



# WHARTON PEOPLE ANALYTICS CASE COMPETITION MEMO

SFRR ANALYTICS

## Executive Summary:

Organizations are facing several issues leading to a significant loss in productive hours, largely attributed to inefficient office layout and collaboration issues. The ability to collaborate effectively is crucial and a major determinant for deciding work location, while employees working from home often show a slight reluctance towards cultural engagement, highlighting the need for tailored engagement activities that align with their preferences. To address these challenges, it's recommended to deploy a Gen AI Workforce Copilot to empower employees with an assistant, make workplace design modifications to enhance collaboration and focus, and fine-tune events to align with employee interests, with an emphasis on recognizing merit. Implementing these strategies is projected to result in a substantial increase of 418 hours in productive hours per week and improve the Satisfaction Index by approximately 1.6 points.

### 1. Introduction and Problem Statement:

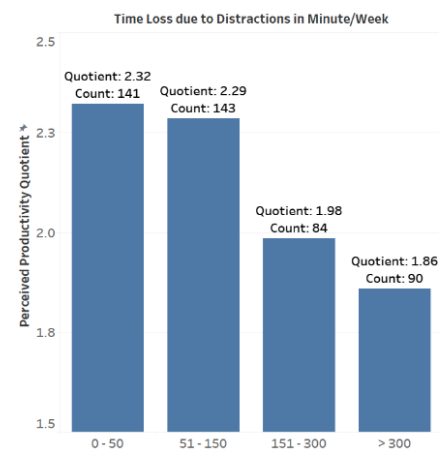
The most valuable asset that a company has are its employees and firms are doing everything they can to make sure that their employees' experience is the greatest. Keeping that in mind, we analyse a survey data across five different organizations and one hundred and eighty-three questions to get employee feedback about workplace preferences, factors that will help them be more productive, and what factors that they are satisfied with. There is empirical evidence in the data that WFH has increased by 25% since 2019 and office occupancy is almost half of that of pre-Covid times. Therefore, by looking at the productivity and preferences of an employee we aim to suggest policies that will help an organization focus on the growth and wellbeing of the employees.

Our analysis focuses on identifying factors that help determine the preference of a workplace of an employee and how employees with different needs should be managed differently. Overall, we suggest policies that best support the employees while ensuring that their work is done effectively.

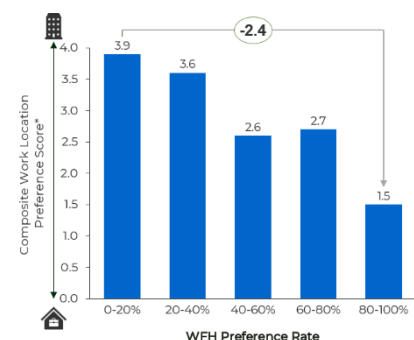
### 2. Understanding the Data:

We feel that in order to suggest policies for helping employees it is imperative to understand the issues that the employees are facing.

Therefore, we start by looking at the 'Perceived Productivity Quotient'\* of these employees with respect to the time lost due to distraction. Productive employees who feel that they are distracted due to poor office layout and unable to find colleagues, poor meeting room technology, environmental discomfort (noise), and visitor disruption during pre-Covid period prefer to stay at home.

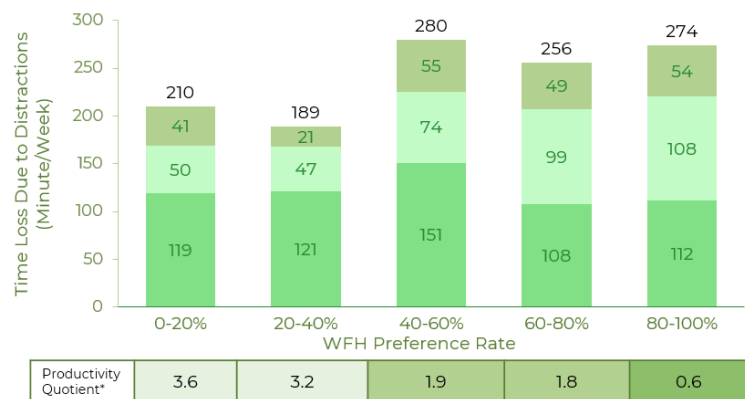


Our target variable (Composite Work Location preference score) showcases a high correlation with the propensity to work from office.

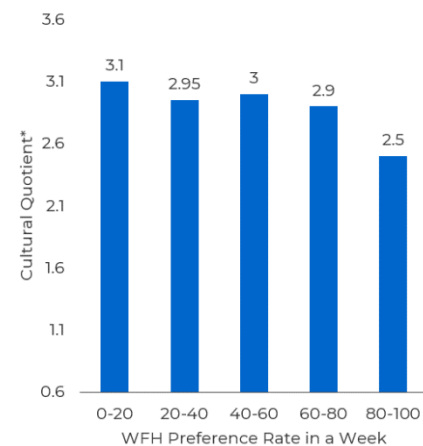


\* - These variables have been defined in Table 1 of the appendix

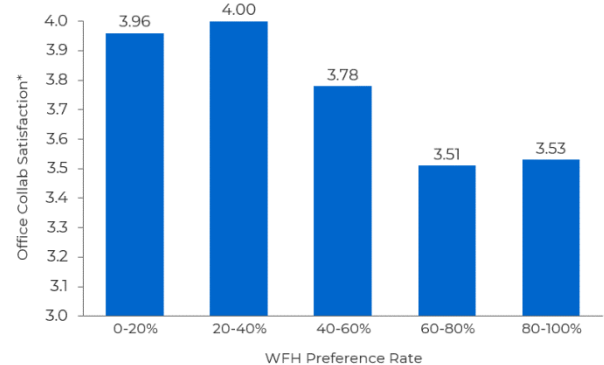
The image below shows us the work from home preference rate on the X-axis and the time loss due to distractions per week on the Y-axis. We notice that the employees who have lost the most time due to distractions is preferring to work from home in the future. On the other hand, more focused employees tend to prefer working from office.



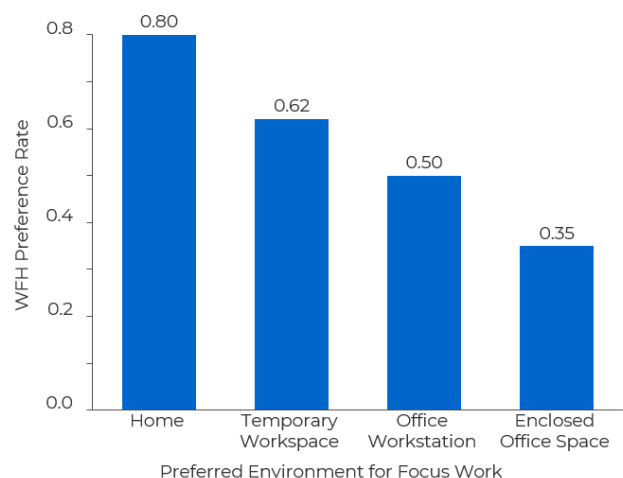
The graphic on the right hand showcases the relation between the Cultural Quotient\* and the rate of work from home. We can notice that employees who are more invested and engaged with community building initiatives prefer to work from office in the future. On the other hand, people averse to these events prefer working from home. This provides an unique opportunity by the leadership to involve everyone in cultural initiatives.



Next, we see that the employees who are satisfied with their collaboration tools in the office prefer to work from the office. On the other hand, we see a preference in the hybrid work scenario where an employee has to collaborate with others. This tells us that employees who have jobs that require collaboration prefer to work from all kinds of workplaces given that their technology, and other factors remain good.



Now, we see that the people who prefer to work from home has a strong inclination for temporary workspace. They want the choice of working from different places and that should help them be more productive.



### 3. Modeling:

The major dilemma for modeling was to come up with a justifiable target variable to understand the factors where employees feel more productive and the explanation behind the usage of those factors. We engineered a target variable that is the average of eleven different 'PostC\_impact\_shift\_' variables (from 'PostC\_impact\_shift\_A\_' to 'PostC\_impact\_shift\_K'). This was done to ensure that we consider the impact and effect of distributed workplace environments for employees across different organizations. Then, we proceeded to omit the variables with null values (greater than 20%) as those are systematically absent in the data and not missing data. After this, we conducted Factor Analysis to create latent variables for a better explainability in our white box model as we will be able to understand how more than groups of variable change with affect our target variable. Finally, we fit a simple decision tree model after standardizing the data to ensure all the variables are on a similar scale and then analysed the contribution of each of the features through a shapley value decomposition model.

Now, let us look at the most important factor loadings with respect to a few important variables that help us describe the latent factors.

<u>Factor Name</u>	<u>Factor Alignment</u>	<u>Shapley Importance Values</u>
Factor 9 – <b>Workspace for Focus &amp; Collab</b>	Preferred workspace and location for in-person collaboration and tasks that require undivided <u>attention</u> <i>Ex.: PREF_space_A_focusedWk, PREF_space_B_inperson_collab</i>	0.36
Factor 3 – <b>Workplace Features Preference</b>	Importance of workplace and work environment features <i>Ex: PREF_features_E_noise, PREF_CollabSpace_C_CollabTools</i>	0.35
Factor 1 - <b>Collaboration Satisfaction</b>	Employee satisfaction levels with respect to collaboration in the workplace <i>Ex: SATSF_facilitate_Office_2B_inpersoncollab, SATSF_facilitate_Office_2C_virtualcollab</i>	0.22
Factor 10 – <b>Productivity Hindrances</b>	Major workplace issues that contributed to loss of productive hours <i>Ex: OBSV_PreC_5A_lost_layout, OBSV_PreC_5F_lost_noise</i>	0.2
Factor 2 – <b>Workplace Satisfaction</b>	Describes the employees' satisfaction with respect to current workplace <u>features</u> <i>Ex: PREF_CollabSpace_A_tech, PREF_features_D_privacy</i>	0.15

### 4. Clustering:

Our exploratory data analysis and rule-based model revealed distinct work preference patterns, leading to a mechanism for segmenting employees into three main categories: 'Office Cohort' for those who prefer the work from home setting up to two days per week, 'Hybrid Force' for employees comfortable with 2-3 days of remote work, and 'Home Anchors' for those who choose to work from home four or more days. In addition to key metrics like productivity and collaboration, we considered other 'Decision' and 'Preference' factors to uncover the root causes of each cluster's trends. We also assessed satisfaction levels pertinent to these factors at the time of the survey. Finally, to tailor our policy recommendations effectively, we analyzed departmental contributions to each group.

Cluster-1 (Office Cohort): Over 80% of employees in this cluster, despite losing approximately an hour to office layout issues per week Pre-Covid, still prefer the office setting. They report higher productivity and collaboration when on-site, likely linked to their collaborative job nature and the

value they place on coworker proximity. Although they are productive, there's an opportunity to boost their office experience, as indicated by a moderate satisfaction score of 3.8 for office design excellence. A significant proportion of this cluster is from Architecture & Construction and Environment & Transport departments.

Cluster-2 (Hybrid Force): A striking 78% of this cluster leaning towards a hybrid work model experienced significant disruptions with visitors, costing them over two hours of productivity each week Pre-Covid. Despite these interruptions, they still find office work slightly more productive. The cluster mainly includes employees in Technology, Architecture & Construction, as well as Sales, HR, Marketing, and Management. Their high regard for privacy and current dissatisfaction with in-person collaboration from their home office could indicate why a hybrid model—balancing focused work and team interaction suits their needs.

Cluster-3 (Home Anchors): This cluster primarily comprises of individuals in Sales, Marketing, HR, and Management, with a significant representation from Technology as well. A majority, around 75.7% of this cluster, reported up to 1.75 productive hours lost per week due to noise at the workplace before COVID-19. This distraction likely influences their current preference for working from home which is supported by their productivity metric. Despite feeling more productive in a quieter home environment, they have mixed feelings about collaboration effectiveness remotely. Moreover, their notably low satisfaction with organizational culture suggests that improvements in the office environment could be crucial to better meet their professional goals and prevent potential attrition.

Variables	Office Cohort (Cluster-1)	Hybrid Force (Cluster-2)	Home Anchors (Cluster-3)
<u>Time Lost Due to Distraction</u>	83.76% these employees lost approx. 53.3mins on average from workspace layout issues Pre-Covid.	78% these employees lost approx. 136.8mins on average from from visitors to workstation Pre-Covid.	75.7% of these employees who lost approx. 104mins on average due to noise Pre-Covid
<u>Perceived Productivity Metric</u> [Better Home (0) - (5) Better Office]	3.6	2.7	1.3
<u>Perceived Collaboration Quotient</u> [Better Home (0) - (5) Better Office]	3.6	3.1	2.6
<u>Decision/Preferences</u> [Unimportant (0) - (5) Important]	Proximity to coworkers = 3.9 (Very important)	Degree of Privacy = 3.7 (Very Important)	Noise Levels = 4 (Very important)
<u>Culture Quotient</u> [Unimportant (0) - (5) Important]	Highest	High	Alarmingly Low
<u>Satisfaction Level</u> [Very Unsatisfied (0) - (5) Very Satisfied]	From Design Excellence = 3.8 Room for improvement	In Person Collaboration from Home = 2.2 In Person Collab from Office = 4.0	Organization Culture Satisfaction Level = 3.5 Unsatisfied
<u>Departments Concentration</u>	33.12% Architecture and Construction 22.08% Environment & Transport Specialists	30.75% Tech Roles 25.48% Architecture and Construction 22.44% Sales Mkt HR and Mgmt	38.70% Sales Mkt Hr and Mgmt 33.2% Tech Roles

## 5. Recommendations:

For addressing the challenges identified in the employee segmentation, we suggest a three-pronged strategy. Our recommendations are categorized to streamline daily operations, enhance productive teamwork, and bolster the cultural framework.

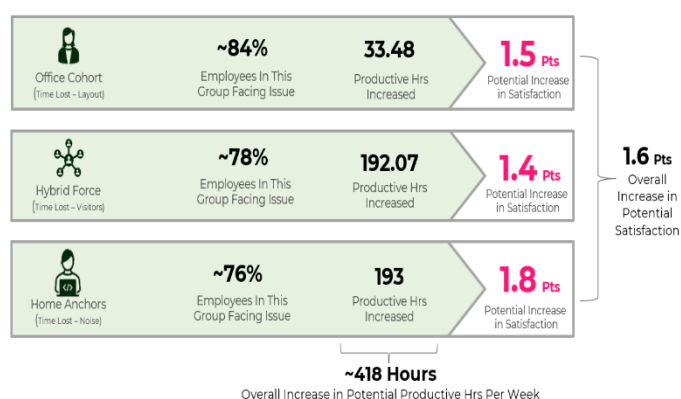
- A) Workforce Copilot: Introducing ROB (Resourceful Office Buddy), our AI-driven assistant designed to streamline workplace challenges. ROB aids in navigating the office, resolving tech issues, and even simplifying daily tasks, like using the coffee machine. This tool also enhances collaboration by automating meeting scheduling and recouping productive time lost to distractions. A detailed working of ROB's UI can be found in the report appendix and a demo video in our presentation's appendix.

\* - These variables have been defined in Table 1 of the appendix

- B) Focus Drivers: To mitigate productivity loss due to noise for hybrid workers, we propose "Focus Drivers": providing noise-canceling headphones for immediate relief, creating cubicles and focus rooms for medium-term solutions, and long-term office redesign for soundproofing. A study in 2020 found that employees perform 17-22% better with cognitive tasks in quieter work-zones/rooms compared to open plans<sup>[3]</sup>. These strategies not only enhance productivity by creating quieter work environments but also nudge 'Home Anchors' to return to the office by offering them distraction-free, collaborative spaces.
- C) Culture Code Enhancement: For strengthening organizational culture, our "Culture Code Enhancement" strategy focuses on low effort but impactful initiatives like employee recognition programs and knowledge sharing sessions to foster alignment with personal goals and encourage office involvement. Additionally, a 'Periodic Employee Pulse' will facilitate ongoing communication, addressing concerns and potentially reducing attrition, thus significantly boosting overall satisfaction.

### Benefits:

Adopting our strategies offers dual benefits, enhancing both employee satisfaction and organizational flexibility. With ROB, the 'Office Cohort' could gain over 33 productive hours weekly through streamlined task resolution. The 'Hybrid Force' may see an increase of around 192 hours per week by using AI for more focused collaboration. 'Home Anchors' are projected to recover 193 hours with gadgets for concentrated work, while being gently encouraged towards office engagement. Analyzing satisfaction levels reveals that addressing the concerns of less satisfied employees can significantly boost their view on collaboration by up to 1.6 points, promoting a positive organizational image. Detailed satisfaction improvements and methodologies are documented in the appendix.



### Implementation Plan & Conclusion:

Our phased implementation plan balances immediate impact against effort, detailed in the appendix. Initially, focus on quick wins like noise-canceling headphones and the Merit Spotlight Program. Next, roll out the Workforce Copilot and office redesigns in Phase-2 and Phase-3 which are medium term initiatives providing significant returns. Finally, Phase-4 introduces the Periodic Employee Pulse to continuously gather and act on employee feedback, ensuring ongoing improvement and engagement.

## References:

- [1] Jahncke, H., & Hallman, D. M. (2020). Objective measures of cognitive performance in activity based workplaces and traditional office types. Journal of Environmental Psychology, 72, 101503. <https://doi.org/10.1016/j.jenvp.2020.101503>

## Appendix:

### All Variables Definition

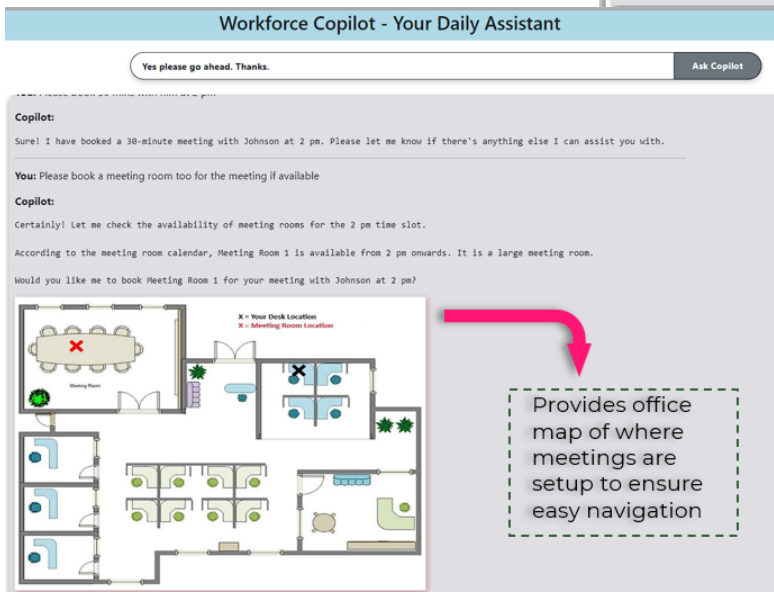
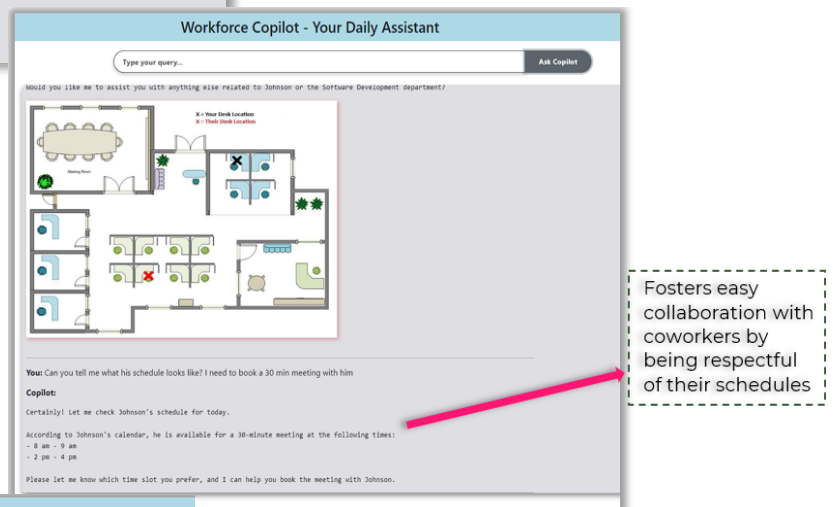
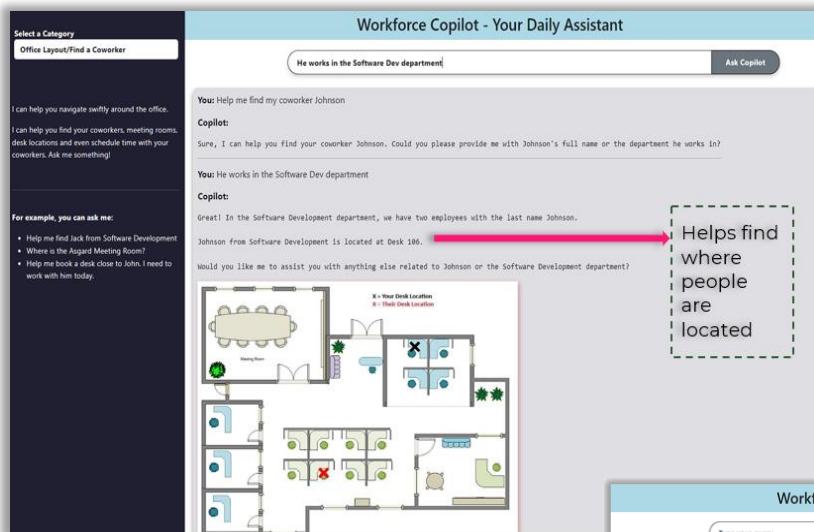
Table-1: The following table contains the calculation and description of all the engineered variables.

Group Var	Individual Vars
Perceived Productivity Quotient	AVG(PostC_impact_shift_A_focus, PostC_impact_shift_E_innovate)
Perceived Collab Quotient	AVG([PostC impact shift F colleagueaccess] + [PostC impact shift G teammeetings] + [PostC impact shift H social] + [PostC impact shift I managersconnect] + [PostC impact shift J client])
Distraction Overall	SUM(OBSV_PreC_5F_lost_noise, OBSV_PreC_5A_lost_layout, OBSV_PreC_5E_lost_visitors, OBSV_PreC_5D_lost_roomtech)
Tech Quotient	PREF_CollabSpace_A_tech, PREF_CollabSpace_B_software, PREF_CollabSpace_C_CollabTools
Collaboration Satisfaction Used in Clustering	AVG([SATSF facilitate Office 2B inpersoncollab] + [SATSF facilitate Office 2A focus] + [SATSF facilitate Office 2C virtualcollab])
Culture Quotient	AVG(DECSN_factors_H_purpose, DECSN_factors_K_socialevents, DECSN_factors_L_community, DECSN_factors_Q_leadership)

### CoPilot Demo

We recommend the use of a Generative AI driven copilot that can support employees for navigating the office on a day to day basis. This copilot system can be driven by latest technologies like Open AI GPT 4. We have built the sample application in python using Flask for the backend and Bootstrap CSS and Javascript for the frontend. Retrieval Augmented Generation techniques were used to help the bot answer specific questions. It can also be further aided with MRKL agents to help the bot perform specific tasks. Open AI GPT 3.5 has been used for powering the bot. The data used was synthetic and just created by generating random data for demonstration purposes







## Clusters - Detailed

HYBRID		OFFICE		WFH	
Variable	Insights	Variable	Insights	Variable	Insights
time lost due to visitors = 136.8 mins on avg	77.95% (145 of 186 peeps) of these people who now prefer to work Hybrid lost upto 100mins due to visitors to workstation PreCovid.	time lost due to layout issues = 53.3 mins on avg	83.76% (129/154) of peeps who lost approx 53.3mins on average precovid in layout issues, still prefer to work from office now.	time lost due to noise issues = 104.7 on avg	75.70% (81/107) of peeps who lost approx 104mins on average precovid due to noise, now prefer to work from home
Perceived Productivity Metric = 2.7	They feel that they're just slightly more productive from office	Perceived Productivity Metric = 3.6	They definitely feel more productive from office	Perceived Productivity Metric = 1.3	They feel highly productive at home
Perceived Collab Quotient = 3.1	And they still feel that collaborating with their colleagues, managers and clients is easier from office so they want to be able to go to office for 2-3 days a week	Perceived Collab Quotient = 3.6	And they still feel that collaborating with their colleagues, managers and clients is easier from office so they want to be able to go to office 4-5 days a week	Perceived Collab Quotient = 2.6	Yet, they're hanging on the edge about where they feel access to colleagues, managers etc. This shows they might want to come to office at least a few days to collaborate
SATSF_facilitate_Home_1B_inpersoncollab = 2.2 AND SATSF_facilitate_Office_2B_inpersoncollab = 4.0	They are not currently satisfied with their home office as to how it aids with inperson collab	PREF_features_B_proximity = 3.9	They feel that proximity to coworkers is very essential for their work	DECSN_factors_G_concentrate = 3.6 AND PREF_features_E_noise = 4.0	Ability to concentrate and noise levels is very important for them
Dept - row wise (how much of each dept consists of)	Dept - cluster wise (how much of the hybrid cluster consists of)	AND SATSF_office_B_designexcellence = 3.8	But the office design excellence is not rated as highly as it should be for office goers. They are clearly finding some things difficult	Culture Quotient = 2.7	Moreover, they feel office culture is not very important for them which might drive them to work from home. It probably doesn't cater to their needs
50% Architecture and Construction, 31% tech, 38% Environmental and Transport Specialist	25.48% Architecture and Construction, 30.75% Tech, 22.44% Sales Mkt HR and Mgmt	Dept - row wise (how much of each dept consists of)	Dept - cluster wise (how much of the hybrid cluster consists of)	SATSF_office_I_orgculture = 3.5	Not very satisfied with organization culture either so they're not motivated to come to office
		42% Environmental and Transport, 27.8% Architecture and construction	33.12% Architecture and Construction, 22.08% Environment and Transport Specialists	Dept - row wise (how much of each dept consists of)	Dept - cluster wise (how much of the hybrid cluster consists of)
				61.7% Sales, Mkt, HR and Mgmt   63.8% customer support   46% Tech	33.2% Tech, 38.70% Sales Mkt Hr and Mgmt

## Cluster- Groups by Department

Cluster Groups Def	
Architecture and Construction	Architect/Designer, Construction and Site Development
Finance	Accounting, Finance, Investments
Tech	Engineering, IT, Prod Development, Workplace & Tech services
Sales Mkt Hr & Mgmt	Sales, Marketing, HR, Management
Customer Support & Ops	Customer Support, Operations & Support
Environment and Transport Specialist	Environment and Transport Specialist

## Detailed Factors 9: Major Contributors

	Factor_1	Factor_2	Factor_3	Factor_4	Factor_5	Factor_6	Factor_7	Factor_8	Factor_9	Factor_10
PREF_space_A_focusedWk	0.000000	0.000000	0.000000	-0.112388	0.158544	0.225405	-0.740443	0.333832	-0.494321	0.0
PREF_space_B_inperson_collab	0.000000	0.000000	0.000000	-0.112173	0.158560	0.225411	-0.740458	0.333841	-0.494319	0.0
DEMO_meeting_remote	0.965119	0.205218	-0.112582	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0
SATSF_HomeOffice_B_software	0.960366	-0.266334	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0
SATSF_CollabSpace_D_furniture	0.966145	0.210191	-0.106041	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0
SATSF_CollabSpace_E_seating	0.966145	0.210189	-0.106040	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0
SATSF_CollabSpace_F_naturallight	0.966145	0.210190	-0.106040	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0
SATSF_CollabSpace_G_acoustics	0.960366	-0.266334	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0
SATSF_HomeOffice_A_Tech	0.960366	-0.266334	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0
SATSF_HomeOffice_C_CollabTools	0.960366	-0.266334	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.0

## Factor Loadings 3: Major Contributors

\* - These variables have been defined in Table 1 of the appendix

	Factor_1	Factor_2	Factor_3	Factor_4	Factor_5	Factor_6	Factor_7	Factor_8	Factor_9	Factor_10
PREF_features_D_privacy	0.701868	0.415481	0.563372	-0.124015	0.0	0.0	0.0	0.0	0.0	0.0
PREF_features_F_daylight	0.701870	0.415481	0.563371	-0.124015	0.0	0.0	0.0	0.0	0.0	0.0
PREF_features_E_noise	0.701869	0.415483	0.563371	-0.124014	0.0	0.0	0.0	0.0	0.0	0.0
PREF_features_H_nature	0.701874	0.415480	0.563366	-0.124013	0.0	0.0	0.0	0.0	0.0	0.0
PREF_features_G_light	0.701877	0.415479	0.563363	-0.124012	0.0	0.0	0.0	0.0	0.0	0.0
SATSF_CollabSpace_A_Tech	0.702279	0.416839	0.563052	-0.122351	0.0	0.0	0.0	0.0	0.0	0.0
PREF_CollabSpace_C_CollabTools	0.702278	0.416844	0.563049	-0.122350	0.0	0.0	0.0	0.0	0.0	0.0
SATSF_CollabSpace_C_CollabTools	0.702281	0.416840	0.563049	-0.122350	0.0	0.0	0.0	0.0	0.0	0.0
PREF_CollabSpace_A_tech	0.702280	0.416842	0.563048	-0.122349	0.0	0.0	0.0	0.0	0.0	0.0
PREF_space_E_recharge	0.702937	0.403353	0.555910	-0.142425	0.0	0.0	0.0	0.0	0.0	0.0

### Factor Loadings 1: Major Contributors

	Factor_1	Factor_2	Factor_3	Factor_4	Factor_5	Factor_6	Factor_7	Factor_8	Factor_9	Factor_10
SATSF_facilitate_OfficeTech_4C_virtualcollab	0.967270	0.208935	-0.106549	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SATSF_facilitate_Office2B_inpersoncollab	0.967270	0.208936	-0.106549	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SATSF_facilitate_OfficeTech_4A_virtualcollab	0.967270	0.208936	-0.106549	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SATSF_facilitate_Office_2C_virtualcollab	0.967270	0.208936	-0.106549	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SATSF_facilitate_OfficeTech_4B_inpersoncollab	0.967270	0.208936	-0.106549	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SATSF_facilitate_Office_2A_focus	0.967270	0.208937	-0.106549	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PREF_features_B_proximity	0.967269	0.208938	-0.106549	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PREF_features_K_temp	0.967269	0.208938	-0.106550	0.0	0.0	0.0	0.0	0.0	0.0	0.0
PREF_features_L_clean	0.967269	0.208939	-0.106550	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SATSF_office_G_myfamily	0.966843	0.195926	-0.113588	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Factor Loadings 10: Major Contributors

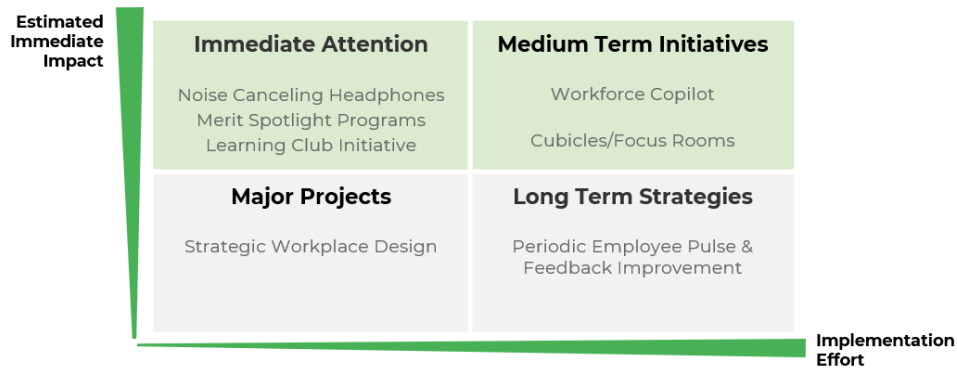
	Factor_1	Factor_2	Factor_3	Factor_4	Factor_5	Factor_6	Factor_7	Factor_8	Factor_9	Factor_10
OBSV_PreC_5J_lost_odor	0.754985	0.000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.608400
OBSV_PreC_5K_lost_natlight	0.758828	0.000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.599390
OBSV_PreC_5H_lost_ergo	0.758751	0.000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.582004
OBSV_PreC_5L_lost_indoorlight	0.768875	0.000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.554283
OBSV_PreC_5A_lost_layout	0.768808	0.000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.528825
OBSV_PreC_5I_lost_temp	0.800167	0.000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.478490
OBSV_PreC_5D_lost_roomtech	0.806911	0.000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.429166
OBSV_PreC_5C_lost_perstech	0.823476	0.000000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.359269
OBSV_PreC_5F_lost_noise	0.848060	0.151545	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.316118
OBSV_PreC_5G_lost_comms	0.873087	0.106589	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.250003

### Benefits – Calculation Increase In Productive Hours Left and Potential Satisfaction Increase (Right)

	Office = layout problems	Hybrid = unwanted visitor problems	WFH = noise problem			Hybrid	Office	WFH
% Of People Out Of Entire Dataset [1]	15%	36%	49%	Group-1: Collaboration Satisfaction > Avg(Collaboration Satisfaction) --- [1]	Avg. Collab_Satisfaction Rating --- 1.i	4.3	4.3	4.3
% Of Employees who had issues in this cluster [2]	83.76%	78.00%	75.70%		Count of Collab_Satsf_Rule Rating --- 1.ii	272	123	420
Assumed - Mid Size Organization with 500 employees [3]	500	500	500	Group-2: Collaboration Satisfaction < Avg(Collaboration Satisfaction) ---[2]	Avg. Collab_Satisfaction Rating --- 2.i	2.9	2.8	2.5
% of people in assumed organization that fall in this cluster [1]*[3] ---- [4]	75	180	245		Count of Collab_Satsf_Rule Rating --- 2.ii	89	31	71
% of people with layout problem in assumed organization [2]*[4] --- [5]	62.82	140.4	185.465					
Mins lost Avg In a Week due to distraction [6]	53.3	136.8	104	Employee Base Who have below avg satsf SUM(2.ii)/(Sum(2.ii) + Sum(1.ii))*100 --- [3]	19%			
Mins lost total in assumed organization [5]*[6] --- [7]	3348.306	19206.72	19288.36					
Hours lost total per week [7]/60 --- [8]	55.81	320.11	321.47	Potential Bump In Satisfaction Points by Implementing Recommendations in this cluster [1.i] - [2.i] --- [4]		1.4	1.5	1.8
Assumed decrease in productive hours lost by implementing Workforce Copilot [9]	0.6	0.6	0.6	Potential Bump In Satisfaction % by Implementing Recommendations [4]/[2.i] --- [5]		48%	54%	72%
Time Saved in Hrs Per Week [8]*[9] --- [10]	33.48	192.07	192.88	Potential Bump In Organization Satisfaction Points by Implementing Recommendations Overall Avg[4] --- [6]		1.57		
Total Hours Saved In Organization SUM[10]--- [11]	418.43 Hrs			Potential Bump In Organization Satisfaction % by Implementing Recommendations Overall Avg[5]--- [7]		57.95%		

\* - These variables have been defined in Table 1 of the appendix

## Benefits – Implementation Report



## SHAP Values – Modeling

