“Is there a magic pill for Employee Retention in our domain”? – A statistical view point

Anu Sivanesan, Ephicacy Lifescience Analytics Private Limited, Bangalore, India

ABSTRACT
And then finally, I am "THE RECRUITER". So, I am fundamentally responsible for the longevity of the people on board and thus the health of the organization. Is there a magic pill for employee’s longevity in our domain? – a statistical view point.

Recruitment in clinical domain has being an important task of choosing the right fighter personnel in the battle against diseases. However, in this epic battle, the fighters need a magic potion to continue their loyalty for the organization they are serving for. This presentation leads to deciphering the ingredients of this magic pill; the trends and factors influencing retention in this industry.
Employee retention is an important aspect in Human Resource management. The importance given to a prospective employee during hiring should be continued in his tenure with the organization in his/her capacity as an employee. However, ‘employee turnover rate’ is a common metric in human resource management. This metric is also one of the important parameters defining an organization’s performance which adds undue pressure on the management team. Deciphering the motivational factors leads to a thought process of employee exit paving way to interesting answers. The outcome of in-depth analysis throws light on these factors - internal environmental factors, external environmental factors and finally motivational factors influencing employee retention in decreasing order. The outcome also shows an interesting revelation - that many of those discontented in their job remain in the organization longer, just due to external environmental factors which might not be a healthy sign for any organization. Through this paper, an attempt has been made to read through the data using a statistical lens – using statistical methodologies and applying them on the sample population to determine which factor affects the most in employee’s retention. Retention efforts and employee exit trend analysis using statistical methodologies would equip organizations to manage risks in a proactive manner resulting in win-win situation for both the employer and the employee.

INTRODUCTION
Attracting and retaining a competitive staff is one of the major strategies in any organization. Employee retention refers to the ability of an organization to retain its employees. Employee retention can be measured by simple statistic – for example if the employee retention rate is 90%, it indicates 90% of the employees are kept in the organization in the given period. Employee retention program can help you protect the most valuable assets: the people, high turnover rates, cost and time and indicate the organization is a stepping stone rather than a destination. It also increases the morale by creating a positive work environment and strengthen the employee’s commitment to work.
This paper focuses on the cause, challenges and steps to overcome the bottlenecks with reference to retention. The story unfolds with the advent of software industry and allied services around the sector.

Trend – growth of Software industry:
Gates, Allen, Jobs…have transformed the way we work today. Software industry dawned in the 80s and it has been quite a revelation moving from paper to soft files on computers. This ushered the age of computing. The most precious thing was then found – it wasn’t the diamond or platinum nor oil – it was TIME. Geographical barriers led to wonders while activities could be completed in a SUN’s day and night which considerably cut short the turn around time.

Drug discovery was the most benefitted field by this innovation. This led to decrease in time; time for drug to be delivered to the market; activities could be done quicker overcoming the geography/time barrier. This also led to the concept of ‘outsourcing’; Instead of using the term outsourcing – it can be aptly called joint-development or co-development. Firms in the US looked to the east to fulfil this promise; Day in the US was night in the eastern world; and the night in the east was day in the west – which led to the concept of co-development. Nations such as India, Philippines, China were the sought-after nations in the east. This was partially also due to the skillset these countries possessed – communication; English knowledge; analytical skills, managerial capabilities.
Drug companies which had their in-house activities moved from paper to computers, leading to instant communication within short time lag. This turned a boon to drug development companies. They strategized and moved towards restructuring the way business was done. They experimented the idea of moving software related tasks to ‘east’ i.e., India, China etc. and hence the concept of clinical research organizations mushroomed in third world countries.

Over a period, technology improved in leaps and bounds. And the focus on co-development increased in multiples. The skill set requirement too got transformed consistently.

Later Googles; facebooks; twitters – revolutionized the field of search and communication. The SUN – 24/7 working culture across geographies– needed an environment to work with; CLOUD joined the SUN, and this transformed the IT environment.

Skillset requirements got transformed to meet the needs of cloud technology. Over a period of time such as interesting Development operations, Production Operations ushered in leading to new job roles and programming automation.

Manual to Automation:
Software/programming tasks previously termed ‘as digital’ now became manual over a period. Further automation using artificial intelligence concepts such as machine learning, deep learning has been leading the pack.

Talent retention is all these cases is of prime importance. Talent management was important then, now and will remain in focus in future too. Talent Management is a set of integral organization HR processes designed to attract, develop, motivate and retain productive, engaged employees. The main objective of talent management is to enhance the performance and sustainability of the business.

Talent management is an organizations’ commitment to recruit, retain and develop the most talented and superior employees available in the job market.

Talent Management requires Human Resource Information System which would track the career paths of employees and manage available opportunities for talented employee.

IBM: In early 2003, IBM’s top HR leaders and executives realized that to meet the demands of their globally integrated clients, they will have to move effectively their internal inventories of workers to the locations and projects where they were needed for this purpose, it was observed that, all employees, managers, contractors should have clear information about changing talent needs, supplies, and ways to quality. Unclear and incompatible information would cause the system to break down.

Toyota way: For retention of employees Toyota has its own way. Toyota feels that adequate compensation and benefits to the employees is the key strategy for employee retention. Philosophies and Strategies of Toyota include:

1. Support long-term employment security through a pay and benefits program founded on good business judgment: Toyota pays people well and motivate people by setting challenging targets, but Toyota prefers to create a trust economy based on a long-term view of the exchange between employee and employer.

2. To attract, develop and retain the best and the brightest is the mantra of Toyota. Long serving leaders at Toyota feel that what kept them with Toyota, is values. Toyota has tremendous relationship with its vendors, its suppliers, its dealers, the community, and its members. Retention issues are tackled in Toyota at three levels; production members, supervisors and middle managers and executive level. Annual attrition rate for production team members has been consistently less than 3%. This group is among the highest paid employees. Even for executive group, the attrition rate is increasingly limited to retirements instead of job hopping. Toyota offers benefits directed at stability and mutual trust include such items as: vacation time, paid personal time off, short term and long-term medical leave, retirement plan, pension plan and so on. Perfect attendance ceremony and on-site child care fitness centers are the few more benefits.

Honda Motors: Three Joys: ‘The joy of producing’, ‘The joy of selling’ and ‘the joy of buying’ have morphed into essentially a call for individual innovation and for employees to challenge themselves to spawn ever more novel ideas and they have emerged as a blue print for managers and decision makers to consult when setting company policies related to training, developing and motivating workers. This helps in long run to retain the employees. It has been a well-established fact that money is no more the driving force behind peoples’ work. Many people still work because they ‘Love’ work and the objectives it attempts to achieve. Research, too, shows a strong correlation between commitment to work and excellence in output. Hence, it is necessary to motivate workers for these objectives. HR department has to formulate necessary strategy for the same.
GOOD HIRE AND A BAD HIRE:
Every organization will make sincere efforts to hire a right candidate at the right time, but there might be probability of errors. There might be situations where a good hire will turn into bad hire due to circumstances or he/she is a bad hire itself, paving the way for a hiring mistake.

TRAITS OF RECRUITER:
Recruiters need high levels of emotional intelligence to manage relationships and mitigate conflict. Headhunting can easily go crooked when negotiations begin, and successful negotiations requires being able to see both positions at the table and build bridges.

Recruiters must build long-term relationships and connections to thrive. As a talent broker, recruiters’ ability to play the role of matchmaker relies on a well-developed network. Each placement becomes another link forged. Maintaining relationships over years requires attention to people. In our transaction-oriented society, it means to really excel, we must go beyond the transaction in our work. In many ways, the placement marks just the beginning. Exceptional recruiters possess strong interpersonal skills and integrity.

Interpersonal skills ultimately will decide whether recruiters succeed or fail. Can you manage your impulses? Can you manage change? Can you adapt to shifting client priorities and needs? How agile are you? Can you build rapport in difficult negotiations or do you become defensive under pressure? These are all skills recruiters must possess as they connect talent with potential employers while supporting the objectives of both talent and companies. It requires a lot of finesse.

Emotional intelligence creates the foundation for effective relationship management. It’s the underpinning of efficiently navigating the maze of personalities, biases and human instincts that can quickly go array. Great recruiters can self-regulate, as well as manage the fears, aspirations and disappointments of candidates. We need to be masters at the art of persuasion. Empathy and emotional intelligence may just be the golden keys to becoming an exceptional recruiter in the machine age.

FOCUS OF THE STUDY:
The objective of the study includes:
1. The reason or what factors influences the most in retaining Employees
2. Recommending retention strategies leading to positive impact in organization.

STUDY INVOLVING ANALYSIS AND INTERPRETATION:
Instrument used and the design sample:
1. The backdrop of this study was the data collation while interviewing candidates. Roughly inputs of 100 candidates has been considered in this study.
2. The data is structured from the responses received from the survey/interview.
3. This led to categorization of data – 2 major factors playing a role:
   a. Internal/motivational factors
   b. External environmental factors

Further to this again, under Motivational and External Factors it is further categorized into low and high factors that have a low impact on the organization and which factors has high impact.

Eleven external factors were highlighted in the survey and candidates were requested to score based on his/her interest. The cut-off was maintained with high score as >6 and low score <=6.

Sixteen internal factors were listed, and the cut-off was >10 as high score and low score as <=10.

Table _1: Data categorization - Factors influencing an Employee’s stay in the Organization

<table>
<thead>
<tr>
<th>Candidate_1</th>
<th>Weight</th>
<th>Motivational/Internal Factors</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>External Factors</strong></td>
<td><strong>Weight</strong></td>
<td><strong>Scores</strong></td>
<td><strong>Motivational/Internal Factors</strong></td>
</tr>
<tr>
<td>Scores</td>
<td></td>
<td></td>
<td>Scores</td>
</tr>
<tr>
<td>External: 11 factors</td>
<td>Yes = 1</td>
<td>No = 0</td>
<td>Motivational: 16 factors</td>
</tr>
<tr>
<td>High score: &gt;6</td>
<td></td>
<td></td>
<td>High score: &gt;10</td>
</tr>
<tr>
<td>Low score: &lt;=6</td>
<td></td>
<td></td>
<td>Low score: &lt;=10</td>
</tr>
<tr>
<td><strong>Distance</strong></td>
<td>1</td>
<td>Growth &amp; Career</td>
<td>1</td>
</tr>
</tbody>
</table>

3
Based on statistician's advice, Chi-square test methodology was applied for analyzing which of the factors is more significant (Was it External or Internal Factors). And below is the contingent table which shows the result from the chi square test.

Table 2: Contingent table showing the relationship between the Motivational/ Internal factors and External Environmental Factors

<table>
<thead>
<tr>
<th>Motivational Factors</th>
<th>External Factors</th>
<th>Low Score</th>
<th>High Score</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>Low Score</td>
<td>External Factors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low Score</td>
<td>High Score</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>Low</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low</td>
<td>High</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td></td>
<td>34.85%</td>
<td>65.15%</td>
<td>66</td>
</tr>
<tr>
<td></td>
<td>High Score</td>
<td>Low</td>
<td>High</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td></td>
<td>62.86%</td>
<td>37.14%</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>44</td>
<td>56</td>
<td>100</td>
</tr>
</tbody>
</table>

\[P < 0.007\] which is lesser than 0.05, \(\chi^2 = 7.263, C = 0.259\) - Contingency Co-efficient
CODE USED IN THE STUDY

/** The dataset CRSTAB has all 100 candidate’s scores on Motivation and External factor

Mot variable: This lists all motivational factors
Ext variable: This lists all external Factors

Options: CHISQ - explains about the relationship between MOT and EXT variables
     Contingency Co-efficient(C) - Explains the Correlation rate between two factors **/

ods output CrossTabFreqs = CRSTAB chisq = chi;
proc freq data = chk_
    table mot*ext / chisq nopercent nocol;
    weight cnt;
run;

OUTPUT DATASET – CHI-SQUARE TEST

<table>
<thead>
<tr>
<th>Table</th>
<th>Statistic</th>
<th>DF</th>
<th>Value</th>
<th>Prchb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Table mot ’ ext</td>
<td></td>
<td>Chi-Square</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Table mot ’ ext</td>
<td></td>
<td>Likelihood Ratio Chi-Square</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Table mot ’ ext</td>
<td></td>
<td>Continuity Adj. Chi-Square</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Table mot ’ ext</td>
<td></td>
<td>Mantel-Haenszel Chi-Square</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Table mot ’ ext</td>
<td></td>
<td>Phi Coefficient</td>
<td>-</td>
</tr>
<tr>
<td>6</td>
<td>Table mot ’ ext</td>
<td></td>
<td>Contingency Coefficient</td>
<td>-</td>
</tr>
<tr>
<td>7</td>
<td>Table mot ’ ext</td>
<td></td>
<td>Cramer’s V</td>
<td>-</td>
</tr>
</tbody>
</table>

RESULTS FROM CHI-SQUARE TEST:

The test results indicate that the assumption of significant relationship between the two factors can be accepted. The Contingency coefficient (C) shows their correlation rate equal to 0.259; meaning that merely 26% of external factors change is originated from the changes in the internal/motivational factor.

Moreover, their relationship direction is inversed; that is, more the job satisfaction increase, the more external environment factor will decline itself in a way that about 65% of those who are not satisfied with their jobs, gained high scores of external environment effects while 63% of job holders satisfied with their job have fewer scores in this regard.

FINDING AND DISCUSSION:

Post assessing what has been analyzed, the motivational factors goes to the extent of nullifying the effects of external factors.

As per Hertzberg’s Two-Factor Theory of motivation, Motivator factors are further classified into Motivator or Intrinsic factors and Hygiene or Extrinsic factors.

It is found that the below 2 factors influence employee motivation and satisfaction...

1. Motivator factors – Simply put, these are factors that lead to satisfaction and motivate employees to work harder. Examples might include enjoying your work, feeling recognized and career progression.
2. Hygiene factors – These factors can lead to dissatisfaction and a lack of motivation if they are absent. Examples include salary, company policies, benefits, relationships with managers and co-workers.
According to Herzberg’s findings, while motivator and hygiene factors both influenced motivation, they appeared to work completely independently of each other.

While motivator factors increased employee satisfaction and motivation, the absence of these factors didn’t necessarily cause dissatisfaction. Likewise, the presence of hygiene factors didn’t appear to increase satisfaction and motivation, but their absence caused an increase in dissatisfaction. These motivational factors put together leads to job satisfaction and makes an employee to stay committed and which in turn defines the culture of an organization.

**THE MAGIC PILL DECODED:**

**THE CULTURE** of the organization – is the defining aspect, trying to emphasize that ‘a culture’ in an organization can satisfy an employee more than the benefits he is receiving/or the role/level he is in. Also, efforts must be made to retain good resources as they will remain internal ambassadors of company’s culture.

<table>
<thead>
<tr>
<th>Hygiene or Extrinsic Factors</th>
<th>Motivator or Intrinsic Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary and Pay</td>
<td>Recognition</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>Sense of Achievement</td>
</tr>
<tr>
<td>Job and Security</td>
<td>Responsibility</td>
</tr>
<tr>
<td>Interpersonal Relationship</td>
<td>Challenging work</td>
</tr>
<tr>
<td>Quality of Management</td>
<td>Growth &amp; Career</td>
</tr>
<tr>
<td>Company Policies</td>
<td>Advancement &amp; Self fulfillment</td>
</tr>
</tbody>
</table>

**CULTURE**

**STRATEGIES FOR RETENTION OF EMPLOYEES IN THE BUSINESS CAPABILITIES OF WORK-FORCE:**

- **Enhancing capabilities of work force**: Due to competition, new skills are required to cater the changing needs of the innovative products and services. Hence strategy which makes employees to enhance their capabilities with new skills required for the industry. It is necessary to make learning new skills as an ongoing process built into the work itself. This is important as in one survey in U.K., it was observed that 59% executives agreed that there exists a skill gap and it will stay the same or increase overtime.

- **Compensation package** should be accompanied with factors like job satisfaction, self-actualization etc.

- **Better communication with employees**: Responsibility and accountability is required to be communicated in simply and easy language. Employees be encouraged to share their views, opinions with the senior level management members.

- **Proper job designing**: Carefully and thoughtfully deciding on the task to be assigned to which job, companies can exert greater influence on the retention rates of employees.

- **Efforts should be taken to satisfy the deeply embedded ‘life interests’ of an employee**: It is necessary to create a customized career path for the employees. For this purpose, a mechanism should be evolved to know accuracy, aptitude and excitements of the employees. For this purpose,
employee’s behavior and his motives, be observed to identify his interest and then accordingly set his job description. This would facilitate retention of middle or senior level managers for long.

❖ **Developing strong inter-personal relations:** Business organization should take pro-active steps to strengthen the inter-personal relations amongst the employees. This can be done by encouraging them to form employee’s clubs such as Drama Clubs or Cultural Activity Club, Family Clubs where even family members of the employees would be involved to create stronger social ties amongst the employees and their families. This would strengthen the inter-personal relation in a healthier manner and good teams could be constituted at workplace considering their interpersonal relations with each other. Hence, building of teams at work place and forming social groups outside the workplace help to create strong social bonding among the employees. This would discourage employees to leave the job.

❖ **Multiple locations of companies:** Most of the IT companies have strategically established them development centers across the country with a view to retain the talent within the company by offering them a choice of location of their workplace. By giving such choices of workplace, attrition rate is likely to come down. Such multi-locations would help to tap talent from various locations.

❖ **Appreciating Employees:** Those employees who are working hard must be appreciated through recognitions.

❖ **Flexi-timings:** It has been observed that many companies especially in IT Sectors, offers flexi timing to their employees in such schemes, employees will have to put in an average of nine hours of work a day according to their convenience. Working mothers can work partly at work place and partly from home by using new technology such as internet, video conferencing and telecommunications etc.

❖ **Empowering employees and exhibiting faith in them:** In Toyota, flexible and organic bureaucracy has been adopted to focus on effectiveness, adaptation to change and empowerment of their employees. Toyota is known to exhibit its faith in the workers as most valuable resources – not just a pair of hands taking orders, but an analyst and problem solver. Such type of strategies create sense of “satisfaction” among the employees and make them an integral part of a company with absolute commitment.

❖ **Dynamic Leadership:** Effectiveness of any organization depends on the superiors. Hence, it is necessary to have specific leadership skills with every superior to retain their valued employees. Superiors will have to foresee the unstable, disturbed employees and accordingly formulate a new strategy to retain them. These superiors must be respectful, courteous and friendly.

**CONCLUSION**

1. **Encourage collaboration.** We’re more successful when we’re not working in a vacuum. We learn through differences, and getting various perspectives is essential to growth. Assigning special projects with cross-functional teams can be a great way to do this.
2. **Allow space for thinking.** Try building in time where teams can unplug from emails, instant messaging and other daily tasks to focus on thinking without interruptions. Even setting aside an hour or two can be valuable.
3. **Empower your people.** Take a top-down approach to empowerment to build an inclusive culture that values good ideas from people at all levels. Consider incentives for bringing new ideas forward.
4. **Offer flexibility.** Flexibility options can help maintain a healthy work-life balance and prevent burnout.
5. **Invest in upskilling and learning opportunities.** This will allow employees to remain future-focused and relevant.

**Focus on Culture:**

Although pay is not the most important driver of employee satisfaction, results don’t suggest that employers can disregard it. Compensation and benefits may have less predictive power for employee satisfaction than the other factors, but it is still the top factor that job seekers consider when evaluating potential employers, according to a recent Glassdoor survey — particularly for job seekers weighing competing offers. For the purpose of attracting talent, offering competitive pay and benefits remains critical for employers.

However, once employers have begun offering pay that’s within the range of competing firms, what’s the next step for improving employee morale, engagement, and productivity? Further tinkering with the compensation package is not likely to improve employee satisfaction much, particularly among higher-earning employees. While pay can help get new talent, research shows it’s not likely to keep them there without real investments in workplace culture: making a commitment to positive culture and values, improving the quality of senior management, and creating career pathways that elevate workers through a career arc in the organization.
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CONTACT INFORMATION

Your comments and questions are valued and encouraged. Contact the author at:

  Author Name: Anu Sivanesan  
  Company: Ephicacy Lifescience Analytics Private Limited  
  Address: 2nd Main Rd, Sarvobhouma Nagar, Areekere.  
  City / Postcode: Bengaluru, Karnataka 560076  
  Work Phone: 080 4146 3195/+91 9945666002  
  Email: anu.sivanesan@ephicacy.in  
  Web: http://www.ephicacy.com