's IT profession entry and progression. The study found that career-minded women chose information technology. International exposure and high salaries were not women's main motives for choosing IT careers. Women in IT pick their careers regardless of marital status. Additionally, relatives in the same field have been partially acknowledged to pick an IT job.The study disproves the need for a relative in IT to work in IT. Advertising has little impact on the initial placement of IT women. The most popular first placement strategy was campus placement then employeerecommendation. M.Tech. graduates dominate campus selection, whereas

Once a woman breaks into the profession, employee referral becomes less important. The 'glass ceiling' persists despite swift promotions for IT women.
The study found that half of women have career development strategies. Most women work to improve their domain skills. Information technology is gender neutral, hence gender-based career strategies may fail. 87% of women did not realize advancement required lobbying.
The study revealed that all businesses where the sampled women work had inbuilt appraisal mechanisms and rate women's performance on a "bell curve." Information technology companies do not rate personnel by gender. Failure due to poor rating is typical.
Attrition is key to career growth. Women in IT have moderate attrition. Attrition is high in practically all designations except 'software engineer' and is strongly correlated with designation. Women in IT have little career impact by marital status. Women employees have the most fun with company transportation. Flexible hours and working from home were the most essential tactics for IT women.

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