



# Wharton Analytics Fellows L'Oreal Project: Employee Engagement Analysis

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# Agenda for today

**Introduce project context and objectives**

**Share data analysis observations and recommendations**

**Discuss next steps and future opportunities**

# Key objective for the project is to identify possible drivers for employee engagement at L'Oreal



## Context

- Observations on employee data and interviews suggest **varying levels of workplace satisfaction and motivation** among different employees
- L'Oreal team has already **collected data** on employee profiles, performance and motivation



## Key questions

- How do **employee data** and **survey / interview results** explain employee engagement scores?
- Based on data analysis, what are the **key drivers of employee engagement** at L'Oreal, with specific focus on managers and their teams?
- What **actions** could L'Oreal take to boost employee motivation?

# We have examined both quantitative and qualitative data as part of this project

## Data filter / scope

Includes **all full-time employees** meeting criteria:

- SALARY PLAN 3
- FLSA Status = X

Excludes  
SalonCentric / LTD employees

Specifically looked at **talent employees** identified via CAROL and RETENTION indicators

## Data reviewed

### Quantitative data

#### Professional experience

- Education history
- Prior work history
- Training history

#### Career progression

- Current actives / Actives history
- Supervisor history
- Performance rating history
- Turnover history

### Qualitative data

#### Survey data

- Pulse survey (team level)
- LBS survey
- Health check survey

#### Interview data

- Exit interviews

# To conduct our analysis, we have leveraged data analysis tools

## Python



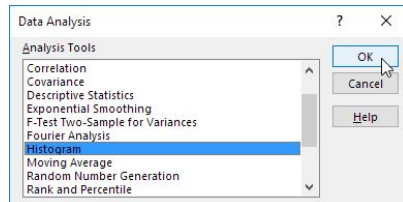
- General purpose programming language
- Data processing
- Correlation analysis
- Creating plots

## Tableau



- Data visualization tool
- Data processing and filtering
- Trend spotting

## Data Analysis Toolpak



- Built-in data analysis tool in excel
- Regression analysis
- Correlation analysis
- Hypothesis testing

## Jupyter



- Web application to create and share documents that contain code, equations and visualizations
- Data cleaning and transformation

# Engagement analysis

Which attributes correlate with employee engagement?

# Engagement analysis

We have assigned each employee a score (which we call “motivation score”), determined by averaging across their numerical answers to questions on the HealthCheck survey:

1. I am proud to work for L'Oréal USA.
2. L'Oréal USA motivates me to do my best everyday.
3. I feel motivated to go beyond my key job responsibilities.
4. I am willing to put in the extra effort to help L'Oréal USA meet its goals.
5. My work gives me a sense of personal accomplishment.
6. I intend to stay with this company for at least the next 12 months.
7. I would recommend L'Oréal USA as a good place to work.

# A Common and unique motivators for ACTIVE employees by function

## Data analysis output

Digital	Finance	Marketing Dir	Marketing Sup	Marketing Global
Valued	Valued	Valued	Valued	Empowered
Empowered	Empowered	Empowered	Empowered	Increased Empowerment
Increased Empowerment	Increased Empowerment	Recognized	Strategic Clarity	Valued
Consumer Focused	Recognized	Increased Empowerment	Increased Empowerment	Consumer Focused
Strategic Clarity	Strategic Clarity	Strategic Clarity	Increased Meaning	Strategic Clarity
Recognized	Increased Meaning	Consumer Focused	Recognized	Good Feedback
<b>Employee Enablement</b>	Good Feedback	Good Meetings	Meaningful Work	Recognized
Empowerment	Meaningful Work	Increased Meaning	Good Meetings	Good Meetings
Good Feedback	Good Meetings	taken action on feedback	Good Feedback	
Good Meetings	Consumer Focused	Good Feedback	Consumer Focused	
Increased Meaning	Empowerment	Meaningful Work		
taken action on feedback	Employee Engagement	recommend my manager		
Manager LBS	Cooperation	Manager LBS		
recommend my manager	taken action on feedback	<b>Career Path</b>		
Employee Engagement				
<b>regular actionable feedback</b>				
Meaningful Work				
<b>check-in past 3 months</b>				
Cooperation				

Note: Correlation with motivation  $\geq 0.25$

### Key:

1 Division

2 Divisions

3 Divisions

4 Divisions

5 Divisions

## Our recommendation

- Pay attention to common motivators across the organization
- Examine function specific motivators and act accordingly, e.g. how to enable Digital employees and plan career path for direct marketing employees



## B Active TALENT employees with ABOVE average motivation...

### Data analysis output

>10% difference in	>5% difference in
# Service Years	Manager's Corporate Training
# Days of Corporate Training	
Performance Ratings	
Career Path	
Flexibility	Employee Enablement
Clarity	Employee Engagement
Meaning	Autonomy
Strategic Awareness	Leaders SMART
Voice	Regular actionable feedback
Inspiration	Actively solicits feedback
Increased Meaning	Check-in past 3 months
Increased Empowerment	Taken action on feedback
Good Meetings	Recommend my manager
Consumer Focused	Manager LBS
Good Feedback	
Recognized	
Valued	
Strategic Clarity	
Meaningful Work	
Empowered	

#### Note:

- Career Path = employee's score for "understanding my potential career path"

#### Observations:

TALENT employees with above average motivation tend to have:

- longer service
- higher performance
- clearer career path
- more corporate training
- higher salaries (~\$4,500 difference; not shown in table to the left)
- better managers

# C Active employee demographics by motivation level and function

## Data analysis output

Scope	Motivation Above Average	Annual Salary	# Service Years	# Completed Degrees	# Corporate Training Courses	# Days in Corporate Training	Manager's # Corporate Training	Career Path Clarity	Manager LBS
Digital	No	\$136,305	3.90	1.38	10.92	30.41	13.59	1.02	3.43
	Yes	\$133,187	3.83	1.30	10.91	27.18	13.50	1.15	4.01
Finance	No	\$131,654	5.64	1.43	6.89	39.02	6.85	0.45	3.75
	Yes	\$146,088	8.56	1.63	7.15	30.76	7.64	0.70	4.04
Mktg Dir	No	\$127,228	3.84	1.44	12.71	26.73	15.00	0.54	3.65
	Yes	\$145,417	5.05	1.40	13.46	45.50	15.17	1.00	3.99
Mktg Sup	No	\$123,945	7.26	1.31	6.85	41.28	10.01	0.68	3.94
	Yes	\$138,830	9.33	1.40	7.70	49.33	10.12	0.56	4.36
Mktg Gbl	No	\$135,832	5.40	1.46	7.71	22.67	10.30	0.60	3.64
	Yes	\$145,935	5.83	1.46	9.84	41.03	8.42	0.80	4.09

Key: >10% difference in >5% difference in

## Observations

- Better motivated employees have different characteristics depending on function
- e.g. Longer corporate training seems to be effective only for Marketing! Why might this be the case?

# D Top and bottom supervisors by active team member motivation

## Data analysis output

Digital		Finance		Marketing Dir		Marketing Sup		Marketing Gbl	
Team Motivation	Manager ID	Team Motivation	Manager ID	Team Motivation	Manager ID	Team Motivation	Manager ID	Team Motivation	Manager ID
5.00	2024487	4.86	2071701	5.00	2038656	4.86	1670829	5.00	1780626
5.00	2038662	4.86	1931475	5.00	2052687	4.79	2019222	5.00	1924866
5.00	2071860	4.86	1957179	4.86	2041830	4.57	1803585	5.00	2058948
4.76	2009313	4.86	1977969	4.71	1782558	4.52	2031168	4.86	2059461
4.71	2035509	4.86	2043132	4.71	2015409	4.50	1760751	4.64	1805304
4.71	2092413	4.57	2041953	4.71	2035281	4.48	2020521	4.57	1925541
4.43	1931820	4.43	1787046	4.57	1777212	4.45	1671267	4.57	2054097
4.43	2049243	4.43	1787718	4.57	1806330	4.43	1530162	4.43	2011476
4.43	2055621	4.41	2014713	4.48	1771122	4.43	2012760	4.43	2089365
4.43	2087949	4.36	1775001	4.43	1975026	4.43	2032806	4.37	1770813
3.00	2001999	2.86	2038512	3.43	1501965	3.29	1670631	3.50	1787685
3.00	2012748	2.29	1927218	3.43	1788762	3.29	2053581	3.50	2062932
3.00	2054697	2.29	2058012	3.43	1928310	3.21	2046969	3.43	1769694
2.93	2031816	2.14	1955502	3.43	2012796	3.14	1769898	3.43	2092416
2.86	1976694	2.07	2055897	3.43	2013330	3.00	1969782	3.29	1780434
2.86	2017833	2.00	1782324	3.43	2070597	3.00	2031600	3.00	1803930
2.86	2052120	2.00	1990005	3.43	2079483	2.86	1744959	2.86	1782996
2.57	2048673	1.57	2017689	3.29	1777020	2.71	1787631	2.81	1779324
2.57	2055543	1.50	2064072	3.29	1976373	2.71	2061198	2.71	2015172
2.43	2030811	1.43	1803282	3.00	1962102	1.71	1809882	2.57	1979157
2.43	2034132			2.93	1779693			2.14	2098989
2.43	2037081			2.86	1990662				
				2.71	1754586				
				2.64	1962210				

### Note:

- Both the manager and his/her team member(s) need to be in the function analyzed
- Teams can vary in size (smallest=1)
- Regression results not shown, but discussed in key takeaways

### Key takeaways

- Manager's comp ratio correlates with team engagement across all functions, esp. for digital and direct marketing
- Employee's comp ratio matter for marketing functions
- Manager's motivation level correlate with their team's motivation for digital and finance
- Next step is to investigate what these supervisors are doing effectively to motivate their employees



## E Top and bottom job codes by motivation level

### Data analysis output

Digital		Finance		Marketing Dir		Marketing Sup		Marketing Gbl	
Job Code	Motivation	Job Code	Motivation	Job Code	Motivation	Job Code	Motivation	Job Code	Motivation
3397	4.86	62	5.00	1668	5.00	2215	5.00	615	5.00
4432	4.71	4507	4.71	4486	5.00	2297	5.00	2921	5.00
3605	4.48	79	4.48	3958	4.86	2300	5.00	3022	5.00
3563	4.43			2480	4.71	2778	5.00	1974	4.46
3600	4.43			2395	4.64	3515	5.00	1949	4.43
4591	4.38					4434	5.00		
2760	4.33					4462	5.00		
3539	4.29					2344	4.86		
3562	4.29					2483	4.86		
						3925	4.86		
2814	3.50	58	3.36	1949	3.00	1949	3.43	3493	3.57
3540	3.50	23	3.23	2513	3.00	1981	3.43	4303	3.57
4616	3.50	36	2.93	3494	3.00	2568	3.43	2432	3.43
4610	3.48			2723	2.86	2304	3.36	2195	3.29
2768	3.46			4484	2.71	3926	3.29	1795	3.14
2795	3.43			2622	2.14	2218	3.25	2513	2.86
4608	3.29					2263	3.21		
3599	2.93					3780	3.14		
3602	2.86					3924	3.14		
1984	2.43					2419	3.00		
2797	2.43					4161	3.00		
2804	1.00					809	2.71		

### Next Steps:

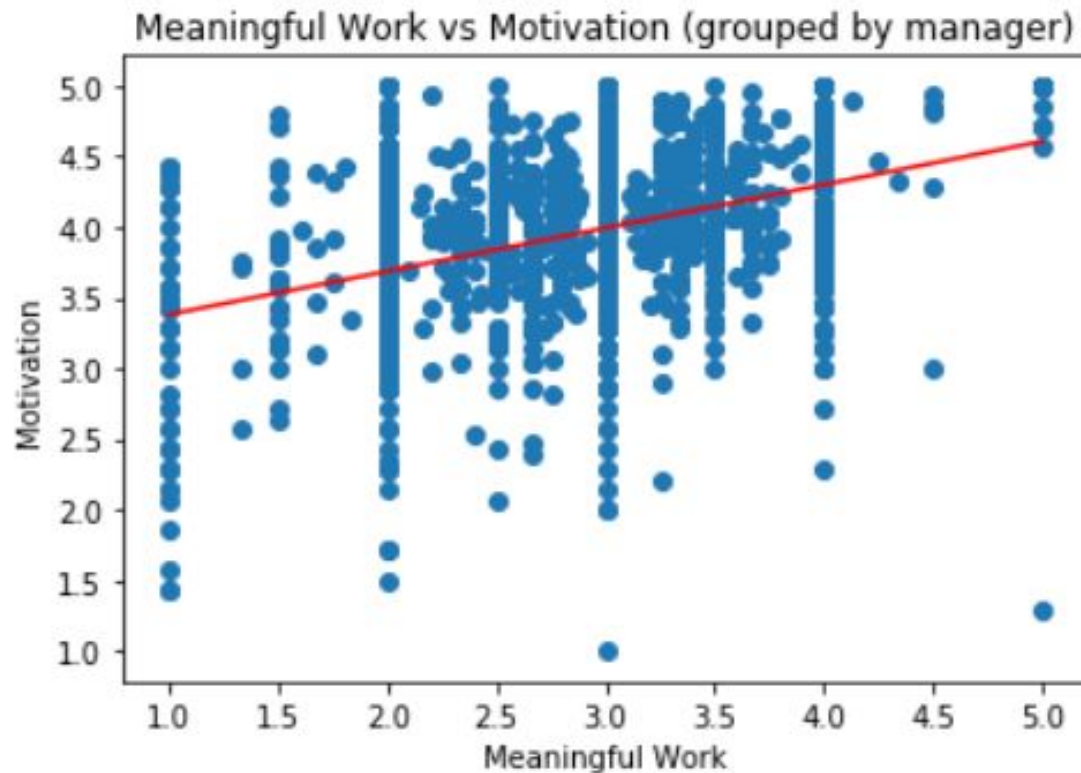
- Investigate what aspects of these jobs contributed to high or low engagement

# Work design and feedback analysis

How are feedback and job design correlated with employee engagement?

# F Work that has purpose motivates employees to perform well

## Data analysis output



### Observations

- Meaningful work positively correlates with employee motivation
- Current work still has room for improvement, as most of the meaningful work ratings fall between 2 and 4
- This pattern occurs across most groups including marketing and digital

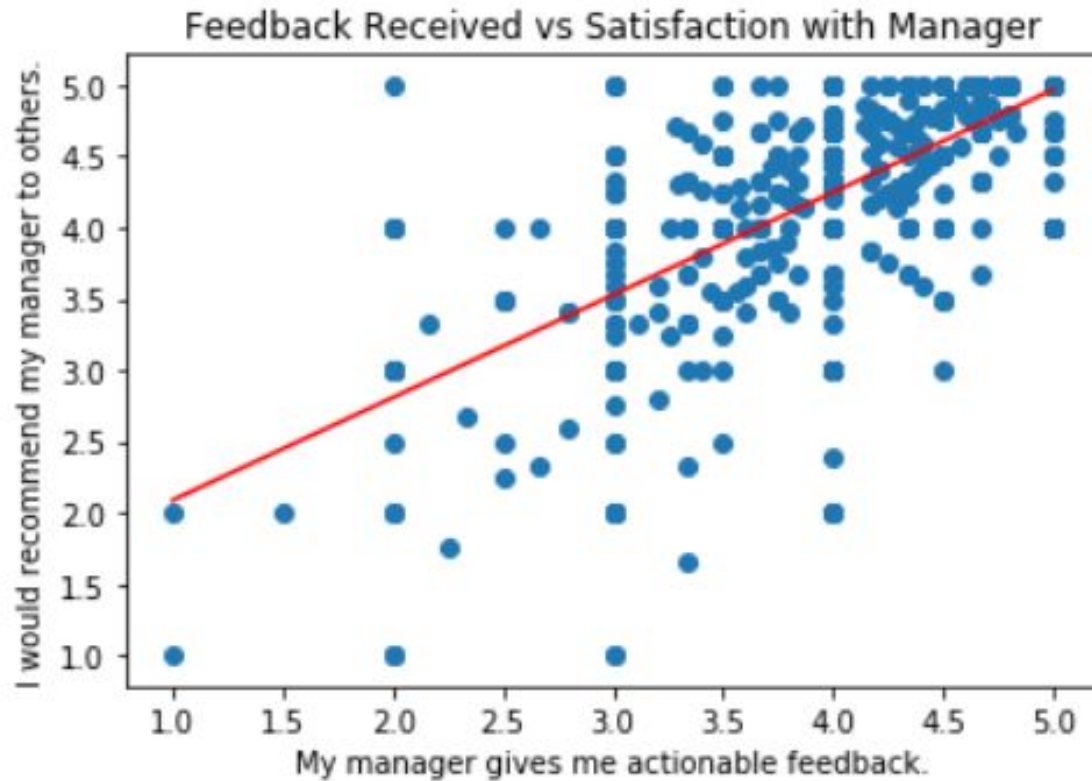
### Our recommendations

- Understand from employees what constitutes meaningful work
- Based on cursory review of academic literature, some potential approaches could make work more meaningful:
  - Make work challenging
  - Make the impact clear
  - Engage employees in “job crafting”

Source: Garrad, Lewis, and Tomas Chamorro-Premuzic. "How to Make Work More Meaningful for Your Team." Harvard Business Review, August 9, 2017

# G Use of feedback increases employee satisfaction with manager

## Data analysis output



### Observations

- Receiving actionable feedback translates into higher satisfaction with manager
- Similarly, being able to provide feedback to manager also increases this same satisfaction
- This pattern occurs across most groups including digital and marketing

### Our recommendation

- Explore optimal feedback format, content and frequency
- Explore initiatives to promote regular feedback between managers and employees

Source: Cappelli, Peter, and Anna Tavis. "The Future of Performance Reviews." Harvard Business Review, October 2016, 58-67.

# Salary analysis

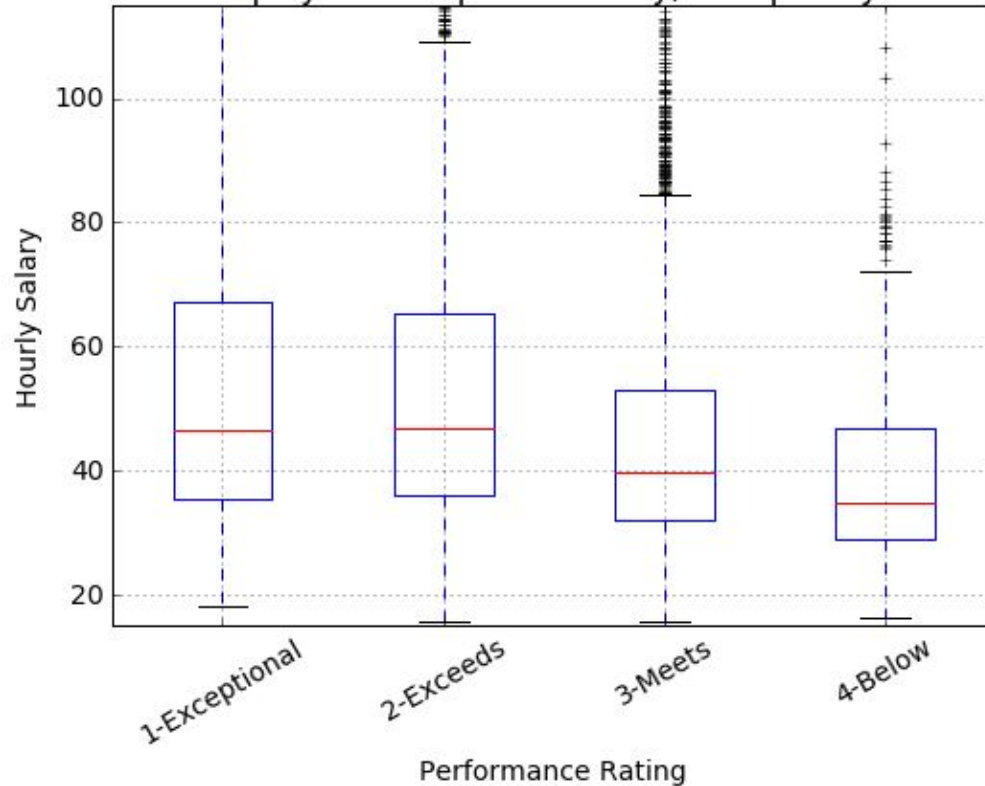
How does salary relate to employee performance?



# H Impact of salary on performance rating for all employees with <15 years of tenure

## Data analysis output

Non-Senior Employees: Boxplot of Salary, Grouped by Performance



## Observations

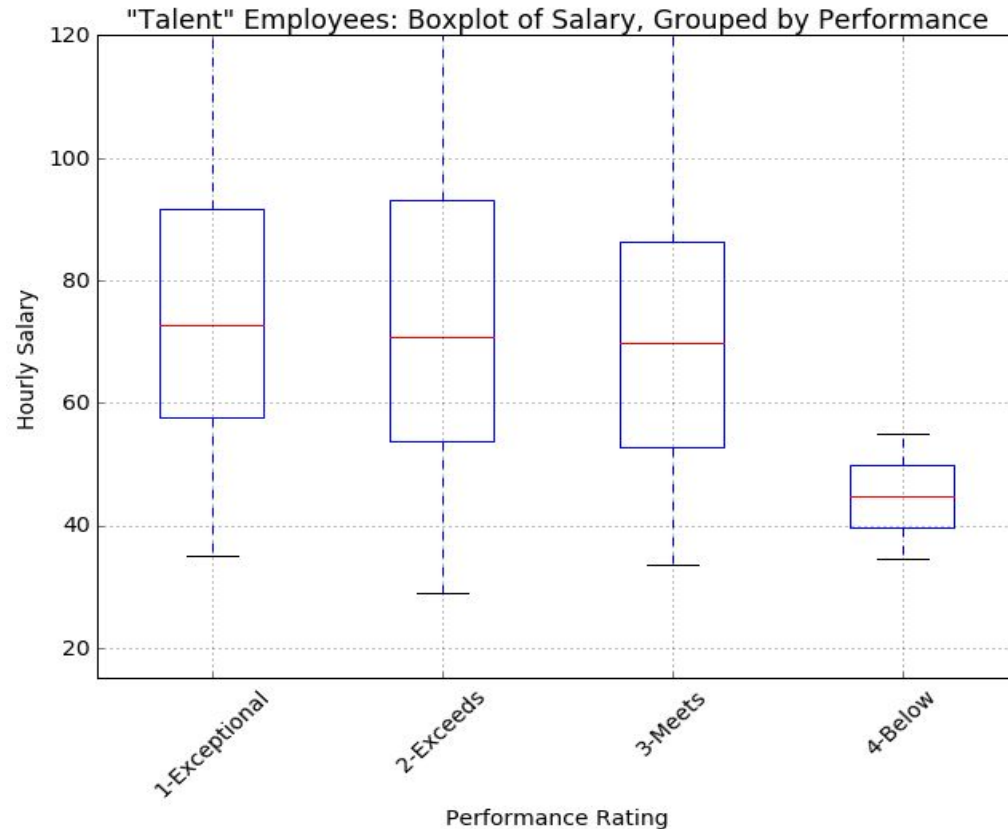
- Employees with <15 years of tenure: no gap between salaries of Exceptional employees and those who Exceed expectations
- Exceptional non-senior employees perhaps not getting salaries they deserve

## Our recommendations

- Drill down into performance and compensation by specific job titles and seniority levels
- Explore optimal salary levels to incentivize employees to perform their best and attain the best performance rating

# I We observe similar trends for talent employees as well

## Data analysis output



### Observations

- Talent employees: hardly any variation in salaries according to performance
- Perhaps talent employees aren't incentivized to perform better (all talents who at least *meet* expectations get similar salaries)

### Our recommendations

- Drill down into performance and compensation by specific job titles and seniority levels
- Explore optimal salary levels to incentivize employees to perform their best and attain the best performance rating

Note: includes both CAROL and RETENTION designated talent employees

# Resignation Analysis

What did former employees care about before they resigned?

# J As already observed, feedback and recognition were key things resigned employees cared about

## Data analysis output based on all resigned employees

Active Employees	Motivation	Resigned Employees	Motivation
NPS	0.65	NPS	0.72
Valued	0.54	Valued	0.69
Empowered	0.50	Recognized	0.62
Strategic Clarity	0.47	taken action on feedback	0.60
Increased Empowerment	0.46	Strategic Clarity	0.60
Recognized	0.43	Good Feedback	0.55
Good Meetings	0.37	Empowered	0.53
Consumer Focused	0.37	Manager LBS	0.45
Good Feedback	0.35	Increased Empowerment	0.44
Increased Meaning	0.32	Cooperation	0.44
Meaningful Work	0.31	Consumer Focused	0.39
Manager LBS	0.25	actively solicits feedback	0.38
recommend my manager	0.25	Good Meetings	0.38
		Voice	0.36
		Increased Meaning	0.35
		Meaningful Work	0.33
		Employee Engagement	0.32
		regular actionable feedback	0.28
		Meaning	0.27
		recommend my manager	0.26

Key for Resigned:

Higher Ranked Motivator

Resigned Only Motivator

Note: Correlation  $\geq 0.25$

### Scope: ALL resigned employees Observations

- Resigned employees' motivation tend to be more correlated with:
  - Feedback**
    - Manager action on employee feedback
    - Regular actionable feedback
    - Actively soliciting feedback
    - Manager LBS
  - Recognition
  - Cooperation
  - Voice

### Our recommendation

- Manager should act on feedback, provide regular actionable feedback, and actively solicit feedback
- Publicly recognize great performance
- Encourage cooperation
- Give employee a voice

# K Resigned talent-designated employees had many higher level needs

## Data analysis output

Active TALENT	Motivation	Resigned TALENT	Motivation
Motivation	1.00	Employee Enablement	1.00
NPS	0.65	Employee Engagement	1.00
Valued	0.54	Motivation	1.00
Empowered	0.50	Empowerment	1.00
Increased Empowerment	0.47	NPS	0.99
Strategic Clarity	0.47	Meaning	0.99
Recognized	0.42	Voice	0.94
Good Meetings	0.39	Recognized	0.94
Consumer Focused	0.38	Valued	0.77
Good Feedback	0.32	MAX_ENDING_RATE	0.67
Increased Meaning	0.31	HOURLY_RT	0.65
Meaningful Work	0.28	ANNUAL_RT	0.65
		Increased Meaning	0.63
		Meaningful Work	0.63
Key for Resigned:		Consumer Focused	0.52
Resigned Only Motivator		COMPA_RATIO	0.49
		Autonomy	0.35

Note: Correlation >= 0.25

## Observations

- Resigned talent employees' motivation tend to be more correlated with:
  - Enablement, engagement, empowerment
  - Meaning
  - Voice
  - Compensation
  - Autonomy
- Higher level needs!**

## Our recommendation

- Cater to TALENT employees' higher level needs for meaningful work, voice and decision on the job, autonomy, etc.
- Investigate TALENT employees' outside offers and prior compensation to see if current pay reasonable



# Next steps and future opportunities (1/2)

## Current observations

Teams' engagement levels vary greatly from by supervisor and by job title

Employees from different departments vary in what correlates with their motivation level



## Future analysis opportunities

- **Investigate what top supervisors** are doing to motivate their teams
- **Explore what aspects of each job's responsibility** contribute to employee engagement
- **Explore specific drivers for each department** and understand what specific initiatives can be designed as a response
- **Generate employee personas** based on current data and focus groups



# Next steps and future opportunities (2/2)

## Current observations

**Limited visible difference in compensation** between employees rated as “Exceptional” vs. “Exceeds expectations”

**Work perceived as “meaningful”** is positively correlated with engagement

**Feedback** is positively correlated with employee satisfaction



## Future analysis opportunities

- **Identify departments and teams** with limited compensation differentiation based on performance
- Explore **performance-based compensation levels** to ensure that it motivates exceptional performance
- Survey and interview employees to **understand what constitutes meaningful work** and design job responsibilities accordingly
- Explore **optimal feedback content , frequency and structure**, and how to give and respond to feedback for both managers and team members

