Gallup Micro-economic Path

[Greater Engagement = Better Business Performance | Snap!](https://stevensonfinancialmarketing.wordpress.com/2012/05/14/greater-engagement-better-business-performance/)

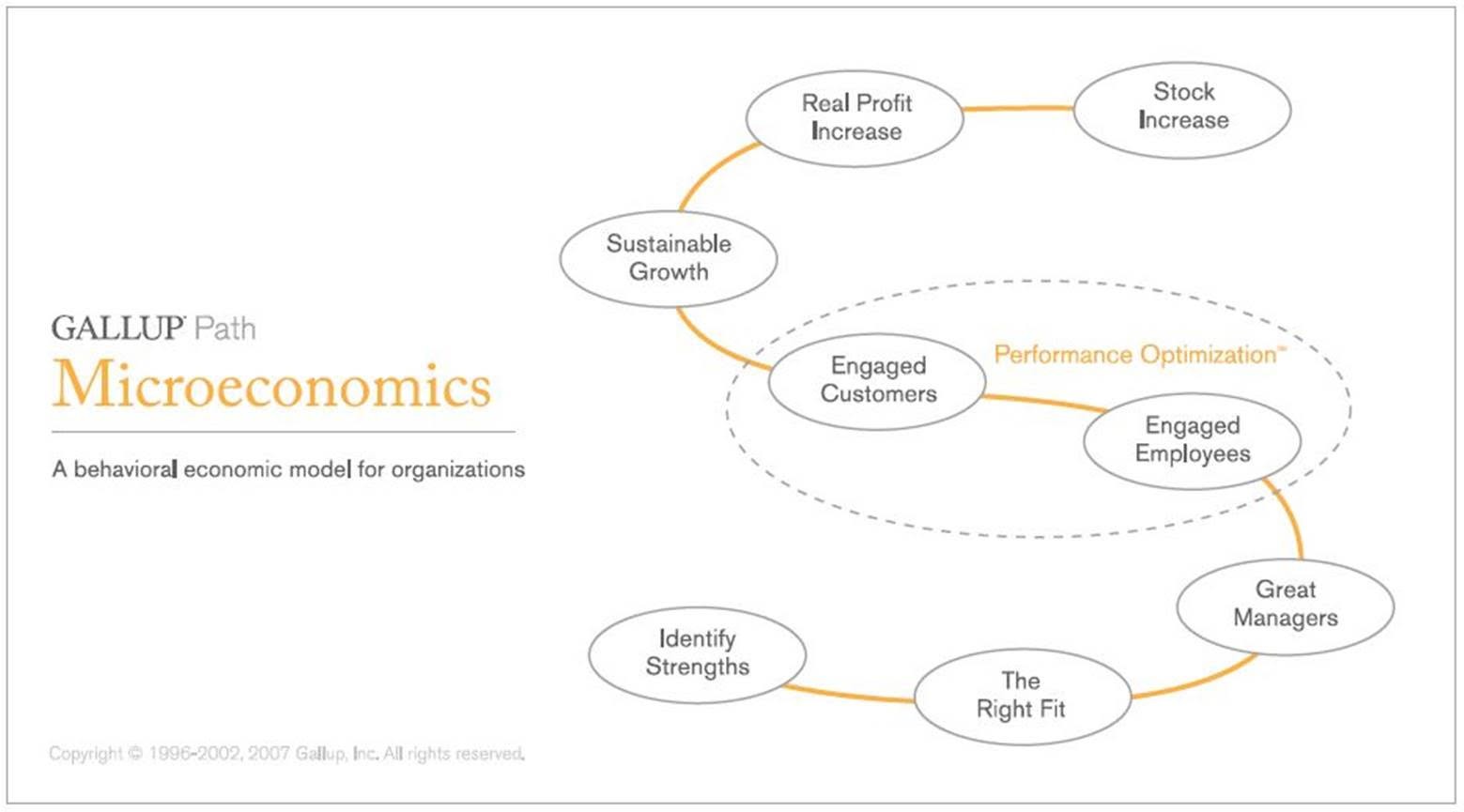
Engaged Employee <- all the questions in the [Gallup Q12](https://www.gallup.com/q12/) with a strong affirmative

Five outcome measures:

1. employee retention
2. productivity
3. customer satisfaction/engagement
4. safety
5. profitability

Direct links between an increase in the number of engaged employees and profit, through increases in productivity, or decreases in employee turnover 🡪 One linear relationship

The 38 questions from Glint could be classified to Basic Need, Individual Contribution, Teamwork, Growth, as suggested in Gallup Q12.



Gallup path was derived to identify the correlation between business performance and employee. Organisation can examine how to best engage and retain employees that accelerate the company’s performance via the path. For example, it mentioned that the good management can empower the psychological safety that enhance the employee engagement, which finally affect the business performance.

**Project goal:**

Maintain a meta-analysis that mention the relationship between employee engagement and business performance

Gallup suggested that the relationship between engagement and financial performance appears to be mediated by its causal relationship with other outcomes such as customer perceptions and employee retention.

It would try to use the Glint’s survey data to meet the requirements suggested by Gallup.

**Hypothesis (Tentative):**

Business-unit-level employee engagement will have positive average correlations with the business/work unit outcomes of customer loyalty/engagement, profitability, productivity, wellbeing and organizational citizenship, and negative correlations with turnover, and shrinkage.

**Measures:**

* Customer perceptions: These metrics included measures of loyalty, satisfaction, service excellence, customer evaluation of quality of claims, net promoter scores and engagement.
* Profitability: a percentage profit of revenue (Revenue/sales)
* Productivity: financial metrics, evaluations or production records (e.g., profit dollars per shop)
* Wellbeing
* Turnover: annualized percentage of employee turnover
* Shrinkage: percentage of total revenue or a difference from an expected target(Separate: Stole, Freshfood)

**Variables and measurement**

**Notes**

Both models would be separated into 2 sub-models, Gallup and Glint, which containing different IVs and DVs under similar logic.

***Model 1: Good manager 🡪 Engaged employee***

**Independent variables (IV):**

**-Gallup**

* Role Clarity & Expectation-Setting: ***Question[37]***
* Strengths-Based Coaching & Encouraging:

"Q22: Empowered to Make Decisions"

* Recognition & Feedback:

"Q17: Provide Feedback for Improvement"

"Q18: Satisfied with Recognition"

* Resource Provision & Support(In work/ mental):
  + Work support:

"Q10: Training for Confidence"

"Q24: Given Enough Resources"

"Q29: Given Technology Resources"

"Q32: "

**-Glint**

* **Glint survey questions [Q7-30, except Q13 -14]**

**Dependent variables (DV):**

**-Gallup**

* Employee Satisfactory score: ***average score of Q1 and Q2***
* Manager score:

"Q7: Recommend my Manager"

* Employee belonging, trust, retention:

"Q5: Belonging"

"Q6: Retention"

"Q15: Trust each other"

"Q16: Trust Leadership"

"Q34: "

**-Glint**

* Engagement score: ***average score of Q1 and Q3***
* Work Satisfaction score: “Q2”
* Future Success score: “Q4”
* Belonging score: “Q5”
* Retention score: “Q6”

***Model 2: Engaged employee 🡪 Business outcomes 🡪 Business performance***

**Engaged employee:**

* ALL Glint survey questions

**Business outcomes**

* Turnover rate
* Operational
  + Shrinkage
    - Unknown shrinkage and Known shrinkage
* Customer perceptions
  + MSP
* Other
  + Workload

**Business performance**

* Finance
  + Profitability: Total Annual Profit / Trading Area
  + Productivity per Trading Area: Total Annual Sales / Trading Area

Dataset used: Wellcome and Overall in Model 1; Wellcome in Model 2

The Glint survey questionnaire analysis would mostly focus on Q1-30 because Q31-38 is only suitable for SSC, which only contains 47 observations in Overall dataset.

Since the data is discontinuous and we want to find the non-linear relationship, **RANDOM FOREST REGRESSION Model** has been selected in **Model 1**.

In **Model 2**, the **LINEAR REGRESSION Model** has been selected and it separates into 2 parts. First, we have used the Engaged employee variables to predict each business outcomes, except Workload, and business performance. Then, all business outcomes would be used to predict each business performance variable again.

**Assumptions**

* Since only the mean of each question score of each store is available to protect privacy, it is assumed to be a valid summary.
* Only stores that are fully operated from Sep 2023 to Aug 2024 are studied. That is, excluding those that are out of business, or newly opened. In total, there are 313 stores with 6437 employees.
* For stores Lok Ma Chau 1 and Lok Ma Chau 2, they are right next to each other, and since Lok Ma Chau 2 would operate only when Lok Ma Chau 1 has a lot of customers, the two stores’ data are combined into one store as “Lok Ma Chau”.
* To calculate the workload of each store, the concept of full-time equivalent is used. That is, workload of each part-time staff is assumed to be half of that of each full-time staff.
* To calculate the productivity and profit of each store, the trading area is used, but not the gross area, and it is assumed to be a valid summary.
* To aggregate the financial data per month of each store, the sum is taken over the year, and it is assumed to be a valid summary.
* The data used in this study are gathered from different teams. It is assumed that there contain no errors.
* The year is assumed to be Sept 2023 to August 2024, hence all data collected is within this period.
* The yearly turnover is calculated as [year sum(head exit)] / [(Sept23 headcount + Aug24 headcount)/2]
* The online shop shrinkage is excluded because of its small proportion of whole shrinkage.
* The yearly total shrinkage sum is calculated as known shrinkage sum + unknown shrinkage sum and its % of Sales will be the measurement.
* The store name is "The Edge" in shrinkage data is same as store name "PopCorn" in financial data.

**Questions Mappings**

Q1: How happy are you working at our company?

Q2: Overall, I am satisfied at work.

Q3: I would recommend our company as a great place to work.

Q4: Our company has the right culture for us to be successful in the future.

Q5: I feel a sense of belonging at our company.

Q6: I am not actively considering leaving our company.

Q7: I would recommend my manager to others.

Short For: "Recommend my Manager"

Q8: Our company has acted upon the feedback provided in previous Your Voice Counts surveys.

Short For: "Action after Feedback"

Q9: I am asked for my opinion on ways we can improve.

Short For: "Asked Opinion"

Q10: My training/development gives me confidence to do my job well.

Short For: "Training for Confidence"

Q11: I see opportunities to develop my career at our company.

Short For: "Career Opportunities"

Q12: I always recommend our stores as great places to shop.

Short For: "Recommend our Stores"

Q13: Overall, what do you believe our company does well as an employer?

Q14: Overall, what would you like to see our company improve on as an employer?

Q15: Across our company, we all trust each other.

Short For: "Trust each other"

Q16: I trust the leadership team at our company.

Short For: "Trust Leadership"

Q17: My manager provides me with feedback that helps me improve my performance.

Short For: "Provide Feedback for Improvement"

Q18: I feel satisfied with the recognition or praise I receive for my work.

Short For: "Satisfied with Recognition"

Q19: Our company delivers a great customer experience.

Short For: "Great Customers Performance"

Q20: I am proud of our company's products and/or services.

Short For: "Proud of Company"

Q21: We consider the needs of our customers (internal and/or external) in everything we do.

Short For: "Consider Customer's Needs"

Q22: I feel empowered to make decisions regarding my work.

Short For: "Empowered to Make Decisions"

Q23: The work that I do at our company is meaningful to me.

Short For: "Meaningful Work"

Q24: I have the resources I need to do my job well.

Short For: "Given Enough Resources"

Q25: People at our company live the company values.

Short For: "Live Company Values"

Q26: At work, I feel cared about as a person.

Short For: "Being Cared"

Q27: Regardless of background, everyone at our company has an equal opportunity to succeed.

Short For: "Equal Opportunity for Success"

Q28: I feel free to speak my mind without fear of negative consequences.

Short For: "Free to Speak my Mind"

Q29: Our company is providing the technology resources I need to be productive.

Short For: "Given Technology Resources"

Q30: Our company does a good job supporting the communities in which it does business.

Short For: "Supporting Communities"

Q31: Teams at SSC collaborate effectively to get things done.

Short For: " SSC Collaborate Effectively"

Q32: SSC does a good job of communicating with team members.

Short For: “SSC Good Team Communicate”

Q33: The leadership team demonstrates a visible commitment to diversity & inclusion.

Short For: “Leadership Team Demonstrates Commitment”

Q34: I am excited about our company's future.

Short For: “Excited about Company's Future”

Q35: Team members at SSC adapt well to changes.

Short For: “SSC Adapt Changes”

Q36: Team members at SSC reliably deliver on their commitments.

Short For: “SSC deliver commitments”

Q37: In my team, we are clear about who is responsible for what.

Short For: “Clear other's Responsiblity”

Q38: In my team, team members are held accountable for their work.

Short For: “Being held accountable for work”

'Satisfy\_score1' = ('avg\_score\_Q1'+'avg\_score\_Q2')/2

'Satisfy\_score2' = ('avg\_score\_Q1'+'avg\_score\_Q3')/2

'Manager\_score' = 'avg\_score\_Q7'

'Belonging\_score' = ('avg\_score\_Q5'+'avg\_score\_Q6'+'avg\_score\_Q15'+'avg\_score\_Q16') / 4

**Findings**

**Model 1 --- Gallup**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **Imp. Rank** | **Recommend Action** | **Sharp Changing Range** | **Overall Sign** |
| **Q29** | Our company is providing the technology resources I need to be productive. | 1 | ↑ | 55-60 and 68-72 | POS |
| **Q10** | My training/development gives me confidence to do my job well. | 2 | -- | 63-66 | POS |
| **Q24** | I have the resources I need to do my job well. | 3 | ↑ | 56-70 | POS |
| **Q17** | My manager provides me with feedback that helps me improve my performance. | 4 | ↑ | 52-58 and 72-77 | POS |
| **Q22** | I feel empowered to make decisions regarding my work. | 5 | ↑ | 63-71 | POS |
| **Q18** | I feel satisfied with the recognition or praise I receive for my work. | 6 | ↑ | 64-67 and 69-73 | POS |

**Satisfy score**

It found that all variables have the positive relationship with Satisfaction score. Also, most of them have the improvement space for getting the higher satisfy score, except Question 10, which has passed over its sharpest changing range.

***Noted:***

1. *The % Var explained is 82.05 and Prediction score range in 65-68.*
2. *The Imp rank first based on the lose of R-squared in model and ordered with the Node Purity when the lose is closer between 2 variables.*
3. *The sharp changing range refers to the sharply increasing range of the variables.*
4. *Recommend Action: What need to do in the future, “↑”= increase and “—" = keep*

**Manager score(Separate Added)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **Imp. Rank** | **Recommend Action** | **Sharp Changing Range** | **Overall Sign** |
| **Q17** | My manager provides me with feedback that helps me improve my performance. | 1 | ↑ | 55-75 | POS |
| **Q29** | Our company is providing the technology resources I need to be productive. | 2 | -- | 60-70 | NA |
| **Q18** | I feel satisfied with the recognition or praise I receive for my work. | 3 | ↑ | 62-80 | POS |
| **Q10** | My training/development gives me confidence to do my job well. | 4 | ↑ | 64-83 | POS |
| **Q22** | I feel empowered to make decisions regarding my work. | 5 | ↑ | 50-60 and 66-80 | POS |
| **Q24** | I have the resources I need to do my job well. | 6 | ↑ | 75-85 | POS |

***Noted:***

1. *The % Var explained is 79.17 and Prediction score range in 63-75.*
2. *The Imp rank first based on the lose of R-squared in model and ordered with the Node Purity when the lose is closer between 2 variables.*
3. *The sharp changing range refers to the sharply increasing range of the variables.*
4. *Recommend Action: What need to do in the future, “↑”= increase and “--" = keep*

**Belonging score**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **Imp. Rank** | **Recommend Action** | **Sharp Changing Range** | **Overall Sign** |
| **Q24** | I have the resources I need to do my job well. | 1 | ↑ | 55-60 and 63-70 | POS |
| **Q10** | My training/development gives me confidence to do my job well. | 2 | ↑ | 52-79 | POS |
| **Q18** | I feel satisfied with the recognition or praise I receive for my work. | 3 | -- | 64-66 | POS |
| **Q22** | I feel empowered to make decisions regarding my work. | 4 | ↑ | 55-64 and 66-71 | POS |
| **Q17** | My manager provides me with feedback that helps me improve my performance. | 5 | ↑ | 67-74 | POS |
| **Q29** | Our company is providing the technology resources I need to be productive. | 6 | -- | 61-65 | POS |

It found that all variables have the positive relationship with Satisfaction score. Also, most of them have the improvement space for getting the higher satisfy score, except Question 18 and 29, which has passed over its sharpest changing range.

***Noted:***

1. *The % Var explained is 91.74 and Prediction score range in 65-68.*
2. *The Imp rank first based on the lose of R-squared in model and ordered with the Node Purity when the lose is closer between 2 variables.*
3. *The sharp changing range refers to the sharply increasing range of the variables.*
4. *Recommend Action: What need to do in the future, “↑”= increase and “--" = keep*

**Short Summary**

All independent variables (IVs) show the positive relationship with the dependent variables (DVs). Also, Q29 is the most important variables in Satisfy score but it is opposite in Belonging score. Similarly, Q24 is the most important variable in Belonging score but it is the least important in Manager score. According to the sum of their Importance rank, it founds that the Top 3 variables is Q10, Q29, Q24 and Q17 respectively.

**Model 1 --- Glint**

**Engagement score**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **Recommend Action** | **Sharp Changing Range** | **Overall Sign** |
| **Q10** | My training/development gives me confidence to do my job well. | ↑ | 67-68 | POS |
| **Q11** | I see opportunities to develop my career at our company. | ↑ | 64-70 | POS |
| **Q12** | I always recommend our stores as great places to shop. | NA | NA | POS |
| **Q15** | Across our company, we all trust each other. | ↑ | 63-70 | POS |
| **Q16** | I trust the leadership team\* at our company. | ↑ | 69-80 | POS |
| **Q17** | My manager provides me with feedback that helps me improve my performance. | NA | NA | POS |
| **Q18** | I feel satisfied with the recognition or praise I receive for my work. | ↑ | 67-70 | POS |
| **Q19** | Our company delivers a great customer experience. | ↑ | 58-62 and 78-85 | POS |
| **Q20** | I am proud of our company's products and/or services. | ↑ | 67-72 | POS |
| **Q21** | We consider the needs of our customers (internal and/or external) in everything we do. | ↑ | 55-75 | POS |
| **Q22** | I feel empowered to make decisions regarding my work. | ↑ | 65-85 | POS |
| **Q23** | The work that I do at our company is meaningful to me. | ↑ | 69-73 | POS |
| **Q24** | I have the resources I need to do my job well. | ↑ | 70-83 | POS |
| **Q25** | People at our company live the company values. | ↑ | 69-83 | POS |
| **Q26** | At work, I feel cared about as a person. | ↑ | 53-70 | POS |
| **Q27** | Regardless of background, everyone at our company has an equal opportunity to succeed. | ↑ | 72-90 | POS |
| **Q28** | I feel free to speak my mind without fear of negative consequences. | ↑ | 59-63 and 72-82 | POS |
| **Q29** | Our company is providing the technology resources I need to be productive. | ↑ | 71-81 | POS |
| **Q30** | Our company does a good job supporting the communities in which it does business. | ↑ | 76-85 | POS |
| **Q7** | I would recommend my manager to others. | ↑ | 80-82 | POS |
| **Q8** | Our company has acted upon the feedback provided in previous Your Voice Counts surveys. | ↑ | 62-76 | POS |
| **Q9** | I am asked for my opinion on ways we can improve. | ↑ | 55-78 | POS |

It found that all variables have the positive relationship with Engagement score. Also, many of them have the improvement space for getting the higher satisfy score, except Question 12 and 17, which only contain slight changes. Q29 is the most important variables in Glint’s Engagement score, which means that providing technology resources is extremely important in increasing employee’s satisfaction score. Curiously, Q30 is certainly important in Engagement score too, which means that the employee is cared about whether the company does the good job in supporting the communities and it would affect their engagement. Both of them have the improvement area.

**Work Satisfaction score**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **Recommend Action** | **Sharp Changing Range** | **Overall Sign** |
| **Q30** | Our company does a good job supporting the communities in which it does business. | ↑ | 53-70 | POS |
| **Q11** | I see opportunities to develop my career at our company. | ↑ | 53-58 and 68-72 | POS |
| **Q29** | Our company is providing the technology resources I need to be productive. | ↑ | 68-70 and 78-90 | POS |
| **Q20** | I am proud of our company's products and/or services. | ↑ | 66-75 | POS |
| **Q21** | We consider the needs of our customers (internal and/or external) in everything we do. | ↑ | 67-73 | POS |
| **Q24** | I have the resources I need to do my job well. | ↑ | 58-74 | POS |
| **Q23** | The work that I do at our company is meaningful to me. | ↑ | 56-72 | POS |
| **Q17** | My manager provides me with feedback that helps me improve my performance. | ↑ | 80-87 | POS |
| **Q22** | I feel empowered to make decisions regarding my work. | ↑ | 59-74 | POS |
| **Q9** | I am asked for my opinion on ways we can improve. | ↑ | 67-75 | POS |
| **Q28** | I feel free to speak my mind without fear of negative consequences. | ↑ | 66-75 | POS |
| **Q15** | Across our company, we all trust each other. | ↑ | 65-80 | POS |
| **Q12** | I always recommend our stores as great places to shop. | NA | 72-78 and 83-85 | NA |
| **Q16** | I trust the leadership team\* at our company. | ↑ | 65-77 | POS |
| **Q19** | Our company delivers a great customer experience. | -- | 57-66 | POS |
| **Q25** | People at our company live the company values. | ↑ | 68-74 | POS |
| **Q18** | I feel satisfied with the recognition or praise I receive for my work. | ↑ | 69-78 | POS |
| **Q10** | My training/development gives me confidence to do my job well. | ↑ | 55-58 and 73-78 | POS |
| **Q27** | Regardless of background, everyone at our company has an equal opportunity to succeed. | NA | NA | POS |
| **Q26** | At work, I feel cared about as a person. | ↑ | 70-78 | POS |
| **Q7** | I would recommend my manager to others. | ↑ | 79-81 | POS |
| **Q8** | Our company has acted upon the feedback provided in previous Your Voice Counts surveys. | ↑ | 56-70 | POS |

It found that most of variables have the positive relationship with Work Satisfaction score, except Question 12 which contain concave. Also, most of them have the improvement space for getting the higher satisfy score. Q30 is certainly important in Work Satisfaction score, which means that the employee is cared about whether the company does the good job in supporting the communities and it would affect their work satisfaction. Moreover, Q11 is also important, which means that having the career opportunities in the company can affect the employee’s work satisfaction.

**Future Success score**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **Recommend Action** | **Sharp Changing Range** | **Overall Sign** |
| **Q29** | Our company is providing the technology resources I need to be productive. | ↑ | 60-74 and 81-85 | POS |
| **Q9** | I am asked for my opinion on ways we can improve. | ↑ | 73-85 | POS |
| **Q25** | People at our company live the company values. | ↑ | 75-83 | POS |
| **Q16** | I trust the leadership team\* at our company. | -- | NA | POS |
| **Q8** | Our company has acted upon the feedback provided in previous Your Voice Counts surveys. | ↑ | 70-85 | POS |
| **Q10** | My training/development gives me confidence to do my job well. | ↑ | 70-73 | POS |
| **Q30** | Our company does a good job supporting the communities in which it does business. | ↑ | 54-68 and 70-82 | POS |
| **Q24** | I have the resources I need to do my job well. | ↑ | 70-83 | POS |
| **Q11** | I see opportunities to develop my career at our company. | ↑ | 68-75 | POS |
| **Q26** | At work, I feel cared about as a person. | ↑ | 74-76 | POS |
| **Q12** | I always recommend our stores as great places to shop. | ↑ | 88-90 | POS |
| **Q23** | The work that I do at our company is meaningful to me. | ↑ | 70-75 and 80-84 | POS |
| **Q20** | I am proud of our company's products and/or services. | ↑ | 70-80 | POS |
| **Q22** | I feel empowered to make decisions regarding my work. | ↑ | 78-92 | POS |
| **Q19** | Our company delivers a great customer experience. | ↑ | 78-80 | POS |
| **Q28** | I feel free to speak my mind without fear of negative consequences. | ↑ | 85-90 | POS |
| **Q21** | We consider the needs of our customers (internal and/or external) in everything we do. | -- | 70-78 | NEG |
| **Q18** | I feel satisfied with the recognition or praise I receive for my work. | NA | NA | NA |
| **Q27** | Regardless of background, everyone at our company has an equal opportunity to succeed. | ↑ | 88-90 | POS |
| **Q15** | Across our company, we all trust each other. | × | NA | NA |
| **Q7** | I would recommend my manager to others. | × | NA | NA |
| **Q17** | My manager provides me with feedback that helps me improve my performance. | × | NA | NA |

It found that most of variables have the positive relationship with Future Success score, except Question 7,15,17 and 18 which show the approximately straight line. Need to note that Q21 is only one has the negative relationship with Future Success score. Similar with Engagement score, Q29 is the most important variables, which means that providing technology resources is extremely important in increasing Future Success score. Also, it contains a large improvement space. Also, Q9 is certainly important too, which shows that being asked opinion could increase the company future success.

**Belonging score**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **Recommend Action** | **Sharp Changing Range** | **Overall Sign** | |
| **Q23** | The work that I do at our company is meaningful to me. | ↑ | 68-88 | POS |
| **Q09** | I am asked for my opinion on ways we can improve. | ↑ | 63-73 and 82-86 | POS |
| **Q25** | People at our company live the company values. | ↑ | 66-76 | POS |
| **Q15** | Across our company, we all trust each other. | ↑ | 69-76 | POS |
| **Q24** | I have the resources I need to do my job well. | ↑ | 63-76 and 84-87 | POS |
| **Q29** | Our company is providing the technology resources I need to be productive. | ↑ | 68-83 | POS |
| **Q11** | I see opportunities to develop my career at our company. | ↑ | 68-75 | POS |
| **Q30** | Our company does a good job supporting the communities in which it does business. | ↑ | 55-85 | POS |
| **Q16** | I trust the leadership team\* at our company. | ↑ | 70-86 | POS |
| **Q19** | Our company delivers a great customer experience. | -- | 62-68 | POS |
| **Q08** | Our company has acted upon the feedback provided in previous Your Voice Counts surveys. | ↑ | 68-74 | POS |
| **Q21** | We consider the needs of our customers (internal and/or external) in everything we do. | ↑ | 67-69 | POS |
| **Q20** | I am proud of our company's products and/or services. | ↑ | 60-68 and 81-83 | POS |
| **Q10** | My training/development gives me confidence to do my job well. | ↑ | 58-68 and 82-88 | POS |
| **Q22** | I feel empowered to make decisions regarding my work. | ↑ | 68-72 and 82-88 | POS |
| **Q07** | I would recommend my manager to others. | ↑ | 55-73 | POS |
| **Q26** | At work, I feel cared about as a person. | -- | 63-66 | POS |
| **Q18** | I feel satisfied with the recognition or praise I receive for my work. | ↑ | 67-76 | POS |
| **Q17** | My manager provides me with feedback that helps me improve my performance. | NA | NA | NA |
| **Q12** | I always recommend our stores as great places to shop. | ↑ | 65-75 | POS |
| **Q28** | I feel free to speak my mind without fear of negative consequences. | ↑ | 81-85 | POS |
| **Q27** | Regardless of background, everyone at our company has an equal opportunity to succeed. | NA | NA | POS |

It found that most of variables have the positive relationship with Belonging score, except Question 17 which shows the approximately straight line. Interesting, Q23 is the most important variable in Belonging score, which means the meaningful work can increase the employee’s belonging. Moreover, Q9 is certainly important too, which shows that being asked opinion could increase employee’s belonging. Both of them still have space for improvement.

**Retention score**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Q. No.** | **Question** | **Recommend Action** | **Sharp Changing Range** | **Overall Sign** |
| **Q29** | Our company is providing the technology resources I need to be productive. | ↑ | 69-85 | POS |
| **Q09** | I am asked for my opinion on ways we can improve. | ↑ | 73-87 | POS |
| **Q08** | Our company has acted upon the feedback provided in previous Your Voice Counts surveys. | ↑ | 65-70 | POS |
| **Q22** | I feel empowered to make decisions regarding my work. | ↑ | 70-88 | POS |
| **Q20** | I am proud of our company's products and/or services. | -- | 65-70 | POS |
| **Q24** | I have the resources I need to do my job well. | ↑ | 71-83 | POS |
| **Q18** | I feel satisfied with the recognition or praise I receive for my work. | ↑ | 70-75 | POS |
| **Q16** | I trust the leadership team\* at our company. | ↑ | 75-76 | POS |
| **Q21** | We consider the needs of our customers (internal and/or external) in everything we do. | ↑ | 84-90 | POS |
| **Q26** | At work, I feel cared about as a person. | -- | 81-84 | POS |
| **Q28** | I feel free to speak my mind without fear of negative consequences. | ↑ | 76-83 | POS |
| **Q23** | The work that I do at our company is meaningful to me. | ↑ | 75-87 | POS |
| **Q25** | People at our company live the company values. | ↑ | 85-88 | POS |
| **Q30** | Our company does a good job supporting the communities in which it does business. | ↑ | 67-71 | POS |
| **Q15** | Across our company, we all trust each other. | ↑ | 60-70 | POS |
| **Q12** | I always recommend our stores as great places to shop. | NA | NA | NA |
| **Q11** | I see opportunities to develop my career at our company. | ↑ | 75-88 | POS |
| **Q10** | My training/development gives me confidence to do my job well. | ↑ | 60-85 | POS |
| **Q19** | Our company delivers a great customer experience. | × | NA | NA |
| **Q27** | Regardless of background, everyone at our company has an equal opportunity to succeed. | × | NA | NA |
| **Q07** | I would recommend my manager to others. | × | NA | NA |
| **Q17** | My manager provides me with feedback that helps me improve my performance. | × | 60-65 | POS |

It contains the most NA in all DVs. It might be because they are not correlated to the Retention score. Except those NA, all variables have the positive relationship with Retention score. Similarly with the result of Future Success score, Q29 and Q9 are Top-2 important variables. It means that providing technology resources and being asked opinion could increase the retention score.

**Importance Comparison Table**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | Short Form | 2Q | Work Satisfy | Future Success | Belonging | Retention | Top10 count | Total Sum | Group | In Gallup |
| Q29 | Given Technology Resources | 1 | 3 | 1 | 6 | 1 | 5 | 12 | High | Yes |
| Q9 | Asked Opinion | 8 | 10 | 2 | 2 | 2 | 5 | 24 | High | No |
| Q24 | Given Enough Resources | 3 | 6 | 8 | 4 | 6 | 5 | 27 | High | Yes |
| Q30 | Supporting Communities | 2 | 1 | 7 | 8 | 14 | 4 | 32 | High | No |
| Q23 | Meaningful Work | 3 | 7 | 11 | 1 | 11 | 3 | 33 | High | No |
| Q16 | Trust Leadership | 8 | 14 | 4 | 8 | 8 | 4 | 42 | Medium-up | No |
| Q11 | Career Opportunities | 10 | 1 | 9 | 6 | 17 | 4 | 43 | Medium-up | No |
| Q20 | Proud of Company | 10 | 4 | 13 | 13 | 4 | 3 | 44 | Medium-up | No |
| Q25 | Live Company Values | 19 | 16 | 3 | 2 | 13 | 2 | 53 | Medium-up | No |
| Q22 | Empowered to Make Decisions | 12 | 9 | 14 | 15 | 4 | 2 | 54 | Medium-up | No |
| Q8 | Action after Feedback | 15 | 22 | 5 | 12 | 3 | 2 | 57 | Medium-up | No |
| Q21 | Consider Customer's Needs | 19 | 5 | 17 | 11 | 9 | 2 | 61 | Medium-low | No |
| Q26 | Being Cared | 6 | 20 | 10 | 17 | 9 | 3 | 62 | Medium-low | No |
| Q18 | Satisfied with Recognition | 5 | 17 | 18 | 18 | 6 | 2 | 64 | Medium-low | No |
| Q28 | Free to Speak my Mind | 12 | 11 | 15 | 21 | 11 | 0 | 70 | Low | No |
| Q10 | Training for Confidence | 16 | 18 | 5 | 14 | 17 | 1 | 70 | Low | Yes |
| Q12 | Recommend our Stores | 14 | 12 | 11 | 19 | 16 | 0 | 72 | Low | No |
| Q15 | Trust each other | 21 | 12 | 20 | 4 | 15 | 1 | 72 | Low | No |
| Q19 | Great Customers Performance | 16 | 14 | 15 | 10 | 19 | 1 | 74 | Low | No |
| Q27 | Equal Opportunity for Success | 7 | 19 | 19 | 22 | 19 | 1 | 86 | Low | No |
| Q17 | Provide Feedback for Improvement | 16 | 8 | 22 | 19 | 21 | 1 | 86 | Low | No |
| Q7 | Recommend my Manager | 22 | 21 | 21 | 16 | 21 | 0 | 101 | Low | No |

*Notes:*

*- In each outcome, it calculated the Sum of Imp MSE and Imp Gini*

*- Top 10 count: How many times that variable is in Top 10 in the models*

*- High: Total\_Sum<35; Medium-up: 35<=Total\_Sum<60; Medium-low: 60<=Total\_Sum<65 and Top\_10\_count>=2*

*- In Gallup: Yes if Top 3 count >= 2 of the relevant variables in Gallup model*

**Short summary**

By comparing the variables’ importance in each DVs, it found that Q29, Q9, Q24, Q30 and Q23 are the Top 5 importance variables. Also, Q29 and Q24 are the important variables in Gallup model too. Noted that Q17 and Q7 cannot show its important in each DVs, which might means that the good manager behaviour/score would not have any important affect under Glint logics.

However, although the models in all DVs have around 80% Variance explained, they are overfitting, which means that some interactions effect might be ignored. The test accuracy is around 80% too.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | Predicted score ~ 68 | | Predicted score ~ 69 | | Predicted score ~ 70 | |
| Variable | Question Text | Score | Increase | Score | Increase | Score | Increase |
| Q9 | We consider the needs of our customers (internal and/or external) in everything we do. | 75.0479 | 8 | 75.0479 | 8 | 75.0479 | 8 |
| Q16 | My manager provides me with feedback that helps me improve my performance. | 78.1246 | 9 | 78.1246 | 9 | 78.1246 | 9 |
| Q23 | In my team, team members are held accountable for their work. | 69.0671 | 2 | 72.0671 | 5 | *NA* | *NA* |
| Q30 | I am asked for my opinion on ways we can improve. | *NA* | *NA* | 81.0383 | 14 | 83.0383 | 16 |
| Q24 | I feel free to speak my mind without fear of negative consequences. | *NA* | *NA* | *NA* | *NA* | 72.6997 | 6 |
| Q29 | I feel satisfied with the recognition or praise I receive for my work. | *NA* | *NA* | *NA* | *NA* | 82.5431 | 18 |

For knowing which variables change can increase much in predicted Engagement Score in Wellcome and how much need to be increased each variable, we have done some prediction score checking.

*Notes:*

*- Assumption: It assumes that other variables unchanged.*

*- The baseline is 67.*

*- Increase How much the new score exceeds the variable's mean*

*- Score: New score needed*

*- Predicted score ~: Overall target score predicted by the model*

Except the Top 5 variables in importance table, Q16 has also been added in predicting. It found that only 3 variables needed to be changed for increasing 1 score in Engagement score and <10 marks needed to be added in each variable. For increasing 2 score, 4 variables would be needed and Q30 need to be increased most, which is +14 score from its mean. For increasing to 70(+3 scores), 5 variables would be needed while Q29 and Q30 need to be increased >10 scores from their means.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | Short Form | 2Q | Work Satisfy | Future Success | Belonging | Retention | Top10 count | Total Sum | Group | In Gallup1 | In Gallup2 |
| avg\_score\_Q29 | Given Technology Resources | 1 | 1 | 1 | 1 | 11 | 4 | 15 | High | Yes | Yes |
| avg\_score\_Q11 | Career Opportunities | 5 | 4 | 4 | 2 | 3 | 5 | 18 | High | No | No |
| avg\_score\_Q30 | Supporting Communities | 3 | 2 | 2 | 8 | 7 | 5 | 22 | High | No | No |
| avg\_score\_Q23 | Meaningful Work | 2 | 10 | 6 | 4 | 8 | 5 | 30 | High | No | No |
| avg\_score\_Q8 | Action after Feedback | 8 | 7 | 9 | 6 | 1 | 5 | 31 | High | No | No |
| avg\_score\_Q19 | Great Customers Performance | 4 | 18 | 5 | 6 | 11 | 3 | 44 | Medium-up | No | No |
| avg\_score\_Q24 | Given Enough Resources | 13 | 6 | 7 | 11 | 9 | 3 | 46 | Medium-up | No | No |
| avg\_score\_Q20 | Proud of Company | 6 | 18 | 3 | 3 | 20 | 3 | 50 | Medium-up | No | No |
| avg\_score\_Q22 | Empowered to Make Decisions | 8 | 9 | 14 | 16 | 4 | 3 | 51 | Medium-up | No | Yes |
| avg\_score\_Q25 | Live Company Values | 15 | 3 | 11 | 17 | 9 | 2 | 55 | Medium-up | No | No |
| avg\_score\_Q27 | Equal Opportunity for Success | 10 | 5 | 18 | 13 | 13 | 2 | 59 | Medium-up | No | No |
| avg\_score\_Q26 | Being Cared | 7 | 8 | 20 | 13 | 13 | 2 | 61 | Medium-low | No | No |
| avg\_score\_Q10 | Training for Confidence | 10 | 12 | 14 | 10 | 17 | 2 | 63 | Medium-low | Yes | Yes |
| avg\_score\_Q15 | Trust each other | 19 | 14 | 18 | 8 | 6 | 2 | 65 | Medium-low | No | No |
| avg\_score\_Q21 | Consider Customer's Needs | 17 | 10 | 10 | 13 | 22 | 2 | 72 | Low | No | No |
| avg\_score\_Q7 | Recommend my Manager | 18 | 12 | 14 | 11 | 18 | 0 | 73 | Low | No | No |
| avg\_score\_Q16 | Trust Leadership | 21 | 21 | 8 | 5 | 18 | 2 | 73 | Low | No | No |
| avg\_score\_Q28 | Free to Speak my Mind | 12 | 16 | 13 | 21 | 13 | 0 | 75 | Low | No | No |
| avg\_score\_Q9 | Asked Opinion | 13 | 16 | 21 | 20 | 5 | 1 | 75 | Low | No | No |
| avg\_score\_Q18 | Satisfied with Recognition | 19 | 14 | 22 | 19 | 2 | 1 | 76 | Low | Yes | Yes |
| avg\_score\_Q12 | Recommend our Stores | 16 | 21 | 17 | 21 | 13 | 0 | 88 | Low | No | No |
| avg\_score\_Q17 | Provide Feedback for Improvement | 22 | 18 | 11 | 18 | 21 | 0 | 90 | Low | No | Yes |

**Overall Importance comparison Table**

*Notes:*

*- In each outcomes, it calculated the Sum of Imp-MSE and IMP-Gini*

*- Top 10 count: How many times that variables is in Top 10 in the model*

*- High: Total\_Sum<35; Medium-up: 35<=Total\_Sum<60; Medium-low: 60<=Total\_Sum<=65 and Top\_10\_count>=2*

*- In Gallup1: Yes if Top 2 count >= 2 of the relevant variables in Gallup model*

*- In Gallup2: Yes if Top 3 count >= 2 of the relevant variables in Gallup model*

**Short summary**

By comparing the variables’ importance in each DVs, it found that Q29, Q11, Q30, Q23 and Q8 are the Top 5 importance variables. It is a little bit difference from the Wellcome’s result. Noted that the same important variables are Q23, Q29 and Q30, which proves that these 3 variables are extremely important even when the dataset be larger. Also, Q29 still is the important variables in Gallup model too, no matter under Top 2 count >=2 or >=3. Furthermore, although Q10 is not super important in each model under the Glint’s logic, it is the important variables in Gallup model, no matter under Top 2 count >=2 or >=3. Moreover, similarly with the Wellcome’s result, Q17 cannot show its important in each DVs, which might means that the good manager behaviour/score would not have any important affect under Glint logics. But, under the Gallup model, it is one of important variables.

However, although the models in all DVs have around 80% Variance explained, they are overfitting, which means that some interactions effect might be ignored. The test accuracy is around 80% too.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | 75 | | 76 | | 77 | | 78 | | 79 | | 80 | |
| NO. | Question Text | Score | + | Score | + | Score | + | Score | + | Score | + | Score | + |
| Q11 | I see opportunities to develop my career at our company. | 78.49 | 4 | NA | NA | 81.49 | 7 | 81.49 | 7 | 81.49 | 7 | 83 | 9 |
| Q29 | Our company is providing the technology resources I need to be productive. | *NA* | *NA* | 80.78 | 7 | 79.78 | 6 | 83.78 | 10 | 84.78 | 11 | 87.78 | 14 |
| Q18 | I feel satisfied with the recognition or praise I receive for my work. | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | 82.25 | 7 | 90.00 | 15 | *NA* | *NA* |
| Q19 | Our company delivers a great customer experience. | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | 84.52 | 6 | 84.52 | 6 |
| Q30 | Our company does a good job supporting the communities in which it does business. | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | *NA* | 86.71 | 11 |

*Notes:*

*- Assumption: It assumes that other variables unchanged.*

*- The baseline is 74.*

*- Increase How much the new score exceeds the variable's mean*

*- Score: New score needed*

*- Predicted score: Overall target score predicted by the model, range in 75-80*

Curiously, Q18 has been selected for increasing even it is the lower priority in importance comparison table under Glint. It might show that the Gallup model logic is somehow true. Thus, the importance of Q18 should be re-considered. It found that only 2 variable needed to be changed for increasing 1,2 and 3 score in Engagement score and <10 marks needed to be added in each variable. For increasing 5 score, 4 variables would be needed and Q18 need to be increased most, which is +15 score from its mean. For increasing to 80(+6 scores), also 4variables would be needed while Q29 and Q30 need to be increased >10 scores from their means. Also, in this case, Q18 are not used.

**Model 2 – Employee To Business Outcomes**

**POS Sign Table**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Productivity Sum** | | **Turnover rate** | | **%Shrinkage of Sales** | | **MSP** | |
| **Term2** | **Coef.2** | **Term3** | **Coef.3** | **Term4** | **Coef.4** | **Term5** | **Coef.5** |
| **Q21** | 4086.429\*\* | Q1 | 170.022\*\* | Q1 | 16.371\*\*\* | Q2  Office - High Income (Upscale) | 1955.277\*\*\* |
| **Residential - Western & Top Income (Upscale)** | Office - High Income (Upscale) | Office - High Income (Upscale) |
| Q2 | 2850.523\* | Q3 | 86.129\*\*\* | Q3  Upscales | 9.139\*\*\* | Q4  Upscales | 881.332\*\*\* |
| Office - Local (Wellcome) | Office - Local (Wellcome) |
| **Q8** | 2581.742\* | **Q1** | 50.038\* | Q4  Urban Hub - High Income (Upscale) | 7.692\*\* | Q2  Residential - Western & Top Income (Upscale) | 651.537\*\*\* |
| **Residential - Western & Top Income (Upscale)** | **Residential - Western & Top Income (Upscale)** |
| **Q20** | 2509.013\*\* | Q19 | 34.69\* | Q4  Residential - Western & Top Income (Upscale) | 6.404\* | Q2  Urban Hub - High Income (Upscale) | 625.213\*\*\* |
| **Upscales** | Residential - Western & Top Income (Upscale) |
| **Q9** | 1722.241\* | Q12  Upscales | 24.447\* | Q19  Residential - Western & Top Income (Upscale) | 3.549\*\*\* | Q3  Urban Hub - High Income (Upscale) | 263.525\*\*\* |
| **Residential - Western & Top Income (Upscale)** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Productivity Sum** | | **Turnover rate** | | **%Shrinkage of Sales** | | **MSP** | |
| **Term2** | **Coef.2** | **Term3** | **Coef.3** | **Term4** | **Coef.4** | **Term5** | **Coef.5** |
| **Q18** | 1521.692\* | Q9 | 21.955\*\* | Q16 | 3.095\*\*\* | Q3 | 240.236\*\*\* |
| **Residential - Western & Top Income (Upscale)** | Upscales | Residential - Western & Top Income (Upscale) | Residential - Western & Top Income (Upscale) |
| Q6 | 1396.052\*\*\* | Q23 | 14.76\*\*\* | Q9 | 2.868\*\*\* | **Q21** | 171.564\*\*\* |
| Upscales | Urban Hub - Local (Wellcome) | Upscales | **Residential - Western & Top Income (Upscale)** |
| Q10 | 859.071\*\* | Q18 | 13.462\* | Q12 | 2.652\*\*\* | **Q8** | 138.338\*\*\* |
| Upscales | Upscales | Upscales | **Residential - Western & Top Income (Upscale)** |
| Q21 | 629.083\*\*\* | Q29 | 12.919\*\*\* | Q8 | 2.172\*\*\* | Q19 | 129.117\*\*\* |
| Residential - High Income (Wellcome) | Urban Hub - Local (Wellcome) | Upscales | Upscales |
| Q25 | 602.877\*\*\* | Q21 | 12.484\* | Q20 | 2.067\*\* | **Q18** | 100.754\*\*\* |
| Urban Hub - Local (Wellcome) | Upscales | Residential - Western & Top Income (Upscale) | **Residential - Western & Top Income (Upscale)** |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Productivity Sum** | | **Turnover rate** | | **%Shrinkage of Sales** | | **MSP** | |
| **Term2** | **Coef.2** | **Term3** | **Coef.3** | **Term4** | **Coef.4** | **Term5** | **Coef.5** |
| Q21  Urban Hub - Local (Wellcome) | 517.317\*\*\* | Q9  Urban Hub - Local (Wellcome) | 11.885\*\*\* | Q7  Residential - Western & Top Income (Upscale) | 2.035\*\*\* | **Q20**  **Upscales** | 87.766\*\*\* |
| Q15  Urban Hub - Local (Wellcome) | 426.359\*\*\* | Q20  Urban Hub - Local (Wellcome) | 7.408\*\*\* | **Q1**  **Residential - Western & Top Income (Upscale)** | 1.628\* | Q12  Residential - Western & Top Income (Upscale) | 85.344\*\*\* |
| Q20  Residential - High Income (Wellcome) | 327.027\*\*\* | Q5  Urban Hub - Local (Wellcome) | 6.652\*\*\* | Q21  Upscales | 1.502\*\*\* | **Q9**  **Residential - Western & Top Income (Upscale)** | 79.13\*\*\* |
| Q19  Residential - High Income (Wellcome) | 308.637\*\*\* | Q4  Urban Hub - Local (Wellcome) | 5.565\*\*\* | Q11  Upscales | 1.386\*\*\* | Q16  Upscales | 63.257\*\*\* |
| Q3  Urban Hub - Local (Wellcome) | 285.35\*\*\* | Q28  Urban Hub - Local (Wellcome) | 4.99\*\*\* | Q2  Office - Local (Wellcome) | 1.378\*\* | Q7  Upscales | 35.403\*\*\* |
|

**NEG Sign Table**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Productivity Sum** | | **Turnover rate** | | **%Shrinkage of Sales** | | **MSP** | |
| **Term2** | **Coef.2** | **Term3** | **Coef.3** | **Term4** | **Coef.4** | **Term5** | **Coef.5** |
| Q20  Residential - Western & Top Income (Upscale) | -6486.821\*\*\* | Q4  Office - Local (Wellcome) | -58.23\*\*\* | Q2  Office - High Income (Upscale) | -19.785\*\*\* | Q3  Office - High Income (Upscale) | -1636.561\*\*\* |
| **Q10**  **Residential - Western & Top Income (Upscale)** | -2445.794\*\* | Q19  Upscales | -37.823\* | Q3  Urban Hub - High Income (Upscale) | -9.188\*\*\* | Q4  Urban Hub - High Income (Upscale) | -909.83\*\*\* |
| Q21  Upscales | -1927.112\*\*\* | Q1  Office - Local (Wellcome) | -26.651\*\*\* | Q3  Residential - Western & Top Income (Upscale) | -8.679\*\*\* | Q4  Residential - Western & Top Income (Upscale) | -801.277\*\*\* |
| Q9  Upscales | -1790.042\* | Q9  Residential - Western & Top Income (Upscale) | -24.42\*\* | Q4  Upscales | -5.93\* | Q2  Upscales | -572.881\*\*\* |
| **Q17**  **Residential - Western & Top Income (Upscale)** | -1334.855\* | Q20  Upscales | -23.371\*\* | Q19  Upscales | -3.733\*\*\* | Q3  Upscales | -293.313\*\*\* |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Productivity Sum** | | **Turnover rate** | | **%Shrinkage of Sales** | | **MSP** | |
| **Term2** | **Coef.2** | **Term3** | **Coef.3** | **Term4** | **Coef.4** | **Term5** | **Coef.5** |
| Q15 | -1052.449\* | **Q10**  **Residential - Western & Top Income (Upscale)** | -21.584\*\* | Q16  Upscales | -3.259\*\*\* | Q20  Residential - Western & Top Income (Upscale) | -292.332\*\*\* |
| Upscales |
| Q11  Upscales | -1035.038\*\* | Q10  Urban Hub - Local (Wellcome) | -15.185\*\*\* | Q9  Residential - Western & Top Income (Upscale) | -3.118\*\*\* | Q1  Office - High Income (Upscale) | -266.529\*\* |
| Q22  Upscales | -595.164\*\*\* | Q17  Upscales | -13.506\*\* | Q12  Residential - Western & Top Income (Upscale) | -2.701\*\*\* | Q16  Residential - Western & Top Income (Upscale) | -133.139\*\*\* |
| Q12  Urban Hub - Local (Wellcome) | -567.36\*\*\* | Q6  Upscales | -10.642\*\*\* | Q7  Upscales | -2.02\*\*\* | Q12  Upscales | -97.717\*\*\* |
|
| Q24  Urban Hub - Local (Wellcome) | -503.436\*\*\* | Q19  Urban Hub - Local (Wellcome) | -8.304\*\*\* | Q20  Upscales | -1.972\*\*\* | **Q10**  **Residential - Western & Top Income (Upscale)** | -96.12\*\*\* |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Productivity Sum** | | **Turnover rate** | | **%Shrinkage of Sales** | | **MSP** | |
| **Term2** | **Coef.2** | **Term3** | **Coef.3** | **Term4** | **Coef.4** | **Term5** | **Coef.5** |
| Q20  Urban Hub - Local (Wellcome) | -479.761\*\*\* | Q26  Urban Hub - Local (Wellcome) | -7.544\*\*\* | Q8  Residential - Western & Top Income (Upscale) | -1.936\*\*\* | Q8  Upscales | -88.428\*\*\* |
| Q30  Residential - High Income (Wellcome) | -458.805\*\*\* | Q1  Urban Hub - Local (Wellcome) | -7.182\*\*\* | Q3  Office - Local (Wellcome) | -1.924\*\*\* | **Q17**  **Residential - Western & Top Income (Upscale)** | -79.672\*\*\* |
| Q4  Residential - High Income (Wellcome) | -450.081\*\*\* | Q6  Urban Hub - Local (Wellcome) | -7.176\*\*\* | Q21  Residential - Western & Top Income (Upscale) | -1.817\*\*\* | Q11  Residential – Western & Top Income (Upscale) | -78.518\*\*\* |
| Q10  Residential - High Income (Wellcome) | -282.984\*\*\* | Q25  Urban Hub - Local (Wellcome) | -6.547\*\*\* | Q1  Upscales | -1.534\* | Q19  Residential - Western & Top Income (Upscale) | -77.003\*\*\* |
| Q27  Urban Hub - Local (Wellcome) | -281.34\* | Q15  Urban Hub - Local (Wellcome) | -4.786\*\*\* | Q15  Residential - Western & Top Income (Upscale) | -1.34\*\*\* | Q18  Upscales | -70.221\*\*\* |

*Notes:*

*- The used data has been duplicated*

*- The R-squared of each model is around 40%, except the MSP, which is >60%.*

*- Scale and Cluster is used as the moderators*

*- The reveal scale:* ***Mass****; The reveal cluster:* ***Residential - Local (Wellcome)***

*- Coef.: The estimated total effect, including its main effect and interaction effect with the moderators*

*- Terms with Top 15 coef. are selected in this table.*

*- Same terms have been highlighted/coloured.*

*- The comparison in Turnover rate and % shrinkage of sales is opposite with other 3 outcomes because less of better refers better performance.*

**Short Summary**

For focusing the questions no. of positive sign tale and negative sign table, it found some questions appear in both table, which means that the moderators cause the estimated effect difference.

For Q1, with the cluster “Office - High Income (Upscale)”, it has the high rank in Negative MSP while the Top 1 rank in Positive Turnover rate and % shrinkage of Sales, which is similar with the assumption that lower Engagement score would increase the employee’s turnover rate and lower the customer’s satisfaction. Also, Q1 with the cluster “Residential - Western & Top Income (Upscale)” have the Positive Turnover rate and % shrinkage of Sales, which might the main reason of affecting the estimated effect of Engagement score in Productivity.

For Q2, including the effect in baseline, with the cluster “Office - Local (Wellcome)”, “Residential - Western & Top Income (Upscale)” and the cluster “Urban Hub - High Income (Upscale)”, it has the highest Negative rank in % shrinkage of Sales in “Office - Local (Wellcome)” and the higher Negative effect in the baseline reveal[“Mass” and “Residential - Local(Wellcome)”] and also contains the higher rank in MSP in other cluster. It could be the crucial reason that not only Q2 with the cluster “Office – Local(Wellcome) is the second highest rank in positive Productivity but also have the high increasing estimated effect in the baseline reveal cluster and scale. It is closer to the hypothesis that high Work Satisfaction score lead to the high customer engagement score and the low turnover rate and % shrinkage of sales while finally increasing the productivity.

For Q3, the cluster “Urban Hub - High Income (Upscale)” and the scale “Upscales” shows the opposite results but illustrates the same finding. For “Urban Hub - High Income (Upscale)”, it has the high rank in Positive MSP and the high rank in Negative % shrinkage of sales, while it has the higher rank in Positive Turnover rate and the high rank in Negative in MSP in “Upscale”. Similarly with Q1, it shows lower Engagement score would increase the employee’s turnover rate and lower the customer’s satisfaction. Also, since the majority of clusters and scale contain the higher rank in Positive turnover rate and % shrinkage of Sales, it might the main reason of having the higher Negative estimated in Productivity.

Moreover, for Q4, similar with Q1, it has the higher rank in Negative MSP and high rank in Positive turnover rate and % shrinkage of Sales, which means that the low Future success score also possibly increase the employee’s turnover rate and lower the customer’s satisfaction. Need to note that it has the statistically significantly negative large estimated effect in Turnover rate and it might the reason why it also shows positive effect in Productivity by the baseline because of being the majority in the group.

For Q6, although the cluster “Upscale” has the higher rank in Negative turnover rate which leads the high rank in Positive Productivity, the majority, the baseline reveal, has the large Negative estimates in MSP and the Positive estimates in Turnover rate, which finally leads the high decreasing Productivity trend when the Store’s scale is Mass and the cluster is Residential – Local(Wellcome). Normally, the high Retention score can reduce employee’s turnover rate and might increase the customer’s satisfaction and finally increase the productivity, which is simply shows in the scale “Upscales”, but it still doesn’t have enough evidence to prove this precondition in this question.

For those remaining Top 5 in Positive Productivity, Q8,9 and 20, are all shows that it would be the higher rank in Positive Productivity when its clusters contain the high rank in Negative turnover rate and % shrinkage of Sales as well as the high rank in Positive MSP.

***A graph of sales and sales

AI-generated content may be incorrect.*Model – Business Outcomes To Business Performance**

***Noted:***

1. *The % Var explained is 50.2 and the Mean of squared residuals is 5079292.*
2. *Scale and Cluster is used as the moderators*
3. *The reveal scale: Mass; The reveal cluster: Residential - Local (Wellcome)*
4. *The blue line is the mean of each variables*
5. *Each variables are assumed as independent variable.*

Like the assumption, lower turnover rate, % shrinkage of sales and workload would decrease the productivity and the higher MSP can help with increasing the productivity. Also, for % shrinkage of sales, it shows that now is passing the increasing way and be the turning point of having a great decline.

A graph of a graph

AI-generated content may be incorrect.***Noted:***

1. *The % Var explained is 20.47 and the Mean of squared residuals is 395625.6.*
2. *Scale and Cluster is used as the moderators*
3. *The reveal scale: Mass; The reveal cluster: Residential - Local (Wellcome)*
4. *The blue line is the mean of each variables*
5. *Each variables are assumed as independent variable.*

Curiously, the turnover rate has shown the increasing trend after the now’s mean. It might because the right amount of turnover rate refers to the suitable competition, which could increase the company’s competitiveness and finally increase the SOP. Also, it has shown the decreasing trend in MSP. It might because the staff in store are familiar with those secret customers and “act” for getting the high MSP score.

**Key Finding Summary**

1. Providing the enough technology resources(Q29) is the supported importance variables in Wellcome and Overall under both Gallup and Glint model.
2. The manager score(Q7) cannot show its importance by comparing each Glint’s outcome. Also, it causes the negative effect in SOP/Trading area and Productivity.
3. Employee Engagement(Q1, 3) can slightly and partially decrease the turnover rate and % shrinkage in some clusters/scales, except the Office and part of Upscales’ store.
4. Work Satisfaction(Q2) has shown the positive effect in Productivity sum and MSP.
5. Future Success(Q4) can partially decrease the turnover rate, especially in the cluster “Office - Local (Wellcome)”.