How Can We Make Careers in Manufacturing More Appealing to Women?

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How Can We Make Careers in Manufacturing More Appealing to Women?

Abstract
Question: Manufacturing environments are often more difficult to cultivate the needed career/personal flexibility for hi-potential women leaders who also want to have families. In many cases, the entry-level female talent base in manufacturing is strong, but the same density of women is not produced/retained through all the career stages. Intricately tied to this question is how to make careers in manufacturing more appealing to women. Student insight will add depth to our real-time thinking on this subject.

Keywords
human resources, manufacturing, female employees, female manufacturing employees

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Executive Summary

Question: Manufacturing environments are often more difficult to cultivate the needed career/personal flexibility for high-potential women leaders who also want to have families. In many cases, the entry-level female talent base in manufacturing is strong, but the same density of women is not produced/retained through all the career stages. Intricately tied to this question is how to make careers in manufacturing more appealing to women. Student insight will add depth to our real-time thinking on this subject.

Clarification: An initial meeting with the executive provided some additional assumptions. The executive emphasized that the company is satisfied with the initial hiring of female manufacturing employees. Instead, the company is focusing on encouraging the promotion of a greater number of qualified women from Phase 1 and Phase 2 roles (direct hires, quality engineers, operations leaders) to Phase 3 and above management positions. The executive was also confident the company had strong mentoring programs to encourage professional growth among women, and suggested we focus our research in other areas, such as the importance of flexibility and the role of culture.

Background & Interviews: Women represent 46.6% of the American workforce but only 24.8% of the manufacturing labor force\(^1\). Furthermore, women are only 11.1% of executive officers in manufacturing and 2.0% of manufacturing CEOs. The trend is getting worse. Between 2010 and 2011, men gained 230,000 manufacturing jobs while women lost 25,000 manufacturing jobs\(^2\).

Some aspects of manufacturing are attractive to women. Three-quarters of women in manufacturing agreed their career was interesting and rewarding, and when asked what makes manufacturing an attractive career path for women, the most common responses were compensation and opportunities for challenging assignments. The least percentage of women, only 8%, believed manufacturing provides an attractive work environment for women\(^3\).

When women in manufacturing rated ten talent programs and tactics on their impact, diversity and inclusion training and employee affinity networks rated at the bottom while flexible work practices rated at the top\(^4\).

Although flexible work practices are an important factor for women, many manufacturing organizations struggle to implement them. Compared to employees in other industries, manufacturing employees were less likely to be allowed to make schedule changes on short notice, less likely to work a compressed workweek, less likely to have reduced-time options, and less likely to rate overall workplace flexibility as high\(^5\).

In over five hours of interviews, the manufacturing employees shared some common themes. The culture is hard-working, results-oriented, very competitive, and — coinciding with the demographics — male-dominated. Career paths to management are clearly communicated from the beginning. The employees reported the environment did not allow for significant flexibility, and suggested flexibility varied depending on one’s manager and position. Furthermore, while the employees agreed flexibility could be improved, they also did not know of solutions that could be easily implemented.

While the male-dominated culture was unanimous, its impact on the organization was not. Some employees believed its effect was minimal, while one manager believed gender sensitivity training did not effectively combat insensitive comments that may offend women and cause them to seek alternate career paths. It was also noted that managers are not trained to identify differences between genders that impact promotion decisions and communication styles. Furthermore, some managers took part in more male-friendly sports and activities with their employees, where women were torn between attending events unsuited to them or losing face-time with their bosses.

Suggested Approaches:

Flexibility: In a survey of employed mothers, when asked, “What could your employer do to help you balance work and family?” the most popular response was flexible work hours, beating out increase family leave, shorter hours, work at home, and others\(^6\). Manufacturing companies are responding, with several automakers offering job-sharing, mothers-at-work, and work hour restructuring programs\(^7,8\). And indeed, increased flexibility at this company is possible. One individual interviewed noted 70% of the cell leader’s responsibilities for the day are completed prior to 9:30 a.m. This means the cell leader has significant flexibility after 9:30 a.m. The individual agreed that, as an example, if the cell leader...
wished to leave twice a week at 3 p.m. to attend to family matters, it would not unreasonably encroach on the responsibilities of the position.

Furthermore, based off employee interviews, we recommend the company consider increasing the power and responsibility of high-potential operations leaders and process quality engineers to allow more flexibility to the cell leaders, and in turn, empower the shift coordinators (highly paid and responsible hours workers) to allow more flexibility to the operations leaders and PQEs. There is no universal solution, but each individual we spoke to has unique opportunities to increase flexibility in his or her role.

When flexibility is possible, implementation is key. A report by Corporate Voices for Working Families finds that, "Companies have found that successful implementation of flexibility in manufacturing environments depends upon leadership support in words and action, manager training, communication, having the right technology and tools, cross training, employee involvement, results orientation, openness to new ways of working and consistent use of clear policies."

Important criteria for success:

(1) Employees in manufacturing are significantly less likely than employees in other industries to agree that their managers are open to requests to attend to personal affairs. Managers are gatekeepers to flexibility in the workplace, and expectations of how managers should treat flexibility should be communicated from the top.

(2) Individual flexibility plans should be formal process, similar to the goal-setting process. Just as the employee sets goals targeting promotion and high performance, she should set achievable and specific goals, with management support, to meet her personal needs around flexibility.

**Culture:** Gender-awareness programs that seek to integrate diverse work and communication styles not only increase the number of women in leadership positions, but also benefit the company’s ‘bottom line’. The company’s employee interviews supported this finding, “leadership and communication style training is necessary to help current leaders recognize differences in communication style. Currently, these differences in communication styles could be perceived as weaknesses. Most women won’t talk over others, and that is often the communication method here.”

- Traditional diversity training does not always result in a significant increase in knowledge. Enhanced training methods such as the use of case studies, increased time, learning-style differences, and post-training evaluation methods and action plans improve results.
- Initiatives are too often focused toward women. Diversity programs involve key decision-makers, should be viewed as a ‘strategic business initiative’, and focus on both genders.

In addition to gender sensitivity awareness, the company’s current mentor and sponsorship programs merit further consideration. Research suggests there is a gap between Executive and Network members’ perceptions on the importance of developmental opportunities, accountability for such programs, and emphasis on individual actions. The company should communicate priorities and expectations for mentorship programs to senior leadership, as well as program participants.

**Conclusion:**

Some unchangeable realities of the manufacturing industry cause it to have careers generally more desired by men, creating the perception of a male-centered industry, leading less women to seek careers in manufacturing, and reinforcing the gender imbalance. This cycle creates some distinct difficulties for recruiting and promoting qualified women in the industry. Employees we interviewed unanimously enjoyed the fast-faced and results-oriented culture, and most believe the company is committed to creating an environment supportive of the advancement of women.

The company is on the right track, notably in recruitment of women, communicating career paths, and presenting role models. The company has an opportunity to increase flexibility with a top-down emphasis on the issue that communicates the company’s commitment, seeks to find individual solutions depending on role and desire, and promotes formal planning of flexibility with the employee and his or her manager. Continuing to update diversity training, gender sensitivity
awareness, and mentor programs can have a positive effect as well. Lifelong careers in manufacturing may not naturally attract men and women equally, but the company has several strategies to consider that may make a constructive impact.
Bibliography

The articles are listed in order of appearance of the executive summary. Following the cited articles are additional suggested readings in alphabetical order by author name.

Cited Articles


4 Ibid.


12 Employee Interview, February, 2013.


16 Deborah A. O'Neil, Margaret M. Hopkins, & Sherry E. Sullivan. (2011). Do women's networks help advance women's careers? 

_Career Development International, 16_(7), 733-754. doi:http://dx.doi.org/10.1108/13620431111187317

**Additional References:**


