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Watson Women's Network Leadership: A Best Practice at IBM Research for Innovative and Effective Recruitment and Retention

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Abstract

We address how the Watson Women's Network (WWN), a community of technical women at IBM's T. J. Watson Research Center, provides business value and positive internal and external visibility for the IBM Corporation. The WWN is focused on reaching all women in technology at our New York sites in Yorktown and Hawthorne, providing them with opportunities to reach beyond their daily routines, connect with others, find solutions, identify mentors, and feel part of a bigger community. The network's mission is to encourage a workplace environment that advances women's professional effectiveness, individual growth, and recognition. Community activities leverage technical expertise, work/life experience, and technology in innovative ways to generate business impact to IBM, and to provide effective means for recruitment and retention. The WWN has grown from 170 members in 2005 to over 270 members in 2007, becoming the largest diversity-related affinity group at IBM Research. The WWN is a model community hosting nearly 50 events annually.

A dynamic group of leadership catalysts organize activities including: i) community outreach; ii) professional networking; iii) technical vitality programs, through a wide spectrum of seminars, career discussion panels, and executive roundtables; and iv) work/life flexibility discussions. The WWN provides an environment that fosters mentoring relationships and international collaborations. Executive roundtables, in particular, provide an opportunity to hear about remarkable career paths, and facilitate intimate discussion on career advancement. Community outreach and professional networking events bring together women from multiple divisions. The positive feedback from these events confirms our success in fostering new cross-divisional technical collaborations. The network helps professional women position themselves as leaders both within IBM and in their professional community, thus positively impacting both their careers and IBM business. This presentation discusses the established methods and the lessons learned that may benefit other organizations, diversity groups, and professional networks.

1. Introduction: Recruitment, Retention and Attrition Challenge

Attracting, nurturing and retaining world-class technical talent are crucial to sustaining IBM's success [1]. Many other companies, academic organizations, and government groups also share this belief, recognizing that recruitment, retention and attrition (RRA) of talented technical people is of significant importance to their ability to develop new technologies, deliver critical services, tailor solutions for new markets, better relate to clients, and enable competitiveness and cutting edge know-how.

1.1 Traditional Methods to Improve RRA

There is a set of commonly practiced methods that organizations use to focus on improving the RRA of team members. These practices have been supported by research findings and well studied executable methods. While such techniques may be of merit, and several will be briefly discussed here, the essence of real improvements in RRA rests upon fostering a stimulating, challenging and supportive environment where members feel significant and included. This inherently makes any successful solution personal and customized. The challenge of utilizing these methods successfully is the ability to adapt them to a particular environment and even a particular individual.

Organizations often offer education programs targeted at mid-career employees to help guide technical career development. These programs effectively provide a broad view of options in technical careers, as well as skills that can aid in successful career navigation. Such programs are commonly specific to the corporation or an organization, but often have a difficult time addressing individual needs, preferences, and immediate environmental pressures. These programs offer a foundation of knowledge for team members, but are often the most difficult to personalize.

One key tactic to improve the work environment for a team member is to increase their personal network. This can be done using a variety of methods including encouraging participation in professional organizations and networking events[2], membership in informal and impromptu teams and groups, and mentoring. Professional organizations allow various levels of member participation. Some members prefer to quietly learn from the group while others enjoy a more active role. Thus, each individual may participate in a manner most comfortable to them. Informal teams and groups are usually formed for the purpose of creating a social network [3]. They help to facilitate pursuits of common concerns, such as improving a specific condition of which the team members become aware. Moreover, effective integration in teams can improve office politics through better communication between the team members. Mentoring of a new team member by someone with more experience is a widely recognized and practiced method that can be extremely effective, as it can address very personal needs [4]. The success of such an arrangement, however, rests upon the relationship of the mentor to the mentee. This method requires an open and flexible approach to find a means of execution that is beneficial to both the mentee and the mentor.

Networks can extend beyond an individual's own team, organization, and corporation or university. In fact, having several mentors who serve multiple developmental needs is desirable; for example, mentors to accelerate becoming indoctrinated into a corporate culture, mentors to assist in acquiring a technical skill, mentors to coach on how to patent an idea, and mentors to teach industry domain expertise. To be effective, the networks truly need to be a community-wide effort. Nurtured relationships between corporations and universities also provide a means to give technical input and feedback, as well as provide students with skills that are relevant in the marketplace. The give and take between universities and corporations is thus mutually beneficial and an excellent aid for students. Networking between universities and corporations is very important in identifying talent and prospective new hires, summer interns, or post-docs, and to incubate new ideas that may seed joint research.

1.2. Importance of Diversity - IBM's Initial Diversity Initiatives

In addition to the aforementioned methods to improve RRA, a key enabler to achieving positive and steady flow in the new candidates pipeline and successful retention of the existing employees is the ability of the employer to provide a technically vital and diversified environment, which supports women in the marketplace [5, 6].

Over a decade ago, business and human resources leaders began to recognize the importance of workplace diversity initiatives, beyond mere compliance with anti-discrimination laws. A diverse workplace was touted as bringing marketplace advantages, not only internally to the corporate organization, in improving morale and productivity, but also externally in bringing competitive advantage in an increasingly global economy [7]. A compliant view of diversity had frequently led organizations to the conclusion that 'everyone is the same,' leaving many frustrated who recognized legitimate differences in communication and leadership styles across genders and ethnic backgrounds. Also published mathematical models and case studies make a case for the importance of diversity [8]. The shift to embracing the inherent differences of a diverse workforce represented a much more genuine attempt to improve organizational effectiveness, improve morale, leverage a variety of viewpoints, and create cracks in the "glass ceiling."

In 1995, after noting that his senior leadership team did not reflect the diversity of available talent, IBM Corporation's CEO, Lou Gerstner, founded a diversity task-force aimed at fostering and nurturing under-represented diversity groups in the organization. From the start, this task-force sought to cater for each diversity group's unique needs and concerns and therefore, rather than lumping all these groups into one diversity pool, they facilitated the creation of eight different diversity groups, including that for women [9]. Two important outcomes of this initiative were the creation of diversity network groups, and further identification of unique RRA-related challenges for each group.

1.3. Particular Challenges for Women in the Marketplace

Among the diversity network groups, professional women's organizations play a key role in improving the female RRA problem. As described by Ely [10], the organizational demographics and social identity have a strong effect on relationships among professional women. In the early days of computing, before computer science became an academically-established field, there were many female practitioners and several key female technical leaders (including Grace Hopper [11], Fran Allen [12], and others). However, as the field matured, computer science degrees were granted limiting the opportunities of those without a college education, and the job of a programmer shifted from being team-oriented to a solitary role. The percentage of women in computer technology dropped, apparently along with their job satisfaction and advancement opportunities [13]. The classical reference describing the shrinking female pipeline in this area is a publication by Tracy Camp [14]. Gerstner's mid-1990's task-forces indeed found that things had changed significantly since the early days of computing, and that for women the list of employee concerns was both particularly extensive and broad. The seven most significant employee concerns identified for women were: (1) Networking; (2) Career Advancement; (3) Succession Planning; (4) Work/Life Balance; (5) Flexibility as a Business Strategy; (6) Executives' Personal Commitment to Advancing Women; and (7) Target Advertising and Marketing [9]. Within the population of technical employees where representation of women is low, each of these issues is a significant challenge to RRA and creation of a high-performance culture.

Simple diversity-training and diversity-sensitivity initiatives, however, have been found to be insufficient in addressing such concerns – Kochan et al. indicate that "Organizations must also implement management and human resource policies and practices that inculcate cultures of mutual learning and cooperation."[15] This was recognized early at IBM. As a result of Gerstner's task-forces, a wide network of employee affinity groups across IBM divisions was created, with specific inclusion of employees across career levels from the entry-level programmers and technicians to executives. At IBM's T. J. Watson Research Center, these affinity groups are tied to a central Diversity Council, but are given individual freedom to choose topics and events which meet the particular interests, concerns, and challenges of their constituencies.

2. Watson Women's Network (WWN) – A Premier IBM Diversity Group for Professional Women

The Watson Women's Network (WWN) is one of the many diversity groups under the umbrella of IBM's Diversity Council. The WWN is a community of technical and professional women at the IBM T. J. Watson Research Center. The WWN has more than a decade-long history of involvement by community-active and highly and technically-skilled members. For example, Fran Allen, IBM Fellow Emeritus and the first woman to receive the Association for Computing Machinery (ACM) Turing Award, was one of the pioneering co-chairs of the WWN in its early history. The mission of the WWN is to encourage a workplace environment that advances women's professional effectiveness, individual growth, and recognition. To execute its mission,

the WWN committee organizes a broad spectrum of programs. These programs are very diverse in nature, and target a variety of audiences in order to attract members and provide something of interest to everyone. Topics cover areas in business, career and leadership development, mentoring, and work/life flexibility. Event attendance is open to the entire research community in order to help improve understanding between men and women throughout the company and provide equal opportunities to both females and males. The WWN also encourages members to become involved in community outreach, networking, and technical vitality programs such as seminars and panels, publishing in and organizing technical conferences, executive roundtables, and recruiting activities.

This unique organization of women is led by a group called "catalysts," who are of diverse technical and cultural backgrounds. The 2008 WWN catalysts, as shown in Figure 1, are a leadership team of about 20 professional technical women who play a personal role in encouraging a workplace environment that advances women's professional effectiveness, individual growth, and recognition. Each catalyst volunteers her time to support diversity and inclusion events at IBM Research. The catalysts organize seminars on a spectrum of technical topics, conduct roundtable events with technical leaders and executives, hold social networking events, offer professional mentoring sessions, provide work/life balance events, and participate in educational community outreach activities.
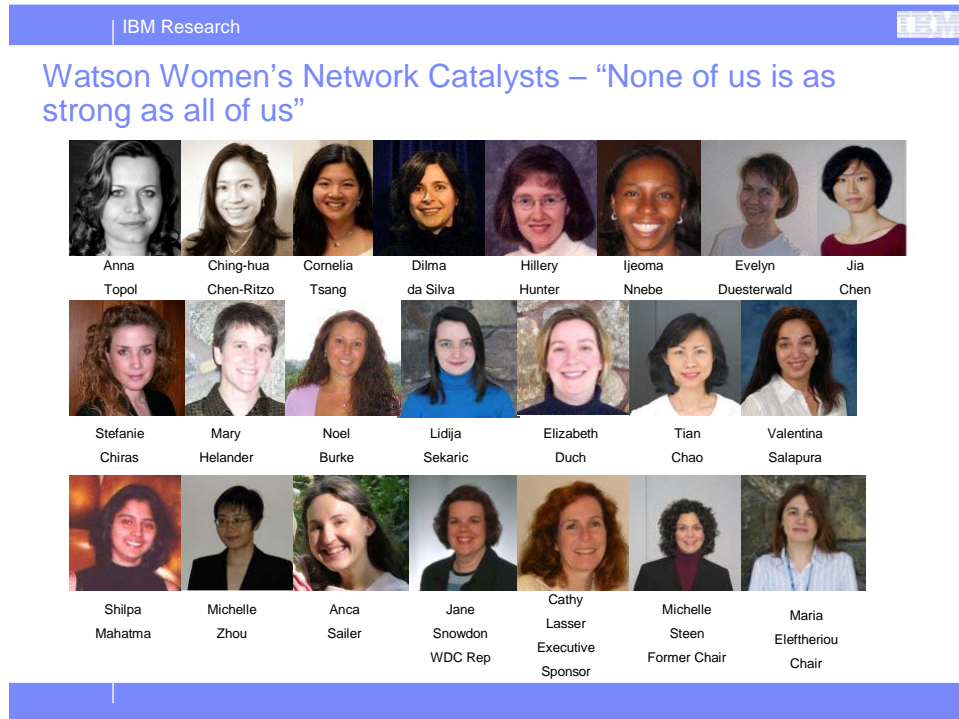

Figure 1. The 2008 WWN Catalyst Leadership Team.

The catalysts are the most active members of the organization and take a personal role in promoting innovation, recruitment and retention of females in science and engineering through a variety of activities. Such activities include:

- **Business development and professional career growth**. The WWN organizes a large number of events with leaders from both IBM and other organizations to expose Watson researchers to areas of business they may not normally encounter in their day-to-day jobs.
- **Professional mentoring panel discussions**. Women in Technology groups within IBM provide mentoring opportunities such as group mentoring and one-on-one mentoring, both formally and informally, and across various IBM divisions. The goal of these mentoring activities is to provide support and guidance in career advancement. As part of career mentoring, the WWN committee organizes roundtable events with executives. At these roundtables, executives describe their career paths and provide useful insights into how to recognize and create opportunities for career advancement.
- **Work/Life flexibility events**. IBM was named Employer of Choice for Women by the federal government's Equal Opportunity for Women in the Workplace Agency (EOWA) [16]. IBM offers flexible work hours and provides flexibility to work from home. The challenge of work/life balance, however, is still one of the issues facing women in the workplace. The WWN committee organizes panel discussions with leaders from IBM Research and other IBM divisions to share their experiences and give recommendations based on their experiences. For instance, the WWN organized two panel events on "Live and Work with Balance," during which technical people shared information on how they manage to excel both at work and at their hobbies, and a second one targeted at the sandwich generation, which juggles both childcare and elder care issues.
- **Initiate IBM business-related activities for the WWN.** The WWN annually hosts a "mixer event," which is a professional networking event to facilitate professional networking between IBM's technical and business communities.
- **Recognition and Award**. IBM has recognized our commitment and dedication to diversity and therefore awarded the WWN catalyst leadership team with the Diversity and Inclusion Volunteers Recognition award.

As will be described in the following paragraphs, the WWN key initiatives address the RRA problems. The WWN catalysts strive to be vital contributors to IBM's diversity and technical vitality initiatives in order to enhance IBM's success in attracting, nourishing and retaining world-class technical talent. A critical aspect of the WWN's success is that, through the catalysts-based organization approach, it creates an innovative and effective approach to the RRA challenge.

3. New Twist on Improving RRA - The WWN Catalysts' Way
With a more traditional "chair and vice-chair" approach for leadership in diversity groups, success depends heavily on the level of engagement and initiative that these leaders can sustain over time. The leader's satisfaction and sense of accomplishment often derives from concrete results and her personal commitment to the mission. These sources of motivation, combined with the WWN catalysts' ability to act as a change agent, result in active shared leadership

responsibility and engagement of the membership to arrange events that are of interest and importance to them.

3.1. Benefits of WWN Catalyst-like Organizational Approach

Single-position leaders are limited in the number of events they can organize based on their time, connection, and influence constraints. However, in the case of a catalyst-based leadership structure, every member organizes a few events leading to a large number of well-planned social and technical affairs, thus providing a broader range of topics and options for members to enjoy. The overall wider personal and professional network of the catalysts improves the diversity of speakers, presenters, invited guests, as well as the material presented.

This is particularly important for new employees. The catalyst group opens up access to a new network of people that spans multiple branches of the organization and various levels of experience in the company. Usually, building a broad network is done over the process of many years; with the catalyst group, similar breadth may be achieved over a few months. The informal interaction with other catalysts offers a window into how other groups and technical fields function, and how they relate to the overall company mission. It is also possible to learn about differences in management "rules" and department guidelines, allowing the person to gauge which current practices could be reasonably challenged. The diversity of technical and business backgrounds in a catalyst group opens up opportunities for future work interaction.

The shared concerns bringing the catalyst group together can enable a culture for interaction and collaboration that differs from the overall organization culture. The involvement in the catalyst group may bring the respite of working in a culture that is more comfortable to the catalyst. At the same time, the catalyst group provides a safe and encouraging space for identifying behavior changes that may facilitate adapting to the broader organization culture.

The essential ingredient for the success in our catalyst approach has been the active involvement of an executive sponsor. An executive sponsor plays a strong role in obtaining the financial and organizational support necessary to enable the initiatives being pursued by the catalysts. The executive also provides assistance in the selection of guest speakers and invitation to other executives for WWN events. In our experience, the regular involvement of our executive sponsor is invaluable in our work sessions. It has enabled the catalyst group to get valuable feedback on how effective the proposed activities could be for IBM.

A second ingredient for the success in our catalyst approach has been the active involvement of a WWN representative, who is also a WWN catalyst, to the Watson Diversity Council (WDC). The WDC serves as a change agent, creating an open environment and culture at Watson that helps attract, motivate and retain a talented, diverse team which will result in diversity of thought and ideas. The WDC meets monthly and organizes and funds events that have broad appeal to the various constituencies. The WDC's approach is fourfold:
- Leverage the personal time, energy and leadership of Watson Diversity Council members and "Friends of the Council;"
- Members are nominated by each Research Strategy area Vice President;

- Work with local Diversity Network Groups to sponsor events that highlight people and cultures of diverse backgrounds and ideas particularly of a technical nature;
- Celebrate the different diversity months throughout the year.

Examples of WDC sponsored events include Black History Month in February, Women's History Month in March, Asian-Pacific Heritage Month in May, Gay/Lesbian/Bisexual//Transgender Awareness Month in June, Hispanic Heritage Month in September, and People with Disabilities Month in October. In addition, the WDC teams with the WWN to co-sponsor many events throughout the year.

Thanks to the effective work of the catalysts and their executive, and the sponsorship and support of the WDC, the WWN offers its members and the surrounding research community a plethora of technical and non-technical events that focus on professional and personal growth. Diversification of subject matter, such as mentoring, work/life balance and networking, and types of events, such as roundtables, tray lunches, seminars and mixers, strengthens the WWN as a leader among peer networking groups and showcases the group as a vital contributor to IBM's diversity and technical vitality initiatives.

3.2. RRA-related Focus Topics Targeted by Watson Women Network

Several areas the WWN has focused on to improve attrition problems of professional women include the challenges of pregnant and working mothers [17]. Through the support of group mentoring sessions, work-life balance talks, and the strong backing of the Human Resources, the WWN continues to create a work environment that supports and empowers the working women marketplace thereby enhancing retention. In fact, the WWN and HR worked together to establish on-site day care at Watson in 2001, a first for the IBM Corporation [18, 19]. The impact of on-site day care has been dramatic, and shows the power of the WWN when they collectively get behind an initiative of importance to the majority of the group. As a result, working mothers and fathers can achieve greater work/life balance. Furthermore, on-site daycare has proven to be a successful recruiting and retention tool at IBM Research. WWN activities, combined with other programs across IBM, have gained IBM nationwide reputability as a women-friendly workplace. IBM has been widely commended for its initiatives in this area, and has consistently been cited for 22 years in Working Mothers magazine's annual list of the "100 Best Companies." [20].

"None of us is as strong as all of us" truly describes the camaraderie and unity that the WWN catalysts exhibit in their passion to create a positive environment for working women at IBM Research. There is something for everyone in terms of the variety of activities with which to lead and participate. Being a WWN catalyst offers opportunities to gain leadership skills, improve communication skills and share best practices with colleagues, connect with technical and business leaders, be mentored, and serve as a mentor. The WWN catalysts are an energetic group who provide a backdrop of encouragement and inspiration to each other. All of these aspects of the WWN are successful in improving retention and addressing attrition problem.

By leveraging the diverse, creative, and fresh ideas of the WWN catalysts, and by sharing the responsibilities for organizing a plethora of meaningful events, the WWN membership has grown to over 250 members and doubled the number of activities year-to-year to almost 1 per week. Debra Adams, U.S. Diversity Delivery Partner, Northeast Region, states "I see the WWN catalysts as a role model for all of IBM's diversity groups."

4. Conclusions

The Watson Women's Network provides a forum for all technical women at the IBM T.J. Watson Research Center to experience different ways to nurture professional and personal growth. Led by a diverse group of catalysts, the WWN organizes a wide variety of activities such as community outreach, professional networking, seminars, executive round-tables and work/life flexibility discussions. These activities benefit not only WWN members, but also IBM at large since the events are open to everyone. Furthermore, the catalyst leadership approach enables the group to work efficiently by distributing the work in planning and facilitating nearly weekly events so that no one person is overburdened. Encouraging a diverse catalyst group is one of the key reasons why WWN is so successful in achieving high membership. The network activities appeal to all women at different stages of their careers. The network's mission to encourage a workplace environment that advances women's professional effectiveness, individual growth, and recognition is thus realized. This helps professional women position themselves as leaders both inside IBM and in the professional community, thus positively impacting IBM business and providing an effective means for recruitment and retention.

WWN's innovative methods can be effectively applied not only in a corporate environment but they can also be easily implemented within academic, government, or not-for-profit organizations. The authors of this paper encourage readers to introduce WWN findings into their organizational units to help foster networking and collaboration ideas, personal and professional growth opportunities, and enable new "means" to provide positive business impact and meet recruitment and retention targets.

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