

PROJECT

What Influences Employee's Satisfaction?

Project Description

The Head of Human Resource Team has requested to know why there's been a decline in the satisfaction ratings of the employees over time, she thinks if the average time spent on the job is reduced, satisfaction ratings will increase. She presented the Data Analytics Team with a historical data of both present and past employees to analyze and identify the trend in order to know how to help improve on employee satisfaction.

The report is aimed at investigating through historical dataset indicating employee's satisfaction and other conditions associated with each employee as at the last time the test was taken. This dataset is to help provide answers to what has been the factor(s) influencing employee satisfaction level on the job.

While working on the dataset;

- Satisfaction was graded into four categories namely; very satisfied, satisfied, managing and not satisfied. This was done using their satisfaction rating such that employees whose rating is above 85% is considered very satisfied, ratings from 65% and 84% are satisfied, ratings from 50% and 64% are considered managing while those below 50% are considered not satisfied.
- Satisfaction growth was classified based on the comparison between the present satisfaction evaluation and the previous evaluation to indicate whether there was an increase, decrease or if it was static.
- The work rate was placed into three groups based on the average work hours of each employee. The average work hours below the 25th percentile is regarded as "Short",

those above the 75th percentile “Long” and those between the 25th to 75th percentile as “medium”

- A comparative feature that indicates if an employee had a better satisfaction rating compared to the previous rating was created.

The analysis of the data revealed that the factors affecting satisfaction in the company include the salary scale of some employees, the number of hours employees work monthly and promotion carried out in the last five-years.

The Problem

The project is aimed at understanding what has been the cause of reduction in employee satisfaction seeing there seems to be a decline in efficiency and productivity. The dataset has a collection of 14,999 employees who have left and are presently working in the organization, it must include fields such as employee's satisfaction rating, previous rating, monthly average work hours, number of projects, time spent in the company, work accident, department and salary category. A total of 14,999 employee's data was garnered across the years.

Design

The initial data had the employee's satisfaction rating, previous rating, monthly average work hours, number of projects, time spent in the company, work accident, department and salary category. More fields were created to categorize important columns such as satisfaction, satisfaction growth, work rate and satisfaction increase.

The visualization tools used was Google spreadsheet, Microsoft Excel and Tableau.

The dataset has a collection of employees who have left and are presently working in the organization. A total of 14999 employee's data was garnered across the years.

The aim of this project is to understand the fundamental reasons for attrition.

Findings

"This organization is one of those organizations that rely on past glory, such a fantastic company with superb precedents as it takes great care of its employees in its startup days when it had not broken even, you know I used to work there" was what Gina, a former staff of the organization, told Marcelo who just received his appointment letter. Marcelo applied to this company weeks ago but he immediately regretted it after just two years of working in the organization because his experience was at variance with the testimonials of the former staff. The summary of his regret was that had he known, he would have applied four years earlier because he was continually encouraged by the professionalism of his co-workers, the ambience of the working environment, the organizational culture and the constantly improving working conditions.

Generally speaking, the lesser people have accidents on the job, the more satisfaction they'd have and that is exactly one of the things historical data depicts as a larger portion of those who were unsatisfied had experienced accidents on the job. The same shocking revelation was seen in the work rate as most of the unsatisfied especially for those currently staffed.

The larger percentage of former employees, like Gina, reported a satisfaction rating below average but the story is not true for the current employees as the largest percentage of them reported a rating above average. Every company seeks to better satisfy their employees and this organization has seen a drastic and impressive increase in how it has satisfied its most important asset – Employees. Further investigation reveals some other things that causes of this variation in the happiness, passion and dedication of its employees to serve the cause of the company.

The company has done well on three fronts:

- It has successfully retained many of its staff.

- It has increased the rate at which it promotes its staff within a five-year period.
- It has employed more people who work medium and long hours on the job.
- It has impressively increased the salary of its employees across all departments.

Depleting Rate of Satisfaction

- Among those currently employed, only 45% of them experience **decrease** in their level of satisfaction but on the general scale only 17% percent reported being unsatisfied.

satisfaction growth				
Satisfaction	Decrease	Increase	Unchanged	Grand Total
Barely satisfied	2195	616	60	2871
Not satisfied	1931	84	21	2036
Satisfied	1724	1987	81	3792
Very satisfied	360	2328	41	2729
Grand Total	6210	5015	203	11428

Table 2.1: Depleting Rate of Satisfaction (Employees)

- Among the employees who left, about **95%** of them reported a **decrease** in their level of satisfaction when comparing the present rating with the previous one.

satisfaction growth				
Satisfaction	Decrease	Increase	Unchanged	Grand Total
Barely satisfied	59	8		67
Not satisfied	2530	3	14	2547
Satisfied	569	51	6	626
Very satisfied	230	88	13	331
Grand Total	3388	150	33	3571

• Table 2.2: Depleting Rate of Satisfaction (Former Employees)

The depleting satisfaction of employees is alarming over a five-year period.

Employees Satisfaction level Against Former Employees

- Among the present employees, 17.8% were not satisfied, 23.9% were very satisfied, 33.2% were satisfied and 25.1% were barely satisfied.

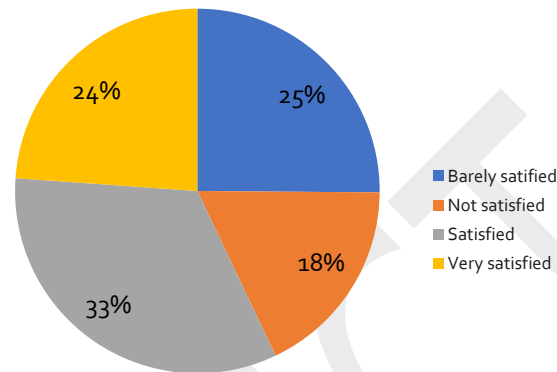


Figure 2.1: How ex-staff rated their satisfaction in the organization

- 71.3% of employees who left are not satisfied, 1.9% are barely satisfied, 17.5% are satisfied and 9.3% are very satisfied.

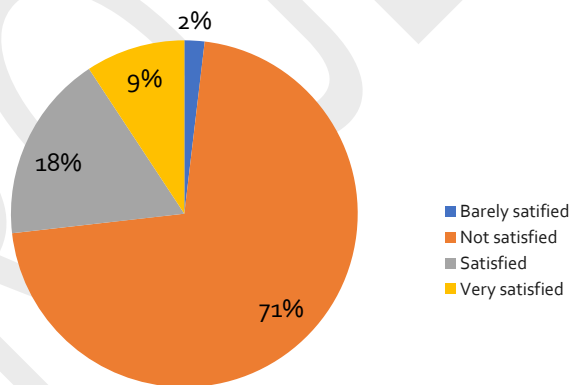


Figure 2.2: How Present Employees rated their satisfaction in the organization

satisfaction					
Left	Barely satisfied	Not satisfied	Satisfied	Very satisfied	Grand Total
No	2871	2036	3792	2729	11428
Yes	67	2547	626	331	3571
Grand Total	2938	4583		3060	14999

Table 2.3: Satisfaction levels of present and former employees.

Promotion influences satisfaction and dissatisfaction

- Among the current staff, 2.6% of those who left had received promotion in the last 5 years, this might account for their satisfaction on the job.

promotion_last_5years			
	No	Yes	Grand Total
Satisfaction			
Barely satisfied	2794	77	2871
Not satisfied	1986	50	2036
Satisfied	3684	108	3792
Very satisfied	2664	65	2729
Grand Total	11128	300	11428

Table 2.4: Pitching promotion in the last five year and satisfaction of employees

- Among those who had left, 0.5% of those who left had not been promoted in the last 5 years, this might account for their high level of dissatisfaction on the job.

promotion_last_5years			
	No	Yes	Grand Total
Satisfaction			
Barely satisfied	67		67
Not satisfied	2532	15	2547
Satisfied	623	3	626
Very satisfied	330	1	331
Grand Total	3552	19	3571

Table 2.5: Pitching promotion in the last five year and satisfaction of former employees

Does Years spent on the job affect satisfaction level?

- Among those presently employed, those who spent less than 5 years make for the most satisfied among the employees.

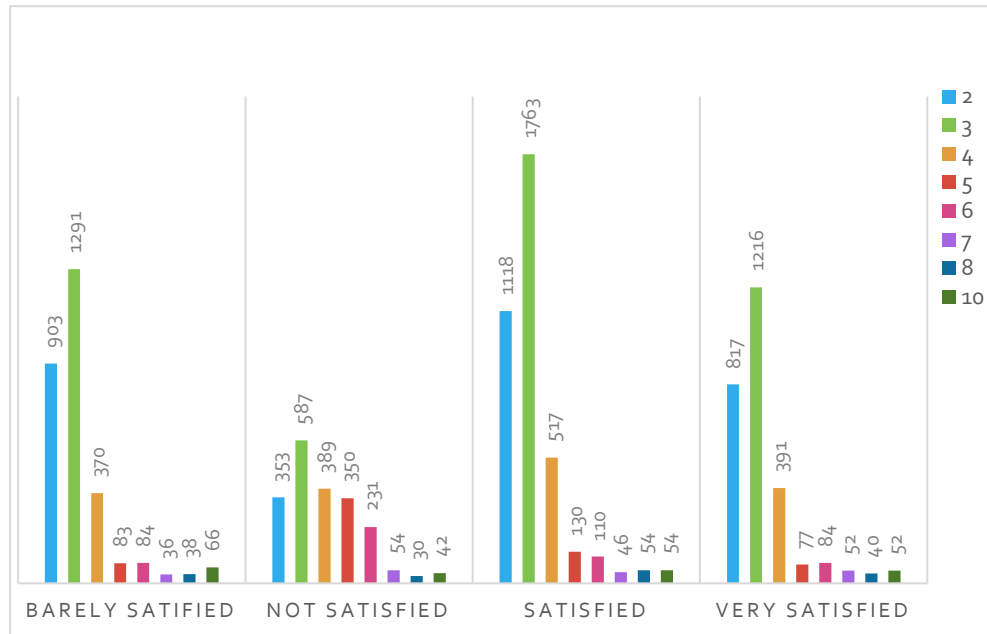


Figure 2.3: Does Years spent on the job affect satisfaction level? (Employees)

- Among employees who had left, those who have spent 5 and 6 years have good satisfaction level whereas only about 12.8% are not satisfied.

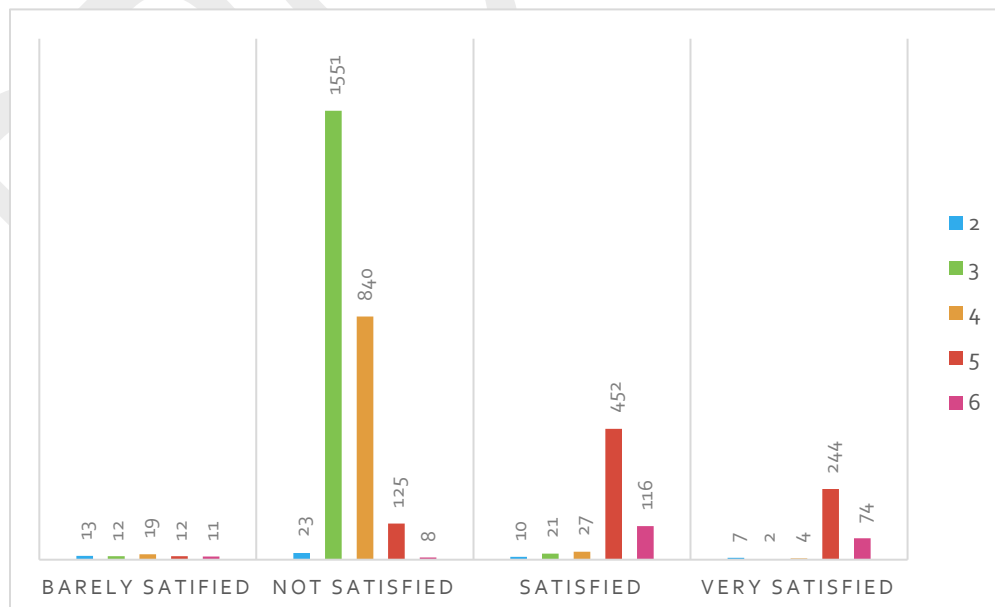


Figure 2.4: Does Years spent on the job affect satisfaction level? (Former Employees)

It is clear that the longer an employee stays on the job, the better his/her satisfaction grows into appreciating the organization.

Experiencing On-The-Job Accident Influences Satisfaction

- Among those currently employed, about 17% of them had experienced work accident across all the different satisfaction levels. Meanwhile only 18% of the unsatisfied had experienced work accident.

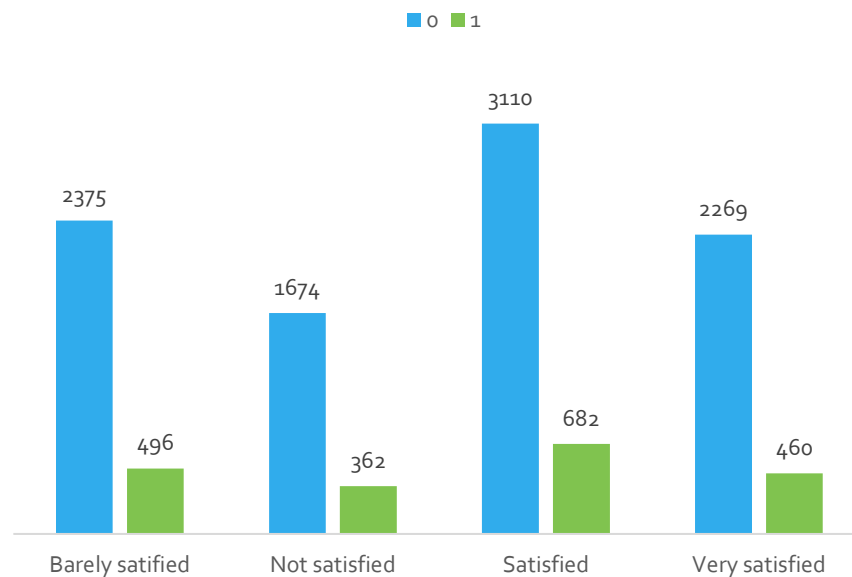


Figure 2.5: On-the-job accident and Satisfaction (Employees)

- Among former employees, less than 1% of them have experienced work accident and 4.7% of the unsatisfied cadre have at one time or the other experienced work accident.

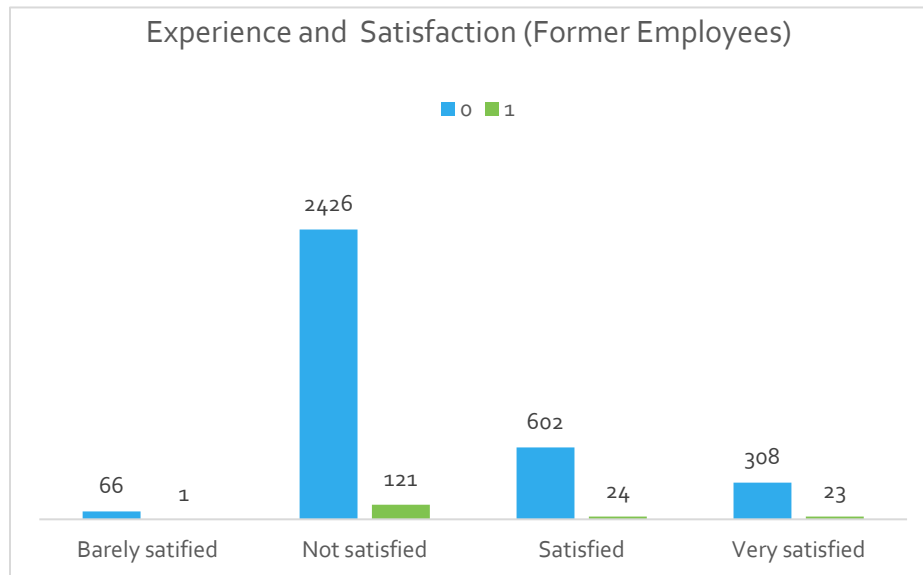
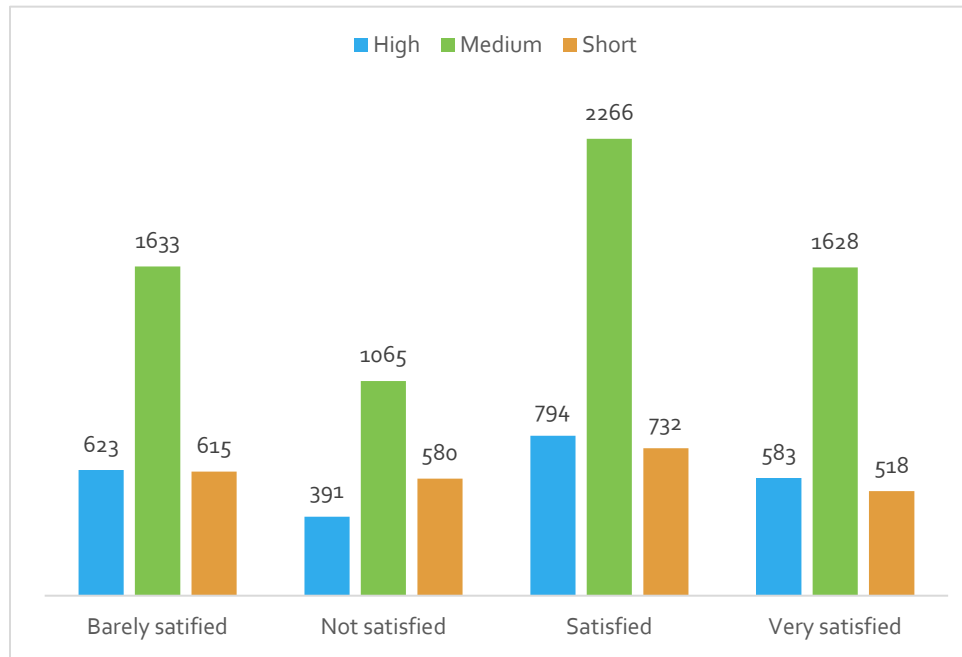


Figure 2.6: Experience and Satisfaction (Former Employees)

On-the-job accident contributed a great deal in the dissatisfaction level of current employees. Interestingly, the same cannot be said about those who have left. This is likely due to the fact that current employees have spent more time on the job and hence they are prone to accidents compared to those who have spent short period of time.

Monthly Work Hours Affect Satisfaction Level

- Among the current staff, those who work shorter hours make up for 40% of the total workers.



- Figure 2.7: Monthly Work Hours Affect Satisfaction Level (Employees)

- Among those who have left, those who work shorter hours are those with the highest dissatisfaction level across board. They make up 21% percent of the total number of those who left.

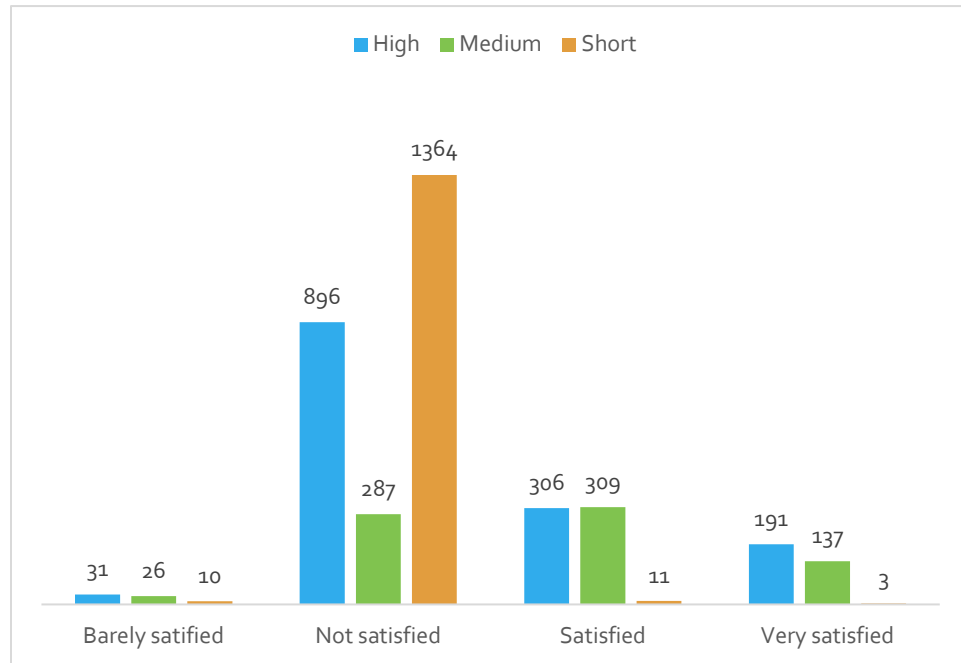


Figure 2.8: Monthly Work Hours Affect Satisfaction Level (Former Employees)

Meanwhile, it is observed that 28% of those who are currently employed and unsatisfied work short hours while 54% of those formerly employed are unsatisfied. Employees working shorter hours seems to be an expression of dissatisfaction on the job and it can be inferred it's a factor causing some to leave the job.

Department and Satisfaction

- Among the present staff; Accounting, Product Management and Research and Development have the highest percentage of unsatisfied employees compared with the total number employees in the department.

COUNTA of satisfaction					
Department	Barely satisfied	Not satisfied	Satisfied	Very satisfied	Grand Total
accounting	141	118	192	112	563
hr	144	92	159	129	524
IT	222	159	339	234	954
management	151	91	199	98	539
marketing	164	115	212	164	655
product_mng	174	148	215	167	704
RandD	163	134	229	140	666
sales	772	553	1012	789	3126
support	417	276	575	406	1674
technical	523	350	660	490	2023
Grand Total	2871	2036	3792	2729	11428

Table 2.6: Pitching promotion in the last five year and satisfaction of former employees

- Among the former staff, accounting, HR, IT, Management, Marketing, Research and Development, Sales and Team department have at least 70% unsatisfied employees.

COUNT of left satisfaction					
Department	Barely satisfied	Not satisfied	Satisfied	Very satisfied	Grand Total
accounting	3	160	23	18	204
hr	8	159	36	12	215
IT	5	199	43	26	273
management		66	19	6	91
marketing	2	149	40	12	203
product_mng	1	129	48	20	198
RandD	1	85	18	17	121
sales	19	727	174	94	1014
support	13	381	116	45	555
technical	15	492	109	81	697
Grand Total	67	2547	626	331	3571

Table 2.7: Pitching promotion in the last five year and satisfaction of former employees

This implies that there is a general increase in the management of all the Department within the organization.

Salary Grade and its impact on employee satisfaction

- Among current staff:
 - 45% of the employees are on low salary across all the satisfaction levels.
 - Management and Marketing have the least percentage of low salary earners and unsatisfied employees.
 - Management has the highest percentage of high-income earners.

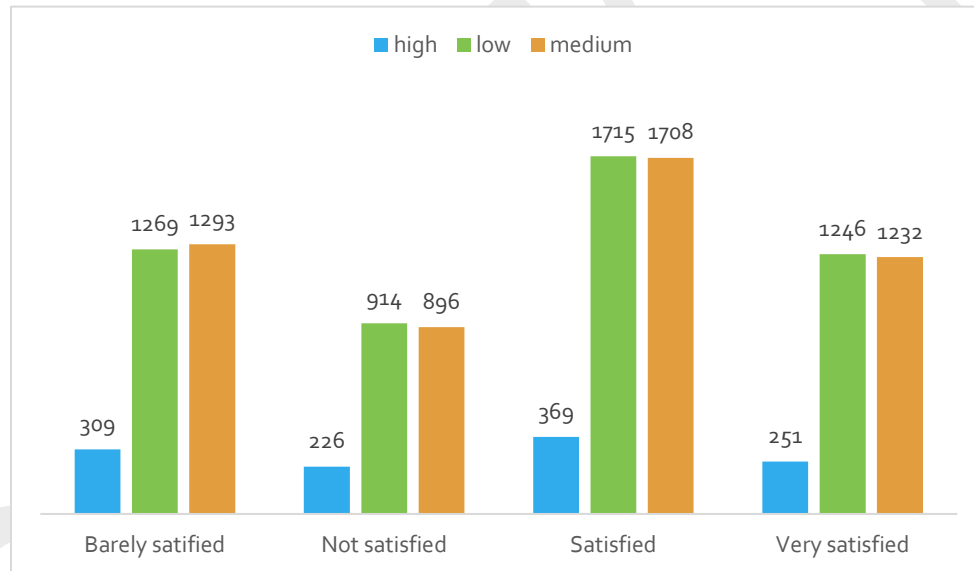


Figure 2.9: Salary Grade and its impact on employee satisfaction (Employee)

- Among those who had left the company:
 - 60% of the employees are on low salary across all the levels. This has a huge impact on my satisfaction level.
 - Marketing, Support, Management, Research and Development, and Support have the highest number of low earners across all satisfaction levels.

- The HR, IT, Marketing, Sales make for the low-income earners among the very satisfied level meanwhile they all have nobody on the high-income scale.

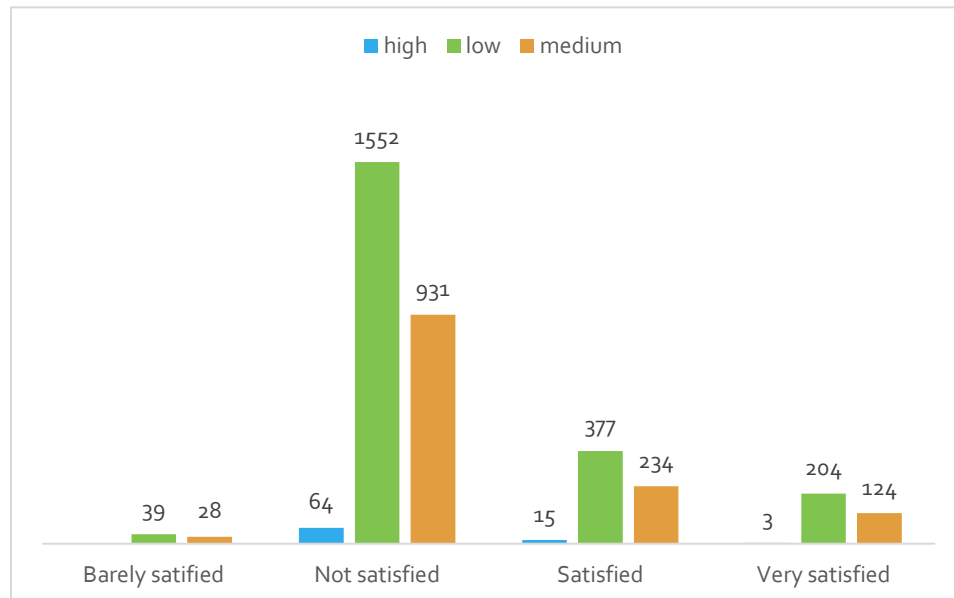


Figure 2.10: Salary Grade and its impact on employee satisfaction (Former Employees)

There's a trend of increment in salary in the company. It steadily rose from 45% to 60%.

Number of Projects Completed and Employee Satisfaction

- The number of projects completed had no significant impact on the satisfaction level of an employee though it is seen that the satisfaction level seems to grow as an employee achieves more than two projects.

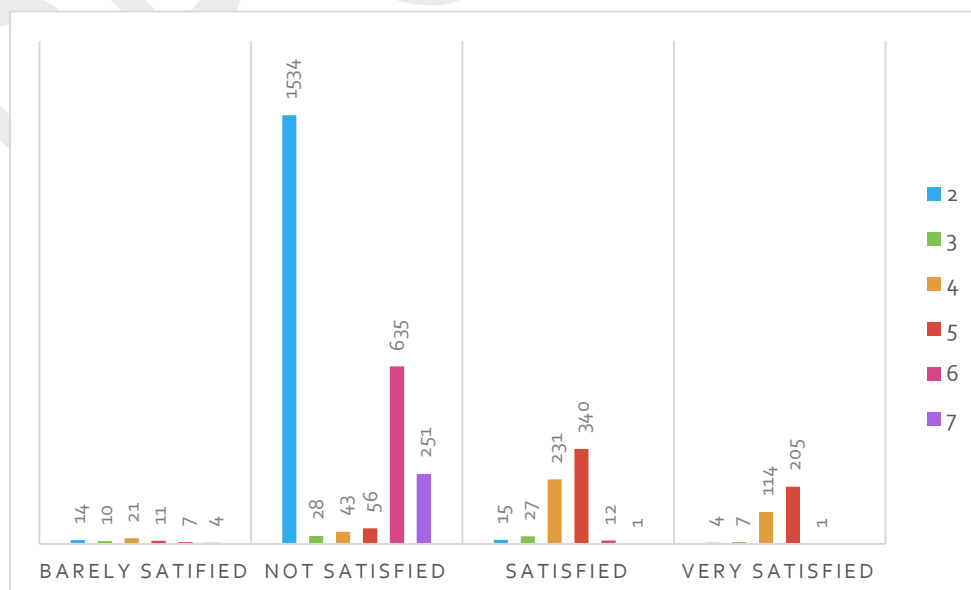


Figure 2.11: Number of Projects Completed and Employee Satisfaction (Employee)

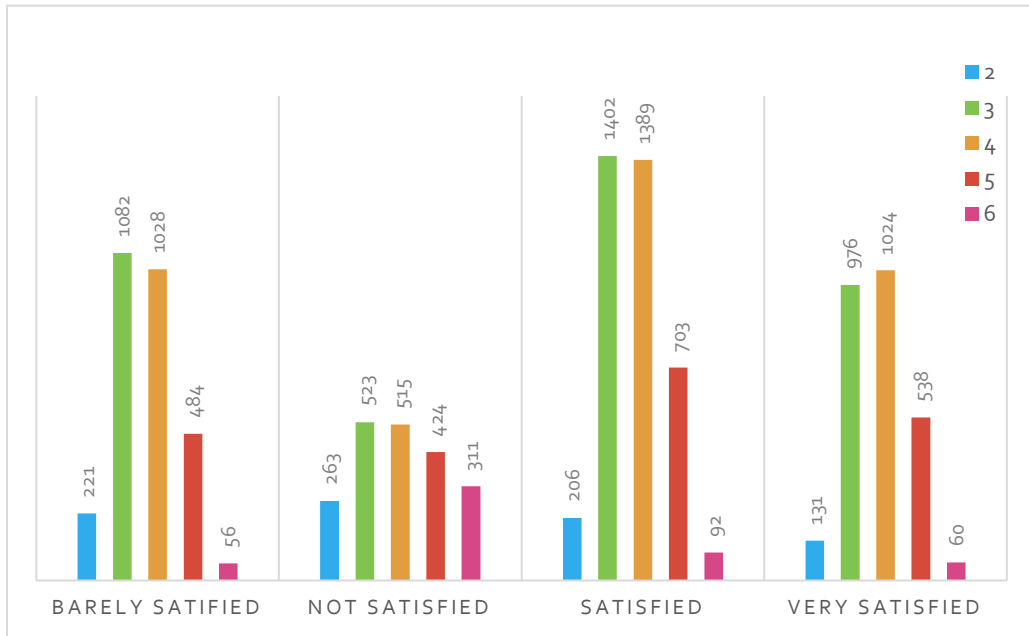


Figure 2.12: Number of Projects Completed and Employee Satisfaction

Analysis

- Why were the majority of employees left unsatisfied? Many were unsatisfied and left the company because they were collecting a low salary.
- Why were people on the low end of the salary scale? The low salary they were earning was because they work shorter hours and completed fewer projects.
- Why were they working shorter hours and completing fewer projects? Because they didn't have superior skills and were not promoted within five years to a higher cadre.
- Why didn't they have superior skills and why were they not promoted? Because they had a low level of education and hence, they do menial jobs that had an insignificant impact on the organization's revenue.
- Why did they have low-level education? Because they came from the minority group in the country and hence, they were marginalized.

The root cause of why employees left is because of their background as they came from the marginalized, uneducated part of the country. They didn't have access to the best form of education and training and hence they were not formidable to compete in the best institutions.

Conclusion

What Marcelo found out is shocking and bizarre as to why people like Gina leave the organization and are bitter and angry. It is because they received low salaries had their ROOT in the state of the nation – the stern marginalization against the minority groups serves as the foundation of the attrition in this organization just as it is found in many others.

If there will be a change in the satisfaction level of employees, there must be a collective defence of the rights of the minority, there must be the provision of basic amenities for them and the general populace must be tolerant, accepting and celebrating them as they are.