

Original Research Article

# Organizational risk and employee retention model: Which employees matter and how to retain them?

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**Abstract:** Employee retention is a critical concern for organizations in today's dynamic labor market. This paper introduces a novel framework, integrating "absolute potential of the employee" and "risk associated with leaving the employee", to address this challenge. Findings from the study suggest that this framework can effectively assist organizations in strategizing retention techniques. The research methodology employed an exploratory research design and collected data from 576 employees across various sectors. The results indicate significant implications for organizational risk assessment and employee retention strategies.

Keywords: attrition; absolute potential; retention; risk management; employee turnover

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#### 1. Introduction

Employee retention is increasingly recognized as a vital aspect of organizational success. However, it is important to understand that every employee has unique skills and a varied set of personal capabilities and values, which makes each one of them contribute differently to achieving personal as well as organizational goals<sup>[1]</sup>. Some may be more performance-oriented than others, some may be more influential, and some employees tend to be more social, while others may have no social skills. Summarizing together, it is essential for every organization to not only find out their hidden gems and stars, but to also find out which employees are lagging and are worth investing in before any competitor understands their value and poaches them. The changing realm of the industry is transforming not only the business model of the companies, but it is also affecting all the stakeholders. If we compare employment trends from the past, employees in the present have a wider job opportunities and avenues to switch.

Attrition is described as a process where there is a "decrease in the number of workers as a result of retirement, death, or resignation". Attrition can take various forms; the two most common types are voluntary and involuntary attrition. Voluntary attrition is when the employee decides to leave the company, and involuntary attrition is when the company decides to remove the employee. Attrition and employee retention has been an integral issue for industries, and with the introduction of new competitors and technology, this problem will further escalate. Voluntary attrition is a main cause of other discrepancies in the company, concerned with the risk of knowledge transfer, loss of money and time invested in the employee through training programs, and culture degradation inside the organization. Usually, companies invest heavily in terms

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of cost and time in the hiring of staff and training them in the hope of generating value. When an employee voluntarily leaves the organization, the reduction in opportunity costs is borne by the company<sup>[2]</sup>. This also affects the profitability and productivity of organizations, increasing the chances of losing good employees as well<sup>[3]</sup>. There are consequences, risks, and costs associated with attrition that direct recruitment costs endured while the company looked out for a replacement, lost labor during the time the new employee filled the position, lost productivity while the employee departs, and reduced work rate of the new hire while learning the job<sup>[4]</sup>. But on the other hand, high levels of unemployment make it difficult for people to find work that suits them, which again affects innovation and productivity for both organizations and individuals, therefore having an overall impact on the economic development of the nation<sup>[5]</sup>.

Job satisfaction is the process by which an employer makes effective efforts to persuade the current workforce to stay with the company. It is always preferable to retain the existing workers as opposed to recruiting new ones. The benefits attached to a retained worker are paramount. They have a strong understanding of the company, its culture and values, its main offerings, the company's valuable clients and stakeholders, etc. Apart from that, an older employee is often considered a wiser one, as he or she is the one who can fix challenges with subordinates that are new to the company. There are various techniques that can help improve job satisfaction and the retention rate of employees. Increased employee involvement and diversity helps employees understand each other, work together, and increase satisfaction with decisions and the organization's processes. Employee engagement and belongingness also lead to greater motivation and morale. Moreover, making employees participate in decision-making and problem-solving sessions can lead to improved attitudes, increased productivity, and decreased absenteeism and employee turnover. Furthermore, changes in organizational variables such as employee participation, scale of benefits, and training and development programs can reduce employee turnover.

It has been suggested by various research studies that primarily seven factors play a critical role in making employees leave the organization. These factors are low pay, lack of recognition, unfulfilling jobs, poor management practices, limited growth opportunities, a dysfunctional work culture and untrustworthy leadership. Although all these factors highlight discrepancies on an organization's end, many times an employee also leaves an organization looking for higher growth opportunities, better pay, or a change in career path, in which the organization must accept the employee's decision for his or her sake to grow. It is high time to accept the reality that voluntary attrition is not always a bad process to go through. It brings a number of other advantages to itself if conducted in an efficient and effective manner. Besides, if no old employee leaves the organization, how will new ideologies, diversity, and competition be introduced to the company? Therefore, the main objective of this paper is to understand what voluntarily attrition is all about by studying various factors and causes leading up to it and testing a newly developed framework known as the "Voluntarily Attrition-Retention" framework, which maps an employee into four quadrants based on the scale of absolute potential of an employee and the risks associated with leaving the organization. This framework will also help in strategizing various correction actions that can be implemented based on the quadrant the respective employee falls into.

## 2. Literature review

## 2.1. Attrition: What it is, causes and implications

Attrition is often defined as the uncontrollable and normal reduction of the workforce because of various factors, not limited to retirement, sickness, death, or relocation. Most employees make several transitions between jobs during their normal working tenure<sup>[7]</sup>. These transitions may include job changes under a single

employer and leaving one firm to take a better job at another firm. In either of the given scenarios, there is generally the intention to improve skills, remuneration, responsibilities, and/or the right job or organizational fit between the employee's skills and job requirements<sup>[8]</sup>. High turnover or attrition is indicative of the fact that employees are dissatisfied with either the work or compensation, but it is also highlighting employees' unhappiness with the working environment, unhealthy conditions, unsatisfactory performance reviews, a lack of career opportunities, challenges with the job scope, or management conflict, leading to higher turnover rates in the organizations. Other factors leading to higher turnover rates are poor morale and low levels of motivation within the workforce, inadequate wage levels making employees shift to better-paying competitors, recruiting and selecting the wrong employees in the first place, a lack of development, poor practices, and a buoyant local labor market offering attractive perks and benefits to employees<sup>[9]</sup>. Voluntary turnover is the practice where an employee leaves the organization at his or her own will, as compared to involuntary turnover, where the employer removes an employee for cases such as laying off, poor performance, unethical conduct, etc. The characteristics of employees engaging in involuntary turnover are no different than those of job-stayers. However, prediction and control can be applied to voluntary turnover through turnover intent. Therefore, voluntary turnover is considered the most important issue that industries should work on and act upon<sup>[10,11]</sup>.

An important distinction highlighted in one of the papers is between functional and dysfunctional voluntary turnover. Functional turnover does not hurt an organization. Examples may include the exit of employees whose talents are easy to replace or poor performers. On the other hand, dysfunctional turnover is harmful to the organization where the exit of high performers, employees with hard-to-replace skills, or minority or female group members takes place, leading to higher replacement costs<sup>[12]</sup>. In various papers, the term "churn rate" has been used to denote a higher turnover level in the organization. This term may also include employees who have been fired as well. A higher churn rate or attrition can adversely affect the working of a company due to higher replacement costs and training costs, a lack of morale in the existing workforce, the loss of productivity of the employees who left the organization, the risk of information breach or transfer to competitors, negative employer branding, and a loss of experience<sup>[13]</sup>. All these implications have the power to break down a company within a few months or even weeks. Therefore, it is evident and said by many scholars that attrition should be well understood by the current age of organizations, where employees have the tendency to switch 56% higher as compared to 10 years ago. It is suggested that organizations study the type of attrition that is happening inside their organization and prepare effective and efficient risk mitigation and retention strategies to overcome this strategic problem<sup>[14]</sup>.

#### 2.2. Retention: What it is, advantages and strategies

One of the major challenges that organizations face these days is how to retain skilled employees once they have been hired and trained. The ease with which current employees can now change jobs has reduced employees' loyalty to organizations. According to Get Les McKeown's book named 'Retaining Top Employees', published in the HBR series, employee retention is defined as "a systematic effort by employers to create and foster an environment that encourages current employees to remain employed by having policies and practices in place that address their diverse needs"<sup>[15]</sup>. One of the main strategies to retain employees is to create an environment where they choose to stay given the availability of other job opportunities. The environment is created by the organizations by understanding the current and future needs of their employees. Recognition, appreciation, and communication are the three basic necessities for retaining employees. Organizations should effectively communicate their past, present, and future needs and requirements to the employees so they are fully secure about the stability and strength of the organization<sup>[16]</sup>. Many research studies have talked about how an organization's transparency and inclusion level help them retain high-performing

employees even during downturns in the economy<sup>[17]</sup>. Some research topics have also discussed the advantages of job autonomy as an integral strategy to improve retention in the organization. Job autonomy can be defined as the amount of independence and discretion an employee enjoys while performing his/her job. Job autonomy substantially impacts the working environment, as when employees feel they have some control over their jobs and outcomes, they feel less stressed and more interested in staying with an organization to stay<sup>[18]</sup>. When employees are given independence and control over their jobs and work, they feel a sense of ownership for their decisions, feel connected to the organization and are thus more willing to stay for long<sup>[19]</sup>.

Employee retention is becoming an essential factor for any booming organization. It can be referred to as a management initiative through the company's strategies and policies to create a high degree of satisfaction among employees with the ultimate motive of profit maximization. Profit maximization is directly linked to bottom-line efficiencies for any organization. Employee retention is directly linked to satisfied employees, leading to satisfied customers, which ultimately leads to better profits and demand for any organization<sup>[20]</sup>. In the article "Employee Retention—A Key to Organizational Growth" it was discussed that it takes around three to six months for any fresh hire to get effectively trained and perform as per the standards. Hiring and the working environment are two integral factors affecting employee retention<sup>[20]</sup>. Employee retention is also important because an employee becomes a repository of knowledge after staying at a company for a considerably longer period of time. A positive relationship is explained by one of the papers: the longer the employee stays in an organization, the more accurately he or she can disseminate the skills acquired down the line<sup>[21]</sup>. Retention of employees leads to customer satisfaction, achievement of company objectives, and succession planning<sup>[22]</sup>. Employee retention also generates stakeholder confidence, as the board of directors and investors are always interested in an organization's capacity to perform in ways that would positively impact the value and investment in the organization. An independent study conducted by the Society for Human Resource Management explained that both tangible (well-designed workspace, good equipment, safe physical space, and an efficient communication chain) and intangible (job satisfaction, organizational commitment, job involvement, and engagement) elements of the work environment contribute to the major factors affecting an employee's decision to leave or stay in a job. Warm and open access to a natural and friendly environment helps reduce depression, stress, and apprehension, which are necessary for creating a healthy and happy environment<sup>[23]</sup>.

#### 2.3. Risk management: Understanding risk and types of risks during employee turnover

Risk management has always been the most important and prominent function for an organization to identify, assess, and mitigate risks. Risk can be defined as any event that occurs and adversely affects the achievement of organization's overall objectives. It is implied that doing business will invite risk on every level, which includes factors affecting both individuals and organizations. There are both internal and external risks. External risks may include financial market changes, changes in economic structure, demographic and governmental changes, political instability, technological changes, environmental changes, and legal changes. Internal risks may include employees' politics, internal communication and misinformation, employee risks, fraud, misappropriation of data, etc.<sup>[24]</sup>. There is no human endeavor that is perfectly safe, and those endeavors that are the safest tend to be the most boring. An integral principle for conducting business is about how an organization takes on risks that they are competent to deal with and how to transfer those risks to other third-party agencies, like insurance firms. It is essential for every business to understand and decide which risks to avoid, mitigate, or tackle<sup>[25]</sup>. Different organizations promote different philosophies concerning how to apply risk management. But universally, risk must be first identified, followed by the process of monitoring and review to include measurement of organizational performance. After risks have been identified, the process of

risk management helps in economically coordinating and applying relevant resources to control the impact, probability, and occurrence of adverse events and to monitor the effectiveness of these actions<sup>[26]</sup>. Most strategies and actions that are available to organizations involve knowing what risks the firm can cope with because of their in-built capabilities and expertise. Some risks can be dealt with; others ignored<sup>[27]</sup>.

Various authors have mentioned in their studies that there are huge costs and risks involved in the process of employee turnover. Some common risks that came out of the research studies are loss of performance, risk of information transfer, loss of business opportunities, replacement and training costs, loss of talent, and loss of customer satisfaction<sup>[28]</sup>. But not every employee turnover cycle may invite the above-mentioned risks in its predetermined course. A "human capital theory" has been introduced in one of the research papers, which talks about losses in performance as employee turnover erodes firm-specific human capital using cost-benefit approaches that help in predicting an optimal level of turnover maximizing the potential difference between perceived benefits and costs<sup>[29]</sup>. One of the major advantages of employee turnover is that it helps in replacing "poorly performing employees" with better job matches. Many companies are adopting this new strategy of "keeping the performance bar high" by maintaining a healthy turnover rate of 10–12%<sup>[30,31]</sup>. Some turnover is inevitable and is required under economic theories of job matching, since it is rational for both employees and employers to continue working with an employment contract only if the employee's productivity level matches the pay level<sup>[32]</sup>. Dysfunctional voluntary turnover (where a high performing employee voluntarily leaves the organization) depends more on pay per performance and is likely to be costlier as compared to functional turnover (where a low-performing employee voluntarily leaves the organization)[33]. Therefore, it becomes essential for an employer to weed out non-performing or low-performing employees after conducting an extensive amount of research concerning the costs and risk factors associated with the same departure<sup>[34]</sup>.

#### 2.4. Organization risk and employee retention framework

In this volatile, uncertain, complex, and ambiguous (VUCA) world, organizational risk is not a new word. Many research articles confirm that an organization is just an amalgamation of "human elements", and risks often depend upon organizational criticalities, whose minimization can be implemented through effective utilization of human resource practices. Through these practices and relevant strategies, organizational risk assessment in an industrial and dynamic environment is conducted with the objective of evaluating, mitigating, minimizing, eliminating, or at least avoiding risks related to inefficient ways of working in terms of operations management. When an organization loses a critical employee, a negative impact on consistency and innovation is also observed, which may also lead to lower-quality deliveries and services. This effective management of risk at the right time helps an organization minimize the negative impacts of employee turnover, which, at the extreme, may jeopardize efforts to achieve organizational long-term goals.

As part of the ongoing process of executing strategies to increase and sustain competitiveness, many organizations face the challenge of retaining their best employees. A critical question that must be answered while implementing this strategy is "Which employee to retain and which one to let go off?" Through various research studies, a limitation has been identified with respect to certain tools or techniques an organization can use to understand which employees must be retained or not during voluntary turnover. Employee turnover poses significant challenges for organizations, including loss of talent, productivity, and organizational knowledge. While previous studies have identified various factors contributing to turnover, existing retention strategies often fail to address the individualized needs of employees. This paper seeks to address this limitation by proposing a framework (Figure 1) that considers both employee potential and organizational risk. By integrating these factors, organizations can develop more targeted and effective retention initiatives, leading to improved employee satisfaction and organizational performance.

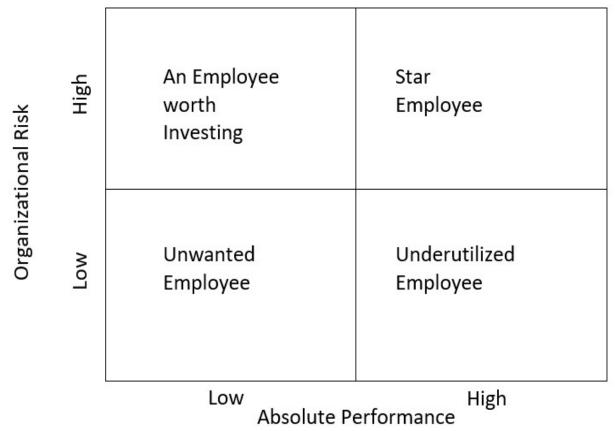


Figure 1. Organizational risk and employee retention framework.

#### 2.5. Organizational risk

As per the framework (**Figure 1**), organizational risk here denotes the challenges and losses an organization faces when an employee leaves the organization. This may include, but is not limited to, loss of human capital, unproductivity, loss of business opportunities, training and replacement costs, loss of customer satisfaction, risk of information transfer, and non-availability of a skilled workforce. Higher organizational risk means significantly greater impact, and lower organizational risk means comparatively lower impact in the above-mentioned areas when an employee leaves the organization.

#### 2.6. Absolute performance

As per the framework (**Figure 1**), absolute performance here means an employee's actual and absolute performance number or score that is being generated according to the organization's performance management system and appraisal method. Instead of comparing co-workers and establishing relative or perceived performance ratings, this framework uses individual performance scores established through the Performance Management System (PMS) and sampling research or production data.

#### 2.7. An employee worth investing

The first quadrant of this model (**Figure 1**) is based on high organizational risk mapped to low absolute performance. An employee falling in this quadrant is the one who is working on a critical client project or is equipped with highly required skills because of the high organizational risk associated with his or her turnover but is still showing low signs of performance. This is the kind of employee who requires a substantial amount of investment in terms of training, mentoring, and development programs to improve his or her performance

levels. As the employee is already an important asset to the organization, improving his or her skillset and performance level may convert that employee into a star performer.

#### 2.8. Unwanted employee

The second quadrant of this model is based on low organizational risk mapped to low absolute performance. An employee falling in this quadrant is the one who is neither equipped with relevant skills nor engaged in any critical work, nor performing up to the standards. During high attrition and voluntary turnover, this is the kind of employee an employer may consider laying off because of the low competitive benefits that employee is bringing to the organization.

#### 2.9. Underutilized employee

The third quadrant of this model is based on low organizational risk mapped to high absolute performance. An employee falling in this quadrant is the one who is showing high signs of performance and is a good player but is still not equipped with highly demanded skills or priority projects in an organization, which reduces his or her associated risk factor. This is the kind of employee who requires an immediate transfer to the prioritized work areas and tailor-made training and capsule programs to provide his or her business-specific skills before any other competitor identifies that employee's worth. As the employee is already performing as per the standards, utilizing that employee in the right function may convert him or her into a star performer.

#### 2.10. Star employee

At last, the fourth quadrant of this model is based on high organizational risk mapped to high absolute performance. An employee falling in this quadrant is the "Star Employee"—one who is equipped with the right skills as required by the organization, working on the right project or role, and is a great performer as well. These employees are the most crucial assets for an employer and must be retained during attrition and turnover at any cost, as poachers may try to steal them away because of their unique traits. Various retention strategies, such as promotion, increased pay, leadership and career development programs, employee stock options, educational scholarships, intangible benefits, etc., can be provided to them to make them feel satisfied and productive with their primary employer.

# 3. Research methodology

This study aims to develop a new framework based on employees' performance levels mapped to organizational risk. The flow of the entire research methodology has been explained in the figure below (**Figure 2**). To validate this newly designed model, exploratory research design has been utilized in this study. The population was comprised of 576 employees from different sectors and positions across the industries. The sample was selected using the simple random sampling method. Employees across all levels (top, middle, and lower) were selected for this study. A self-designed questionnaire was developed for collecting responses using a five-point Likert scale (after analyzing the validity and reliability), with 5 representing "strongly agree" and 1 representing "strongly disagree". The questions focused on all aspects of the quadrants used in the proposed framework, like the need for training and development programs, job enrichment activities, transfers, underutilized skills, etc.

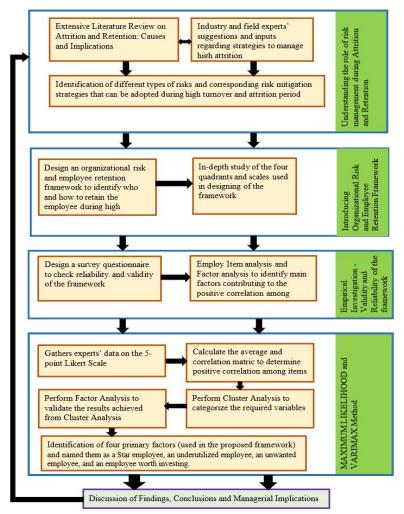


Figure 2. Research methodology.

Techniques such as item analysis and factor analysis were used to study the variables and how strongly they were establishing their relationship with the framework. Item analysis helps in examining each respondent's responses to individual questionnaire items to assess the quality of the items used and the questionnaire.

This helps us understand the quadrants and the labels used in the proposed framework. Further, factor analysis is the technique that helps in reducing the large number of variables found in the questionnaire into a smaller number of factors (four in order to validate the framework).

#### 3.1. Research analysis

To collect the data, a research survey was planned, but initially, creating a survey was also a challenge. The authors created a survey instrument with approximately 20 items. Before the collection of the final data, we conducted a survey where only 40 respondents were considered for testing the instrument and the items of the survey. The respondents were professionals from both academic and industry-related fields. On the initial data, an item analysis was done using the software Minitab 21.0. The data was collected through an interview and noted down using Microsoft Excel.

The Excel sheet containing the data was used as an input, and the responses were loaded on Minitab 21.0 for further analysis. After the initial analysis, the following was the result.

After doing the initial item analysis, it was evident that our items have moderately high and positive values in the correlation matrix (**Table 1**), along with certain specific items, which indicate that the items are highly correlated with many other items. These items shall further be clubbed together and analyzed through factor analysis. The overall Cronbach's alpha is 0.7264 (**Table 2**), which is greater than the common benchmark of 0.7. Therefore, the authors concluded that the items were measuring similar characteristics through the survey for all the positively correlated items in the instrument.

**Table 1.** Correlation matrix of items (instrument testing).

	Item-1	Item-2	Item-3	Item-4	Item-5	Item-6	Item-7	Item-8	Item-9
Item-2	-0.114								
Item-3	0.232	-0.504							
Item-4	-0.175	0.153	-0.267						
Item-5	-0.110	0.819	-0.334	0.103					
Item-6	0.804	0.154	0.139	0.064	0.104				
Item-7	0.191	-0.267	0.471	-0.346	-0.236	0.088			
Item-8	0.137	-0.020	-0.220	0.229	-0.015	-0.016	0.058		
Item-9	0.069	-0.452	0.540	-0.256	-0.322	-0.005	0.573	-0.245	
Item-10	0.715	-0.204	0.192	0.257	-0.043	-0.016	0.204	0.444	0.092
Item-11	-0.233	0.704	-0.302	0.200	0.769	0.015	-0.222	0.087	-0.320
Item-12	0.817	0.056	0.279	0.039	0.022	0.583	0.118	0.187	0.022
Item-13	-0.136	0.888	-0.354	0.014	0.890	0.051	-0.287	-0.012	-0.444
Item-14	0.083	-0.010	0.000	0.192	-0.045	-0.022	0.060	0.456	-0.013
Item-15	0.748	0.179	0.175	-0.180	0.132	0.542	0.309	0.035	0.126
Item-16	0.179	-0.407	0.569	-0.314	-0.152	-0.028	0.469	0.038	0.553
Item-17	-0.032	-0.247	0.408	-0.327	-0.136	-0.034	0.289	-0.135	0.506
Item-18	0.913	0.087	0.192	0.128	-0.032	0.554	0.000	0.048	0.082
Item-19	-0.178	0.743	-0.259	0.039	0.802	-0.084	-0.183	-0.017	-0.288
Item-20	0.039	-0.097	-0.023	0.766	-0.170	-0.038	-0.072	0.800	-0.077
	Item-10	Item-11	Item-12	Item-13	Item-14	Item-15	Item-16	Item-17	Item-18
Item-11	0.013								
Item-12	0.032	-0.133							
Item-13	-0.084	0.490	0.040						
Item-14	0.454	0.150	0.124	-0.101					
Item-15	-0.067	0.005	0.385	0.100	-0.129				
Item-16	0.110	-0.219	0.197	-0.282	-0.013	0.225			
Item-17	0.000	-0.085	0.068	-0.128	0.069	-0.071	0.387		
Item-18	0.000	0.020	0.627	-0.054	-0.097	0.554	0.219	0.000	
Item-19	-0.075	0.841	-0.169	0.632	-0.009	0.108	-0.005	0.000	0.037
Item-20	0.750	0.066	-0.007	0.722	0.744	-0.148	-0.096	-0.028	-0.138
	Item-19								

Item-20 -0.118

 Table 2. Cronbach alpha (items 1-20).

Alpha	
0.7264	

After the consistent results of item analysis, the same instrument was used to collect the data, and the survey was further continued. The entire data collection process continued for over 4 months, and the authors were able to collect the data of 583 respondents. The responses of 7 respondents were disregarded and dropped from the analysis as they were incomplete for all the items. The final analysis was done on 576 responses. The respondents were mostly from different domains of the industry, and the detailed analysis and descriptive study have been shown through the tables and figures below (**Tables 3–8**, **Figures 3–5**).

Table 3. Descriptive analysis of respondents (as per age).

Age (in years)	Count	% of row	% of column	% of total
21–25	249	100	43.23	43.23
25–35	159	100	27.60	27.60
35–45	42	100	7.29	7.29
45–55	42	100	7.29	7.29
55 above	84	100	14.58	14.58
All	576	100	100.00	100.00

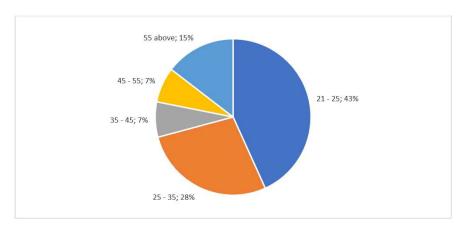


Figure 3. Percentage contribution as per age (in years).

Table 4. Descriptive analysis of respondents (as per professional domain).

Domain/background	count	% of row	% of column	% of total
Business analytics and IT	47	100	8.16	8.16
Business excellence	15	100	2.60	2.60
Finance	113	100	19.62	19.62
Human resources	124	100	21.53	21.53
Medical and healthcare	23	100	3.99	3.99
Operations and supply chain	137	100	23.78	23.78
Research and product development	24	100	4.17	4.17
Sales and marketing	93	100	16.15	16.15
All	576	100	100.00	100.00

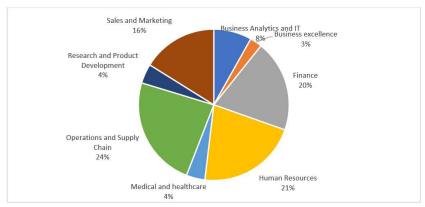


Figure 4. Percentage contribution as per professional domain.

Table 5. Descriptive analysis of respondents (as per experience).

Experience	Count	% of row	% of column	% of total
1-less than 4 years	88	100	15.28	15.28
12-less than 20 years	42	100	7.29	7.29
20-less than 30 years	28	100	4.86	4.86
30 years or more	112	100	19.44	19.44
4-less than 8 years	73	100	12.67	12.67
8-less than 12 years	30	100	5.21	5.21
Less than 1 year	203	100	35.24	35.24
All	576	100	100.00	100.00

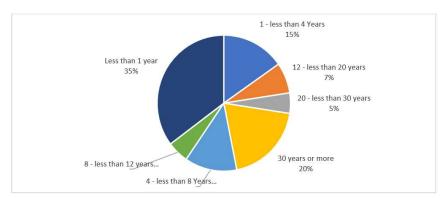


Figure 5. Percentage contribution as per experience (in years).

Also to study the crosstabulation and a better assessment of the responses, a heat-map of the respondents has been prepared which is shown below.

Table 6. Heatmap (crosstabulation of age with experience—Count in numbers).

	Age (in years)							
Experience	21–25	25–35	35–45	45–55	>55	Grand total		
Less than 1 year	175	28	0	0	0	203		
1-less than 4 years	59	29	0	0	0	88		
4-less than 8 years	15	58	0	0	0	73		
8-less than 12 years	0	30	0	0	0	30		
12-less than 20 years	0	14	28	0	0	42		
20-less than 30 years	0	0	14	14	0	28		
30 years or more	0	0	0	28	84	112		
Grand total	249	159	42	42	84	576		

Table 7. Heatmap (crosstabulation of age with domain—Count in numbers).

	Age (in y	ears)				
Domain	21–25	25–35	35–45	45–55	>55	Grand total
Business analytics and IT	27	8	4	2	6	47
Business excellence	0	4	8	2	1	15
Finance	70	35	2	4	2	113
Human resources	78	32	1	8	5	124
Medical and healthcare	1	18	2	1	1	23
Operations and supply chain	21	24	14	20	58	137
Research and development	5	11	0	3	5	24
Sales and marketing	47	27	11	2	6	93
Grand total	249	159	42	42	84	576

Table 8. Heatmap (crosstabulation of domain with experience—count in numbers).

	Experience							
Domain	1–less than 4 years	12–less than 20 years	20–less than 30 years	30 years or more	4–less than 8 years	8–less than 12 years	Less than 1 year	Grand total
Business analytics and IT	13	4	3	6	4	3	14	47
Business excellence	4	0	8	3	0	0	0	15
Finance	14	2	2	4	12	11	68	113
Human resources	27	2	5	8	34	5	43	124
Medical and healthcare	0	3	1	1	16	2	0	23
Operations and supply chain	6	17	8	75	3	2	26	137
Research and development	3	2	1	7	0	6	5	24
Sales and marketing	21	12	0	8	4	1	47	93
Grand total	88	42	28	112	73	30	203	576

All these respondents of varied experience and from different domains were given a survey of 20 items to respond. Following are those items and the descriptive analysis of the responses considering each item (**Table 9**).

Table 9. Items of the instrument survey.

No.	Item
1	An employee "with relatively low performance, if leaves the organization can have a high risk to the organization" is an individual who an organization cannot afford to lose.
2	An employee "with relatively high performance, if leaves the organization can have a high risk to the organization" is an individual who an organization cannot afford to lose.
3	An employee "with relatively low performance, if leaves the organization can have a low or no risk to the organization" is an individual who an organization cannot afford to lose.

Table 9. (Continued).

No.	Item
4	An employee "with relatively high performance, if leaves the organization can have a low or no risk to the organization" is an individual who an organization cannot afford to lose.
5	It is worth to invest on an employee (like imparting trainings etc.) who is "with relatively low performance, but if leaves the organization can have a high risk to the organization"
6	It is worth to invest on an employee (like imparting trainings etc.) who is "with relatively low performance, but if leaves the organization can have no or low risk to the organization"
7	It is worth to invest on an employee (like imparting trainings etc.) who is "with relatively high performance, but if leaves the organization can have no or low risk to the organization"
8	It is worth to invest on an employee (like imparting trainings etc.) who is "with relatively high performance, but if leaves the organization can have high risk to the organization"
9	If you are forced to reduce the employee strength then you will go for an employee "with relatively high performance, but if leaves the organization can have high risk to the organization"
10	If you are forced to reduce the employee strength then you will go for an employee "with relatively high performance, but if leaves the organization can have no or low risk to the organization"
11	If you are forced to reduce the employee strength then you will go for an employee "with relatively low performance, but if leaves the organization can have no or low risk to the organization"
12	If you are forced to reduce the employee strength then you will go for an employee "with relatively low performance, but if leaves the organization can have high risk to the organization"
13	An employee who must be given more exposure based on performance or must be better utilized in terms of skill is an employee "with relatively low performance, but if leaves the organization can have high risk to the organization"
14	An employee who must be given more exposure based on performance or must be better utilized in terms of skill is an employee "with relatively high performance, but if leaves the organization can have high risk to the organization"
15	An employee who must be given more exposure based on performance or must be better utilized in terms of skill is an employee "with relatively high performance, but if leaves the organization can have no or low risk to the organization"
16	An employee who must be given more exposure based on performance or must be better utilized in terms of skill is an employee "with relatively low performance, but if leaves the organization can have no or low risk to the organization"
17	An employee who must be cherished, rewarded and should not be allowed to leave is an employee "with relatively low performance, but if leaves the organization can have no or low risk to the organization"
18	An employee who must be cherished, rewarded and should not be allowed to leave is an employee "with relatively high performance, but if leaves the organization can have no or low risk to the organization"
19	An employee who must be cherished, rewarded and should not be allowed to leave is an employee "with relatively high performance, but if leaves the organization can have high risk to the organization"
20	An employee who must be cherished, rewarded and should not be allowed to leave is an employee "with relatively low performance, but if leaves the organization can have high risk to the organization"

Each of these mentioned items were given a response on a Likert scale of 1–5 which is mentioned below (**Table 10**). Every item mentioned in **Table 10** was analyzed. The descriptive analysis of each item has been done based on the respondent's age, experience and professional domain (**Tables 11–13**).

Table 10. Recoded values of responses.

Original value	Recoded value
Agree	4
Disagree	2
Neutral	3
Strongly agree	5
Strongly disagree	1

 Table 11. Descriptive analysis of item wise responses as per the respondents age.

Age (in years)	Item-1 mean	Item-2 mean	Item-3 mean	Item-4 mean	Item-5 mean	Item-6 mean	Item-7 mean	Item-8 mean	Item-9 mean	Item-10 mean
21–25	2.104	4.229	1.410	3.474	3.880	2.526	1.462	3.647	1.345	3.466
25–35	2.189	4.000	1.635	3.547	3.830	2.283	1.547	3.547	1.365	3.906
35–45	2.000	4.667	1.000	3.333	5.000	2.333	1.333	4.000	1.333	3.667
45–55	2.333	3.333	1.333	4.000	3.333	2.333	1.000	4.000	1.333	4.000
55 above	2.667	3.667	1.833	3.833	3.167	2.833	1.833	3.833	1.833	4.167
All	2.219	4.050	1.498	3.575	3.804	2.476	1.497	3.698	1.420	3.743
Age (in years)	Item-11 mean	Item-12 mean	Item-13 mean	Item-14 mean	Item-15 mean	Item-16 mean	Item-17 mean	Item-18 mean	Item-19 mean	Item-20 mean
21–25	3.823	2.582	3.944	3.293	2.458	1.466	1.590	2.635	3.996	3.478
25–35	3.912	2.101	3.736	3.736	2.176	1.541	1.459	2.176	4.277	3.830
35–45	4.333	2.333	3.667	4.000	2.000	1.667	1.333	2.333	4.667	3.667
45–55	3.333	2.333	3.333	3.667	2.000	2.000	1.000	2.333	3.667	4.333
55 above	3.667	2.833	3.333	4.000	2.333	1.500	1.667	2.833	3.667	3.667
All	3.826	2.450	3.733	3.597	2.295	1.545	1.503	2.493	4.050	3.679

Table 12. Descriptive analysis of item wise responses as per the respondent's experience.

Experience	Item-1 mean	Item-2 mean	Item-3 mean	Item-4 mean	Item-5 mean	Item-6 mean	Item-7 mean	Item-8 mean
1-less than 4 years	2.330	4.000	1.818	3.170	3.682	2.670	1.318	2.659
12-less than 20 years	2.000	5.000	1.000	3.667	5.000	2.333	1.333	4.000
20-less than 30 years	2.000	4.000	1.000	3.500	4.000	2.500	1.000	4.000
30 years or more	2.625	3.500	1.750	3.875	3.250	2.625	1.625	3.875
4-less than 8 years	2.000	4.014	1.192	3.411	3.425	2.411	1.795	4.000
8-less than 12 years	2.500	3.500	2.000	3.500	4.000	2.000	1.500	4.000
Less than 1 year	2.059	4.281	1.429	3.645	3.995	2.429	1.498	3.793
All	2.219	4.050	1.498	3.575	3.804	2.476	1.497	3.698
Experience	Item-9 mean	Item-10 mean	Item-11 mean	Item-12 mean	Item-13 mean	Item-14 mean	Item-15 mean	Item-16 mean
1-less than 4 Years	1.489	3.159	3.659	2.330	3.852	3.000	2.489	1.318
12-less than 20 years	1.333	3.667	4.667	2.000	4.000	3.667	2.000	1.333
20-less than 30 years	1.000	4.000	3.500	2.500	4.000	3.500	2.000	2.000
30 years or more	1.750	4.125	3.625	2.750	3.250	4.000	2.250	1.625
4-less than 8 Years	1.397	4.000	3.616	2.219	3.616	3.795	2.192	1.397
8-less than 12 years	1.500	4.000	4.000	2.000	3.500	4.000	1.500	1.500
Less than 1 year	1.281	3.635	3.931	2.571	3.931	3.502	2.493	1.640
All	1.420	3.743	3.826	2.450	3.733	3.597	2.295	1.545
Experience	Item-17 mean	Item-18 mean	Item-19 mean	Item-20 mean				
1–less than 4 years	1.500	2.648	3.989	3.489	<del>_</del>			
12-less than 20 years	1.000	2.000	4.667	4.000				
20-less than 30 years	1.500	3.000	4.500	3.500				

 $\textbf{Table 12.} \ (\textit{Continued}).$ 

Experience	Item-17 mean	Item-18 mean	Item-19 mean	Item-20 mean
30 years or more	1.500	2.625	3.625	3.875
4-less than 8 Years	1.411	2.000	3.616	4.014
8-less than 12 years	2.000	2.000	4.500	4.500
Less than 1 year	1.571	2.635	4.212	3.369
All	1.503	2.493	4.050	3.679

 Table 13. Descriptive analysis of item wise responses as per the respondent's professional domain.

Professional domain	Item-1 mean	Item-2 mean	Item-3 mean	Item-4 mean	Item-5 mean	Item-6 mean	Item-7 mean
Business analytics and IT	2.447	4.404	1.681	3.277	3.596	2.489	1.723
Business excellence	2.200	4.067	1.400	3.467	4.467	2.400	1.000
Finance	1.885	3.832	1.788	3.265	3.549	2.407	1.681
Human resources	2.048	4.363	1.073	3.766	4.056	2.371	1.347
Medical and healthcare	2.174	4.130	1.087	3.217	4.043	2.217	1.783
Operations and supply chain	2.460	3.745	1.489	3.766	3.693	2.474	1.664
Research and product	2.375	4.042	1.458	3.625	3.750	2.375	1.292
Sales and marketing	2.355	4.151	1.763	3.656	3.892	2.796	1.172
All	2.219	4.050	1.498	3.575	3.804	2.476	1.497
Professional domain	Item-8 mean	Item-9 mean	Item-10 mean	Item-11 mean	Item-12 mean	Item-13 mean	Item-14 mean
Business analytics and IT	3.426	1.979	3.404	3.872	2.702	3.660	3.383
Business excellence	3.733	1.000	3.867	4.067	2.867	3.733	4.000
Finance	3.522	1.540	3.602	3.531	2.301	3.593	3.504
Human resources	3.710	1.032	3.750	3.871	2.258	4.242	3.540
Medical and healthcare	4.043	1.696	3.913	3.435	2.087	3.913	3.870
Operations and supply chain	3.825	1.562	4.022	3.898	2.460	3.401	3.635
Research and product	3.708	1.417	3.417	3.958	2.208	3.542	3.500
Sales and marketing	3.753	1.301	3.688	4.022	2.828	3.753	3.731
All	3.698	1.420	3.743	3.826	2.450	3.733	3.597
Professional domain	Item-15 mean	Item-16 mean	Item-17 mean	Item-18 mean	Item-19 mean	Item-20 mean	
Business analytics and IT	2.596	2.021	1.681	3.255	4.255	3.362	_
Business excellence	2.267	1.667	1.533	2.933	4.600	3.600	
Finance	2.230	1.690	1.796	2.133	3.655	3.850	
Human resources	2.194	1.089	1.218	2.331	4.081	3.742	
Medical and healthcare	1.957	1.826	1.783	1.435	4.130	4.087	
Operations and supply chain	2.292	1.635	1.453	2.606	4.058	3.562	
Research and product	2.250	1.458	1.667	2.458	4.333	3.917	
Sales and marketing	2.462	1.538	1.398	2.796	4.194	3.570	
All	2.295	1.545	1.503	2.493	4.050	3.679	

Further, to find out the specific variables from the data, the author's performed cluster analysis to categorize the required variables. Below (**Table 14**) is the detailed result of the cluster analysis.

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Table 14	Amalgama	ition stens	tor cluster	analysis

Step	Number of clusters	Similarity level	Distance level	Clust joine		New cluster	Number of observations in new cluster
1	19	91.9839	0.16032	11	19	11	2
2	18	85.9442	0.28112	2	5	2	2
3	17	81.3574	0.37285	12	18	12	2
4	16	79.8429	0.40314	1	6	1	2
5	15	79.2580	0.41484	2	13	2	3
6	14	78.5582	0.42884	7	9	7	2
7	13	78.3779	0.43244	3	16	3	2
8	12	77.0662	0.45868	14	20	14	2
9	11	75.6440	0.48712	1	12	1	4
10	10	74.3345	0.51331	2	11	2	5
11	9	73.1921	0.53616	3	7	3	4
12	8	72.7932	0.54414	8	14	8	3
13	7	69.3041	0.61392	1	15	1	5
14	6	64.1415	0.71717	3	17	3	5
15	5	62.9987	0.74003	4	10	4	2
16	4	59.8427	0.80315	4	8	4	5
17	3	46.1129	1.07774	1	3	1	10
18	2	39.9735	1.20053	2	4	2	10
19	1	24.7009	1.50598	1	2	1	20

The detailed cluster analysis resulted in the statistical dendrogram (**Figure 6**). This dendrogram clearly highlights that the cluster analysis has clearly categorized the response into four clusters shown in different colors (**Figure 6**). These clusters have been formed based on the similarity level observed during the clustering of all the responses by the respondents. The items and their responses to the similarity have been mentioned in the table below (**Table 15**).

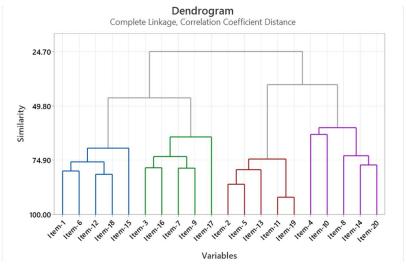


Figure 6. Dendrogram structural linkage of the categorical variables after the cluster analysis.

**Table 15.** Partition table after the cluster analysis.

	Variables
Cluster 1	Item-1, Item-6, Item-12, Item-15, Item-18
Cluster 2	Item-2, Item-5, Item-11, Item-13, Item-19
Cluster 3	Item-3, Item-7, Item-9, Item-16, Item-17
Cluster 4	Item-4, Item-8, Item-10, Item-14, Item-20

#### 3.2. Final partition

Further, to validate the results from the cluster analysis, the author's factor analysis was performed on the responses. As per the analysis, four factors were extracted using the maximum likelihood method and the varimax rotation. Also, the scree plot was are the results (**Table 16**) obtained. Below are the results (**Table 16**).

**Table 16.** Factor analysis—Varimax rotation table.

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Communality
Item-1	-0.143	0.726	-0.104	-0.076	0.564
Item-2	0.614	0.140	0.485	0.100	0.642
Item-3	-0.263	0.215	-0.676	0.011	0.572
Item-4	0.067	0.006	0.380	-0.348	0.270
Item-5	0.758	0.069	0.234	0.092	0.642
Item-6	0.006	0.779	0.092	0.029	0.616
Item-7	-0.178	0.139	-0.581	-0.047	0.391
Item-8	0.011	0.103	0.110	-0.685	0.491
Item-9	-0.296	0.019	-0.696	0.084	0.579
Item-10	-0.051	-0.014	-0.158	-0.560	0.341
Item-11	0.864	-0.076	0.140	-0.170	0.801
Item-12	-0.085	0.794	-0.036	-0.122	0.654
Item-13	0.653	0.039	0.314	0.142	0.547
Item-14	0.026	-0.010	-0.018	-0.742	0.551
Item-15	0.157	0.646	-0.164	0.145	0.490
Item-16	-0.037	0.148	-0.789	-0.014	0.646
Item-17	-0.019	-0.055	-0.544	0.021	0.300
Item-18	0.084	0.741	-0.108	0.029	0.568
Item-19	0.964	-0.087	-0.034	0.021	0.938
Item-20	-0.109	-0.075	0.101	-0.688	0.500
Variance	3.3229	2.8764	2.8572	2.0476	11.1041
% Var	0.166	0.144	0.143	0.102	0.755

#### 3.3. Rotated factor loadings and communalities

The above analysis clearly reflects and categorizes that 75.5% of the variance can be explained by these 4 latent factors or variables, which define the response.

• Factor 1 is described by Cluster 2 - Item-2, Item-5, Item-11, Item-13, Item-19.

- Factor 2 is described by Cluster 1 Item-1, Item-6, Item-12, Item-15, Item-18.
- Factor 3 is described by Cluster 3 Item-3, Item-7, Item-9, Item-16, Item-17.
- Factor 4 is described by Cluster 4 Item-4, Item-8, Item-10, Item-14, Item-20.

Large factor loadings, irrespective of positive or negative, largely influence the variables.

The scree plot (**Figure 7**) after the factor analysis also clearly describes the contribution and the variation purely based on the eigenvalues of the first four factors. These four factors directly validate our initial assumption regarding the newly proposed model for risk assessment based on employee performance in an organization. Each factor based on the instrument questionnaire and the associated items with their responses has been named as a star employee, an underutilized employee, an unwanted employee, or an employee worth investing in.

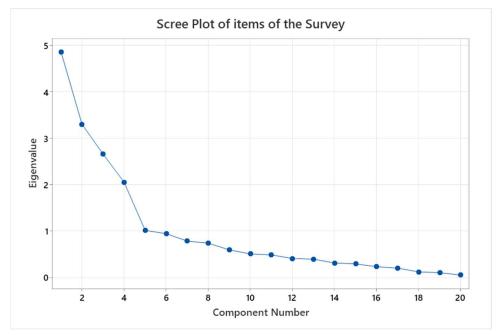


Figure 7. Scree plot after the factor analysis.

# 4. Research findings

The study's findings underscore the significance of tailoring retention strategies to individual employee profiles. While the proposed framework offers valuable insights, further research is needed to validate its effectiveness across different organizational contexts. Future studies could also explore cultural differences in retention dynamics and compare the proposed framework with existing models to identify its unique contributions.

More significantly, the research findings provide relatively strong support for the respective strategies that can be used for various employees falling into different quadrants, namely: star employee, underutilized employee, unwanted employee, and employee worth investing in. This research study therefore supports the research proposed in 2011 by Sivaram Tekuru that "retention is an art of managing people. In an environment of cooperation, trust, and collaborative approach by the management, employees get to feel the connect." Organizations are not required to spend millions of dollars on retention strategies, but a simple change in their leadership can keep employees attached to the organization. A complex blend of management skills that allows growth, flexibility, and development is all that is required to sustain business operations.

# 5. Conclusion and implications

As the population has now crossed the mark of 8 billion people on Earth, the global economy now offers an unlimited opportunity to find alternative jobs as there is an exponential growth in the size of international and national markets. Therefore, employee retention has now become a major challenge and concept that needs to be taken care of in this dynamic environment. In conclusion, this study contributes to the growing body of literature on employee retention by proposing a novel framework that integrates employee potential and organizational risk. The findings have significant implications for organizational risk management and employee retention strategies. However, further research is needed to validate the framework's effectiveness and explore its applicability across diverse organizational contexts.

Finally, this research study recommends that industries apply this model and utilize it for the betterment of employee satisfaction and organizational growth. It is also recommended that future research studies be conducted on a large scale in order to allow for more generalizations of the above-proposed findings.

#### **Author contributions**

Conceptualization, SS and AK; methodology, SS; software, SS; validation, SS; formal analysis, SS; investigation, SS and AK; resources, SS and AK; data curation, SS and AK; writing, Avleen Kaur; writing—review and editing, SS and AK; visualization, SS and AK; supervision, SS and AK; project administration, SS and AK. All authors have read and agreed to the published version of the manuscript.

#### **Conflict of interest**

The authors declare no conflict of interest.

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