## ANALYSIS TO DRIVE ORGANIZATIONAL PERFORMANCE

**Northwestern University, Searle Center Leadership Roundtable on Talent Analytics and Workforce Science** 

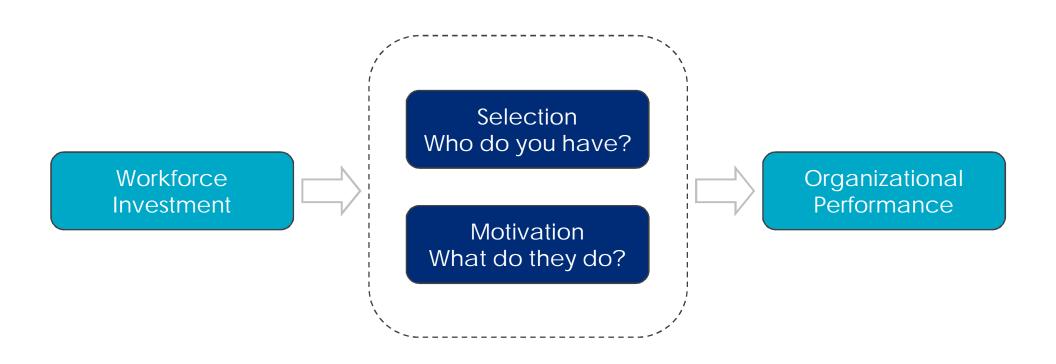
November 18, 2016

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### MANAGING THE PRODUCTION FUNCTION



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### CASE STUDY #1: CALL CENTER

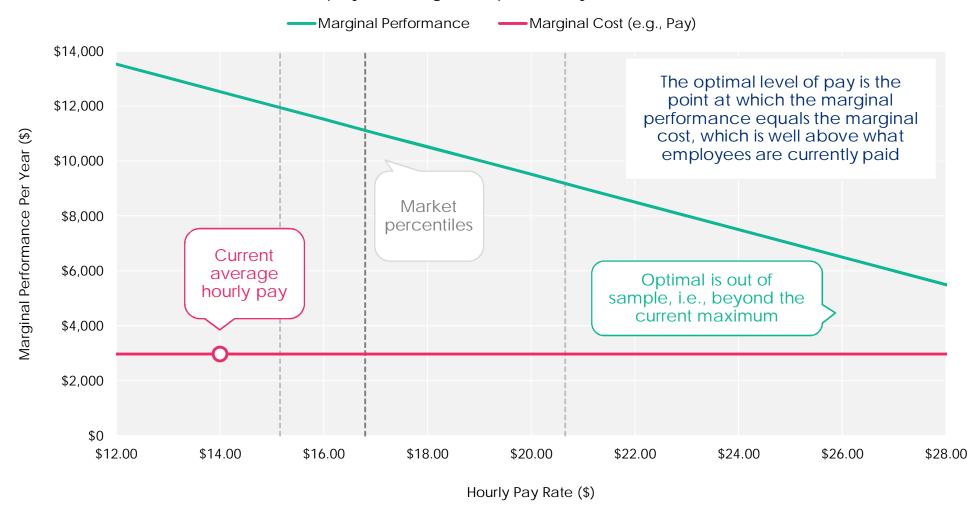
Analysis of the system shows work/life balance, pay, and training are key factors to drive desired workforce outcomes

Retention Likelihood	Sales Performance	Customer Satisfaction
Hired in Period	On-leave as of End of Period	Current Customer Satisfaction
Tenure at Organization	<ul><li>Current Sales Performance</li></ul>	• Part-Time
Hourly Pay Rate	• Hourly Pay Rate	On-leave as of End of Period
<ul><li>Current Sales Performance</li></ul>	Completed Targeted Training	• Returned from LOA in Period
Actual Overtime Wages Earned	<ul><li>Actual Commissions Earned</li></ul>	• Completed Targeted Training
Actual Commissions Earned	Actual Overtime Wages Earned	• Hourly Pay Rate
• Returned from LOA in Period	<ul><li>Actual Bonus Earned</li></ul>	Actual Overtime Wages Earned
O Completed General Training	U Current Customer Satisfaction	• Completed General Training
On-leave as of End of Period	<ul><li>Tenure at Organization</li></ul>	U Tenure at Organization
	U Hired in Period	• Received Commission in Period
		U Current Sales Performance

### CASE STUDY #1: CALL CENTER

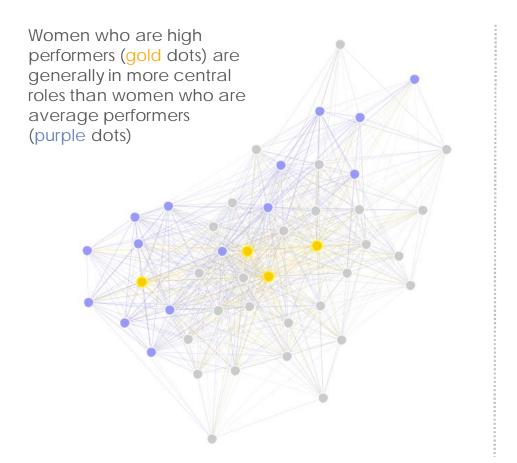
## Optimizing pay from the model parameters

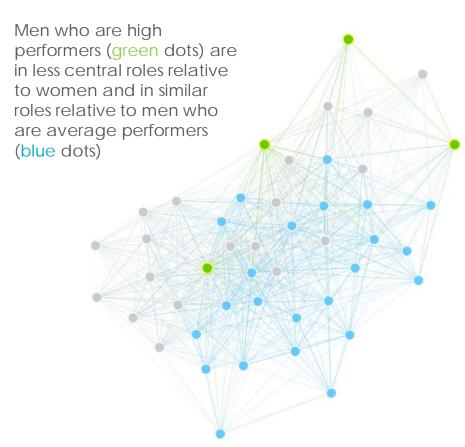
### Sales Employees: Marginal Impact of Pay on Performance



### CASE STUDY #2: RESEARCH AND DEVELOPMENT

### Network analysis shows the impact of role on performance





Diagrams represent the same network, with different nodes highlighted. Each dot in the network visuals represents an employee and each line connecting the dots represents a connection. The networks are drawn to show employees who are more centrally connected in the center of the graph

### CASE STUDY #2: RESEARCH AND DEVELOPMENT

Modeling of network analysis data shows the impact on innovation

What are the drivers/predictors of success and a favorable "innovation experience"?

Factors Linked to Less Favorable Results

- 1. EE's Betweenness Centrality
- 2. Female

HIGHER

Factors Linked to More Favorable Results

- 1. Supervisor's Span of Control
- 2. % Of EE's Network in Different Levels
- 3. EE's Eigenvector Centrality
- 4. Range of Age in an EE's Network
- 5. % Of EE's Network in a Diff. Unit
- 6. % Of EE's Network in a Diff. Location

### KEY TAKEAWAYS

- Employee performance is only on workforce outcome driving organizational performance
  - Examine outcomes of the system
  - Focus on areas of misalignment
- Data from different kinds of analyses (e.g., predictive modeling and network analysis) can be combined to provide critical insights

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# MAKE TOMORROW, TODAY