

# How can organizations build better imaginations?

Danielle Li, Massachusetts Institute of Technology

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To succeed, organizations must effectively evaluate people and ideas

- ▶ Which ideas should we prioritize, develop, and fund?
- ▶ Which people can best develop those ideas?

This requires imagination on a huge scale

- ▶ For every candidate:  
*How well would they do, **IF** given the opportunity?*

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My research: how can organizations build better imaginations?

- ▶ We live in an information (data, experience, advice) rich world
- ▶ How should we seek and manage information in order to make better inferences and better decisions?

Today: Who gets to be the boss?

- ▶ How well do organizations evaluate people's potential?
- ▶ What mistakes do we make, and can we do better?

# Today's paper

“Potential” and the Gender Promotion Gap (joint with Alan Benson and Kelly Shue)

# Who should we promote?

## Evaluate using demonstrated performance

- ▶ Based on observed evidence (e.g. sales targets met)
- ▶ But management may require a different skill set
- ▶ “Peter Principle”: promote people out of a role they are good at, and put them in a role they are bad at.

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## A common solution: Directly assess a worker’s “potential”

- ▶ Recognizes that workers can change and grow
- ▶ Recognizes that the managerial role relies on a different skill set
- ▶ But potential is fundamentally imagined and subjective

# Forecasts of potential may disproportionately hurt women

## 1. Role congruity theory

- ▶ Mismatch between female stereotypes and successful leadership stereotypes
- ▶ Women are less likely to be perceived as results-oriented, assertive, ambitious, competitive, dominant
- ▶ Women are less frequently observed in managerial roles

## 2. Subjective forecasts subject to favoritism/politicking

- ▶ Women may have less inclination, access, or returns to networking, self promotion, negotiation, and complaining
- ▶ This puts women at a disadvantage in getting managers to give them high subjective ratings

## This paper

We study evaluations and promotions in a large North American retail chain

- ▶ Focus on 30K full-time salaried “management-track” workers
- ▶ Data covers 2011-2015

Our firm evaluates workers using a **Nine Box** grid

1. Performance (1, 2, 3): **backward** looking performance that year
2. Potential (1, 2, 3): **forward** looking projections of future contributions to the firm, in either current or new role

Nine Box (and similar) grids are widely used in HR

- ▶ JP Morgan, Accenture, Bristol Myers Squibb, Intel, Cisco, General Mills
- ▶ Used to allocate promotions, bonuses, training opportunities
- ▶ Offers window into how firms and organizations think about potential

Potential ratings matter, and they hold women back

## Potential ratings matter, and they hold women back

1. Women receive lower potential ratings despite having higher performance
  - ▶ Gap in potential ratings accounts for up to half of the gap in promotions

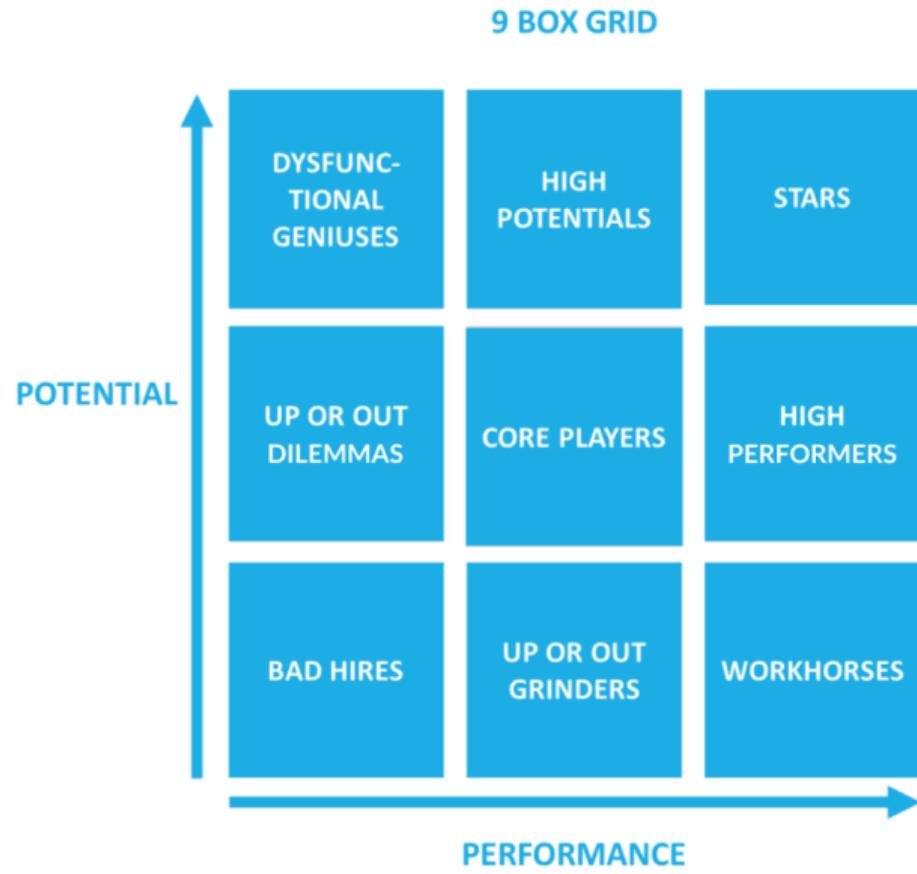
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2. Potential ratings appear biased
  - ▶ When promoted, women have higher “realized potential” (future performance) than men with the same initial performance and potential ratings

# Potential ratings matter, and they hold women back

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2. Potential ratings appear biased
  - ▶ When promoted, women have higher “realized potential” (future performance) than men with the same initial performance and potential ratings
3. Firm rewards the threat of leaving with higher potential ratings
  - ▶ Men are more likely to quit.
  - ▶ But rather than viewing this as a negative, firms reward “risk of loss”
  - ▶ Workers at high risk of loss receive higher potential scores
  - ▶ ⇒ instead of promoting women with higher future performance and lower attrition, firms promote men to retain them.

# Nine Box

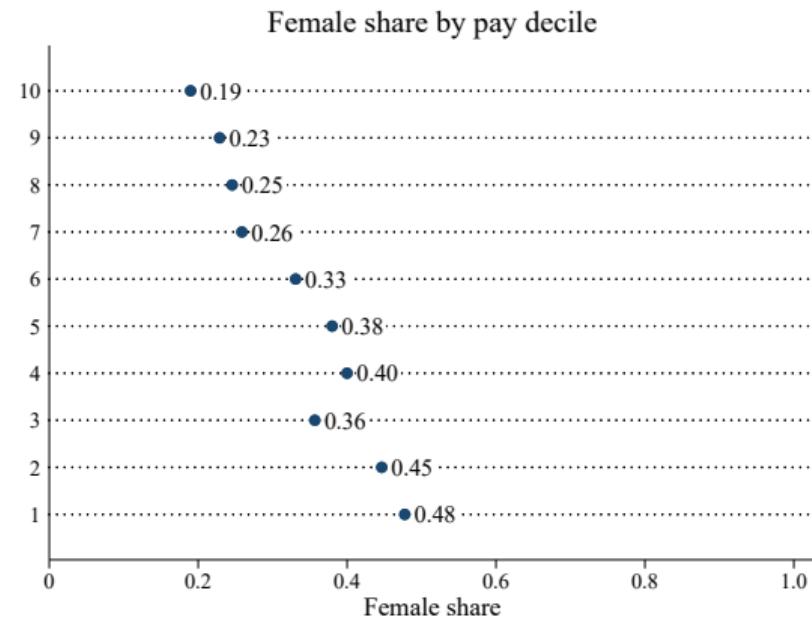
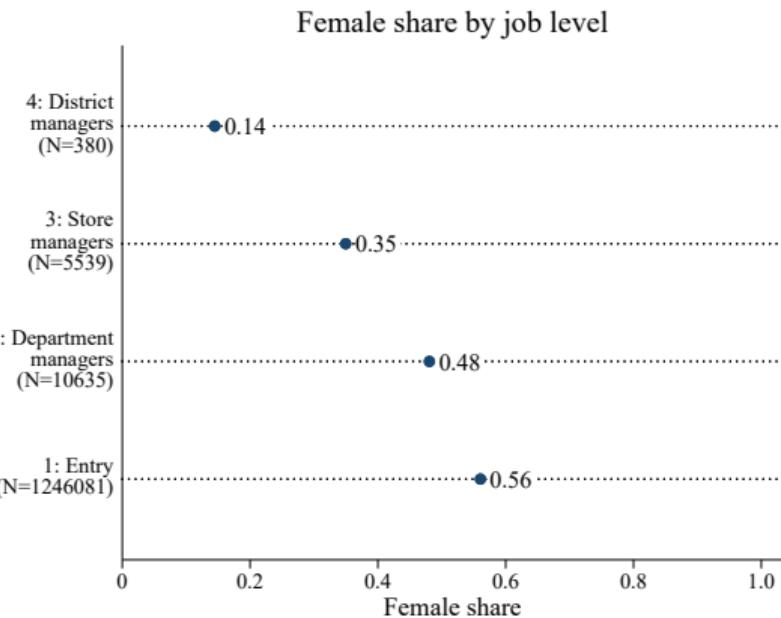


## Nine Box

*This wonderfully simplistic tool is the management science equivalent of free software. It's like Angry Birds for administrators, Fruit Ninja for the executive...in essence, Nine Box provides a simple but effective tool for forming the foundations of succession planning*

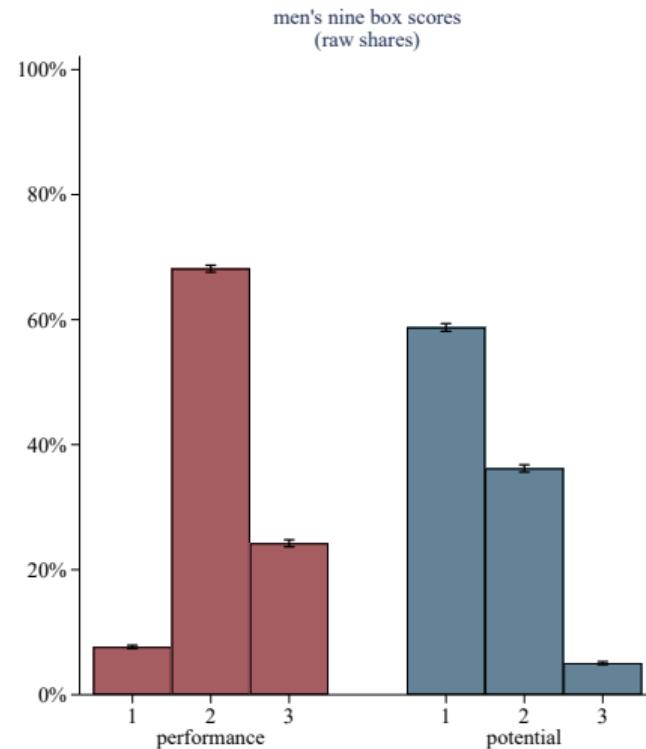
– Drew Brock, Ph.D. “Why I love Nine-boxing and Why You Should Too”

# Women's representation shrinks as we move up the career ladder

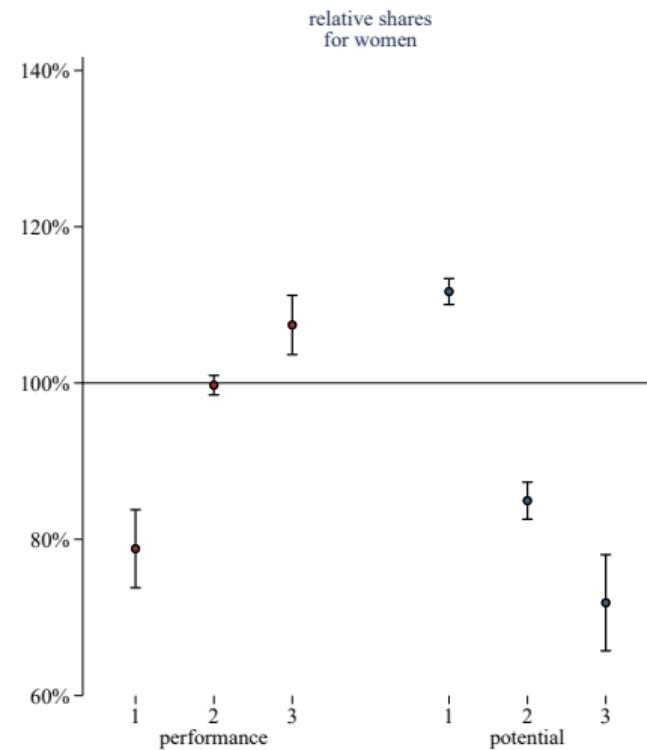
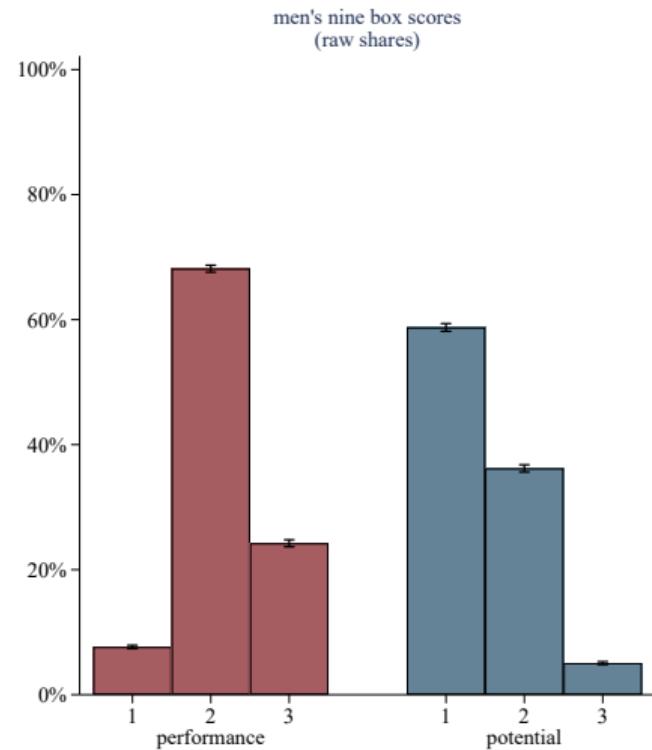


- Women make up 56% of entry level workers, but only 14% of district managers

# Women receive higher performance and lower potential ratings



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## Maybe women have lower potential?

Practitioner literature: “Potential” is defined as employee’s ability to contribute to the firm in the future

- ▶ Improved performance and greater responsibilities in her original job role
- ▶ Leadership in a new managerial role

What if women contribute less in the future?

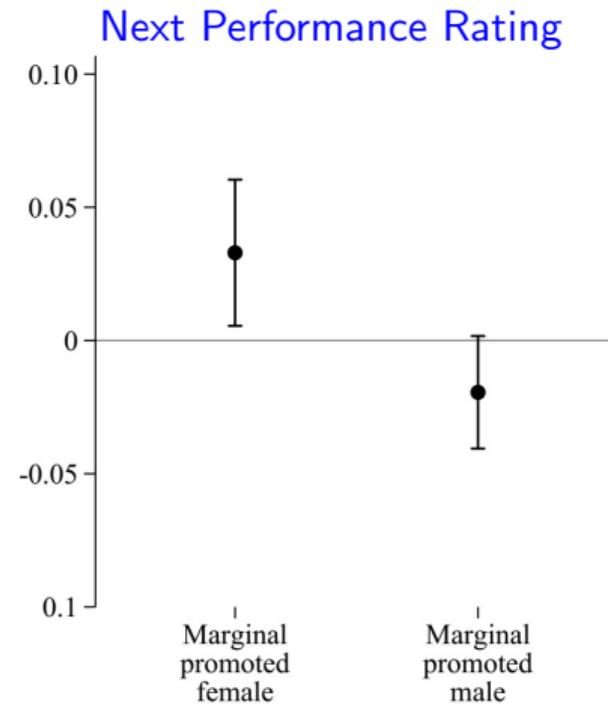
- ▶ Lower aspirations/ “leaning out” /self-steering away from leadership roles
- ▶ Career interruptions due to family obligations, etc.

We examine women’s “realized potential”

1. Are women’s lower current potential ratings justified by lower future performance?
2. ... or by higher attrition or leaves of absence?

## Women have higher “realized potential” (future performance)

- ▶ Promoted women earn higher performance ratings in the next period
- ▶ Suggests that women are held to higher standard: we only promote women when their expected future performance is very high.



## Attrition and “Risk of Loss”

Maybe women are more likely to leave?

- ▶ Managers may give women lower potential ratings because they think women are more likely to have babies and leave their jobs.

Leaving aside its legality, are such beliefs are justified by the data?

## Attrition and “Risk of Loss”

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Leaving aside its legality, are such beliefs are justified by the data?

1. Women have **lower attrition**—especially when they are “passed over” for promotions despite high performance
2. But loyalty doesn’t help women: workers rated as having higher “risk of loss” receive higher potential scores, promotions, and wages

⇒ Women’s unwillingness/inability to leave leads firms to direct more resources toward retaining men.

- ▶ But this results in firms promoting men who don’t actually make very good managers (relative to the women the firm could have promoted instead).

# Can we change the manager?

## 1. Assign women to female managers

- ▶ May act as mentors and advocates for female subordinates
- ▶ But could backfire due to “queen bee syndrome”

## 2. Assign women to “star” managers

- ▶ Better at assessing subordinates’ true performance and potential
- ▶ Can more effectively advocate for their subordinates (of either gender)

## 3. Assign women to younger managers

- ▶ Younger managers may have more updated gender attitudes or stereotypes.

## No easy answers

### 1. Assign women to female managers?

- ▶ Female managers have a lower potential gap between male and female subordinates
- ▶ But they give lower ratings to everyone on average

### 2. Assign women to “star” managers?

- ▶ High performing managers give higher ratings to their subordinates
- ▶ But they have a higher gender gap.

### 3. Assign women to younger managers?

- ▶ Managers of all ages give higher potential scores to men.

Ok, if we can't change the manager, can we just change the rating?

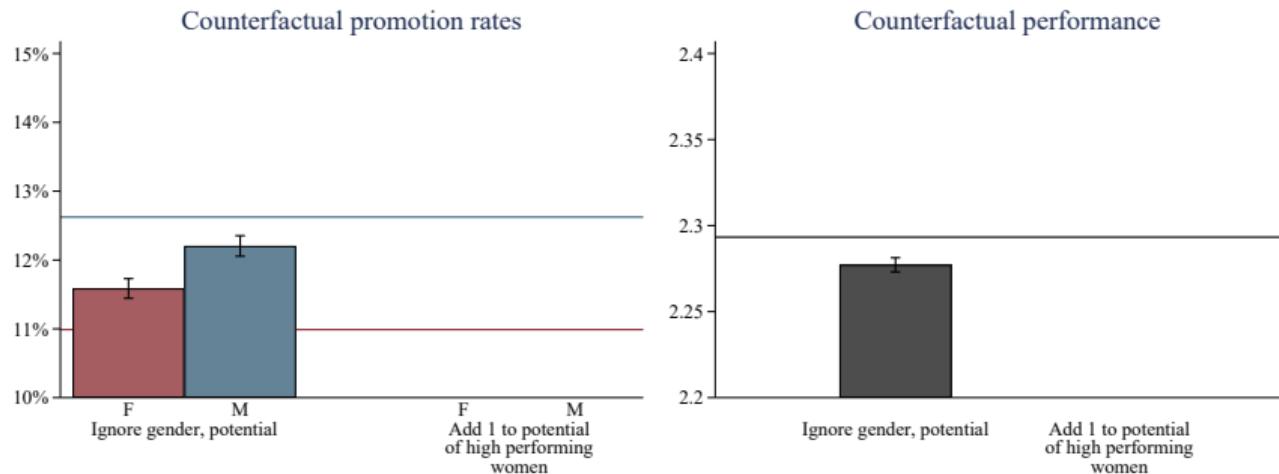
Use simulations to study two simple alternatives:

1. Don't use info on potential ratings or gender
2. "De-bias" ratings: increase potential ratings for high performing women (e.g. if a woman gets a high performance rating, bump up her potential rating).

What would happen to gender representation and efficiency?

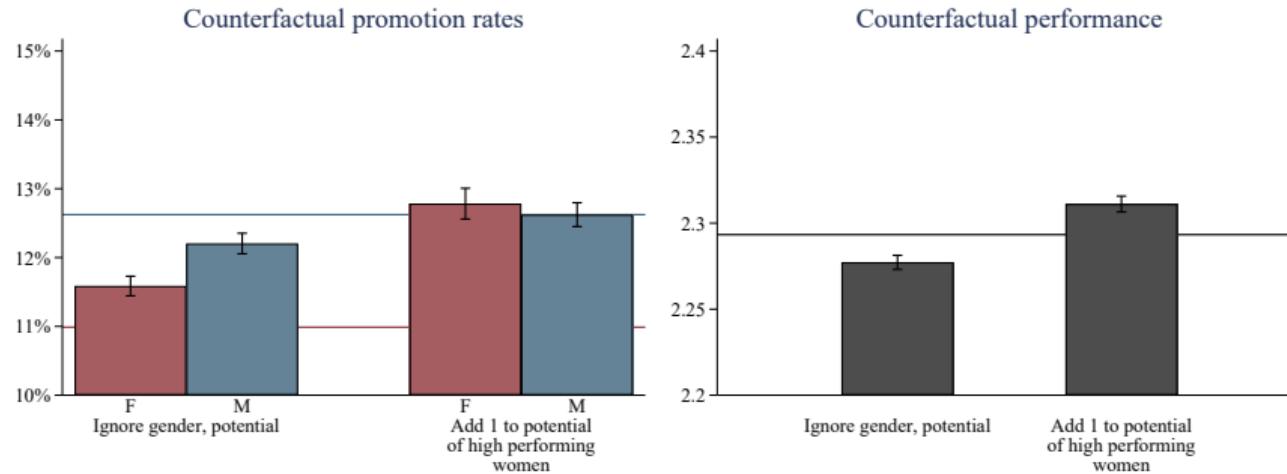
- ▶ Representation: average promotion rates by gender
- ▶ Efficiency: average future performance of promoted managers

# Eliminating potential ratings increases representation but reduces efficiency



- ▶ Eliminating potential ratings reduces gender promotion gap
- ▶ But it also decreases average future performance.
- ▶ Potential ratings, though biased, contain useful information about future performance!

# Can we reduce gender bias while preserving information?



- ▶ Keeping potential ratings but “bumping up” women’s ratings equalizes promotion gap and increases quality
- ▶ Suggests firms can benefit by de-biasing otherwise informative potential ratings

# Conclusion

Subjective assessments of potential contribute to gender gaps in promotion and pay

- ▶ Managers have a hard time imagining women as leaders—even after they have seen evidence of women's leadership ability!
- ▶ Yet getting rid of potential forecasts would lead to worse promotion decisions.

Can we de-bias potential ratings?

1. Reduce unconscious bias: define potential and ask managers to justify their ratings in writing.
2. Reduce strategic mistakes: reward loyalty to the firm rather than the threat of quitting.
3. Consider other tools: screening algorithms with less bias (Li, Raymond, Bergman 2021)