

Executive Summary

Research Question

What steps are manufacturing companies taking to help increase the number of women in leadership and non-staff roles?

What Women Value in Employers

According to a recent study by Deloitte consisting of 600 women in manufacturing across functional roles and levels, women across all manufacturing sectors in the US are underrepresented. While women represent 46.6% of the total US labor force, they comprise 24.8% of the durable manufacturing workforce.¹ (Appendix A)

Flexibility: Additionally, the paper cites a recent study by the Families and Work Institute in which 85% of the manufacturing employees surveyed reported that having the flexibility needed to manage work and personal life would be “extremely” or “very” important when considering a new job.² In the interview part of the survey, women expressed their desires to ‘stay relevant’, stressing the importance of continuing education and personal development to their own success.

Industry Image and Gender Bias: Many women feel that there is a historical gender bias in the manufacturing industry which has excluded women from managerial roles such as production supervisors and operations managers.³ In fact, when asked ‘Which factor do you believe contributes most to women’s underrepresentation in manufacturing?’ 51% of respondents said it was the perception that the industry culture is biased toward men. (Appendix B) Overall, retention is lower for women than for men in every industry because of women’s low association as ‘in-group’ members in male-majority work settings.⁴

Education Initiatives: When women were asked ‘Over the next 10 years, what can manufactures do to improve their ability to attract, retain and promote women?’ “Improve the external image of the industry” was listed as the number one priority. (Appendix C) The Manufacturing Institute Manufacturers can also support STEM related programs for girls K-12 to both improve industry image and get girls interested in technical fields at a young age.

What Other Companies Do

It is globally notable that “women were much more likely to be in lower-level rather than higher-level leadership positions” (Howard & Wellins, 2008) (Appendix D). Therefore organizations need to have objective, job-relevant procedures for identifying high-potentials, ensuring readiness for promotions, and making promotion decisions.

Caterpillar: The Women’s Initiative Network is an international diversity outreach program at Caterpillar that meets on a monthly basis. It has focus groups in four areas: developing business acumen, providing a forum for less experienced professional women to develop relationships with women leaders, address the needs of women currently in leadership positions, finding creative ways to help employees find a balance between the needs of work and the needs of home.⁵

Cummins: The Women Affinity Groups at Cummins undertakes many projects and initiatives to attract and retain talented women such as: mentoring circles, Executive Speaker series and using existing female employees to aid in the recruitment of other women. These groups exist in the US and internationally.⁶ On an international level, Cummins founded the Women’s College of Engineering in Pune, India in response the shortage of college educated women near these operations.⁷ They hire nearly all the graduates of this school.

Rockwell Automation: Women support groups such as the Professional Women’s Council and the Society of

Women Engineers formed to ‘engage and enrich the careers of women’ at Rockwell.⁸

BBC: In a hierarchical organisation such as the BBC, status is an important factor in relationships. It is important in this type of organisational structure that staff have access to mentors who will introduce them to senior people whom they would not ordinarily encounter. The BBC does not undertake to completely manage an employee’s mentoring relationships, but “puts them on the road to mentoring” through “bespoke” development programmes (that is, development programmes that have been initiated with particular groups in mind, such as development routes into senior leadership for feeder grades or journalism for under-represented staff or even more individualised programmes based on individual appraisals) (Mercer (ORC Worldwide) Global Equality, 2009).

Xerox: Xerox uses its caucus groups to connect members with senior leaders who are like themselves in some way and who may have taken untraditional roads to the top (Mercer (ORC Worldwide) Global Equality, 2009).

Successful Approaches

Provide Women with Mentors: Women should be provided the equal access to mentors like men. Whether mentoring is formal or informal, women stand to benefit greatly from having a mentor (Blake-Beard, 2001).

Internationalize Women’s Experience: Often times the management assumed that women are not willing to take international assignment, and even if they were, they wouldn’t perform well (Addler, 1994). However, assumptions made about women with families traveling abroad need to be reexamined. Studies show that women who go abroad with trailing spouses are often well-adjusted expatriates due to very strong, well-established support systems anchored on their partners (Caligiuri & Lazarova, 2002).

Organizations shouldn’t take it for granted that women will reject expatriate assignments; if the experience is important, it should be offered to women as often as to men. Perhaps more important, women need the opportunity for multinational leadership experiences that expose them to cultural challenges without necessarily requiring living abroad (Howard & Wellins, 2008).

Other Approaches: As Appendix E shows, around the world, more than 80 percent of the respondents in the survey says since the economic crisis began, there has been no change in their companies’ view of gender diversity as a strategic issue; however, this figure tells that respondents in Asia-Pacific and developing markets are likelier to say gender diversity has become a more important strategic issue at their companies. However, actions has been taken in the past 5 years (Appendix F). The top three measures are: options for flexible working conditions and locations, support programs to facilitate and reconcile family and work life, and programs to encourage female networking and role models.

Strategies for Success

Deloitte recommends 6 strategies for manufacturing companies to overcome female talent shortages: 1) Align senior leaders with diversity programming and hold them accountable for progress 2) Address gender-bias head on by creating targeted awareness trainings that will uncover the drivers of individual thought process 3) Create a more flexible work environment to better accommodate female demand of workplace flexibility 4) Foster sponsorship to support women’s advancement into leadership positions 5) Promoting personal development through experiential learning programs that include identifying challenging assignments, roles and experiences that will help the company close the gender gap 6) Build a strong employer brand by supporting STEM education initiatives in high schools and universities and partnering with organizations and by taking a relationship-based recruiting approach to build relationships with targeted women.

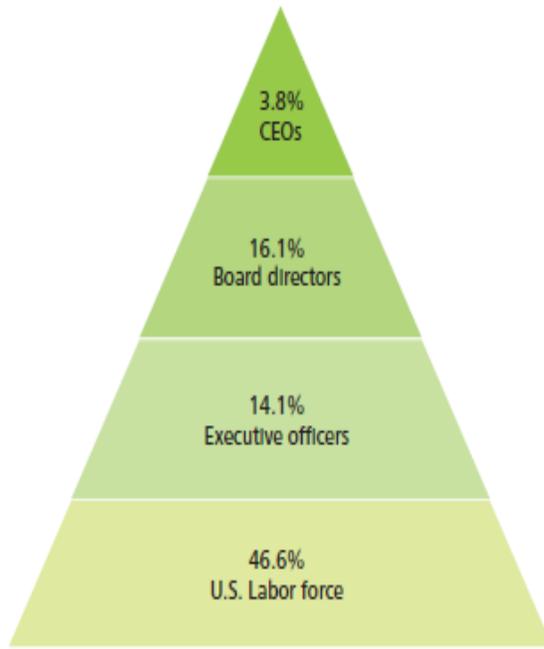
Works Cited

1. Deloitte Development LLC and the Manufacturing Institute. Untapped resource: How manufacturers can attract, retain, and advance talented women, 2012.
2. Families and Work Institute, 2008 National Study of the Changing Workforce, Workplace Flexibility in Manufacturing Companies 2011
3. Deloitte Development LLC and the Manufacturing Institute. Untapped resource How manufacturers can attract, retain, and advance talented women, 2012.
4. Hom, P. W., Roberson, L., & Ellis, A. D. (2008). Challenging Conventional Wisdom About Who Quits: Revelations From Corporate America. *Journal Of Applied Psychology*, 93(1), 1-34.
5. Women's Initiative Network. Caterpillar. <http://www.caterpillar.com/en/careers/why-caterpillar/diversity-inclusion/employee-resourcegroups/womens-initiative-network.html>
6. Voice for women. Cummins. <http://www.cummins.com/cmi/navigationAction.do?nodeId=211&siteId=1&nodeName=A+Voice+for+Women&menuId=1050>
7. Cummins college of Engineering for Women, Pune MH India. Engineering College for Women. <http://cumminscollege.org/>
8. 2014 STEP Award Honorees. Women in Manufacturing. <http://www.themanufacturinginstitute.org/Initiatives/Women-in-Manufacturing/2014-STEP-Awards/2014-STEP-Award-Honorees/Shimoyama/Shimoyama.aspx>
9. Howard, A., & Wellins, R. S. (2008) *Holding women back: Troubling discoveries - And best practices for helping female leaders succeed*. Pittsburgh, PA: Development Dimensions International.
10. Blake-Beard, S.D. (2001). Taking a hard look at formal mentoring programs: A consideration of potential challenges facing women. *Journal of Management Development*, 20, 331–345.
11. Adler, N.J. (1994). Women managers in a global economy. *Training and Development*, 48, 30–36.
12. Mercer (ORC Worldwide) Global Equality. (2009). *2009 Talent Management Processes for a Diverse Leadership Team*. Industrial Relations Counselors, Inc.

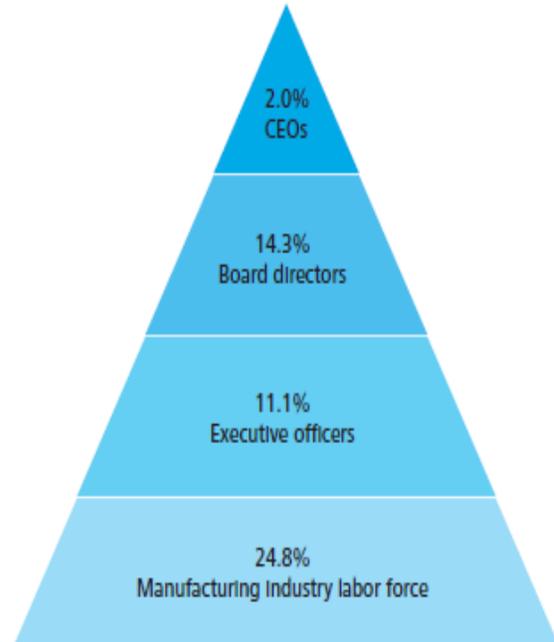
Appendix A

Figure 1 Women in U.S. manufacturing vs. women in U.S. business

Women in U.S. Business



Women in U.S. Manufacturing*



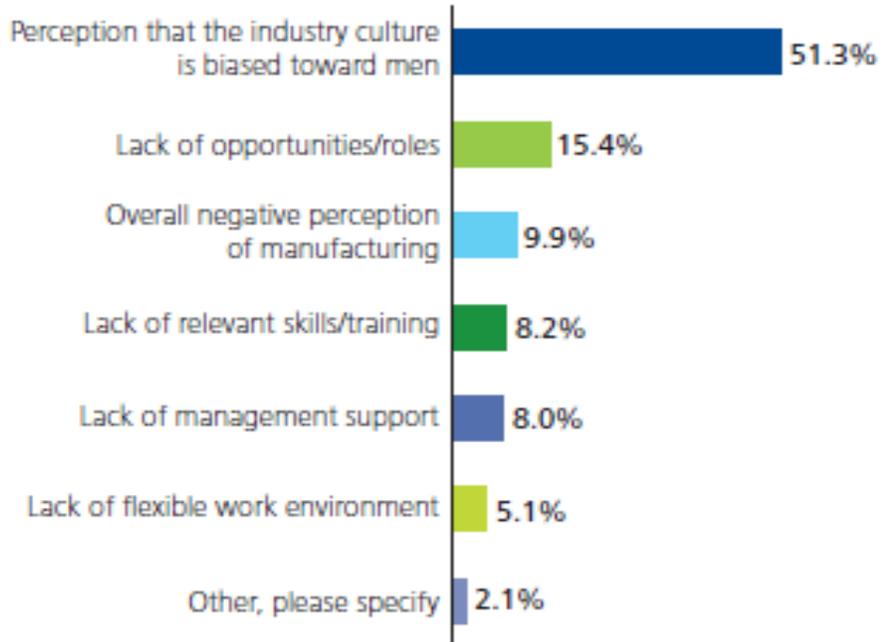
*Manufacturing is defined as "durable goods manufacturing"

Source: Catalyst Research. U.S. Women in Business, 2012. Catalyst Research. Women in U.S. Manufacturing - Durable Goods, 2012.

Appendix B

Figure 8 Contributing factors to underrepresentation

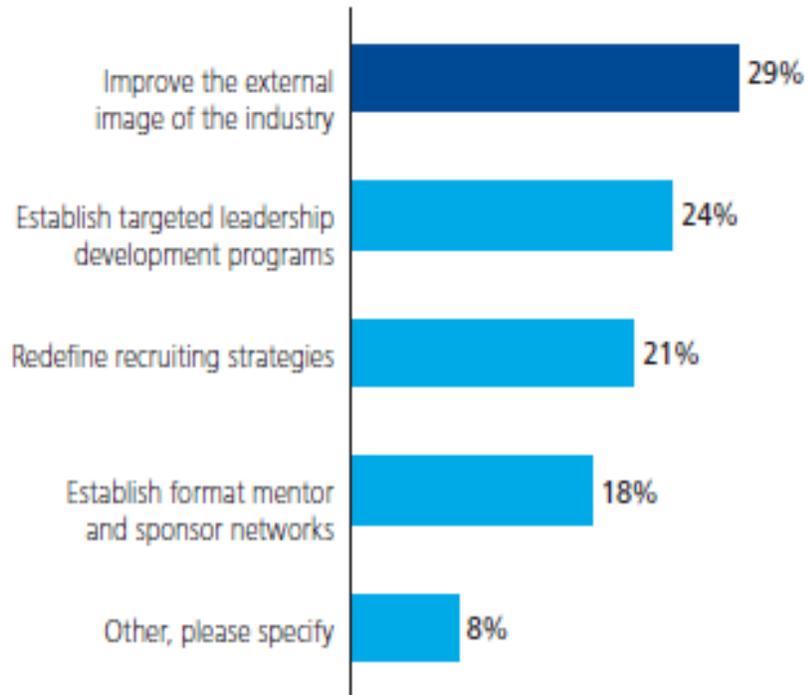
Q. Which factor do you believe contributes most to women's underrepresentation in manufacturing?



Appendix C

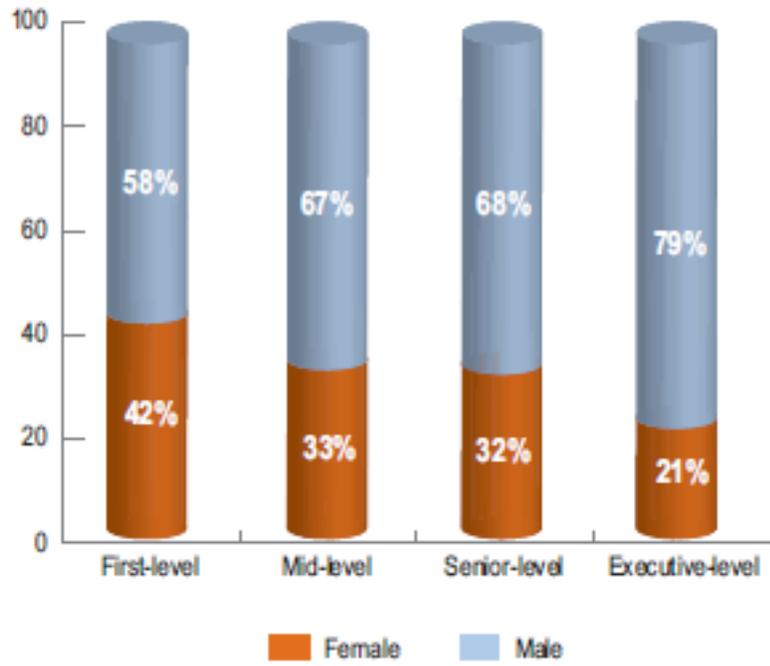
Figure 9 Recommendations for the next 10 years

Q. Over the next 10 years, what can manufactures do to improve their ability to attract, retain and promote women?



Appendix D

FIGURE 2 Percent Female by Management Level



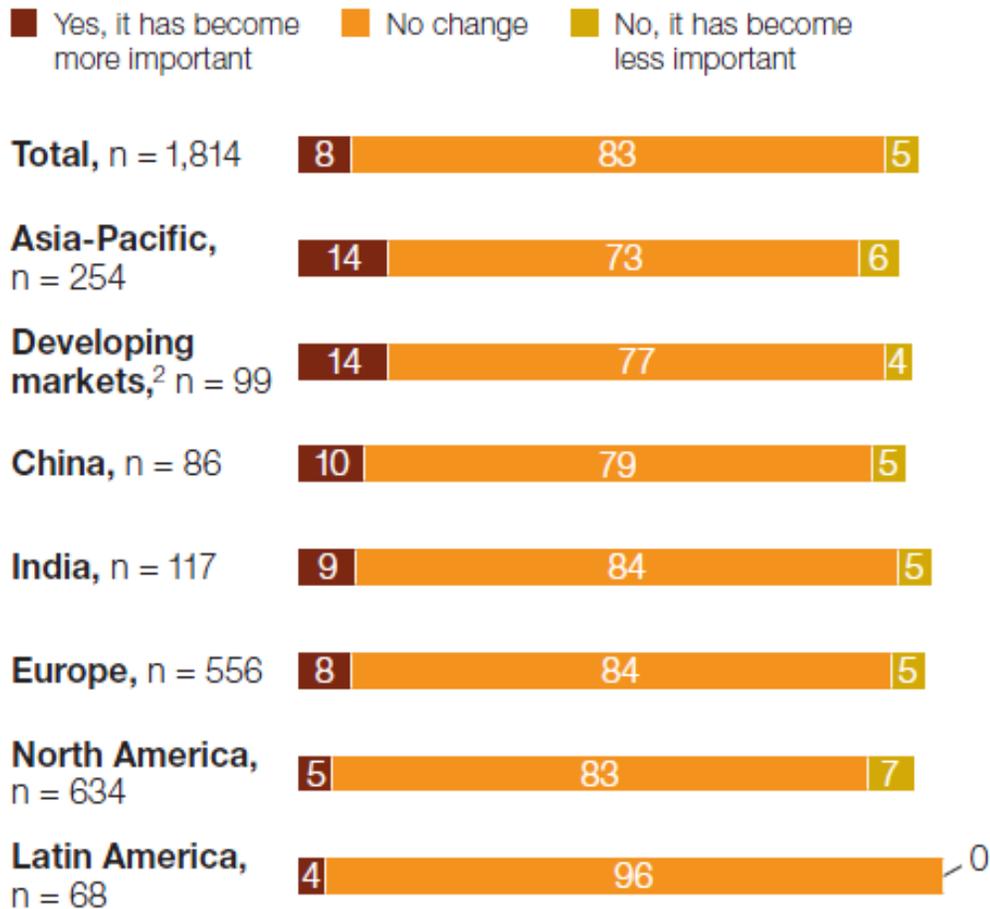
Appendix E

Exhibit 1

Where women matter

% of respondents¹

Has gender diversity's level of strategic importance at your company changed as a result of the economic crisis?



¹Respondents who answered "don't know" are not shown.

²Excludes China, India, and Latin America.

Appendix F

Exhibit 2

Taking action?

% of respondents,¹ n = 1,814

Over the past 5 years, which measures has your company undertaken to recruit, retain, promote, and develop women?



¹ Respondents who answered “other” and “don’t know” are not shown.

Further Reading:

<http://www.neiu.edu/~circill/F7684IP.pdf>