

An Evaluation of Human Resources of IT Departments in Banks of Bangladesh

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+ - IT ---- Business



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Section No. 2, Mirpur, Dhaka-1216

RESEARCH MONOGRAPH 64

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An Evaluation of Human Resources of IT Departments in Banks of Bangladesh

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As part of the ongoing dissemination of BIBM research outputs, the present research monograph contains the findings of the research project: "An Evaluation of Human Resources of IT Departments in Banks of Bangladesh". Technology professionals in banks are the new Masters of the Universe. In theory, those who run IT hold the trump cards, and banks are working harder to attract and retain them. Todays, fast-changing business atmosphere needs a planned HR development for the IT department within the framework of the organization's overall business plan. To cope with the emerging necessities, maintaining a constructive work environment and retaine capacity are a few of the major challenges which every HR specialist has to face to make a successful online bank. Still, a big portion of banks have been facing a lot of problems regarding IT employee management due to a dearth of longterm visualization, proper design and initiatives, scarcity of manpower, meager IT budget, and lack of appropriate and advanced training. There is no comprehensive study found on the overall HRM of IT departments in commercial banks of Bangladesh. The study aims to evaluate the current status of HRM of IT department in banks, assess the occupational hassle; mental, physical and financial health of IT professionals and analyze the gap between expected and actual quality and performance of employees in IT departments. This publication also identifies the job contentment of professionals belonging to the IT department based on some selected indicators and suggests some course of action for better IT employee management.

It gives me immense pleasure, on behalf of BIBM, to offer this important resource of academic inputs to the practitioners of the banks and financial institutions, regulatory agencies as well as to the academics and common readers. I hope, this monograph will be a valuable resource for professionals, especially for the banking community for understanding the current status of human resource management of IT departments in banks and taking necessary actions to develop a successful online banking sector. Further, this will assist the employees to form a proper work-life balance

We do encourage feedback from our esteemed readers on this issue which certainly would help us to improve our research activities in the years ahead.

Md. Akhtaruzzaman, Ph.D. Director General, BIBM

This research project has been completed with the great support from many persons and organizations. We would like to especially thank Dr. Md. Aktaruzzaman, honorable Director General, BIBM for his valuable advice, inspiration, comments and thoughts to progress our research work. The remarks and insights of Professor Dr. Barkat-e-Khuda, Former Dr. Muzaffer Ahmad Chair Professor of BIBM and Dr. Md. Shahid Ullah, Associate Professor of BIBM were significant at different stages of our work. Further, the research team has benefitted immensely from a comprehensive review and editing of the paper by Professor Dr. Barkat-e-Khuda.

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List of Abbreviations

ACR Annual Confidential Report

ADC Alternative Delivery Channel

AIX Advanced Interactive eXecutive

AMD Additional Managing Director

APR Annual Performance Report

ATM Automated Teller Machine

AWS Amazon Web Services

BB Bangladesh Bank

BC Business Continuity

BDT Bangladeshi Taka

BIBM Bangladesh Institute of Bank Management

BOD Board of Directors

BRPD Banking Regulation and Policy Department

BUET Bangladesh University of Engineering and Technology

CBA Collective Bargaining Agent

CBS Core Banking Solution

CCNA Cisco Certified Network Associate

CCNP Cisco Certified Network Professional

CEH Certified Ethical Hacker

CISA Certified Information System Audit

CISM Certified Information Security Manager

CISO Chief Information Security Officer

CISSP Certified Information System Security Professional

CompTIA Computing Technology Industry Association

CSE Computer Science and Engineering

DAIBB Diplomaed Associate of Institute of Bankers Bangladesh

DBA Database Administrator

DC Data Center

DMD Deputy Managing Director

DR Disaster Recovery

DRS Disaster Recovery Site

EEE Electrical and Electronic Engineering

ESR Employee Service Rule

FGD Focused Group Discussion

HR Human Resources

HRD Human Resource Department
HRM Human Resource Management

IBM MQ International Business Machines Message Queue

IDRBT Institute for Development & Research in Banking Technology

ISAC Information Sharing and Analysis Center

IT Information Technology

ITIL Information Technology Infrastructure Library

LFA Leave Fare Assistance

MBA Master of Business Administration

MCSA Microsoft Certified Solutions Associate

MCSE Microsoft Certified Solutions Expert

MD Managing Director

MDSA Master Diploma in System Administration

OCP Oracle Certified Professional

OS Operating Systems

PCI DSS Payment Card Industry Data Security Standard

PnP Plug and Play

RAC Real Application Cluster

RBI Reserve Bank of India

RHCA Red Hat Certified Architect
RHCE Red Hat Certified Engineer

RSA Rivest–Shamir–Adleman

SEVP Senior Executive Vice President

SOC Security Operation Center

VAPT Vulnerability Assessment and Penetration Testing

VRoL Visa Resolve Online Program

WHO World Health Organization

Technology has become an inherent part of the business policy at banks. Globally, banking businesses are going through a sequence of fast changes due to the pace of technological improvement. The Information Technology division is part of the Organization Service. It controls the bank's computer network, services employee computers, checks and installs software and quickly eradicates IT failures and mistakes. The department maintains persistent IT system security, evaluates IT security instances, carries out IT system security checks, as well as keeps in contact and manages actions with the Central Bank about these subjects. It plans, improves and cultivates the IT systems used at the bank, looks for and purchases new hardware and software, necessary IT services.

Technology professionals in banks are the new Masters of the Universe. In theory, those who run IT hold the trump cards, and banks are working harder to attract and retain them. Today's fast-changing business atmosphere needs a planned HR development for the IT department within the framework of the organization's overall business plan. To cope with the emerging necessities, maintaining a constructive work environment and retaining capacity are a few of the major challenges which every HR specialist has to face to make a successful online bank. The achievement of the IT department depends on the bank's business policies, objectives and support from the board and top-level directors which, in turn, helps to develop programs related to employee retention, training and progress, and performance-oriented payments. In the past, topics related to remunerations and job safety were foremost issues for IT employees. But, now issues like enthusiasm, retention of the workforce, mentoring, training, late night works, tension, ego hassles between teams, discontent due to unnecessary rules, etc. are getting more common in banks.

This study evaluated the IT employees of banks in different dimensions like stress, health (mental and physical), financial soundness and job satisfaction. It used both primary and secondary data. This study covered 4 public and 26 private commercial banks. However, we did not receive any response from the foreign commercial banks. Also, valid data from 750 randomly selected employees of all banks (354 from IT and 396 from business group) were analyzed. Further, the review team visited 5 Heads of IT, 3 Heads of HRD and 3 CEOs for getting in-depth information regarding different aspects and practices of HR functions of banks in Bangladesh. The review team also conducted two focused group discussions (FGD) separately with 10 Heads of IT and 7 Heads of HRD.

Still, a big portion of banks have been facing a lot of problems regarding IT employee management due to a dearth of long-term visualization, proper design and initiatives, scarcity of manpower, meager IT budget, and lack of appropriate and advanced training. To overcome these problems, a bank should allocate a certain portion of its annual profit for the ICT HR development budget. This budget may be used for ICT manpower development and keep them informed about contemporary technology. Leadership quality and efficacy of IT project execution team should be developed for successful design and implementation of banking computerization projects. The budget for training was very low in the last five years. About 3 percent of the total IT budget is spent on training purposes and CTOs are not pleased regarding this matter. The budget approval for IT skill development is a challenge in our banking sector. Management approves IT budget for system implementation, but they are reluctant on

training for IT skill development. Moreover, research shows that 88% of the banks do not have a documented and approved IT Roadmap for IT professional development. A technology roadmap for IT professional development may help the CIO to perform more in line with the business strategy of the institute.

The study findings show that all types of employees (IT and Business) in the banking sector were working under 'High' stress. But, the overall stress level of IT employees (59.59) was greater than business employees (56.74). The highest stress was observed for the IT staff of private banks (63.82). Out of 20 parameters under study, the stress of IT employees (both public and private banks) was highest in the case of 13 parameters compared to business employees in the banking sector. The study also clearly identified that if an employee is stressed then his/her mental health is affected and, in turn, it affects his/her physical health and job satisfaction in the organization. Organizations and individuals himself/herself can take measures to avoid stress effects. Employees must know the symptoms of their stress, and employers must know the impact of stress on the health of their employees. Men and old employees having more experience at the job can handle stress efficiently. Social support, advice, proper planning, and time management can help to handle job stress.

The study found various health problems like overweight, blood pressure, diabetes, eyesight problem, back pain, etc. of IT employees in private and public banks. IT employees had been suffering from eyesight problem which may have resulted from working for a very long time in front of a computer. They also have been suffering from spinal cord problems, spondylosis, back pain, and chronic headache. Refreshment time might be increased to reduce such health problems. Regular health checkup is essential for employees. Mandatory health insurance can be imposed on every employee. The habit of fast food and lack of balanced food is responsible for some health hazards of IT employees. Making the habit of taking balanced food and avoiding the habit of fast food may prevent overweight problems of IT employees.

Stable mental health is essential for bank employees. The study measured the mental health of employees based on various factors like average sleeping hours, the distance of office from home, working hours, refreshment time, family time, duration of working in the same position, personal and family problems, leave facilities, etc. The study found that holiday and leave facilities of the employees are not up to mark. By considering this fact, banks can increase leave facilities for the employees. Social engagement of employees can be another way to improve the mental health of employees.

The findings show that business employees were getting more salary than IT employees in both private and public banks. Although the salary deviation was not too high, private employees always expect higher salaries compared to the public sector. The overall economic status of IT and business employees were very close. However, the non-monetary benefits of IT employees were low. Management can consider this issue seriously.

By using 'Factor Analysis' techniques, the most important factors identified for IT employees in this research that have severe impact on employee job satisfaction were: 'Financial Rewards and Career

Opportunities', 'Training for Developing Efficiency', 'Challenges Toward the Working Environment', 'Variation in Core Duties', 'Leadership Capacity', 'Boringness Duties, 'Transportation Facilities' and 'Workload Balancing'. Management may consider these factors to enhance the satisfaction level of their employees in their professional life.

In general, the HoIT was not involved in the IT recruitment and promotion process of banks. But, as IT employees work under the supervision of HoIT, it will make sense to include HoIT in the whole process. Bank administration may think about this matter. Moreover, the IT employee turnover rate was very high. To reduce the turnover rate it is needed to recruit the right people first by following a transparent selection process. If the wrong employee is selected, IT risk might be increased for his/her unfitness in this sector. Then, it is needed to help the recruited employees to boost up their skills and knowledge by giving proper training. Attention can be given to job engagement and enrichment. After a certain period, job rotation is required to avoid being at a specific desk and increase their horizon of knowledge. On-time and escalated promotion (if necessary) may motivate them for better job satisfaction and reduce turnover rate. Financial benefits like competitive salary, bonus and on time increment may help to the retention of IT employees. Recognition and rewarding are also great factors to motivate employees. Prioritization of employee happiness and leadership may also reduce the turnover rate.

The study also found that unethical pressure for quitting a job; grievance handling and protection of employees' rights are major problems in IT Departments. It is necessary to establish an Employee Association like CBA/Trade Union to handle such problems and about 50% of employees (both IT and business) agreed on this issue. In this regard, employees of all banks must come forward to establish an Employee Association to bring them under the same umbrella.

There was no central database of the human resources working in the banking industry. It is known that for the top management post such as MD/CEO, the commercial bank requires Bangladesh Bank's (BB) approval for appointment in such posts. In that case, BB conducts a 'fit test'. BB checks employment history from the very beginning of his/her career to the last. The absence of a central HR database makes it a difficult task for the central bank. Moreover, a central HR database can help the commercial banks to check the employment history, fraud and forgery, ethics and integrity, qualification, career progress, switching rate of the employees, etc. Hence, it is recommended for developing a central HR database either with the collaboration by the banks or the central bank can develop it.

Bangladesh Bank has been operational for a long period to raise the overall IT frame of the banking sector. Suitable guidelines and monitoring of BB have also been aiding the IT departments of different banks to expand in an exact way. As an outcome, the expectation from BB is growing day by day. BB may form a committee taking members from the scheduled banks. The committee may conduct meetings and formulate specialized regulations and policies for better IT employee management for the bank regarding recruitment, IT skills development, experience, additional IT allowance, training, transfer, safety, transportation, employee turnover, and performance appraisal criteria.

There is, no comprehensive study found on the overall HRM of IT departments in commercial banks of Bangladesh. This study tried to evaluate human resource management practices of the IT department of banks. This study also attempted to compare the working environment of employees, job stress, physical and mental health facets of employees along with the glitches faced by them in the business and IT departments. Further, this will assist the employees to form a proper work-life balance.

An Evaluation of Human Resources of IT Departments in Banks of Bangladesh

1.0 Background of the Study

Technology has become an inherent part of the business policy at banks. Banking industry has been using technology in several ways to fulfill their needs. Now a days, banking businesses across the world are going through a sequence of fast changes due to the pace of technological improvement. Use of Alternative Delivery Channels (ADCs) and advance statistical models for data analysis has altered the way traditional banking activity was executed. Mobile Banking, Agent Banking and Apps based banking permits bank management to expand their spread to inhabitants living in rural areas where it would not be lucrative to create branches. Traditional, paper-based methods are now computerized, and self-service options for customers are increased through the use of IT. It has been seen that technology can reduce cost while improving client service. The digital revolution has released a growing upsurge of revolution, of which we have only seen the beginning. Big data, cloud computing, advanced analytics—such as data storage technology that supports high-speed analysis of immense data volumes— artificial intelligence, blockchain and quantum computing are just a few examples of new technologies that have the potential to renovate the financial services industry. New technologies are now the core of banks' policies.

The Information Technology Division is part of the organization service. It controls the bank's computer network, services employee computers, checks and installs software and quickly eradicates IT failures and mistakes. The department maintains persistent IT system security, evaluates IT security instances, carries out IT system security checks, as well as keeps in contact and manages actions with the Central Bank in relation to these subjects. It plans, improves and cultivates the IT systems used at the bank, looks for and purchases new hardware, software and necessary IT services.

Technology professionals in banks are the new Masters of the Universe. In theory, those who run IT hold the trump cards, and banks are working harder to attract and retain them. Todays, fast changing business atmosphere needs a planned HR development for IT department within the framework of the organization's overall business plan. To cope up with the emerging necessities, maintain constructive work environment and retaining the capacity are few of the major challenges which every HR specialists has to face to make a successful online bank.

With new challenges beyond operational concerns, the roles and accountabilities of IT professionals are constantly sprouting and expanding. Achievement of IT department depends on bank's business policies, objectives and support from board and top level directors which n turn helps to cultivate programs related to employee retaining, their training and progress and

performance oriented payments. In past, topics related to remunerations and job safety was foremost issues for IT employees. But now the issues like enthusiasm, retention of workforce, mentoring, training, late night works, tension, ego hassles between teams, discontent due to unnecessary rules etc. are getting more common in banks.

Proactive HR authorities always make efforts in understanding staffing challenges, preserve a positive milieu to ensure that team stay concentrated on their staple jobs, and stay united with banks' development objectives. HR experts need to work freely (but they can't) without any intervention from management so that they can make healthier recommendations and decisions.

As the technology landscape evolves, banks and their IT teams across the world are facing an increasing threat to their security from a variety of sources. Often in the press and media we find once or twice a month there are instances of banking business disruptions and fraud because of the lack of proper management of IT infrastructure and security. Sometimes poor human resource management triggers such catastrophic situations. A lot of the finances and funds are getting lost. Also, lack of good IT governance is also a big issue. It is seen that in 80% cases frauds, disruption and malfunctions occurs due to the lack of sufficient manpower and their skills (Alam et. el, 2018).

Human resources of Information Technology department are considered the most important assets of a bank, but very few banks are able to fully harness its potential (Aurther, 2005). Now-a-days the Information Technology department is considered as the life blood of a bank. The operational success and business goal of a bank mostly depends on the performance of the IT department. So a strong IT department with skilled manpower and good governance is highly required. Employees of the department can be transformed into human resources when they are equipped with adequate knowledge, skills and competencies (Becker, 1996). So appropriate fostering of the department guarantees the success of commercial banks.

There is, in fact, no comprehensive study found on overall HRM of IT departments in commercial banks of Bangladesh. In this state of affairs a research on this area is essential to uncover the significant facts.

1.1 Objectives of the Study

The general objective of the study was to assess the status of human resource management in IT being usually practiced in the banking sector of Bangladesh. More precisely, the objectives are to: (i) evaluate the job stress and health (mental, physical and financial) of IT professionals of banks; (ii) analyze the qualifications of existing human resources in IT departments; (iii) review the HRM practices of IT departments in banks and assess the job satisfaction of professionals belonging to the IT departments based on some selected indicators; and

(iv) compare IT employees with Business Employees (Non-IT) in all aspects of HRM and to suggest some course of action for better IT employee management.

1.2 Methodology

This study used both primary and secondary data. Primary data were collected from the IT and business departments of banks through a semi-structured questionnaire. We sent questionnaires to all banks of which 4 govt. and 26 private commercial banks responded. We did not receive any response from the foreign commercial banks. Banks randomly distributed the questionnaire among their employees (both IT and Business) and a total of 814 (387 from IT and 427 from business departments) employees submitted the filled in questionnaires. 750 (354 from IT and 396 from Business group) responses were analyzed and 64 (33 from IT and 31 from Business group) responses were rejected for giving insufficient data by the employees. Further, the review team visited 5 Heads of IT, 3 Heads of HRD and 3 CEOs for getting indepth information regarding different aspects and practices of HR functions of banks in Bangladesh. In this regards, the discussion was noted and summarized for better prediction of HR practices. Accordingly, a summary of the discussion outcome has been incorporated in this paper. The review team also conducted two focused group discussions (FGD) separately with 10 Heads of IT and 7 Heads of HRD. As to secondary data, various publications of BB, BB circulars, annual reports of banks, previous reports of BIBM on HR review and policy guidelines, and related published research articles were reviewed. The findings of this report are mainly presented in tabular form along with some graphical presentations. To identify factors that affect employees' satisfaction, 'Factor Analysis' was carried out. In this study, we used a five-point 'Likert' Scale to measure the variables. The report has been finalized after incorporating the opinions and comments of the participants and experts of the banking sector who were present at the dissemination seminar.

1.2.1 Sample Distribution

For this study, we collected data from IT and business departments of private and public banks. Data were collected from different levels of executives. The majority of the respondents belonged to the age group 31 to 40 years. Very few employees who belonged to the age group 50+ were also included in the study.

Table 1: Sample Distribution

		ľ	IT Employees			Business Employees			
		((Total: 354)			(Total: 396)			
		Private	Private Public Total		Private	Public	Total		
		251	103	354	288	108	396		
Landof	Operation Level	186	78	264	172	59	230		
Level of Employees	Mid-Level	38	17	55	81	41	121		
	Top-Level	27	8	35	35	9	44		
	Up to 30	43	19	62	46	15	61		
Age	31 - 40	159	65	224	176	64	240		
Agc	41 - 50	41	16	57	59	27	86		
	Above 50	7	3	10	6	2	9		
Gender	Male	242	95	337	255	89	344		
Gender	Female	9	8	17	33	19	52		

Source: BIBM Survey

As more women move in the labor force, economies can develop faster in response to higher employment inputs. But women's status is much neglected in IT departments of the Bangladeshi banking sector. As a result, female participation is very low in IT departments of banks. Less than 7% of respondents were females who participated from IT departments in this study, while from business departments of both types of banks the involvement of women was somewhat better (12.5%).

1.2.2 Scale and Variables

In this study, we measured job stress, mental health (unhappiness), physical health (unfitness), job satisfaction and other related issues with employees. In each case, we considered 20 variables understudy. To estimate variables/parameters a 'Likert Scale' of five points ranging from 0 to 5 was used. Order of the scale varied from (Very Low: 0 to Extremely High: 5 or Extremely High: 0 to Very Low: 5) question to question depending on the nature of the questions (Appendix-A). While measuring physical health (unfitness), for example, 5 points were given for each disease (question) considering the severity of the disease on physical fitness to make an index of 100. Maximum value 100 means the employee was physically very unfit having all of the 20 diseases at a severe level, whereas 0 means absence of all diseases. The higher the value, the higher the level of physical unfitness. The same process was followed to measure job stress, mental health (unhappiness) and job satisfaction of employees.

1.3 Organization of the Paper

The paper is organized into four sections. After an introductory section with objectives and methodological issues, Section-2 reviews the relevant literature. Section-3 reviews and analyses the collected data. Finally, section-4 puts forward concluding remarks and some recommendations.

1.4 Limitation of this Study

This study was conducted based on the survey of the sample banks. Hence, one has to be careful in generalizing the findings from this study. We only compared HRM of IT departments of private and public banks. Comparison among public, private and foreign banks could not be done, because we did not receive any response from the foreign commercial banks.

2.0 Literature Review

A large body of literature were studied to sharpen the understanding of the research team and improve the quality of the study by knowledge sharing.

Dessler (2003) termed the human resource management (HRM) as "The process of acquiring, training, appraising, and compensating employees, attending to their labor relations, health and safety, and fairness concerns."

Decenzo and Robbins (1999) explained HRM as "The responsibility for getting competent people, training them, getting them to perform at high effort levels and providing mechanisms to ensure that these employees maintain their productive affiliation with the organization." Therefore, it can be said that human resource management is concerned with the management of personnel within the organization to achieve organizational goal efficiently and effectively. Considering the functions of human resources management, Dessler (2003) identified the human resource management activities or functions like recruiting, selecting, training, compensating, appraising and developing employees. Again, Decenzo and Robbins (1999) divides the human resource functions into four broad categories such as: acquisition functions (strategic human resource planning, recruiting, selection), training and development functions (orientation, employee training, employee development, career development), motivation functions (performance appraisal, rewards and compensation, employee benefits) and maintenance functions (safety and health, communications, employee relations).

According to Pooja (2016), "Job satisfaction describes a positive feeling about a job, resulting from an evaluation of its characteristics. A person with a high level of job satisfaction holds positive feelings about his/her job. The parameters of job satisfaction includes--(i) personal aspects, e.g., feelings of inadequacy, security, non-acceptance, etc., (ii) interpersonal aspects, e.g., interaction with supervisors, officials, etc., (iii) job aspect, e.g., pay, workload, under work."

Locke (1976) defined job satisfaction as "An attitudinal variable that reflects how people feel about their jobs overall as well as various aspects of them. Job satisfaction that refers to extent to which people like or dislike their jobs. Job satisfaction is a positive attitude resulting from the perception of one's job as fulfilling one's needs."

Pooja (2016) also identified that "There are three important magnitudes of job satisfaction; Job satisfaction, Job stress, Mental health. Today's successful organizations must foster innovation and master the art of change, or they will become candidates for extinction. Organizations employees can be the impetus for innovation and change or they can be a major stumbling block." She also mentioned that "The challenge for supervisors is to motivate their employees' vision. Workers need to continually update their knowledge and skills to perform new job requirements. Employees are increasingly recognizing that work is infringing on their personal lives and they are not happy about it. Evidence indicates that balancing work and life demands now surpasses job security as an employee priority. They want 'a life' as well as 'a job'. Organizations that don't help their people achieve work-life balance will find it increasingly difficult to attract and retain the most capable and motivated employees."

In a study Alam, et al. (2018) opined that "Instead of responding to competitive pressures by 'turning up the heat', some banks are trying to realize a competitive advantage by fostering a positive work environment. Today's managers needs to create an ethically healthy climate for his/her employees, where they can do their work productively and confront a minimal degree of ambiguity regarding what constitutes right and wrong behaviours. For any bank its IT employees are the main pillars which are needed to hold the smooth functioning of the bank. The employee's cognitive and behavioural attributes are very crucial in shaping the future of the organization where he/she is working. The organization's productivity, profitability, efficiency depend on its IT employees."

Regarding productivity Pooja (2016) similarly mentioned that "The personality pattern and dynamics of the personnel along with his/her job satisfaction, job anxiety, work motivation, job involvement, organizational citizenship behaviour, job stress, organizational commitment and mental health are important parameters shaping the work productivity of the employee in turn contributing to the profit and progress of the firm."

According to Sauter et al. (1999), "There are a number of work-related approaches that grip positive or negative assessments that employees hold about features of their working atmosphere. Some of them are—(1) Job Contentment (2) work-related stress and (3) employee mental fitness. Many researches have presented a relationship between job strain and various diseases. Stress upshots problems like changes in mood, disturbed sleep, headache, upset stomach, and disputes with the friends and family that rapidly grow. Usually, these initial symptoms of job stress can be observed easily. But it is not easy to observe the influence of job stress on incurable disorders because incurable disorders take more time to evolve and can be affected by many elements other than stress. However, stress plays a crucial role in various types of incurable health issues particularly heart diseases, musculoskeletal pains, and mental illness. Initial alarming symptoms of job stress are headache, sleeping disorder, lack of

concentration, short temperament, disturbed stomach, lack of Job satisfaction, and low confidence."

World Health Organization (2004) identified that, "Irritating behavior, depression, anxiety, unable to concentrate, sleeping disorder, tiredness, heart diseases, digestive system problems, headaches, high blood pressure, and muscular-skeleton problems are the diseases which result a result of stress. If the employees of an organization are suffering stress, this will ultimately affect the performance of an organization. It will also be risky for an organization to survive in the market."

Blaug, Kenyon and Lekhi (2007) opined that "Stress is the cause of many physical and psychological disorders. When the individual experiences stress, blood flows from the internal parts of the body and skin to the brain and muscles, fatty acids and cellulose are activated in the blood to supply energy, eyesight, and listening skill is enhanced and a person becomes alert. Normal physical support functions i.e. digestion, immune and curative systems are all weakened. This response to the stress is normal which develops when the stress is perceived by an individual but when the stress continues for a long time and it's severe and not properly managed, it will be a threat for the health of an individual. The immune system is disturbed as a result of the severe stress and the body is unable to function normally and becomes sensitive to various diseases and illness. Psychological diseases which result from job stress badly influence both employee and employer. Depression, tension and other psychological diseases normally result in absence because of sickness, medical appointments and malfunction."

According to Cox, (1993) and Cryer (1996), "Toxic stress has more harmful effects as compared to the normal stress. Stress at work affects the quality of life and brings negative changes to human nature both physically and mentally. Stress not only badly affects the health of an employee but also detriments the performance of an employee in an organization. Ulcer, weak immune system, rheumatoid arthritis and coronial heart diseases are the results of job stress. Stress influences mental as well as physical health. University of London reported that stress is a major cause of cancer and heart disease as compared to smoking or cholesterol foods."

Now a day's professional life has become more perplexing than ever before. The employee needs to strike equilibrium between the individual and professional life. The organization wants more in items from its workforces every minute in comparison to previous times. So, it's very critical for a staff to be extremely knowledgeable and focused on work along with having an upright mental and physical health. This will help him to be more dynamic towards the organization.

The workforce needs to have job satisfaction, should be more motivated to work, i.e., have high work motivation and commitment towards the organization. He/she should have low

stress and anxiety towards her job and/or organization. This in turn will boost up the mental health of the employee. All these dimensions of job are influenced by certain personality factors as well. Ultimately this reflects how competent the personnel will be in his/her job as well as personal life.

Work-related stress is defined to be a mental and physical state that calls in an unfavorable effect on the individual's throughput. The employees who start to sense the 'pressure to perform' can get caught in a descending spiral of increasing effort to come across rising opportunities with no escalation in job satisfaction. Stress disturbs emotions and moods. At work, hectic day-to-day events (e.g., an impending cutoff date, being scolded by supervisor) negatively affect employees' attitudes. The stress relating to job have become predominant feature of present life, exerting for reaching affects on focal employees' performance and fine-tuning on as well as off the job.

Margolis and Kroes (1974) defined job stress as "A condition worth interacting with worker characteristics to disrupt psychological or physiological homoeostasis. The different physical and psychological conditions at work act as potential stressors. Some of the causal factors of occupational stress are - Role overload, Role ambiguity, Role conflict, Powerlessness, Poor peer relations, strenuous working conditions, etc."

The professional stress is the degree of the extent of stress which employees observe arising from numerous constituent and situations of their job. Stress is perceived when an environmental situation is perceived as presenting demand which impends to exceed the person's skills and resources for meeting it. Occupational stress stems from role overload, role uncertainty, role conflict, powerlessness, vigorous working environments, etc.

3.0 Data Analysis and Findings

While evaluating the IT human resources in banks, this study considered job stress, health (physical, mental and financial) of employees, qualifications of existing human resources, work environment, talent acquisition, talent development, talent motivation, leading the talent, talent maintenance, job switching and job satisfaction.

3.1 Job Stress and Health of Employees

Health is a form of complete physical, mental and societal well-being, not merely the absence of illness or infirmity. Stress is the cause of many physical and psychological disorders. Moreover, stress at work affects the quality of life and brings negative changes to human nature, both physically and mentally. Stress not only adversely affects the health of an employee but also detriments the performance of an employee in an organization. As stress is the cause of many physical and psychological disorders, in this study stress was first measured

in the following section and in subsequent sections physical, mental and financial health are discussed.

3.1.1 Employees' Job Stress

In today's hectic world, the workplace too often seems like an emotional roller coaster. Long hours, tight deadlines, and ever-increasing demands can leave employees' feeling worried, exhausted, and overwhelmed. And, when stress exceeds one's ability to cope, it stops being helpful and starts causing damage to employee's mind and body-as well as employee's job satisfaction.

Stress is the body's response to physical and mental demands. Stress, in general, is defined as "a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation." Job stress is a type of stress and is caused by conditions in the workplace that negatively affect an individual's performance and/or overall well-being of his body and mind. Work-related stress is the result of a conflict between the role and needs of an individual employee and the demands of the workplace.

3.1.1.1 Measurement of Job Stress

There are many sources of stress for employees at work. These usually include working conditions, work overload, long hours, excessive travel, too many decisions, deadlines and time pressures. Interpersonal relationships with colleagues, superiors and subordinates may form a major source of stress. Poor interactions generate poor human relations as a result of which people experience low trust, low co-operation, low supportiveness and low interest in listening to others.

After studying a large number of research papers, 20 variables were considered to measure the 'Job Stress' (Appendix-A). These are: 'Workload, Refreshment Time (Tea, Lunch, Prayer, etc.)', 'Leave/Vacation Facilities (Ordinary/Casual/Earn/Recreation, etc.)', 'Holiday Enjoying Facilities', 'Travel Time (Home to Office and Office to Home)', 'Scope of Career Planning and Career Development', 'Job Insecurity', **'Promotion** Time'. 'Frequent/Unethical/Unrealistic Transfer', 'Less Qualified Immediate Boss', 'Bad Boss', 'Leadership Quality', 'Knowledge Gap (Difference between the expected and actual knowledge to perform the job)', 'Workplace Culture', 'Relationships at Work', 'Environmental Conditions', 'Unrealistic Deadlines and Time Pressures', 'Unrealistic Expectations of Efficiency due to Technological Advancement', 'Intense Pressure to Perform at Peak Levels all the time' and 'Unethical Pressure from Top level Executives'. Each variable is measured by using a five-point 'Likert' scale ranging from 0 to 5 in such a way that the value '0' indicates very low stress, whereas '5' means the highest stress level of the variable understudy.

Table-2 shows the stress level of individual parameters, including the overall Job Stress level of IT and business employees in private and public banks. The stress level of each parameter was calculated by averaging all the values (0-5) given by the employees for each parameter (question). Overall Job Stress was calculated by summing up the average values of 20 parameters. Hence, the Stress Index 0-100 represents the level of job stress (Table-3). Higher the value, the higher the job stress.

Table-2 shows a clear dissimilarity between IT and business employees regarding job stress. In case of 13 parameters (out of 20), the highest stress was observed among IT employees (both public and private banks) compared to business employees in the banking sector. Unrealistic expectations, unhealthy and unreasonable pressures on the employees, can be tremendous sources of stress and suffering. Increased workload, extremely long work hours, taking work home, not taking vacation, unrealistic deadlines and intense pressure to perform at peak levels all the time for the same pay, can leave an employee physically and emotionally exhausted. It is seen that minimum, maximum and average working hours of IT employees of private banks were 8, 14 and 9.11 hours, respectively, which was comparatively higher than public banks' IT employees (minimum, maximum and average working hours were 7, 11 and 7.87 hours, respectively).

We found the highest workload (4.78) stress in IT employees of private banks among all groups in a five-point 'Likert' scale and the lowest was (3.86) for business employees of public banks. On an average, IT employees of private banks got 1.13 hours daily refreshment time (Lunch, Tea, Prayer, etc.) at the office, which is slightly higher than their business counterparts, i.e. business employees of private banks (1.03 hours). IT employees of public banks got the highest amount of time (1.59 hours) for refreshment in the banking sector. The possibilities to enjoy Leave/Vacation facilities for both IT and business employees of private banks are limited (3.61 and 3.75 respectively, where 0: Excellent, 5: Very Poor) and is not an easy issue compared to public banks. But, except IT employees of private banks (3.26), all other groups were enjoying holiday facilities well. Excessive journey/travel from home to office and office to home also contribute to an employee's stressors. We found that the average distance of office from the home of an IT employee of private banks was 11.08 Km, while it was 7.63 Km for an employee who is working in the business department of private banks.

Table 2: Job Stress of Employees: IT vs. Business

			IT		Business		
Sl. No.	Parameters	Overall	Private	Public	Overall	Private	Public
1.	Workload (0: Very Low - 5: Extremely High)	3.91	4.78	3.96	4.15	4.08	3.86
2.	Refreshment Time (Tea, Lunch, Prayer, etc.) (0: Extremely High, 100-120 minutes - 5: Very Low, 0-20 minutes)	3.03	3.11	1.73	3.31	4.01	2.81
3.	Leave/Vacation Facilities (0: Excellent - 5: Very Poor)	3.17	3.61	2.68	3.31	3.75	3.04
4.	Holiday Enjoying Facilities (0: Excellent - 5: Very Poor)	2.99	3.26	2.83	2.64	2.86	2.50
5.	Travel Time (Home to Office and Office to Home) (0: Very Low - 5: Extremely High)	3.08	3.18	2.92	2.03	2.04	2.02
6.	Scope of Career Planning and Career Development (0: Excellent - 5: Very Poor)	3.55	3.77	3.43	3.42	3.56	3.35
7.	Job Insecurity (0: Very Low - 5: Extremely High)	2.68	3.19	2.04	2.52	3.28	2.07
8.	Promotion in Time (0: Strongly Agree – 5: Strongly Disagree)	3.68	3.77	3.38	3.49	3.61	3.38
9.	Frequent/Unethical/Unrealistic Transfer (0: Strongly Disagree – 5: Strongly Agree)	1.95	1.92	2.14	2.17	2.22	2.04
10.	Less Qualified Immediate Boss (0: Strongly Disagree – 5: Strongly Agree)	3.24	2.62	3.75	2.51	2.85	2.10
11.	Bad Boss (0: Strongly Disagree – 5: Strongly Agree)	2.94	2.52	3.55	2.54	2.35	2.80
12.	Leadership Quality (0: Excellent - 5: Very Poor)	2.72	2.08	3.41	2.11	1.98	2.36
13.	Knowledge Gap (0: Very Low - 5: Extremely High)	3.15	3.00	3.55	2.90	2.90	3.05
14.	Workplace Culture (0: Excellent - 5: Very Poor)	2.19	2.54	1.94	2.18	2.27	2.23
15.	Relationships at Work (0: Excellent - 5: Very Poor)	2.06	2.10	1.90	2.33	2.96	2.12
16.	Environmental Conditions (0: Excellent - 5: Very Poor)	2.18	2.03	2.40	2.01	1.89	2.32
17.	Unrealistic Deadlines and Time Pressures (0: Very Low - 5: Extremely High)	3.80	4.75	3.33	3.66	4.58	3.06
18.	Unrealistic Expectations of Efficiency due to Technological Advancement (0: Very Low - 5: Extremely High)	3.33	4.15	3.11	3.63	4.48	3.01
19.	Intense Pressure to Perform at Peak Levels all the time (0: Very Low - 5: Extremely High)	3.43	3.95	3.31	3.14	3.91	2.71
20.	Unethical Pressure from Top level Executives (inside banks), Politician, Govt. High level Executives (0: Very Low - 5: Extremely High)	2.51	3.12	1.89	2.69	3.16	2.25
	Overall Job Stress (Out of 100)	59.59	63.82	56.88	56.74	62.74	53.08

Source: BIBM Survey

Table 3: Stress Index

Score	Stress Level	Score	Stress Level
0 to ≤ 10	Very Low	$> 50 \text{ to } \le 70$	High
$> 10 \text{ to } \le 30$	Low	$> 70 \text{ to } \le 90$	Very High
$> 30 \text{ to } \le 50$	Moderate	$> 90 \text{ to } \le 100$	Extremely High

Source: Literature Review

Also, an IT employee of private banks had to spend, on an average, 3.18 hours to go to office and back home, which was 2.04 hours for a business employee of private banks. So, it is no wonder that in five-point 'Likert' scale (where 0 means 'very low' and 5 means 'extremely high') the stress of an IT employee of private banks in case of excessive travel was higher than a business employee of the same group of bank (2.04).

The feeling of getting stagnated in one's career is highly frustrating and stressful. Sometimes, concerns about job security, impending layoffs, lack of opportunity for growth, advancement, or promotion; rapid changes for which workers are unprepared, temporary work and fixed-term contracts all lead to stress. Business employees of private banks have to stay, on an average, 5.6 years in their current position, which is 6.43 years for IT employees of private banks. So, in the five-point 'Likert' scale the reflection of the stress of an IT employee of private banks in this parameter (promotion in time) was slightly higher (3.77) than a business employee of the same category of banks (3.61). The highest job insecurity is seen in the case of business employees (3.28) of private banks, followed by the IT employees (3.19) of the same group. Regarding scope for career planning and development, employees of all types of banks are almost equally frustrated, but the highest dissatisfaction was seen among the IT employees of private banks. Although the frequent, unethical, and unrealistic transfer can be a source of stress, this study did not find it to be a significant factor.

"Bad Boss" is generally considered to be a major source of stress. These types of people are unpredictable, erode the self-esteem of subordinates, grab the credit for work done by others, make unwarranted or unjust criticism and ridicule or disparage subordinates. A bad boss usually creates a win/lose situations and the boss must-win necessarily. Those who lose, feel downtrodden and the atmosphere becomes distrusting and hostile. Some employees are more qualified than their immediate bosses. They have more qualifications to manage a team of employees because they have more experience, greater knowledge, and better leadership skills. In fact, according to the experts, this isn't so uncommon, and it can be extremely frustrating and very tough to work with such less qualified immediate bosses. Approximately 23% of IT employees in public banks and 13% of IT employees in private banks have to deal with immediate supervisors who are less qualified. As a result, highest dissatisfaction score (3.75)

was given by the IT employees of public banks in this regard. According to the study, IT employees of public banks strongly agreed (average score was 3.55 out of 5) that their bosses are bad. In public banks, a large number of businesspeople are working in the IT department as senior executives without having a sound technical background. Technical knowledge gap and leadership quality might be the major factors that made them bad bosses for their new generation techno-savvy young forces. The score (3.55), indicating a lower leadership quality, strongly supports this assumption.

The knowledge gap is another stress parameter. A higher knowledge gap develops frustration and reduces efficiency, leadership quality and productivity of an employee. This also hurts on banking operations and targeted submission date of work. A higher knowledge gap is seen among IT employees of banks (3.15) compared to business employees (2.90). It necessarily indicates the higher demand for training for IT employees who are working in a rapidly changing domain.

Adjusting to the workplace culture can be intensely stressful. Making one adapt to the various aspects of workplace culture such as communication patterns, hierarchy, dress code if any, workspace and most importantly working and behavioural patterns of the boss as well as the co-workers can be quite challenging. Maladjustment to workplace cultures may lead to subtle conflicts with colleagues or even with superiors. In many cases, office politics or gossip can be major stress inducers. A lack of interpersonal support or poor working relationships leads to a sense of isolation. A blame culture where people are afraid to get things wrong or to admit to making mistakes can be a huge stressor. Overall, moderate workplace culture was seen for employees of both IT and business departments of banks (2.19 and 2.18, respectively). But, relationship at work was better among IT employees (2.06) compared to business employees (2.33) in the banking sector. Business environmental condition was better in private banks than public banks.

The expansion of technology, computers, cell phones and the Internet has resulted in heightened expectations for productivity, speed and efficiency, increasing pressure on the individual worker to constantly operate at peak performance levels. There is also the constant pressure to keep up with technological breakthroughs and improvisations, forcing employees to learn new software all the time. Workers with prolonged computer usage are under constant stress to remain alert. It is seen that unrealistic deadlines and time pressure was highest for IT employees of private banks (4.75), followed by business employees of the same group. Private sector banks heavily introduced FinTech in the last couple of years. As a result, highest unrealistic expectation of efficiency due to technical advancement was observed (4.48) for business employees of private banks. Moreover, a higher intense pressure to perform at peak levels all the time was seen in private banks for both IT and business employees compared to public banks.

About 39% of business employees of private banks faced unethical pressure from a number of sources. IT employees of those banks were in a far better position in this regard (29.26%). On a five-point 'Likert' scale, business employees of private banks had the highest dissatisfaction score (3.16) among all groups.

3.1.1.2 Comparative Analysis of Job Stress between IT and Business Employees

The stress level of IT professionals of private banks ranged from 48.75 to 98.1 (out of 100), whereas the minimum and maximum stress levels of business staff of private banks were 46.5 and 96.5, respectively (Table 4). According to the stress index (Table-3), the average stress levels of both the IT and business staff of private banks were "High", at 63.82 and 62.74 out of 100, respectively.

H_{0A:} Job Stress of both IT and Business Employees of Private Banks are the same.

H_{1A:} Job Stress of both IT and Business Employees of Private Banks are not the same.

To test the above null hypothesis (H_{0A}) against the alternative one (H_{1A}) to see whether there is a significant difference between the Job Stress of IT and business employees of private banks, the corresponding t-value for the difference between these two means was 0.545 with p-value 0.591, ensuring no significant difference.

H_{0B:} Job Stress of both IT and Business Employees of Public Banks are the same.

H_{1B}: Job Stress of both IT and Business Employees of Public Banks are not same.

Table 4: Comparative Analysis of Stress of IT vs. Business Employees in Banks

Type of Bank	Central Tendency	IT	Business	t_{cal}	p- value	Significance
Deissets	Average	63.82	62.74	0.545	0.591	Not Significant
Private	Maximum	98.1	96.5			
	Minimum	48.75	46.5			
D. Li	Average	56.88	53.08	1.201	0.243	Not Significant
Public	Maximum	94.2	95.2			
	Minimum	34.5	44.5			
t_{co}	* al	1.971	2.364			
p-ve	alue	0.031	0.013			
Signif	icance	Highly Significant	Highly Significant			
Overall	Average	59.59	56.74	0.524	0.606	Not Significant
Overall	Maximum	98.1	96.5			
	Minimum	34.5	44.5			

Source: BIBM Survey

^{*}Comparison of average stress of employees between public and private banks.

The stress level of IT professionals of public banks ranges from 34.5 to 94.2 (out of 100), whereas minimum and maximum stress levels of business staff of public banks are 44.5 and 95.2, respectively (Table-4). The average stress levels of IT and business employees of public banks are both "High", at 56.88 and 53.08 out of 100, respectively (Table-3). Notable that these stress levels in public banks are significantly lower compared to private banks. The following hypothesis is tested and no significant difference is found between the stress levels of IT and business staff of public banks even at 5% level of significance. Hence we accepted the null hypothesis H_{0B} .

On the other hand, the average stress levels of IT employees are 63.82 in private banks and 56.88 in public banks. It clearly specifies that IT employees of private banks are more stressed than that of public banks.

H_{0C:} Job Stress of IT Employees of both Public and Private Banks are the same. H_{1C:} Job Stress of IT Employees of both Public and Private Banks are not the same.

The above hypothesis is tested and it is seen that at 3% level of significance the null hypothesis is rejected, indicating a significant difference between the Job Stress of IT employees of both Public and Private banks. Similarly, business employees of private banks (62.74) were more stressed than that of public banks (53.08), which is statistically significant at 1% level of significance.

Additionally, the overall average stress levels of IT and business employees in the banking sector were 59.59 and 56.74, respectively (both of which fall in the 'High' category of stress index in Table-3). The corresponding t-value for the difference between these two means is 0.524 with a p-value 0.606, indicating no significant difference between the stress levels of the two groups, accepting the following null hypothesis H_{0D} .

H_{0D:} Job Stress of both IT and Business Employees of Banks are the same.

H_{1D:} Job Stress of both IT and Business Employees of Banks are not the same.

3.1.2 Employee's Mental Health

The employees' mental well-being is the skill to balance moods, wants, goals and morals in one's daily living. According to Anand (1989), "a mentally healthy person should be understood as a dynamic and conscientious individual who is found to be reasonably rational in the choice of means for the realization of his pious ends. If an employee is stressed then his/her mental health is affected and in turn it affects his/her productivity and job satisfaction in the organization. The personnel also might be experiencing conflicts and anxiety. This situation can even be cyclic affecting mental health. The more an employee is mentally healthy,

the more is he/she fit to work, achieves greater job satisfaction and is more motivated and committed to his/her job as well his organization."

Mental health at work refers to the psychological wellbeing of people working in any organization. In the past, occupational health was concerned with the safety and physical health of employees and little attention was paid to the mental health aspect. Mental health is a growing field which emphasizes assessment, prevention and intervention to promote the psychological well-being of employees. Mental health refers to behaviors, attitudes and feelings that represent an individual's level of personal effectiveness, success and satisfaction (S Banks et al., 1980). Several investigators have shown that job satisfaction plays an important role on employees' health and well-being (Caplan, 1975). Mental health is defined as the state of mental pleasure and lacking of psychosomatic criticisms. The mental health of personnel in different organizations is very critical in the performance of the employee on the profession. Psychological symptoms related to stress include bad temper, anger, sadness, nervousness, and anxiety. In addition, many individuals experience difficulties regarding sleeping.

3.1.2.1 Measurement of Mental Health (Unhappiness)

A large number of research papers were reviewed and in light of that 20 variables were considered to measure the 'Mental Health' (Appendix-A). Those are: 'Family Problems', 'Financial Difficulties', 'Residential Problems', 'Transportation Complications', 'Social Status', 'Loss of Interest in Job', 'Sleeping Problems,' 'Fatigue/Tiredness', 'Trouble Concentrating', 'Social Withdrawal/Social Isolation', 'Using Alcohol or Drugs to Cope', 'Family Time-Sharing', 'Recreation at Home (TV/Movie/Listening to Music, etc.)', 'Addiction to Social Media', 'Visiting Home and Abroad', 'Frustration/Depression', 'Tension', 'Habits of Reading of Books/Novels', 'Reading Newspaper' and 'Reading Journals/Articles/Magazine'.

We measured the overall unhappiness of the employees to indicate the overall current status of mental health. To do so, each variable was measured by using a five-point 'Likert' scale ranging from 0 to 5 in such a way that the value '0' indicates very low problem/difficulties/unhappiness (highest happiness) of the parameter, whereas '5' means highest problem/difficulties/unhappiness level. We did so to make similarities in the measurement Index of job stress, mental health (unhappiness), physical health (unfitness) and job satisfaction of employees and to compare among them.

Overall mental health was calculated by summing up the average values of the 20 parameters mentioned above. Here, 0 to 5 points were given for those parameters considering the impact of the parameter on mental fitness to make an index of 100. Each parameter was calculated first by averaging all the values (0-5) given by the employees for each question regarding mental health. Hence, the index (0-100) represents the level of overall mental

health (unhappiness). Maximum value 100 means the employee is very unhappy mentally, whereas 0 means the absence of all anxieties indicating very happiness in his/her personal and professional life (Table-6). Higher the value, the poorer the mental health.

Table-5 outlines the mental health condition of the business and IT employees of public and private banks. A person who is deprived of sound sleeping can get tired easily and consequently cannot focus on his/her job. The average sleeping hour of employees, irrespective of department and bank type, is less than 7 hours. Particularly IT employees of private banks had the least average sleeping hour (6.41) among the groups (IT employees of public bank: 6.47 hours, business employees of public bank: 6.54 hours and business employees of private bank: 6.65 hours). Three parameters like, 'Sleeping Problem', 'Fatigue/Tiredness' and 'Trouble Concentrating' were predominant among business employees of private banks. On a five-point 'Likert' scale they scored the highest (Sleeping Problem: 3.53, Fatigue/Tiredness: 4.12, Trouble Concentrating: 3.78) among all other groups, where 0 means very low and 5 means extremely high. The business employees of public banks are financially deprived and facing difficulties in society. They got 3.86 in 'Financial Difficulties' and 3.18 in 'Social Status' parameters which is a very alarming issue. Facing family problems is another concerning issue for employees that ultimately affects their professional life. As seen from the table, IT people of public banks are burdened with this particular difficulty (2.59). It is found that IT staff of private sector banks have the least opportunity to pass time with their family members. They got only 3.84 hours per day to spend. Sharing and recreation time with family members at home is noticeably very low in the case of business employees of private banks, which is not a very good sign. They scored very high indicating very poor time-sharing in these two parameters (Family Time Sharing: 4.23 and Recreation at Home: 3.32. Scale: 0-excellent, 5: very poor). It is seen that business employees of private banks have a knack for reading books among all other groups. About 31.19% of business employees of private banks read books and novels, which is the highest percentage among all other groups (27.4% and 20.69% of IT employees of private and public banks, respectively. 28.89% of business employees of private banks). On a five-point 'Likert' scale they got 3.48, where 0 means regularly and 5 means never. We found that only 69.59% of IT employees of private banks read a newspaper which is the lowest among all other groups (IT employees of public banks: 89.66 %, business employees of private banks: 76.36% and business employees of public banks: 80%). Finally, IT people of public banks are the unhappiest group among all other groups. They got 63.9 out of 100.

Table 5: Measurement of Mental Health (Unhappiness) of Employees, IT vs. Business

			IT		Business			
S. No.	Parameters	Overall	Private	Public	Overall	Private	Public	
1.	Family Problems (0: Very Low - 5: Extremely High)	1.47	1.44	2.59	1.23	0.91	1.53	
2.	Financial Difficulties (0: Very Low - 5: Extremely High)	2.85	2.71	3.56	3.43	2.82	3.86	
3.	Residential Problems (0: Very Low - 5: Extremely High)	3.42	3.11	4.15	3.51	2.51	3.98	
4.	Transportation Complications (0: Very Low - 5: Extremely High)	3.08	3.18	2.92	2.73	2.04	3.02	
5.	Social Status (0: Excellent- 5: Very Poor)	3.06	3.06	3.03	3.01	2.56	3.18	
6.	Loss of Interest in Job (0: Strongly Disagree – 5: Strongly Agree)	3.22	3.27	3.17	2.69	3.18	2.04	
7.	Sleeping Problems (0: Very Low - 5: Extremely High)	3.21	3.32	3.13	3.49	3.53	3.15	
8.	Fatigue/Tiredness (0: Very Low - 5: Extremely High)	3.41	3.53	3.36	3.96	4.12	3.41	
9.	Trouble Concentrating (0: Very Low - 5: Extremely High)	2.99	3.18	3.28	3.55	3.78	3.19	
10.	Social Withdrawal/Social Isolation (0: Very Low - 5: Extremely High)	2.15	2.22	2.83	3.59	4.02	3.07	
11.	Using Alcohol or Drugs to Cope (0: Very Low - 5: Extremely High)	1.64	1.91	1.28	2.84	3.04	2.71	
12.	Family Time Sharing (0: Excellent- 5: Very Poor)	3.08	3.12	3.03	3.88	4.23	3.05	
13.	Recreation at Home (TV/Movie/ Music, etc.) (0: Excellent- 5: Very Poor)	3.17	3.22	3.03	3.17	3.32	3.11	
14.	Addiction to Social Media (0: Very Low - 5: Extremely High)	2.85	2.18	3.93	2.20	2.12	2.27	
15.	Visiting Home and Abroad (0: Regularly - 5: Never)	2.15	2.25	2.01	3.01	3.35	2.99	
16.	Frustration/Depression (0: Very Low - 5: Extremely High)	3.44	2.49	4.14	3.19	3.67	2.94	
17.	Tension (0: Very Low - 5: Extremely High)	3.91	3.18	4.56	3.98	4.18	3.74	
18.	Habit of Reading of Books/Novels (0: Regularly - 5: Never)	3.69	3.63	3.97	3.47	3.48	3.56	
19.	Habit of Reading Newspapers (0: Regularly - 5: Never)	1.46	1.51	0.52	1.13	1.78	1.02	
20.	Habit of Reading Journals/Articles/Magazines (0: Regularly - 5: Never)	4.05	3.99	4.81	4.14	4.26	3.98	
Ove	of 100)	58.30	56.50	63.30	62.20	62.90	59.80	

Source: BIBM Survey

Table 6: Mental Health (Unhappiness) Index

Score	Unhappiness Level	Score	Unhappiness Level
0 to ≤10	Very Low	$> 50 \text{ to } \le 70$	High
$> 10 \text{ to } \le 30$	Low	$> 70 \text{ to } \le 90$	Very High
$> 30 \text{ to } \le 50$	Moderate	$> 90 \text{ to } \le 100$	Extremely High

Source: Literature Review

3.1.2.2 Comparative Analysis of Mental Health (Unhappiness)

Business employees of private banks (62.9) were suffering more from mental anxieties compared to IT employees (56.5). Mental unhappiness of IT professionals of private banks ranges from 19.25 to 95.5 (out of 100), whereas minimum and maximum unhappiness levels of business staff of private banks are 25.2 and 97.0, respectively (Table-7).

H_{0A:} Mental Health (Unhappiness) of both IT and Business Employees of Private Banks are the same.

H_{1A:} Mental Health (Unhappiness) of both IT and Business Employees of Private Banks are not the same.

To test the above null hypothesis (H_{0A}) against the alternative one (H_{1A}) to see whether there is a significant difference between the mental health of IT and business employees of private banks, the corresponding t-value for the difference between these two means is -3.236 with a p-value 0.000, indicating a highly significant difference.

Table 7: Comparative Analysis of Mental Health (Unhappiness) of IT vs. Business Employees

Type	Central	IT	Business	t_{cal}	p-value	Significance
of	Tendency					
Bank						
	Average	56.5	62.9	-3.236	0.000	Highly Significant
Private	Maximum	95.5	97.0			
	Minimum	19.25	25.2			
	Average	63.3	59.8	0.912	0.212	Not Significant
Public	Maximum	89.25	89.5			
	Minimum	31.18	37.75			
	${t_{cal}}^*$	-2.556	0.712			
p-	value	0.011	0.532			
Sign	ificance	Significant	Not Significant			
	Average	58.3	62.2	-2.161	0.031	Significant
Overall	Maximum	95.5	97.0			
	Minimum	19.25	25.0			

Source: BIBM Survey

^{*}Comparison of average stress of employees between public and private banks.

The unhappiness level of IT professionals of public banks ranges from 31.18 to 89.25 (out of 100), whereas the minimum and maximum unhappiness levels of the business staff of public banks are 37.75 and 89.5, respectively (Table-7). The average unhappiness levels of IT and business staff of public banks are both high, at 63.3 and 59.8 out of 100, respectively. The unhappiness level of business employees of private banks was higher than employees of public banks; however, the reverse scenario was found for IT employees of public banks. The following hypothesis was tested and no significant difference was found between the unhappiness levels of IT and business staff of public banks. Hence we accepted the null hypothesis H_{0B} .

H_{0B}: Mental Health (Unhappiness) of both IT and Business Employees of Public Banks are the same.

H_{1B:} Mental Health (Unhappiness) of both IT and Business Employees of Public Banks are not the same.

On the other hand, the average unhappiness level of IT employees was 56.5 in private banks and 63.3 in public banks. It specifies that IT employees of public banks are unhappier than that of private banks.

H_{0C}: Mental Health (Unhappiness) of IT Employees of both Public and Private Banks are the same.

H_{1C:} Mental Health (Unhappiness) of IT Employees of both Public and Private Banks are not the same.

The above hypothesis was tested and it is seen that at 1% level of significance the null hypothesis is rejected, indicating a significant difference between the unhappiness level of IT Employees of both public and private banks. Further, no significant difference was found between the unhappiness levels of business employees of both types of banks.

Additionally, the overall average mental unhappiness levels of IT and business employees in the banking sector were 58.3 and 62.2, respectively (both of which fall in the 'High' category of unhappiness index in Table-6). The unhappiness of business employees are a little bit higher than IT employees. The corresponding t-value for the difference between these two means is -2.161 with a p-value 0.031, indicating a significant difference between the mental unhappiness levels of the two groups, rejecting the following null hypothesis H_{0D} and accepting the alternative one (H_{1D}).

H_{0D:} Mental Health (Unhappiness) of both IT and Business Employees of Banks are the same.

H_{1D:} Mental Health (Unhappiness) of both IT and Business Employees of Banks are not the same.

3.1.3 Employee's Physical Health

According to Sauter et al. (1999), "There is a relationship between job strain and various diseases. Stress upshots problems like changes in mood, disturbed sleep, headache, upset stomach, and disputes with friends and family that rapidly grow. Usually, these initial symptoms of job stress can be observed easily. But it is not easy to observe the influence of job stress on incurable disorders because incurable disorders take more time to evolve and can be affected by many elements other than stress. However, stress plays a crucial role in various types of incurable health issues particularly heart diseases, musculoskeletal pains, and mental illness. Initial alarming symptoms of job stress are headache, sleeping disorder, lack of concentration, short temperament, disturbed stomach, lack of Job satisfaction, and low confidence."

Tension may have severe health effects, increasing the probability of cardiovascular illness and intensifying medical disorders such as asthma, diabetes, and hypertension. Stress is inevitable, but learning to handle it efficiently is critical. While many individuals handle stress relatively fine, some individuals experience physical and/or mental symptoms. Examples of physical symptoms associated with stress include lethargy, headache, gastrointestinal (GI) upset, muscle tension, episodes of unsteadiness, weight loss or gain, back pain, and teeth grinding.

3.1.3.1 Major Diseases that IT and Business Employees Sufferer from

It is only a dynamic worker that can contribute optimally to the organization's aims and successes. But, Table-8 illustrates a somewhat different and grimy picture of physical fitness related problems of IT and business employees in our banks.

Table 8: Major Diseases of IT and Business Employees

S.	Health Problem	IT Em	ployees (%)	Business Employees (%)			
No.	rieaith Froblem	Both/Overall	Private	Public	Both/Overall	Private	Public	
1	Overweight/Obese	31.7	41.9	20.6	41.1	43.2	35.7	
2	Blood Pressure	20.5	21.2	19.6	28.6	35.0	27.6	
3	Cholesterol In Blood*	18.8	19.8	17.4	24.5	33.3	17.1	
4	Diabetes	12.1	14.8	10.9	14.3	13.8	16.7	
5	Eyesight Problem	36.2	46.2	39.1	32.9	33.7	27.6	
6	Spinal Cord Problem	13.6	11.8	15.6	11.3	14.3	13.8	
7	Spondylosis	4.8	7.7	2.5	7.7	6.9	8.1	
8	Back Pain	28.3	33.3	24.0	32.0	36.7	27.9	
9	Chronic Headache /	14.1	19.3	13.3	18.6	20.8	17.6	
9	Migraine							
10	Others	2.60	4.20	2.30	4.30	4.60	3.40	

Source: BIBM Survey, *High LDL or Low HDL

Most employees are likely to work in front of a computer for a long time. As a result, they (both in IT and business) have been suffering from various prolonged diseases. About 36% of IT and nearly 33% of business employees developed eyesight problems. Back pain and obesity are the other two alarming diseases. Both in public and private banks, about 31.7% of IT and 41.1% of business employees have been suffering from overweight or obesity leading to back pain also. The table reveals one shocking point that is 43% of the business employees of private sector banks have been facing overweight or obesity. Finally, it can be said that business employees of private banks have been suffering much more from health-related problems than other employees who are working in public banks or IT employees of both public and private banks.

3.1.3.2 Physical Health (Unfitness) of IT vs Business Employees

To maintain the similarities with stress and mental health measurement, we considered 20 major diseases (Appendix-A) to assess physical unfitness after reviewing a large body of literature. Variables that are considered to measure the status of physical health are 'Weight Gain and Obesity according to Body Mass Index (BMI)', 'Allergies/Skin Problems (Rashes etc.)', 'Blood Pressure (High or Low)', 'Level of LDL Cholesterol in Blood', 'Level of HDL Cholesterol in Blood', 'Chronic Heart Disease (coronary artery disease, heart rhythm problems, heart valve disease, disease of the heart muscle, heart infection, etc.)', 'Diabetes', 'Eyesight/Vision Problem', 'Spondylosis', 'Back Pain', 'Chronic Headache /Migraine/ Prolonged Headache', 'Spinal Cord Problem', 'Liver Disease', 'Upset Stomach/Digestive Problem', 'Gastrointestinal Disease', 'Chronic Kidney Disease', 'Thyroid Dysfunction', 'Respiratory Problems (asthma, nasal or chest congestion, cold, catarrh pneumonia)', 'Musculoskeletal Problem (body pains, muscular, bone joints) and Carpal Tunnel Syndrome'¹.

Table-9 shows the level of the overall physical health (unfitness) of IT and business employees in private and public banks. Overall physical health (unfitness) was calculated by summing up the average values of 20 parameters (diseases) mentioned above. Here, 0 to 5 points are given in a 'Likert Scale' for each disease considering the severity level of the disease to make an index of 100. All parameters are calculated first by averaging all the values (0-5) given by the employees for each question (regarding each disease). Hence, the index (0-100) represents (Table-10) the level of overall Physical Health (Unfitness). Maximum index value of 100 represents the presence of all 20 major diseases (like blood pressure, diabetes, eye-sight

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¹ Causes of Carpal Tunnel Syndrome are Repetitive motions, like typing, or any wrist movements that we do over and over. This is especially true of things we do when our hands are lower than our wrists.

problem, back pain etc) at a severe level, whereas 0 means the absence of all diseases. The higher the value, the higher is the level of physical unfitness.

In every 20 parameters of the table, business employees of private and public banks scored much higher than their IT counterparts (Table-9). And in many cases, the business employees of public banks scored the highest -- suffering more from various types of serious diseases like Diabetes, Spondylosis, Chronic Headache/Migraine, Liver Disease, Chronic Kidney Disease, Thyroid Dysfunction, etc. If a person undergoes continuous Back Pain, Spondylosis, Spinal Cord Problem or Chronic Headache/Migraine, then it is very difficult for him/her to pursue his regular official job.

Table 9: Physical Health (Unfitness) of Employees, IT vs. Business

S.			IT]	Business	3
No.	Parameters		Private	Public	Overall	Private	Public
1.	Weight Gain and Obesity according to Body Mass Index (BMI)* (0: Normal Weight- 5: Extremely Obese)	1.77	2.32	1.18	3.04	3.39	2.39
2.	Allergies/Skin Problems (Rashes etc.) (0: Very Low - 5: Extremely High)	0.69	0.78	0.61	1.14	0.93	1.33
3.	Blood Pressure (Deviation from Standard: High or Low) For High Pressure: 0-Standard – 5: Extremely High For Low Pressure: 0-Standard – 5: Extremely Low	1.22	1.28	1.13	1.91	2.89	1.98
4.	Level of LDL (Low-density lipoprotein) Cholesterol in Blood $ (0: 100 \text{ mg/dL} - 5: 190 \text{ mg/dL})^* $	1.13	1.21	1.02	1.71	2.05	1.46
5.	Level of HDL (High-density lipoprotein) Cholesterol in Blood (0: Greater Than 60 – 5: Less Than 40)	0.66	0.72	0.59	1.09	1.22	1.03
6.	Chronic Heart Disease (coronary artery disease, heart rhythm problems, heart valve disease, Disease of the heart muscle, heart infection, etc.) (0: Very Low - 5: Extremely High)	0.90	0.96	0.80	1.40	1.63	1.24
7.	Diabetes (0: Very Low - 5: Extremely High)	0.80	0.96	0.70	1.20	1.22	1.29
8.	Eyesight/Vision Problem (0: Very Low - 5: Extremely High)	2.00	2.53	2.11	2.13	2.07	1.98
9.	Spondylosis (0: Very Low - 5: Extremely High)	0.43	0.61	0.28	0.87	0.79	0.95
10.	Back Pain (0: Very Low - 5: Extremely High)	2.11	2.39	1.85	2.58	2.72	2.50
11.	Chronic Headache /Migraine/ Prolonged Headache (0: Very Low - 5: Extremely High)	0.90	1.19	0.82	1.91	1.93	1.98

S.			IT]	Business	S
No.	Parameters	Overall	Private	Public	Overall	Private	Public
12.	Spinal Cord Problem (0: Very Low - 5: Extremely High)	0.86	0.81	0.93	1.13	1.29	1.05
13.	Liver Disease (0: Very Low - 5: Extremely High)	0.26	0.33	0.21	0.59	0.50	0.78
14.	Upset Stomach/Digestive Problem (0: Very Low - 5: Extremely High)	0.31	0.38	0.26	0.68	0.48	0.85
15.	Gastrointestinal Disease (0: Very Low - 5: Extremely High)	0.64	0.85	0.59	1.28	0.77	1.65
16.	Chronic Kidney Disease (0: Very Low - 5: Extremely High)	0.26	0.30	0.23	0.58	0.43	0.73
17.	Thyroid Dysfunction (0: Very Low - 5: Extremely High)	0.32	0.43	0.27	0.70	0.62	0.77
18.	Respiratory Problems (asthma, nasal or chest congestion, cold, catarrh pneumonia) (0: Very Low - 5: Extremely High)	0.51	0.66	0.45	1.06	0.65	1.32
19.	Musculoskeletal Problem (body pains, muscular, bone joints) (0: Very Low - 5: Extremely High)	0.34	0.35	0.24	0.64	0.46	0.81
20.	Carpal Tunnel Syndrome (0: Very Low - 5: Extremely High)	0.32	0.38	0.27	0.59	0.52	0.70
	Overall Physical Unfitness (Out of 100)	16.43	19.44	14.54	26.23	26.56	26.79

Source: BIBM Survey * Appendix-B

Table 10: Physical Health (Unfitness) Index

Score	Physical Health (Unfitness) Level	Score	Physical Health (Unfitness) Level
0 to ≤10	Very Low	$> 50 \text{ to } \le 70$	High
> 10 to ≤ 30	Low	$> 70 \text{ to } \le 90$	Very High
$> 30 \text{ to } \le 50$	Moderate	$> 90 \text{ to } \le 100$	Extremely High

Source: Literature Review

It is seen from the table that employees working in the public bank's business department were burdened the most due to their physical unfitness. They got 26.79 out of 100, which is the highest score. In case of Allergies/Skin Problems, Diabetes, Spondylosis, Chronic Headache /Migraine/ Prolonged Headache, Liver Disease, Upset Stomach/Digestive Problem, Gastrointestinal Disease, Chronic Kidney Disease, Thyroid Dysfunction, Respiratory Problems (asthma, nasal or chest congestion, cold, catarrh pneumonia), Musculoskeletal Problem (body pains, muscular, bone joints) and Carpal Tunnel Syndrome, their severity level is the highest among all groups. It is seen that business employees are much more older than IT workforces in the banking sector. As condition of physical health generally worsens with

the increase of the age of human beings; a large portion of business employees was suffering from being overweight; and they had to support customers for a long time without or with little rest under tremendous stress; they had very limited scope to take care of their physical health. We also see that the health condition of business employees of private banks (26.56 out of 100, the second-highest score) is also very close to the same employee group of public banks. The severity levels of diseases that are highest for this group of people are obesity and heart diseases (blood pressure, cholesterol, etc.). On the other hand, though young IT people were also suffering from a lot of diseases, the severity level was not as high as business people. They were suffering mainly from eyesight/vision problems due to prolonged use of computer devices (mainly watching smartphone screens and monitors). The overall unfitness value of IT people in the banking sector is only 16.43, which is more lower than business people indicating their better physical fitness.

3.1.3.3 Comparative Analysis of Physical Unfitness

Table-11 represents levels of average physical health (unfitness) of IT and business employees in private and public banks. The data is shown on a scale of 100 which means the higher the value, the higher the physical unfitness. From the table, we observe that private banks' business employees (26.56) are suffering from more diseases compared to IT employees (19.44). Physical health (unfitness) of IT professionals of private banks ranges from a minimum of 0 to a maximum of 36.2 (out of 100), whereas minimum and maximum physical unfitness levels of business staff of private banks are 0 and 42.1, respectively.

H_{0A:} Physical Unfitness of both IT and Business Employees of Private Banks are the same

H_{1A:} Physical Unfitness of both IT and Business Employees of Private Banks are not the same.

To test the above null hypothesis (H_{0A}) against the alternative one (H_{1A}) to see whether there is a significant difference between the physical unfitness levels of IT and business employees of private banks, the corresponding t-value for the difference between these two means is - 3.156 with a p-value 0.000 ensuring a highly significant difference.

We can also see from Table-11 that the physical unfitness levels of IT professionals of public banks range from minimum 0 to maximum of 28.2 (out of 100), whereas minimum and maximum physical unfitness levels of business staff of public banks are 0 and 39.4, respectively. The average physical unfitness levels of IT and business staff of public banks are at 14.54 and 26.79 out of 100, respectively. Notable that the physical unfitness level of business employees of public banks are slightly higher than employees of private banks. But the reverse scenario is found for IT employees of public banks, their physical unfitness level is significantly lower compared to private banks. The following hypothesis is tested and a

highly significant difference is found between the physical unfitness levels of IT and business staff of public banks. Hence we accepted the alternative hypothesis H_{1B} .

H_{0B}: Physical Unfitness of both IT and Business Employees of Public Banks are the same

H_{1B}: Physical Unfitness of both IT and Business Employees of Public Banks are not the same.

Table 11: Comparative Analysis of Physical Unfitness of IT vs. Business Employees

Type of Bank	Central Tendency	IT	Business	t cal	p-value	Significance
	Average	19.44	26.56	-3.156	0.000	Highly Significant
Private	Maximum	36.2	42.1			
	Minimum	0.0	0.0			
	Average	14.54	26.79	-4.215	0.000	Highly Significant
Public	Maximum	28.2	39.4			
	Minimum	0.0	0.0			
	t_{cal}^*	3.351	0.339			
p-	value	0.000	0.734			
Sign	ificance	Highly Significant	Not Significant			
Overel	Average	16.43	26.23	-3.985	0.000	Highly Significant
Overal	Maximum	36.2	42.1			
1	Minimum	0.0	0.0			

Source: BIBM Survey

On the other hand, the average physical unfitness score of 19.44 for IT people of private banks indicates that an IT employee of private banks suffers more from different diseases compared to IT employees of public banks (14.54).

H_{0C}: Physical Unfitness of IT Employees of both Public and Private Banks are the same.

H_{1C:} Physical Unfitness of IT Employees of both Public and Private Banks are not the same.

The above hypothesis is tested and the null hypothesis is rejected ensuring a highly significant difference between the physical unfitness of IT Employees of both public and private banks. It is also notable that no significant difference is found between the physical unfitness levels of business employees of both types of banks.

Additionally, the overall physical unfitness scores of IT and business employees are 16.43 and 26.23, correspondingly which indicates the better physical fitness of the young IT workforce than business. The corresponding t-value for the difference between these two means is -3.985

^{*}Comparison of average stress of employees between public and private banks.

with a p-value 0.000 ensuring a highly significant difference between the physical unfitness levels of the two groups, rejecting the following null hypothesis H_{0D} and accepting the alternative one (H_{1D}).

H_{0D:} Physical Unfitness of both IT and Business Employees of Banks are the same.

H_{1D:} Physical Unfitness of both IT and Business Employees of Banks are not the same.

3.1.3.4 Problems that were developed after Joining the IT Department of Banks

Work-related stress can have negative effects on individuals' health as seen from the following table (Table-10). From Table-2 we see that job stress is higher for IT people (59.59) compared to business employees (56.74). As a result, after working a few years in banks' IT departments, employees developed several diseases like back pain (19.7%), eyesight problem (22.2%), weight gain (23.8%), high blood pressure (14.8%), etc. Prolonged working hours, high workload, unrealistic expectations, unethical pressure, intense pressure to perform at peak levels all the time, unrealistic project implementation deadline, continuous sitting in front of a computer screen, lack of exercise and food habits might be the reasons to develop such diseases quickly by IT people.

Table 12: Physical Problems Developed after Joining IT Department

Physical Problem	Employee (In %)
Back Pain	19.7
Eyesight Problem	22.2
Migraine	7.4
Weight Gain	23.8
Headache	9.1
Acidity	7.4
High Blood Pressure	14.8
Sleeping Problem	13.7
High Cholesterol	11.7
Fatty Liver	3.7
Anxiety/Tension	18.5

Source: BIBM Survey

3.1.3.5 Health Habits of IT vs. Business Employees

Food habits such as scarce intake or high intake both have hostile effects on health. Also eating too much fast food can increase the risk for health complications such as high blood pressure, heart disease, and obesity.

Table 13: Health Related Habits of IT vs Business Employees

	IT (% of Employees)			Business (% of Employees)			
	Overall	Private	Public	Overall	Private	Public	
Habit of taking Balanced Food	56.94	64.45	39.13	54.89	55.14	33.57	
Habit of getting Fast Food	12.26	11.82	13.33	13.07	14.29	6.90	
Smoking Habit	19.87	17.27	26.09	19.21	18.92	23.77	
Habit of Taking Alcohol	0.64	0.91	0.00	2.84	2.72	3.45	
Average Number of Medicine Per Day	1.11	1.10	1.15	1.88	1.97	1.56	
Health Insurance Policies	12.59	12.00	13.95	34.71	38.46	14.81	

Table-13 indicates that business people are fond of taking more fast food and are less habituated to eating balanced food than IT people. One point worth noting from the table is that around 13% of IT people have health insurance policies while about 34% of businesspeople enjoy this opportunity.

3.1.3.6 Habits of Taking Exercise (IT vs. Business Employees)

Working in the banking industry is known to be a stressful and challenging profession. Regular physical activity can improve muscle strength and boost endurance. Exercise delivers oxygen and nutrients to tissues and helps the cardiovascular system work more efficiently. And when heart and lung health improve, more energy is released to tackle daily chores.

Table-14 shows the exercise habit of IT and Business Employees in both categories of banks. Though 62.1% of business employees (highest in all categories) of public banks take regular physical exercise, it can be seen from the table that business staff of private banks are more health-conscious in terms of doing exercise than other groups. On average, they spend more than 52 minutes per day for exercise to keep them fit.

Table 14: Exercise Taken by IT vs. Business Employees

	IT			Business		
	Overall	Private	Public	Overall	Private	Public
Percentage of Employees take Regular Exercise	54.5	18.0	43.5	56.8	55.8	62.1
Average Exercise Time per day (Minutes)	40.4	41.2	37.5	51.4	52.6	46.0

Source: BIBM Survey

3.1.4 Financial Health

3.1.4.1 Financial Benefits of Employees and Economic Status

There is a solid and positive connection between payment and employees' performance and that salary/wage and bonus/incentives also serve as a form of enthusiasm to the employees. Therefore they are very important for the organization too. It is found from different research

that salary has a constructive influence on employee performance. The average salary structure of IT and business people in both types of banks is shown in Table-15. According to the table, in most of the cases business workers are getting more salary than IT people in both private and public banks. And one interesting point is that overall salary structure of the business department is much more lucrative than IT department in all age groups except the age bracket between 41 and 50.

Table 15: Average Salary of IT vs. Business Employees (in BDT)

Aga]	IT		iness	Overall		
Age	Private	Public	Private	Public	IT	Business	
Up to 30	60000	50000	70000	50000	55500	62500	
31 - 40	95000	60000	87500	67500	79500	87500	
41 - 50	135500	80000	110000	85000	115000	101500	
Above 50	295000	225000	398000	250500	235500	295500	

Source: BIBM Survey

The societal standing of both IT and business staff in either type of bank (i.e. public and private) is shown in Table-16. The overall economic status of both IT (2.85) and business (2.83) employees are almost equal. In our common thinking, owning a home or flat means an immense achievement in life. In that sense, business employees of private sector banks are far ahead of any other group. Around 51% of business personnel of private sector banks have their flat.

Table 16: Economic Status of IT vs. Business Employees

	IT			Business			
	Overall	Private	Public	Overall	Private	Public	
Economic Status*	2.85	2.91	2.56	2.83	2.82	2.86	
Own Home/Flat	32%	38%	17%	38%	51%	24%	
Number of Dependents	3.37	3.08	4.12	3.54	3.61	3.12	

Source: BIBM Survey

*Likert Scale: Poor 0 Lower Middle Class 1 Middle Class 2 Upper Middle Class 3 Rich 4 Very Rich 5

3.1.4.2 Satisfaction Level Regarding Financial Benefits

As the name infers, a financial incentive (salary, bonus, loan, pension, gratuity, etc.) has an obvious monetary value; an employee knows precisely what one is worth. Whereas, non-monetary benefits (leave, prizes, facilities, etc.) do not directly put money into an employee's bank account. These are given to employees to encourage them and to increase their level of satisfaction. As seen from Table-17, business employees of private sector banks enjoy monetary (2.58) and non-monetary benefits (1.72) the most. But on a scale of 5 these scores are not at a satisfactory level. In case of Monetary and Non-monetary benefits after retirement, business workforces of public sectors are ahead of others which is 2.68 on a scale of 5.

But even this is a little bit higher than the moderate level (2). Bank management should think about this issue seriously to motivate their workforce.

Table 17: Satisfaction Level Regarding Financial Benefits*

	IT			Business			
	Overall	Private	Public	Overall	Private	Public	
Monetary Benefit	2.39	2.31	2.28	2.31	2.58	2.45	
Non-monetary benefits	1.55	1.60	1.44	1.61	1.72	1.07	
Monetary and Non-monetary benefits after Retirement	2.53	2.45	2.61	2.59	2.37	2.68	

Source: BIBM Survey

*Likert Scale: Very Low 0 Low 1 Moderate 2 High 3 Very High 4 Extremely High 5

3.2 Qualifications of Existing Human Resources in IT Departments

3.2.1 Educational Background

In our country, till the educational status and quality of public universities are far better than most of the private universities. So, it is a positive sign that our banking industry recruits the graduates of public universities in a great number as seen from Table-18. About 45.45% of IT employees recruited from students who are graduated from public universities. In the case of business department, the number is 54.35%. One interesting point that can be seen from the table is, banks' IT departments recruit more graduates from private universities than business departments. Students from foreign universities and colleges under the technical-board are very low in number in our banking workforce.

It is imperative that a degree in CSE undeniably helps an IT employee to handle critical things better than those who have a commerce or arts background. As seen from Table-19, about 65% of IT employees have honours degree in CSE/ICT, which is a very good sign. Interesting thing is, a total of 9.08% of IT employees have B. Com (4.89%) or B. A. (4.19%) background, which is less likely compatible with the IT environment.

Table 18: Educational Institutions of IT and Business Employees

Type of Institutes	IT (% of En	nployees)	Business (% of Employees)		
Type of Institutes	Graduation	Masters	Graduation	Masters	
Public University	45.45	48.05	54.35	58.23	
Private University	37.88	41.56	14.49	17.16	
Foreign University	1.51	0.0	0.72	0.0	
Colleges (National University)	14.39	10.39	30.43	24.63	
Colleges (Technical Board)	0.76	0.0	0.0	0.0s	

Source: BIBM Survey

Table 19: Educational Background of IT Employees

	Graduation	Masters						Rec	hnical C ceived CCNA, C			
	(%)	No	Same Subject	MBA	Other Subject	More Than One	No	One	Two	Three	Four	Five
CSE/ICT	65.03	29.8	47.9	20.2	0.0	2.1	51.6	13.7	12.6	4.2	6.3	11.6
AP/EEE	7.69	20.0	30.0	40.0	10.0	0.0	54.5	9.1	9.1	0.0	9.1	18.2
B. Sc.	18.18	8.3	54.2	29.2	4.2	4.2	56.0	16.0	4.0	12.0	4.0	8.0
B. Com	4.89	14.2	-	85.7	0.0	0.0	85.7	14.1	0.0	0.0	0.0	0.0
B. A.	4.19	16.7	83.3	0.0	0.0	0.0	83.3	0.0	16.7	0.0	0.0	0.0

But 16.7% of B. A. degree holders have 2 professional certifications like MCSE, OCP, CCNA, CISSP, etc., wich means they are constantly thriving to cope with the IT atmosphere. Another point worth noting is that 20.2% of IT employees who have graduated from the CSE/ICT department did their MBA degree. It is also seen that 40% of IT employees having MBA degree graduated from AP or EEE departments, which certainly assist them to understand the business environment of their banks along with the IT environment.

The experience and expertise of IT employees in different IT fields are shown in Figure-2. All the 11 fields shown in this figure are equally significant for the IT operations of a bank and IT employees should have vast knowledge in these areas. It is evident from the figure that, IT employees who are looking after 'Hardware, Storage and Server' having experience of 6 years, which is good for their work. 'Software Development' (6.1 years) and 'CBS' (6.6 years) teams are also capable of handling their job. But other vital areas like 'Security' (3 years), 'IS Audit' (3.5 years) and 'DC, DR and BC' (4.3 years) are handled by comparatively inexperienced manpower. IT employees' skills range from a minimum of 2.3 to a maximum of 4 on a scale of 5* in these 11 areas, which is far from the expected skills needed for IT employees. Especially, the expertise of 'Security' and 'IS Audit' team is very poor (2.3 and 2.6 on a scale of 5, respectively). We see that the overall working experience of IT employees is 5.1 years, whereas their average skills level is only 3.2 on a scale of 5, which is not very high for an IT employee as expected.

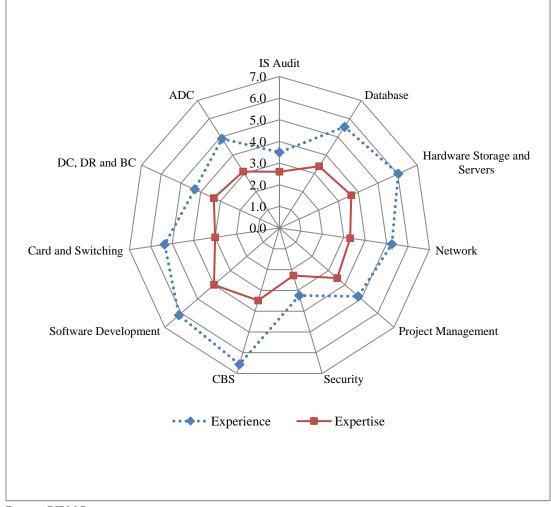


Figure 1: Experience (in Years) and Expertise* (0-5) of IT Employees

*Likert Scale: Very Low 0 Low 1 Moderate 2 High 3 Very High 4 Extremely High 5

3.2.2 Resource Development of IT Professionals through Training

Though the importance of training is undeniable, the real picture of training in our banking industry gives us a somewhat different image. Among the surveyed employees only 13.3% of business staff got training. Whereas, it is 16.94% for IT employees. Though the number of employees in IT who got training is slightly higher than business employees, this is very low regarding the rapid changes of IT infrastructure and security. In the current scenario, it is required that every IT employee should attend at least one training in home or abroad at least in two years.

Table 20: Training Need of Both IT and Business Employees

IT	(% of Employees	s)	Busin	ness (% of Employ	ees)
Overall	Private	Public	Overall	Public	
58	58	61	61	60	71

The employees of private banks are more acquainted with current technological/business trend than the employees of public banks. As a result, 61% of IT staff of public banks feel the thrust of training, whereas the figure is 58% for the private sector. In the case of business department, the difference between the training need of private and public sector banks is even more. As a whole, we can say that IT people are more accustomed with up-to-date knowledge than business people.

3.2.3 Demand for IT Training

In order to survive in the IT arena, IT employees need to sharpen their knowledge regularly. That's why training is compulsory for IT personnel. We ranked the training preference of IT staff in the following table (Table-21). It is found that Database Administration (DBA) course is the first choice of IT workers.

Table 21: Training Need of IT Employees

Training Title	Rank	Training Title	Rank
Database Administration (DBA)	1	ITIL	27
Business (General Banking)	2	DC/DRS	28
IT Security	3	RHCA	29
Network Security	4	RSA	30
MCSE	5	PCI DSS	31
CCNA	6	CompTIA+	32
CCNP	7	CCISO	33
IT Audit	8	Advance Training on System Administration	34
СЕН	9	Red Hat Certified Network Defender	35
MCSA	10	Payment Card Security	36
CISA	11	Dispute Management	37
Linux/AIX	12	IBM Training	38
RHCE	13	Oracle RAC and Grid Infrastructure	39
Project Management	14	IT Risk Management	40
OS	15	Clustering	41
CISSP	16	Jonas	42
Software Security	17	ATM	43
SOC	18	CISM	44
VAPT	19	Juniper	45
Active Directory	1	PnP	27

Training Title	Rank	Training Title	Rank
Advance Training on Storage	2	Artificial Intelligence	28
Administration	2	Artificial intelligence	20
E-commerce Fraud Prevention and	3	CompTIAN	29
Detection	3	CompTIAN+	29
Advance Java	4	AWS	30
CBS	5	IBM MQ Series	31
MIS Reporting	6	Visa Resolve Online (VRol)	32
Foundation IT	7		

After that IT staff want to know about general banking, which is a very good indication for the banking industry. Because IT workforce needs to know not only IT but also banking to endure in this competitive phase. Then various certification courses like MCSE, CCNA, CCNP, CEH, CISA or CISSP are in their preference list. They are also interested to know about various operating systems, programming languages and network systems.

3.2.4 Preference of Training Institute of IT Personnel

From survey data, it is found that 25% of IT employees prefer BIBM for training. Another 35% want to get training in local technical institutes that jointly work with international vendors. BUET is chosen by 10% of employees, while 4.5% prefer in-house training. 13% of IT personnel want to go to foreign countries like Singapore, Malaysia, India, the UK and South Korea. Another 5% of them are interested to receive training from local vendors and the rest of them are unsure about where to get the training. In the case of business employees, 33% prefer BIBM and 56.7% like In-house training. The business employees who want to go outside of the country for training is only 10.3%.

3.3 Human Resource Management (HRM)

Human Resource Management is the process of recruiting, selecting, inducting employees, providing orientation, imparting training and development, appraising the performance of employees, deciding compensation and providing benefits, motivating employees, maintaining proper relations with employees and their trade unions, ensuring employees' safety, welfare and health measures in compliance with labour laws of the land and finally following the guidelines of the Central Bank, if any. The following sections explain the current HRM practices for IT employees of banks compared to business employees in Bangladeshi banks.

3.3.1 Work Environment

The working atmosphere has a substantial impact on employee performance and efficiency. Several issues that control employee performance. The workplace's environment affects

employee self-reliance, output and commitment – both positively and negatively. Productivity of professional employees is reduced not only due to working environment factors but also due to the dearth of human resource management features such as appreciation of employees who perform well, poor working condition, the nonexistence of productivity judgment system and poor response on productivity outcome. It is clear from Table-22 that the working conditions of the private sector IT employees are in a much better position in almost every aspect than the public sector IT employees. Though public banks' IT workers enjoy better job security (2.96 on a scale of 0-5: Very Low-Extremely High) than private banks' IT workers, they are loaded with work (3.96 out of 5) compared to business employees of the same group of banks (3.86) and also safety measures taken for them is not adequate (1.93). Likewise, it is seen from the table that the overall working condition of IT personnel is much healthier than business employees of both types of banks. Business employees of private banks are stressed with the lowest job security (1.72 on a scale of 5).

Table 22: Work Environment in Public and Private Sector Banks for Both IT and Business Employees*

Parameters		IT		Business				
Parameters	Overall	Private	Public	Overall	Private	Public		
Job Rotation (0: Very Low, 5: Extremely High)	1.86	2.05	1.42	1.66	1.68	1.52		
Opportunities to use Skills and Abilities (0: Very Poor, 5: Excellent)	2.46	2.93	1.8	2.48	2.52	2.25		
Job Security (0: Very Low, 5: Extremely High)	2.32	1.81	2.96	2.48	1.72	2.93		
Involvement and Responsibility (0: Very Poor, 5: Excellent)	2.49	2.67	2.04	2.32	2.3	2.39		
Disciplinary Procedures (0: Very Poor, 5: Excellent)	2.84	3.03	2.39	2.81	2.8	2.83		
Formal and Friendly Atmosphere (0: Very Poor, 5: Excellent)	2.99	3.11	2.68	2.66	2.6	2.97		
Workload (0: Very Low, 5: Extremely High)	3.91	4.78	3.96	4.15	4.08	3.86		
Transfer Practices (0: Very Poor, 5: Excellent)	2.63	2.74	2.38	2.37	2.42	2.14		
Safety Measures (0: Very Poor, 5: Excellent)	2.3	2.79	1.93	2.37	2.38	2.31		
Monotonous Duties (0: Very Low, 5: Extremely High)	2.11	1.98	2.45	2.2	2.19	2.28		
Grievance Handling Mechanism (0: Very Poor, 5: Excellent)	2.27	2.84	2.05	2.01	1.98	2.11		

Source: BIBM Survey, *Average score is given on a scale of 0-5 (Appendix-A)

Employee grievance refers to the discontent of an employee with what he/she expects from the organization and its management. Though neglect of grievances in the working place leads to reduced performance, low morale and indiscipline among the workers; grievance management of private banks is not satisfactory (1.98 on a scale of 5).

3.3.2 Talent Acquisition

Under talent acquisition, this research discusses employment, selection, independency of heads of HR in human resource operations, and the necessity to analyze employees' morals before final selection. It is seen from Table-23 that almost all IT employees of banks said that the bank gives advertisement before any new appointment, but this figure drops down to 85.9% in the business department of banks. Again while 89.7% of IT employees agreed that management follows the proper selection process before appointing an employee in the bank, only 67.4% of business employee agreed with this point. The independency of the HR head is more or less the same in both the IT and business departments of banks to take any decission.

Table 23: Talent Acquisition for Both IT and Business Employees (% of Employees)

Particulars		1	Business		
	Yes	No	Yes	No	
Gives advertisement before any fresh recruitment	99.3	0.7	85.9	14.1	
Follows proper selection process before appointing an employee at any level	89.7	10.3	67.4	32.6	
Head of HR is independent to take HR recruitment decision	52.7	47.3	51.2	48.8	

Source: BIBM Survey

3.3.3 Talent Development

Talent expansion is a vital and the second step after the right placement of the employees in banks. We found from the table (Table-24) that only 32.7% of IT employees are asked by the HR department before giving nominations in any training programs. This figure is somewhat encouraging in the business department (54.9%). After completing any specific training transfer to the concerned department help an employee to deliver his knowledge properly. More than 24.9% of business employees have this opportunity, while only 9.2% of IT employees have this experience. This study finds that a shocking number of 38% of business employees feel that they are under pressure for forced resignation. IT employees are in a better position in this regard. This is not a good practice in HRM in the banking sector of Bangladesh. Career counseling is very vital for bank employees for their individual and also organizational career development. This is usually done by branch managers or immediate line managers. 49% of IT and 47.3% of business employees received career counseling from their banks.

Table 24: Talent Development of Both IT and Business Employees (% of Employees)

Particulars -		1	Busi	ness
		No	Yes	No
Asked by the HR department before getting nomination in any training program	32.7	67.3	54.9	45.1
Consult by the Manager/Line-Manager/HRD for getting any specific training nomination	61.3	38.7	64.7	35.3
Transfer (to concern department) by the HR after completing any specific training	9.2	90.8	24.9	75.1
Have you/your colleague ever faced forced resignation?	12.6	87.4	38.0	62.0
Did you receive career counseling from your superior?	49.0	51.0	47.3	52.7

This research endeavors to find the violation of the ethical code of conduct and training on corporate ethics. Recently it is claimed by different survey findings and media reports that the violation of the ethical code of conduct is increasing. The study finds that 61% of employees believe that violations of the ethical code of conduct among the bank employees are increasing. This is alarming for the banking industry and should be controlled immediately.

Training is essential for organizational development and success. Training program brings employees to a higher level so that they all have parallel skills and understanding. But the following table (Table-25) reveals a upsetting picture of our banking industry regarding training. Both IT and business employees of private and public banks are quite unhappy about the number of training provided for them. Public banks' business employees' score is 2.71, which is the highest among all groups. Again it is seen that the impact of training to improve employees' competency is also very low. The score ranges from 2.27 to 2.91.

Table 25: Impact of Training in **Talent Development of IT and Business Employees** (% of Employees)*

Domain	IT			Business			
Domain	Overall	Private	Public	Overall	Private	Public	
Number of Training Program Conducted	2.31	2.34	2.33	2.51	2.51	2.71	
Impact of Training Provided to Improve the Efficiency	2.32	2.31	2.27	2.84	2.82	2.91	

Source: BIBM Survey

*Likert Scale: Very Low 0 Low 1 Moderate 2 High 3 Very High 4 Extremely High 5

3.3.4 Talent Motivation

Talent motivation and leadership is one of the core components of the HR operations of banks. To ensure better service bank officials should be properly encouraged. An unsatisfied employee cannot provide better service to his customers. In this regard to ensure good service, employees should receive a job descriptions and job specifications. The study finds that only

57.5% of IT and 59% of business employees have a job descriptions and job specifications from the HR of banks (Table-26). A shocking 35.3% of IT and 42.9% of business employees are not pleased with the existing employee performance appraisal system. The study tries to capture the status of leading the talent in the banking sector where it finds that more than 62% of business employees see leadership succession plans for developing future banking leaders in their banks. A lower portion of IT employees (56.7%) compared to business wings believe this issue.

Table 26: Talent Motivation of IT and Business Employees (% of Employees)

Particulars -		T	Business		
		No	Yes	No	
Receive job description and job specification from HR	57.5	42.5	59.0	41.0	
Satisfied with your current performance appraisal system (ACR)/APR	64.7	35.3	57.1	42.9	
Leadership succession plan	56.7	43.3	62.4	37.6	

Source: BIBM Survey

It is a good practice that 79% of banks developed a scale to define the best employees for a well-done job. But the culture of appreciation for good jobs and vision is very low in our banking industry. We found that the satisfaction score regarding this parameter ranges between 1.78 and 2.33 out of 5 (0: Very Poor, 5: Excellent), which is below the moderate level (Table-27). After joining the banks a Management Trainee Officer/Probationary Officer needs 29 years on average (maximum 37 years) to reach the top management position (i.e. MD, DMD) conditioned that if the employees get a regular promotion. In this regard, the satisfaction levels of both IT and business employees are very low (minimum 1.23 and maximum 1.64). That means they are not getting their promotion in due time. The level of motivational schemes is also very low. Bank management should look after these issues very seriously.

Table 27: Talent Motivation of IT and Business Employees (% of Employees)*

Particulars		IT		Business			
ratuculars	Overall	Private	Public	Overall	Private	Public	
The recognition for a well done job and creativity by prizes and awards	2.15	2.31	1.78	2.31	2.33	2.31	
Promotion/Career Opportunities	1.39	1.23	1.60	1.55	1.42	1.64	
Level of motivational schemes	1.92	1.76	2.07	1.91	1.91	1.82	
Recognition for Creativity	2.24	2.28	1.78	2.11	2.14	2.24	

Source: BIBM Survey

*Scale: 0-5 (0: Very Poor, 5: Excellent), Appendix-A

3.3.5 Leading the Talent

About 70% of bank employees (both IT and Business) said that they have a visionary map for becoming top executives (e.g. MD, DMD, AMD and SEVP or operation in-charge) of their banks (Table-28). While a mere 32% of IT and 36% of the business staff of banks did not participate in any leadership training program either organized by the banks or other organizations. Banks have the scope to improve the leadership quality (soft skill) of the employees. Most importantly, 40.8% of IT and 58.5% of business employees said that there is an absence of ethical leaders in the banking industry, which is not a good sign at all.

Table 28: Leading the Talent of Both IT and Business Employees (% of Employees)

Particulars		•	Business		
	Yes	No	Yes	No	
Visionary map for becoming top executive (e.g. MD, DMD, AMD)	69.9	30.1	70.9	29.1	
Participated in any leadership/motivation/team management training program in this year	32.0	68.0	36.2	63.8	
Absence of good/ethical leader in bank	40.8	59.2	58.5	41.5	
Right persons are placed in the right places	51.7	48.3	38.5	61.5	

Source: BIBM Survey

3.3.6 Talent Maintenance

Talent maintenance i.e. the attraction, improvement, management and retaining of talent is a significant driver of success. But there are many challenges as well. Today employees work in such a vibrant and ever varying environment that needs a clever shaping of talent policy if the organization wants to get the most out of the potential of its employees. Amongst talent maintenance employee grievance is very crucial. That is why the study tries to depict the status of employee grievance and complaint management in banks.

The study discloses that 68% of business employees receive employee service rule (ESR) from their respective banks (Table-29). Further, for talent maintenance, the presence of grievance handling, and the necessity of CBA/Trade Union/Employee Union are important. About 50% of employees (both IT and Business) opined that the banking industry needs the presence of an Employee Association/Union like CBA/Trade Union to protect their rights.

Table 29: Talent Motivation of Both IT and Business Employees (% of Employees)

Particulars -		T	Business		
		No	Yes	No	
Received employee service rule (ESR) from the HR department	62.3	37.7	68.0	32.0	
Employee Association (like Trade Union) is necessary to protect rights		51.7	49.7	50.3	

Source: BIBM Survey

3.3.7 Job Satisfaction of IT and Business Employees

Job satisfaction refers to a progressive emotion about a job, resulting from an evaluation of its characteristics. A person with a great level of job contentment holds positive feelings about

his/her job, while a frustrated person holds negative feelings. Gratified and devoted employees, for instance, have low rates of turnover, bunking off, and withdrawal behaviors. They also perform better in their career.

After studying a large number of research papers 20 variables are considered to evaluate job satisfaction (Appendix-A). These are: 'Transportation Facilities', 'Ordinary Leave Facilities', 'Recreation Leave Facilities', 'Holiday Enjoying Facilities', 'Monetary Benefits', 'Non-Monetary Benefits', 'Level of Job Security', 'Responsibility and Involvement', 'Disciplinary Practice and Procedures', 'Work Environment and Culture', 'Work Load', 'Job Rotation', 'Monotonous Duties', 'Grievance Handling Mechanism', 'Training Facilities', 'Skill Development', 'Opportunities to Use Skills and Abilities', 'Recognition for Creativity', 'Recognition by Reward', and 'Promotion and Career Opportunities'.

Table-30 shows the level of the overall job satisfaction of IT and business employees in private and public banks. Overall job satisfaction is calculated by summing up the average values of 20 parameters understudy. Here, 0 to 5 points are given in a 'Likert Scale' for each parameter considering the level of job satisfaction to make an index of 100. All parameters are calculated first by averaging all the values (0-5) given by the employees for each question (regarding each parameter). Hence, the index (0-100) represents the level of overall job satisfaction. Maximum value 100 means the employee is extremely satisfied with his job, whereas 0 means extremely dissatisfied. The higher the value, the higher the job satisfaction (Table-31).

As seen from Table-30, IT employees of public sector banks enjoy the highest leave facilities like ordinary and recreation. On a 5-point 'Likert' scale they achieved 2.32 and 2.25, respectively in these two parameters, where 0 means 'Very Poor' and 5 means 'Excellent'. It is seen that the business staff of private and public banks are ahead of their IT counterparts in getting financial benefits. Particularly IT staff who are working in public sector banks achieve the lowest score in this parameter (2.28). But in the case of non-monetary benefits, both the IT and business employees who are engaged in private banks are getting more benefits than public banks. As seen from the table, factors like, 'Level of Job Security', 'Responsibility and Involvement', 'Disciplinary Practice and Procedures', 'Grievance Handling Mechanism', 'Work Environment and Culture' and 'Recognition for Creativity', the overall score of IT employees both in public and private sector banks are better than business employees of both types of banks. However, the overall score of business personnel in the parameter, 'Promotion and Career Opportunities' is higher than IT personnel. The first group achieved 1.55 on a 5point 'Likert' scale, which is 1.39 for the second group. Finally, the overall job satisfaction, as found from the table, is better for business staff of public and private banks than their IT colleagues. The business workforce got 42.43 out of 100, which is slightly higher than IT

workforce (41.81). But if we look at the individual score then we can see that the business workforce of public sector banks achieved the highest score (44.28). Using 'Job Satisfaction Index' table (Table-31), we can say that the job satisfaction of the employees of all categories of the whole banking industry of our country is 'Moderate', as both IT and business staff of private and public banks got below 50.

Table 30: Job Satisfaction of IT and Business Employees*

			IT			Business	
Sl. No.	Parameters	Overall	Private	Public	Overall	Private	Public
1.	Transportation Facilities (0: Very Poor - 5: Excellent)	1.92	1.82	2.08	2.27	2.96	1.98
2.	Ordinary Leave Facilities (0: Very Poor - 5: Excellent)	1.83	1.39	2.32	1.69	1.25	1.96
3.	Recreation Leave Facilities (0: Very Poor - 5: Excellent)	1.92	1.57	2.25	2.03	1.70	2.23
4.	Holiday Facilities (0: Very Poor - 5: Excellent)	2.01	1.74	2.17	2.36	2.14	2.50
5.	Monetary Benefits (0: Very Poor - 5: Excellent)	2.30	2.31	2.28	2.51	2.58	2.45
6.	Non-Monetary Benefits (0: Very Poor - 5: Excellent)	1.55	1.60	1.44	1.61	1.72	1.07
7.	Level of Job Security (0: Very Low - 5: Extremely High)	2.32	1.81	2.96	2.48	1.72	2.93
8.	Responsibility and Involvement (0: Very Low - 5: Extremely High)	2.49	2.67	2.04	2.32	2.30	2.39
9.	Disciplinary Practice and Procedures (0: Very Poor - 5: Excellent)	2.84	3.03	2.39	2.81	2.80	2.83
10.	Work Environment and Culture (0: Very Poor - 5: Excellent)	2.99	3.11	2.68	2.66	2.60	2.97
11.	Work Load (0: Extremely High - 5: Very Low)	1.09	0.22	1.04	0.85	0.92	1.14
12.	Job Rotation (0: Very Low - 5: Extremely High)	1.86	2.05	1.42	1.66	1.68	1.52
13.	Monotonous Duties (0: Extremely High - 5: Very Low)	2.11	1.98	2.45	2.20	2.19	2.28
14.	Grievance Handling Mechanism (0: Very Poor - 5: Excellent)	2.27	2.84	2.05	2.01	1.98	2.11
15.	Training Facilities (0: Very Poor - 5: Excellent)	2.32	2.33	2.30	2.68	2.67	2.81
16.	Skill Development (0: Very Poor - 5: Excellent)	2.31	2.34	2.33	2.51	2.51	2.71
17.	Opportunities to Use Skills and Abilities (0: Very Low - 5: Extremely High)	1.81	1.84	1.83	2.01	2.01	2.21
18.	Recognition for Creativity (0: Very Poor - 5: Excellent)	2.24	2.28	1.78	2.11	2.14	2.24
19.	Recognition by Reward (0: Very Poor - 5: Excellent)	2.15	2.31	1.78	2.31	2.33	2.31
20.	Promotion and Career Opportunities (0: Very Low - 5: Extremely High)	1.39	1.23	1.60	1.55	1.42	1.64

Overall Job Satisfaction (100)	41.81	40.47	41.19	42.43	41.62	44.28
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Table 31: Job Satisfaction Index

Score	Satisfaction Level	Score	Satisfaction Level
0 to ≤ 10	Very Poor	$> 50 \text{ to } \le 70$	Good
$> 10 \text{ to } \le 30$	Poor	$> 70 \text{ to } \le 90$	Very Good
> 30 to ≤ 50	Moderate	> 90 to ≤ 100	Excellent

Source: Literature Review

3.3.7.1 Comparative Analysis of Overall Job Satisfaction of IT and Business Employees

Table-32 represents levels of average job satisfaction of IT and business employees in private and public banks. The data is shown on a scale of 100 which means the higher the value, the higher the job satisfaction. From the table, we observe that job satisfaction levels of IT professionals of private banks range from a minimum of 12.6 to a maximum of 80.4 (out of 100), whereas minimum and maximum job satisfaction levels of business staff of private banks are 10.0 and 88.5, respectively. The average job satisfaction levels of IT and business staff of private banks (40.47 and 41.62 out of 100, respectively) are almost the same and both fall in 'Moderate' level according to the job satisfaction index (Table-31).

H_{0A:} Job Satisfaction Levels of both IT and Business Employees of Private Banks are the same.

H_{1A:} Job Satisfaction Levels of both IT and Business Employees of Private Banks are not the same.

To test the above null hypothesis (H_{0A}) against the alternative one (H_{1A}) to see whether there is a significant difference between the job satisfaction levels among IT and business employees of private banks, the corresponding t-value for the difference between these two means is -0.785 with a p-value 0.605 ensuring no significant difference at 5% level of significance.

Table 32: Comparative Analysis of Job Satisfaction of IT and Business Employees

Type of Bank	Central Tendency	IT	Business	t _{cal}	p- value	Significance
	Average	40.47	41.62	-0.785	0.605	Not Significant
Private	Maximum	80.4	88.5			
	Minimum	12.6	10.0			
D 11'	Average	41.19	44.28	-1.125	0.059	Significant at 10% level
Public	Maximum	78.6	82.2			
	Minimum	18.5	20.6			
	${t_{cal}}^*$	-0.392	-1.261			
p-	value	0.803	0.311			
Sign	ificance	Not Significant	Not Significant			
	Average	41.81	42.43	-0.331	0.784	Not Significant
	Maximu	80.4	88.5			
Overall	m	50. 4	00.5			
	Minimu	12.6	10.0			
	m	12.0	10.0			

We can also see from Table-32 that the job satisfaction levels of IT professionals of public banks range from a minimum of 18.5 to a maximum of 78.6 (out of 100), whereas minimum and maximum job satisfaction levels of business staff of public banks are 20.6 and 82.2, respectively. The average job satisfaction levels of IT and business staff of public banks are both 'Moderate', at 41.19 and 44.28 out of 100, respectively. Notable that for both categories of employees these job satisfaction levels are slightly higher compared to private banks. The following hypothesis is tested and at 5% level of significance, no difference is found between the job satisfaction levels of IT and business staff of public banks. But at 10% level of significance a statistical difference can be considered (reject the null hypothesis H_{0B})

H_{0B}: Job Satisfaction Levels of both IT and Business Employees of Public Banks are the same.

H_{1B:} Job Satisfaction Levels of both IT and Business Employees of Public Banks are not the same.

On the other hand, the average job satisfaction levels of IT employees are 40.47 in private banks and 41.19 in public banks. It specifies that IT employees of both private and public banks are almost equally satisfied.

^{*}Comparison of average stress of employees between public and private banks.

H_{0C:} Job Satisfaction Levels of IT Employees of both Public and Private Banks are the same.

H_{1C:} Job Satisfaction Levels of IT Employees of both Public and Private Banks are not the same.

The above hypothesis is tested and no statistical reasons were found to reject the null hypothesis ensuring a significant difference between the job satisfaction levels of IT employees of both public and private banks. Similarly, business employees of public banks (44.28) are slightly more satisfied regarding their job compared to the employees of private sector banks (41.62). But this difference is not also statistically justified. Additionally, the overall average job satisfaction levels of IT and business employees in the banking sector are 41.81 and 42.43, respectively (both of which fall in the 'Moderate' category of the job satisfaction index in Table-31). The corresponding t-value for the difference between these two means is -0.331 with a p-value 0.784 ensuring no significant difference between the job satisfaction levels of the two groups, accepting the following null hypothesis H_{0D} .

H_{0D}: Job Satisfaction Levels of both IT and Business Employees of Banks are the same. H_{1D}: Job Satisfaction Levels of both IT and Business Employees of Banks are not the same.

3.3.8 Job Turnover (IT Employees)

Though one of the most important factors is job satisfaction, employees change their work for various reasons. They look for better career scenarios, professional progress and work prospects. Sometimes they want a variation in career path or look for new challenges at work. Table-33 depicts the reasons for which a staff wants to change his/her job. It is seen that career development (40.7%) and job safety (39%) are the two main concerns of the staff behind changing jobs.

Table 33: Reasons for Job Change

Reasons	Employee (In %)
Job Security	39.0
Social Recognition	11.9
Career Growth	40.7
Financial Benefit	22.0
Better Working Environment	22.0

Source: BIBM Survey

More than 7, 14%
No Turnover, 33%

1-3 Jobs, 30%

Figure 2: Job Switching of IT Professionals

If employees are not satisfied with their job in all aspects, unrest may prevail in the banking sector hampering security and operations. The current switching rate of IT professionals is shown in the graph below (Figure-2). It is seen that 30% of IT professionals changed their jobs 1 to 3 times. 23% of professionals replaced jobs 4 to 6 times in different banks. Only 14%, mainly the top-level professionals/Heads of IT have experience of more than 7 jobs in the career path. 33% of employees of the IT department have no experience of switching job. Of course, most of them are newly recruited professionals who have been waiting for experiences and looking for better opportunities.

3.4 Stress, Mental Health (Unhappiness), Physical Health (Unfitness) and Job Satisfaction of IT and Business Employees: At a Glance

As seen from the graph (Figure-3), the job stress of IT staff who are working in private sector banks is the highest among all groups. In general, in our banking industry the stress of IT people is higher than business people. Overall job stress of IT and business people are 59.59 and 56.74, respectively, on a scale of 100. But specifically, the stress of private banks IT employees is noticeable. On a scale of 100, their score is 63.82. There are various reasons behind this. Their workload is very high. Also, they are not happy with their workplace culture and environmental conditions. Moreove, they are burdened with unrealistic deadlines and time pressures. They always feel stressed to carry out their duties at the topmost levels all the time. All these factors increased their work stress (Details in Table-2).

While measuring mental health (unhappiness) we found that in general, business people are unhappier than IT people. Overall mental unhappiness of IT and business people are 58.30 and 62.20, respectively, on a scale of 100. But among four groups, IT staff of public sector banks are the most depressed group. On a scale of 100, their score is 63.30. Factors that contribute to their gloominess are family and residential problems. Also, they suffer from depression and

tension. Habits that can relieve worry like, reading books/novels and reading journals/magazines/articles are also very low among this group. It is found that in public sector banks, the knowledge gap of senior IT people (mainly from business backgrounds) is very high. As a result, junior IT people of those banks (mainly from IT background) are not happy with their less competent immediate supervisor which eventually intensifies their mental grief (Details in Table-5).

As found from the graph, physical health (unfitness) is severe for business staff of public sector banks. On a scale of 100, their score is 26.79. Among twenty parameters (Details in Table-9), this group scored the highest in 12 parameters, which is a very shocking finding. The public sector's business people are suffering more than other groups from various disturbing diseases like diabetes, spondylosis, migraine, liver disease, chronic kidney disease, thyroid dysfunction and many more. It is seen that in general, the IT workforce (16.43 out of 100) is comparatively fit than the business workforce (26.23 out of 100). Reasons behind the fitness of IT people might be- IT people are comparatively younger than their business counterpart and also they do not have to work for a prolonged time by sitting at their desks, whereas business people have to sit down for a long time continuously while they are dealing with their customers.

By analyzing the graph, it is clear that business staff of our banking industry are slightly more satisfied with their job than IT staff. Their scores are more or less equal. Overall job satisfaction of IT and business people are 41.81 and 42.43, respectively, on a scale of 100. But if we scrutinize the scores of individual groups, then we can see that the business workforce of public sector banks is the most contented group among others. On a scale of 100, their score is 44.28. They are more satisfied because they can enjoy the holiday facilities more and their workload is the lowest among all groups. Also, they get promotions in time compared to other groups, which eventually increased their job satisfaction. On the other hand, the private sector's IT staff are seriously lack some vital requirements. Their job satisfaction score is the lowest among all other groups (40.47 out of 100). They are deprived of enjoying their holiday facilities, their workload is very high and their responsibility and involvement towards their job are also very rigid compared to their counterpart. And they do not get promotions in due time compared to the other groups of employees. All these factors negatively impacted their job satisfaction (Details in Table-30).

Job Stress (Overall) 70 Job Satisfaction (Public) Job Stress (Private) 60 50 ¥40 Job Satisfaction (Private) Job Stress (Public) 30 20 10 Mental Health Job Satisfaction (Overall) 0 (Unhappiness, Overall) Mental Health Physical Unfitness (Public) (Unhappiness, Private) Physical Unfitness Mental Health (Private) (Unhappiness, Public) Physical Unfitness (Overall) - ◆ - IT ••••• Business

Figure 3: Stress, Unhappiness, Physical Unfitness and Job Satisfaction of IT and Business Employees

3.5 Correlation among Stress, Mental Health, Physical Health and Job Satisfaction

Table-34 below shows the correlation among different factors. Statistical correlations between Job Stress and Mental Health (Unhappiness) for both IT and business employees are very close to each other (r=0.53 and r=0.52) and statistically highly significant which indicates that job stress has the positive impact on mental health (unhappiness). We also tried to see the statistical relationship between job stress and physical health (unfitness). It is seen that in the case of IT employees, r=0.18, which is lower than business employees (r=0.32) and both are statistically highly significant. Though the values of r for both categories are less than 0.5, the relationship clearly states that the health of business employees is affected more by job stress compared to IT employees. The correlation between Job Stress and Job Satisfaction is negative for both IT and business employees $(r=-0.632 \ and -0.529)$ and statistically

highly significant. That is, stress is responsible for decreasing job satisfaction. On the other hand, the correlation between mental health (unhappiness) and physical health (unfitness) of IT and business employees are also positive and statistically highly significant (r = 0.602 and 0.604). That is anxiety is responsible for more health hazards. Moreover, mental unhappiness and job satisfaction are negatively correlated with each other (for IT employees r = -0.503 and business employees r = -0.53) which means increased mental unhappiness of the employees decreases job satisfaction. Finally, the negative correlation between physical unfitness and job satisfaction indicates that unhealthy people are not able to give better services to the organizations which triggers the management's dissatisfaction and employees' job satisfaction. The study identified that if an employee is stressed then his mental health is affected and in turn, it affects his physical health, productivity and job satisfaction in the organization.

Table 34: Correlation among Stress, Anxiety, Health and Job Satisfaction of IT vs Business Employees

	Stress			Health ppiness)		l Health (tness)	Job Satisfaction		
	IT	Business	IT	Business	IT	Business	IT	Business	
Stress	1.00	1.00	0.53 (0.000)	0.52 (0.000)	0.18 (0.009)	0.32 (0.007)	-0.623 (0.000)	-0.529 (0.000)	
Mental Health (Unhappiness)	0.53 (0.000)	0.52 (0.000)	1.00		0.602 (0.000)	0.604 (0.000)	-0.503 (0.000)	-0.53 (0.000)	
Physical Health (Unfitness)	0.18 (0.009)	0.32 (0.007)	0.602 (0.000)	0.604 (0.000)	1.00	1.00	-0.174 (0.032)	-0.263 (0.039)	
Job Satisfaction	-0.623 (0.000)	-0.529 (0.000)	-0.503 (0.000)	-0.53 (0.000)	-0.174 (0.032)	-0.263 (0.039)	1.00	1.00	

Source: BIBM Survey

3.6 Factors that Affect Employees' Job Satisfaction

A lot of literature were reviewed to identify the factors that affect the job satisfaction of employees. Overall, the set of data came across the fundamental requirements of factor analysis reasonably. In evaluating the data given, the 26 response items were subjected to a factor analysis using the principal component technique. The considered response items are: 'Social Status', 'Happiness in Family Life', 'Transportation Facilities', 'Ordinary Leave Facilities', 'Recreation Leave Facilities', 'Holidays Enjoyable Facilities', 'Social Isolation', 'Monetary Benefits', 'Non-monetary Benefits', 'Benefits after Retirement', 'Job Rotation', 'Opportunities to use Skills and Abilities', 'Job Security', 'Involvement and Responsibility', 'Disciplinary Procedures', 'Formal and Friendly Atmosphere', 'Work Load', 'Transfer

Practices', 'Monotonous Duties', 'Grievance Handling Mechanism', 'Number of Training Received', 'Impact of Training to Improve Efficiency', 'Recognition for Creativity', 'Recognition by Reward and Prize', 'Promotion in Time and Career Opportunity', and 'Motivational Schemes'. All variables are measured using a five-point Likert Scale (Appendix-A). For both IT and Business Employees factor analyses were done separately.

3.6.1 Factor Analysis for IT Employees

To identify the factors that are responsible for the job satisfaction of IT employees the following factor analysis is done. It is seen from the table (Table-35) that at the 0.000 level Bartlett's test of spherecity is significant and it indicates the existence of nonzero correlation. The overall measure of sampling adequacy was 0.795 which exceeds their commended cut-off level of 0.5 and individual measures were all well above this cut-off level.

Table 35: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of	Sampling Adequacy.	0.795
	Approx. Chi-Square	1519.543
Bartlett's Test of Sphericity	df	325
	Sig.	.000

By using Scree Plot and the conditions of an eigenvalue greater than 1, eight factors emerged that accounted for 71.346% of the total variance (Table-36). A Varimax rotation with Kaiser Normalization was also used to achieve a simpler and more meaningful factor solution.

Table 36: Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings			
Component : 1 2 3 4 5 6 7 8 9 10 : :	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulativ e %	
1	7.912	30.429	30.429	7.912	30.429	30.429	3.833	14.742	14.742	
2	2.260	8.691	39.121	2.260	8.691	39.121	2.744	10.553	25.294	
3	2.052	7.892	47.013	2.052	7.892	47.013	2.729	10.495	35.789	
4	1.663	6.394	53.407	1.663	6.394	53.407	2.303	8.859	44.648	
5	1.302	5.009	58.416	1.302	5.009	58.416	2.019	7.765	52.413	
6	1.195	4.597	63.012	1.195	4.597	63.012	1.966	7.561	59.974	
7	1.158	4.454	67.466	1.158	4.454	67.466	1.519	5.842	65.816	
8	1.009	3.880	71.346	1.009	3.880	71.346	1.438	5.530	71.346	
9	.916	3.522	74.868			•	•			
10	.763	2.933	77.801							
:	:	:	:	1	Extraction M	Lothod, Duine	inal Compos	aant Amalysi		
:	:	:	:	J	Extraction iv	ieuioa: Princ	cipal Compor	ient Anarysi	S	
25	.146	.561	99.765							
26	.061	.235	100.000							

It is clear from the factor loadings as highlighted in Table-36 that eight factors emerge. These eight factors denote different elements of job satisfaction that form the underlying factors from the original 26 response items given. Referring to Table-37, Factor-1 represents elements of job satisfaction directly related to promotion, motivation, monetary and non-monetary benefits; it is therefore labeled 'Financial Rewards and Career Opportunities'. Factor-2 represents training and its efficiency; it is therefore labeled as 'Quality Training for Developing Efficiency'. Factor-3 represents atmosphere, transfer practices and disciplinary procedures; it is therefore labeled as 'Challenges Toward the Working Environment'. Factor-4 represents only two elements, i.e., job rotation and holiday enjoying facilities. It is therefore labeled as 'Variation in Core Duties'. Factor-5 represents grievance handling and opportunities to use skills and abilities. It is therefore termed as 'Leadership Capacity'. Factor-6 represents monotonous duties and social isolation. As a reason, it is therefore named as 'Boringness in Duties. Factor-7 represents only one element, transportation facilities. It is therefore identified as 'Transportation Facilities'. Factor-8 represents only one element involvement and responsibility among employees. It is therefore identified as 'Workload Balancing'.

Table 37: Rotated Component Matrix

D				Comp	onent			
Response Items	1	2	3	4	5	6	7	8
Social Status	.271	.540	.386	.099	.072	.001	.148	325
Happiness in Family Life	110	.652	.391	.096	019	173	.028	.205
Transportation Facilities	046	.056	063	218	024	.036	.806	096
Ordinary Leave Facilities	.352	.155	.194	.585	.141	317	232	146
Recreation Leave Facilities	.397	.376	.032	.443	.085	279	362	033
Holiday Enjoyable Facilities	.170	.180	.216	.606	.044	261	.038	.199
Social Isolation	206	250	116	.012	.170	.642	080	.013
Monetary Benefit	.799	.107	.160	.026	.018	186	.091	005
Non-monetary Benefits	.512	.212	.094	.043	.096	.097	184	.474
Benefits after Retirement	.713	.299	.128	.080	062	137	.165	.133
Job Rotation	.006	.071	.170	.776	.015	.156	.008	.075
Opportunities to use Skills and Abilities	.087	.049	.151	.181	.933	021	038	.085
Job Security	.294	.034	.185	.322	004	.353	.490	.136
Involvement and Responsibility	.105	.083	.494	.140	.052	297	.059	.602
Disciplinary Procedures	.194	.177	.764	.309	.043	006	055	.074
Formal and Friendly Atmosphere	.183	.259	.768	.147	.018	186	.044	.067
Work Load	.063	.135	.447	306	.122	.597	.035	259
Transfer Practices	.370	154	.621	.171	.156	.020	.014	.261
Monotonous Duties	.009	.113	172	013	120	.750	.251	006
Grievance Handling Mechanism	012	.034	008	051	.959	.074	006	.013
Number of Training Received	.391	.712	074	.033	002	.070	024	.205
Impact of Training to Improve Efficiency	.363	.705	.069	.195	.057	.025	.037	021
Recognition for Creativity	.336	.433	.235	.410	.250	127	052	.305
Recognition by Reward and Prize	.373	.429	.178	.258	.149	.054	.079	.535
Promotion in Time and Career Opportunity	.803	.105	.168	.174	.050	111	.061	.041
Motivational Schemes	.697	.250	.174	.124	.046	.282	143	.115

Rotation Method: Varimax with Kaiser Normalization. Extraction Method: Principal Component Analysis.

3.6.2 Factor Analysis for Business Employees

To identify the factors that affect the job satisfaction of business employees the following factor analysis is done. It is seen from Table-38 that Bartlett's test of spherecity is significant at the 0.000 level and that implies the presence of nonzero correlation. The overall measure of sampling adequacy was 0.845 which exceeds their commended cut-off level of 0.5 and individual measures were all well above this cut-off level.

Table 38: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of	Sampling Adequacy.	0.845
	Approx. Chi-Square	1182.287
Bartlett's Test of Sphericity	df	253
	Sig.	.000

Overall, the set of data meets the requirements of factor analysis satisfactorily. In analyzing the data given, the 23 response items (Table-40) were subjected to a factor analysis using the principal component method.

With the help of Scree Plot and using the criteria of an eigenvalue greater than 1, eight clear factors emerged accounting for 68.507% of the total variance (Table-39). As in common practice, a Varimax rotation with Kaiser Normalization was performed to achieve a simpler and theoretically more meaningful factor solution.

Table 39: Total Variance Explained

Commonant	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings				
Component	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulativ e %	Total	% of Variance	Cumulativ e %		
1	7.238	31.469	31.469	7.238	31.469	31.469	3.766	16.376	16.376		
2	1.857	8.075	39.545	1.857	8.075	39.545	2.675	11.632	28.008		
3	1.435	6.241	45.785	1.435	6.241	45.785	2.339	10.168	38.177		
4	1.207	5.246	51.032	1.207	5.246	51.032	2.043	8.883	47.059		
5	1.188	5.167	56.198	1.188	5.167	56.198	1.334	5.802	52.861		
6	1.030	4.480	60.678	1.030	4.480	60.678	1.243	5.405	58.266		
7	.954	4.149	64.827	.954	4.149	64.827	1.217	5.290	63.555		
8	.846	3.680	68.507	.846	3.680	68.507	1.139	4.952	68.507		
9	.829	3.605	72.112		r.	. ,					
10	.768	3.340	75.451								
:	÷	:	:	E	Extraction M	ethod: Princi	pal Compon	ent Analysi	S.		
:	÷	:	:								
22	.230	.998	99.216								
23	.180	.784	100.000								

Source: BIBM Survey

It is found from the factor loadings as highlighted in Table-39 that eight factors emerge. These eight factors represent different elements of job satisfaction that form the underlying factors from the original 23 response items given. Referring to Table-40, Factor-1 represents elements of job satisfaction directly related to training and its impact on employees' efficiency; it is therefore labeled 'Quality Training for Developing Efficiency'. Factor-2 represents non-

monetary benefits (insurance, treatment, maternal and paternal leave) and benefits after retirement (PF, gratuity, leave encashment); it is therefore labeled as 'Long Term Job Benefit'. Factor-3 represents ordinary leave, recreation leave and holiday facilities; it is therefore labeled as 'Leave Facilities'. Factor-4 represents only one element, i.e., happiness in family life. It is therefore labeled as 'Family Soundness'. Only one element, Workload, is represented by Factor-5. For this reason, it is named 'Work Stress'. Factor-6 also represents promotion and career opportunities. As a reason, it is identified as 'Career Opportunity'. Factor-7 represents a single element named 'Monotonous Duties'. It is therefore identified as 'Boringness in Duties'. Factor-8 represents a unique element named 'mode of transportation'. Hence, it is termed as 'Transportation Facilities'.

Table 40: Rotated Component Matrix

Domain/Parameters				Comp	onent			
Domani/Parameters	1	2	3	4	5	6	7	8
Happiness in Family Life	058	.287	.075	.805	.085	.026	191	017
Transportation Facilities	038	030	093	.030	030	.122	010	.907
Ordinary Leave Facilities	.144	.263	.844	.139	083	.112	.076	.008
Recreation Level Facilities	.188	.131	.881	.088	046	.024	094	041
Holiday Enjoying Facilities	.228	.343	.613	.118	.110	124	252	154
Monetary Benefit	.098	.595	.369	.289	.069	.183	038	011
Non-Monetary Benefits	.147	.683	.228	.206	093	.002	.061	055
Benefit after Retirement	.237	.765	.181	011	007	.217	020	.034
Opportunities to use Skills and Abilities	.445	.365	.087	.463	.196	024	117	.080
Job Security	.579	.195	.110	.138	326	.154	178	040
Involvement and Responsibility	.432	.423	.085	.178	259	004	.204	287
Disciplinary Practice	.548	.221	.268	.016	.101	.231	.188	.022
Formal and Friendly Atmosphere	.579	.040	.038	.308	.155	.229	152	217
Workload	.030	022	067	.078	.829	.035	.285	065
Formal and Friendly Atmosphere	.524	.566	.070	.008	.050	087	307	.061
Monotonous Duties	081	022	131	101	.312	098	.799	026
Grievance Handling Mechanism	.354	051	.193	.599	040	039	.125	.033
No. of Training Received	.706	.166	.184	.010	.000	058	.020	.008
Impact of Training to Improve Efficiency	.620	.328	.177	.373	040	.092	146	112
Recognition for Creativity	.469	.071	.160	.450	100	.451	.280	.011
Recognition by Prize and Awards	.125	.147	.020	034	.054	.851	103	.117
Promotion and Career Opportunities	.461	.311	.127	.382	051	129	068	.326
Job Rotation	.594	.016	.116	.053	.489	.104	081	.071

Source: BIBM Survey

Rotation Method: Varimax with Kaiser Normalization. Extraction Method: Principal Component Analysis.

3.7 Outcome of the Focused Group Discussion (FGD)

The research team has discussed with 10 Heads of IT and 7 Heads of HRD for getting in-depth pictures regarding different aspects and practices of HR functions of banks in Bangladesh. In this regard, the discussion has been noted and summarized for better prediction of HR practices.

3.7.1 Focused Group Discussion (FGD) with Heads of IT

The summary outcome of the expert group discussion covering status, challenges and future course of actions are stated in Box-1.

Box 1: Opinion of the IT Heads in the Focused Group Discussion

- Banks are tremendously adopting IT-based solutions. If any problem arises, whether it arises from IT or
 not, bank management always considers it as an IT problem. All people working in the bank are part of the
 banking system so it is everyone's responsibility to ensure smooth banking operation by taking care of the
 systems properly.
- Lack of practical orientation at the university level is one of the major challenges for recruiting fresh IT employees. New graduates are talented but more theoretical; as a result, they cannot cope with the job nature in the practical field.
- A banking diploma (DAIBB) is a nightmare for IT professionals. Database Administrator, Programmer,
 System Administrator, Network Administrator are very technical people. Practically, it is very difficult for
 them to concentrate on other areas rather than their areas. Sometimes it is seen that having an MBA degree,
 employees are forced to get the certificate of banking diploma. So, a banking diploma should not be included
 in promotion criteria for IT employees' instead international professional IT certifications (MCSE, SISA,
 CISSP, etc.) can be included.
- IT ensures 24/7 banking facilities. IT people work round the clock for ensuring these amenities so they need some additional facilities to serve the bank uninterruptedly. IT allowance can be given to motivate them.
- It is not difficult to comprehend the importance of training for developing IT professionals. Training can change employees' knowledge, skills and attitudes. But the budget for training is very low. Now it is time to increase the budget for developing IT professionals in banks.
- IT person is not included in the IT recruitment process. HoIT should be included in this procedure.
- Technological challenges are increasing day by day. For overcoming these challenges banks need efficient IT leaders.
- Bangladesh Bank can impose a rule that every year top level executives like MD and DMD of a bank take part in awareness programs of IT.
- Some banks engage their IT personnel to collect the deposit. It should not be mandatory for IT people.

Source: BIBM Survey

3.7.2 Focused Group Discussion (FGD) with Heads of HRD

The summary outcome of the Heads of Human Resource discussion covering status, challenges and future course of actions are stated in Box-2.

Box 2: Opinion of the Heads of HRD in the Focused Group Discussion

- Expert IT employees are not interested to teach others. They are busy doing their job. So, creating a learning environment is essential for newly recruited IT employees. In-house and local training facilities can overcome this problem.
- Usually IT experts are not included in IT promotional viva-board which is not good. IT experts should be included in the IT promotional viva.
- It is alarming that in many cases, the head of HRM gets frequent and unethical references from different stakeholders regarding recruitment, promotion, and getting training from abroad. In the case of recruitment and promotion of IT employees, 'quality' should be given the highest priority rather than reference. Otherwise, less qualified employees may pose serious security threats that might come from a shortage of skills and knowledge.
- In case of getting training from abroad, most of the cases top management prefers employees they like the most. Relevant employees of the IT department do not get the opportunity in most cases.
- In many cases foreign vendors and international training institutes bypassing HRD directly request HoIT for trainees. As a result, proper nomination of IT trainees cannot be accomplished by the HRD. Demand for trainees by the foreign vendors and international training institutes should be placed in the HRM department directly and HoIT may nominate proper trainees.
- New generation IT employees are less enthusiastic to learn but they expect promotion very quickly with high financial benefits. Sometimes, they create pressure for promotion. Such embarrassing situation is common now-a-days.
- Some banks imposed deposit targets for IT employees and included this into the promotion criteria. Deposit targets should not be given to IT employees that can affect their technical concentrations.
- The shortage of IT experts in the core banking technology area is one of the biggest challenges. Even after nomination for training in home and abroad, HoIT is not interested to release any core employees for training due to the absence of his substitute. So, creating the second and third layers of substitutes is a major challenge for banks.
- IT employee turnover is very high in banks. Sometimes, it becomes disastrous for the IT department to run the bank if high-level core experts leave their job. Management should give proper attention in this regard.

Source: BIBM Survey

3.8 Suggestions Given by IT Employees, Heads of HRDs, HoITs and Top-Level Executives

We put some open-ended questions in the questionnaire so that respondents can reply based on their complete knowledge, sense and understanding. Therefore, the responses to these questions can be used for better human resource management. Table-41 summarizes the answers to the question, 'What are your current problems related to job/service/operations and how can we overcome these?' The answers are given by IT employees, Heads of HRD, HoITs and Top-Level Executives (AMDs, DMDs, CXOs).

Table 41: Current Problems Related to HRM of IT Department and the Way Out

S. No.	Problems	% of Banks	Remedies
1.	Budget deficiencies for training.	39%	Management should approve the required budget.
2.	Lack of skilled manpower.	68%	Adequate training is needed.
3.	Lack of motivation.	43%	The motivational scheme by HRD may be introduced.
4.	Non Existence of On-Time Promotion and Accelerated Promotion.	31%	Yearly twice evaluation can be effective.
5.	Absence of medical and insurance policy.	65%	BB may take necessary actions to introduce these facilities.
6.	Nonexistence of pension facility for private banks.	55%	BB may take necessary actions to introduce this facility.
7.	Low job security.	59%	Proper implementation of Bangladesh Bank's circular related to the right of bankers is needed.
8.	Lack of refreshment facilities.	32%	Need more refreshment activities to relieve pressure and increase vigor.
9.	Employee turnover.	56%	Proper and justified benefits should be offered.
10.	Insufficient employees to complete jobs.	49%	Provide more employees.
11.	Less qualified employees.	52%	Recruit more qualified employees.
12.	On-time job completion.	58%	Sufficient and qualified employees should be recruited.
13.	Lack of Leadership.	55%	The right person should be placed in the right position.
14.	Absence of proper salary structure and other benefits.	58%	Salary and other benefits (pension, loan, life insurance and risk allowance) should be increased.
15.	Lack of job description.	42%	All employees should have assigned job responsibilities and these should be documented.
16.	Lack of redundant skilled manpower for critical system.	65%	Increase the number of professional training for the existing IT officials for skill development.

Source: BIBM Survey

The dearth of expert human resources was the number one problem faced by bank employees. The other major problems were absence of medical and insurance poliy, absence of proper salary structure and other benefits, etc.

Table 42 summarizes responses to the question, 'What can BIBM do for the betterment of banks' IT operations?'. . About 86% of employees opined that BIBM should arrange seminars for their high officials and BODs. Through this process, they can make changes in their way of thinking and get them acquainted with up-to-date know-how. And 68% of employees proposed that BIBM can arrange both business and IT related training and certification courses for all IT employees on a serial basis.

Table 42: Roles that can be played by BIBM for the Benefits of IT Employees

Sl. No.	Roles					
1	BIBM should invite the senior executives and BODs of different banks frequently for dissemination of changing knowledge regarding IT, banking and economy so that they can enlarge their horizon to address the emerging issue to cope with the need of time.	86				
2	With the help of BB, BIBM may propose to the banking community to develop an autonomous body or association of employees of all banks to protect their interests.	77				
3	Both business and IT-related training and certification courses for IT employees can be arranged by BIBM on a serial basis instead of making them available to a selected few.	68				
4	BIBM can offer scholarship programs with the help of all banks under the guidance of the Central Bank for IT Professionals who visit BIBM.	53				

Source: BIBM Survey

Table-43 summarizes responses to the question, 'What Roles can be played by the central bank for employees' better career and to protect their rights?'

Table 43: Roles that can be played by the BB for Employees' Better Career and to Protect their Rights

S. No.	Roles	Employ ee (In %)
1.	BB may form a committee taking members from the scheduled banks. The committee may conduct a meeting and formulate specialized regulations and policies for better IT employee management for the bank regarding recruitment, IT skills development, experience, additional IT allowance, training, transfer, safety, transportation, employee turnover and performance appraisal criteria. For better IT employee management BB may update its policy as per updated technological advancement. BB may circulate this guideline for compliance.	72
2.	The Central Bank can provide suggestions to the authority of the bank to arrange training programs related to IT for the employees for better learning.	64
3.	Central bank can guide the banks' management to ensure a proper working environment and employee rights. BB may strengthen supervision for ensuring banker's rights and job security prevailing in its policy. It can act as a bridge between employees and the bank's higher authority.	46

S. No.	Roles	Employ ee (In %)
4.	BB may form a "Cyber Security Information Sharing Center" to proactively disseminate information on the latest financial cyber threat and mitigation strategies.	59
5.	The Central Bank may encourage all banks to develop the skills of their employees. BB may monitor that profit sharing is equally distributed among employees.	63
6.	BB may provide necessary assistance to equip BIBM with more ICT-related manpower and resources so that the role of BIBM becomes more pragmatic and it can provide more in-depth training to IT employees.	78
7.	BB may establish a separate specialized institution/academy for the professional training and development in Banking and Financial Technology, like IDRBT established by RBI in India.	83

Source: BIBM Survey

4.0. Recommendations

Based on the analysis, the research team identified a number of issues that need to be properly addressed for better IT employee management in the banks. The issues and recommendations are presented below.

One, Job Stress: According to the study and stress index all types of employees (IT and Business) in the banking sector are working under 'High' stress. But the overall stress level of IT employees (59.59) is greater than business employees (56.74) out of 100. The highest stress is observed for the IT staff of private banks (63.82). Notable that the average stress levels of IT and business staff of public banks are significantly lower compared to private banks. Out of 20 parameters understudy, the stress of IT employees (both public and private banks) is found highest in the case of 13 parameters compared to business employees in the banking sector. The study also clearly identified that if an employee is stressed then his mental health is affected and in turn, it affects his physical health and job satisfaction in the organization. One of the major reasons for stress for the IT employees of public banks is their less qualified and bad bosses. In public banks, a large number of businesspeople are working in the IT department as senior executives without having a sound IT background. Technical knowledge gap and leadership quality might be the major factors that made them bad bosses in front of new generation techno-savvy young forces. A higher knowledge gap is seen among IT employees in the banking sector compared to business employees. It necessarily indicates the higher demand for training for IT employees who are working in a rapidly changing domain. Business environmental condition is found better in private banks than public banks. By providing a good working environment public banks may reduce stress significantly. Job stress has negative impact on the health and happiness of employees and also negatively affects the efficiency and income of organization. Organizations and individuals himself/herself can take

measures to avoid stress effects. Employees must have the knowledge of symptoms of their stress and employers must know the impact of stress on the health of their employees. Men and old employees having more experience at job can handle stress efficiently. Social support, advice, proper planning, and time management can help to handle job stress.

Two, Mental Health (Unhappiness): Stable mental health is essential for bank employees. The study measures the mental health of employees based on 20 parameters. The overall mental health (unhappiness) levels of IT and business employees in the banking sector are 58.3 and 62.2, respectively out of 100 (both of which fall in the 'High' category according to of unhappiness index). It is clear that business employees are unhappier than IT employees in the banking sector. The parameters that trigger the unhappiness of business employees are mainly related to overwork and financial difficulties. On the other hand, the highest unhappiness is seen in the case of public banks' IT employees (63.3). They are more frustrated and always in great tension. Job stress, lack of skills and expertise, and knowledge gap are their main source of anxieties for them. In public sector banks, the knowledge gap of senior IT people (mainly from business backgrounds) is very high. As a result, junior IT people of those banks (young and mainly from IT background) are not happy with their less competent immediate supervisor which eventually intensifies their mental grief. Family and residential problems are also responsible for their unhappiness. IT employees of private banks are also not happy in their life. Out of a hundred, they scored 56.5. Though they are in a better position in terms of their mental health compared to other groups, transportation problem is a major factor for their unhappiness. Due to high job stress, loss of interest in the job is also a pain for them. The report finds that holiday and leave facilities of the employees are not up to the mark. By considering this fact banks can increase the duration of leave facilities for the employees. Social engagement of employees can be another way to improve the mental health of employees.

Three, Physical Health (Unfitness) of IT Employees: The overall physical health (unfitness) scores of IT and business employees are 16.43 and 26.23, correspondingly which indicates the better physical fitness of the young IT workforce than business. In the case of private banks, we observed that the physical unfitness score of business employees (26.56) is more compared to IT employees (19.44) which indicates that the physical health of IT employees is better. Whereas, the physical unfitness score of business employees of public banks (26.79, highest among all groups) is also much higher than IT employees of the same group of banks (14.54). An interesting finding is that, the physical unfitness level of IT employees of public banks (lowest among all groups) is significantly lower compared to private banks' IT employees. The main reason might be the lower workload (Table-2) in public banks as their automation status is far behind than private banks.

We see that job stress is higher for IT people (59.59) compared to business employees (56.74). As a result, after working a few years in banks' IT departments, employees developed several

diseases like back pain (19.7%), eyesight problem (22.2%), weight gain (23.8%), high blood pressure (14.8%), etc. Prolonged working hours, high workload, unrealistic expectations, unethical pressure, intense pressure to perform at peak levels all the time, unrealistic project implementation deadline, continuous sitting in front of a computer screen, lack of exercise and food habits might be the reasons to develop such diseases quickly by IT people.

Though 62.1% of business employees (highest in all categories) of public banks take regular physical exercise, it is seen that business staff of private banks are more health-conscious in terms of doing exercise than other groups. Though business people take more exercise than IT people, they suffer more from health-related problems. This is unexpected according to health science. Perhaps business people started taking exercise according to the suggestions of doctors after developing several diseases. Employees should understand that prevention is better than cure. They should start taking exercise regularly for a healthier life before developing diseases.

Refreshment time might be increased to reduce work stress which is a major factor of various health problems. Regular health checkup is essential for employees. Banks may arrange such health checkup facilities for their employees. Mandatory health insurance can be imposed on every employee. The habit of taking fast food and lack of getting balanced food is also responsible for some health hazard of IT employees. Making the habit of taking balanced food and avoiding the habit of fast food may prevent overweight problems of IT employees.

Four, Financial Benefits and Financial Health of IT Employees: According to the study findings business employees are getting more salary than IT employees in both private and public banks. Although the salary deviation is not too high, private employees always expect higher salaries compared to the public sector. This study also finds that the overall economic status of IT and business employees are very close. However, the non-monetary benefits of IT employees are unsatisfactory. Management can consider this issue seriously. In our common thinking, owning a home or flat means an immense achievement in life. In that sense, business employees of private sector banks are far ahead of any other group. Around 51% of business personnel of private sector banks have their own flat/home. Whereas only 17% of IT and 24% of business employees of public banks archived this asset. In the case of IT employees of the private banks, it is only 38%. Long-term home loan facilities can be increased with low-interest rates for bank employees.

Five, Work Experience and Skill Development: We see that the overall working experience of IT employees is 5.1 years, whereas their average skills level is only 3.2 on a scale of 5, which is not very high for IT employees as expected. Especially, expertise and experience of 'Security', 'IS Audit' and 'DC, DR and BC' team is very poor. IT employees' skills range from a minimum of 2.3 to a maximum of 4 on a scale of 5 in several areas understudy, which is far from the expected skills needed for IT employees.

Though 58% of IT staff of banks feel the thrust of training, only 16.9% got the opportunity which is very low regarding the rapid changes of IT infrastructure and security. In the current scenario, it is required that every IT employee should attend at least one training in home or abroad at least in two years. Training on DBA and IT Security are on their top preference list. Moreover, IT staff want to know about general banking, which is a very good indication for the banking industry. Because IT workforce needs to know not only IT but also banking to endure in this competitive phase. IT employees of private and public banks are quite unhappy about the number of training provided for them. It is also seen that the impact of training to improve employees' competency is also very low. The study reveals that the HR department fails to select the right person for the right training. Among the IT employees selected for training in home and abroad, only 32.7% are asked by the HR department before giving nominations in any training programs. The Head of IT should be involved in selecting IT employees for training. After completing any specific training, transfer to the concerned department helps an employee to deliver his knowledge properly. But only 9.2% of IT employees have this experience.

Six, Work Environment and HR Management: The study finds that the overall working environment of the private sector's IT employees is much better in almost every aspect than public sector's IT employees, but their workload is the highest. In the case of talent acquisition, 47.3% of IT employees believe that the Head of HRM cannot take decisions independently. It is very upsetting that 12.6% of IT employees always feel that they are under pressure for forced resignation. This is not a good practice in IT HRM in the banking sector of Bangladesh. A large portion (61%) of employees (IT and Business) believe that violations of ethical code of conduct among the bank employees are increasing. This is alarming for the banking industry and should be controlled firmly. Moreover, a shocking 35.3% of IT and 42.9% of business employees are not pleased with the existing employee performance appraisal system. It is also seen that IT employees are not getting their promotion in due time. The level of motivational schemes is also very low for them. Bank management should look after these issues very seriously.

Seven, A roadmap for IT Professional Development: Still a big portion of banks have been facing a lot of problems regarding IT employee management due to a dearth of long-term visualization, proper design and initiatives, scarcity of manpower, meager IT budget, and lack of appropriate and advanced training. To overcome these problems, a bank should allocate a certain portion of its annual profit as an ICT HR development budget. This budget may be used for ICT manpower development and keep them informed about contemporary technology. A recent study of BIBM reveals that nearly about 3% of the total IT budget is spent for training purposes and CTOs are not pleased regarding this matter. Bank management should increase their level of understanding and appreciation that there is no substitute to improve ICT skills in banks because ICT is a swiftly changing platform and more sophisticated and diversified

cyber-attacks/frauds are also increasing day by day. An IT roadmap for IT professional development is the governing document that dictates precisely how IT professionals will support the business plan and drive businesses urgencies over the next 3-5 years. A roadmap for IT professional development can help the CIOs to perform more in line with the business strategy of the institute.

Eight, Job Satisfaction: We see that the job satisfaction of the employees of the banking sector of our country is 'Moderate'. But the overall job satisfaction is slightly higher for business staff of public and private banks than their IT colleagues. Among the 20 parameters understudy, IT employees of public sector banks enjoy the highest leave facilities like ordinary and recreation. It is seen that business staff of private and public banks are ahead of their IT counterparts in getting financial benefits. Particularly IT staff who are working in public sector banks achieved the lowest score in this parameter. But in the case of non-monetary benefits, both the IT and business employees who are engaged in private banks are getting more benefits than public banks. 'Promotion and Career Opportunities' is found higher for business personnel than IT personnel. If employees are not satisfied with their job with all aspects, they change their job frequently. As a result, unrest may prevail in the sector hampering security and operations. The most important factors identified by IT employees in this research that have a severe impact on employee job satisfaction are: 'Financial Rewards and Career Opportunities', 'Training for Developing Efficiency', 'Challenges Toward the Working Environment', 'Variation in Core Duties', 'Leadership Capacity', 'Boringness Duties, 'Transportation Facilities' and 'Workload Balancing'. Management may consider these factors to make their employees more satisfied in their professional life.

Nine, Involvement of Head of IT in some HR Activities: This study finds that HoITs are not involved in the IT recruitment and promotion process of banks. But as IT is a specialized high-tech area and IT employees work under the direct supervision of HoIT, it will make sense to include HoITs in the whole process. Bank management may think about this matter.

Ten, Technology Awareness of Top Level Executives: In our research, we found that top-level executives of banks are not aware of the latest high-tech development. As a result, there is always a gap between them and banks' IT executives. To overcome this gap, every year Bangladesh Bank and BIBM may organize IT awareness programs where MDs, AMDs, DMDs and other top-level executives of banks may take part.

Eleven, IT Employee Turnover: The study reveals that 67% of IT employees changed their job 1-7 times in their career path. Though it is seen that the work environment of the IT department is the best in the banking sector, still 22% of employees change their job for better environmental factor. Moreover, career development (40%) and job security (39%) are the two

other main concerns of staff behind changing jobs. To reduces the turnover rate at first it is needed to recruit the right people by a transparent selection process. If wrong employees are selected, IT risk might be increased for their unfitness in this sector. Then it is needed to help the recruited employees to boost up their skills and knowledge by giving proper training. Attention can be given to job engagement and enrichment. After a certain period job rotation is required to avoid stickiness to a specific desk and increase their horizon of knowledge. Ontime and escalated promotion (if necessary) may motivate them for better job satisfaction and reduce turnover rate. Financial benefits like competitive salary, bonus and on time increment may help to the retention of IT employees. Recognition and reward is also a great factor to motivate employees. Prioritization of employee happiness and leadership may also reduce the turnover rate.

Twelve, Development of Central Database for Employees: In our country, there is no central database of the human resources working in the banking industry. It is known that for the top management post such as MD/CEO, the commercial bank requires Bangladesh Bank's (BB) approval to appoint. In that case, BB conducts a 'fit test'. BB checks employment history from the very beginning of his/her career to the last. The absence of a central HR database makes it difficult for the central bank. Moreover, a central HR database can help the commercial banks to check the employment history, involvement in fraud and forgery, ethics and integrity, qualification, career progress, switching rate, etc. of the employees. Hence, it is recommended that a central HR database can be developed either with the collaboration of the banks or the Central Bank can develop it individually.

Thirteen, Development of an Employee Association: It is necessary to establish an Employee Association like CBA/Trade Union to handle unethical pressure for quitting the job, grievance handling and protection of employees' rights. The study finds that about 50% of employees (both IT and business) opined that the banking industry needs the presence of Employee Association to protect their rights. In this regard, employees of all banks must come forward to establish an Employee Association to gather them under the same umbrella.

Fourteen, Relevance of Banking Diploma for IT Professionals: Technical posts like Database Administrator, Programmer, System Administrator, Network Administrator, etc. require high technical knowledge. Practically, it is very challenging for them to focus on other areas rather than their own. We found in our research that 60.2% of IT employees who completed graduations from CSE or Applied Physics or EEE departments also did their MBA, which certainly support them to realize the business atmosphere of their banks. But in banks banking diploma (DAIBB) is included in promotion criteria for IT professionals. Bank management may waive this condition for IT professionals.

Fifteen, Deposit Target of IT Employees: It is also seen that majority of the private banks imposed an extra burden of deposit collection to IT employees. Deposit collection is not the task of IT people. It should not be obligatory for them by any means. Otherwise, their main tasks i.e. looking after IT things may be hampered. Management of banks may consider this issue very seriously.

Sixteen, Role of BIBM: BB may provide necessary assistance to BIBM to equip with more ICT-related manpower and resources. The role of BIBM becomes more pragmatic and more in-depth training can be provided to IT employees. Blending programs can be jointly organized with the help of software and hardware vendors (IBM, Oracle, Microsoft, Cisco, etc.), skilled IT professionals of different banks and academicians from different organizations (in home and abroad). Specialized training, certification (like certified E-banker) and post-graduate program (like Masters in E-banking) for both general bankers and IT professionals of banks may be directed by BIBM. BIBM should invite the senior executives of different banks frequently for dissemination of changing knowledge regarding IT, banking and economy so that they can enlarge their horizon to address the emerging issue to cope with the need of time.

Seventeen, Role of Bangladesh Bank: BB has been trying for a long period to raise the overall IT frame of the banking sector. Suitable guidelines and monitoring of BB have also been aiding the IT departments of different banks to expand in the right way. As an outcome, expectations from BB is growing day by day. BB may take initiatives to develop an Information Sharing and Analysis Center (ISAC), where the fellows can talk over and share their views regarding different IT operational and security matters to alleviate the risks and be mindful about the latest security threats. Moreover, BB can play a dynamic role in setting up a cell/wing, including a data bank for all of the commercial banks, to support collections and sharing of up-to-date information regarding the current status, growth and difficulties of the banking sector. IT Heads of 83% of banks agreed that the banking sector should have a center for sharing electronic banking experiences, problems and the way out. BB, with the help of BIBM, can take initiatives in this regard. A specialized Banking Information Technology Institute may be set up for Training, Research, Development and Consultancy in the area of Banking and Financial Technology of our country like IDRBT (Institute for the Development and Research in Banking Technology) in India established by RBI.

BB may form a special committee taking members from the scheduled banks. The committee may formulate specialized regulations and policies for better IT employee management for the banks regarding recruitment, skills development, experience, allowance, training, transfer, safety, transportation, employee turnover and performance appraisal criteria. For better IT employee management BB may modernize its policy as per updated technological advancement. BB may circulate this guideline for compliance.

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Appendix-A

An Evaluation of Information Technology Human Resource in Banks

Questionnaire

(If you hesitate and feel pressure from your bank to put your fair opinion please contact with us. We shall provide online questionnaire)

I. Please fill up the following table regarding Demographic Information

	Name (Optional)				Cell Phone No. (Optional)		
Naı	me of the Bank (Optional)						
	Bank Type	□ State-owne	ed 1	ialized 2	☐ Private 3		Foreign 4
		Business Empl	loyees (Officer, A	VP, SEVP,	etc.):		
	Designation	IT Employees	(Security Officer,	DBA, Netv	work Manager, CT	O, etc.):	
		☐ Operationa	l Executive 1	Mid-Lev	vel Executive 2	□ Top-Le	evel Executive 3
Depar	rtment/Wing/Section (As Organogram)						
	Gender	☐ Male 1	☐ Female 0				
	Marital Status	☐ Married 1	☐ Unmarrie d 2	☐ Others			
	Age in Years						
	Religion	☐ Musli ☐ m 1	☐ Hindu 2 ☐	Christian	Buddhist 4	□ Othe	ers 5
II. Pleas	se select the following	ng options rega	rding Job Stress				
1	Workload						
1	□ Very Low 0 □	Low 1	\square Moderate 2	☐ High 3	□ Very	High 4	Extremely High 5
2	How much time (in	n minutes) do yo	ou get for tea, lunc	h, prayer ar	nd refreshment per	day at office	e?
	□ 101-120 ₀	□ 81-100 ₁	□ 61-80 ₂	□ 41	-60 ₃ □ 2	1-40 4	□ 0-20 ₅
3	Ordinary Leave Fa	cilities					
3	☐ Excellent 0 ☐	Very Good 1	☐ Good 2	☐ Mode	rate 3	4	□ Very Poor 5
4	Recreation Leave/		es				
3		Very Good 1	☐ Good 2	□ Mode	rate 3 Poor	4	□ Very Poor 5
5	Holiday Enjoying						
	☐ Excellent 0	□ Very Good				oor 4	□ Very Poor 5
6	How many hours of	•				•	er day?
5	□ 0-1 ₀	□ 1-2 ₁	□ 2-3 2	□ 3-4	4 ₃	-5 4	□ 5+ 5
7	Scope of Career Pl	-	_				
		Very Good 1	☐ Good 2	□ Mode:	rate 3 Poor	4	□ Very Poor 5
8	Job Insecurity ☐ Very Low 0	\square Low 1	☐ Moderate 2	□ H	ligh ₃ □ V	ery High 4	☐ Extremely

	Promotion in Time									
9	☐ Very Strongly Agree 0	☐ Strongly Agree 1	☐ Agree 2	□ Disagree 3	☐ Strongly Disagree 4	☐ Very Strongly Disagree 5				
	Frequent/Unethi	cal/Unrealistic Tra	nsfer							
10	☐ Very Strongly Disagree 0	☐ Strongly Disagree 1	□ Disagree 2	☐ Agree 3	☐ Strongly Agree 4	☐ Very Strongly Agree 5				
	Less Qualified I	mmediate Boss								
11	☐ VeryStronglyDisagree 0	☐ Strongly Disagree 1	☐ Disagree 2	☐ Agree 3	☐ Strongly Agree 4	☐ Very Strongly Agree 5				
	Bad Boss									
12	☐ Very Strongly Disagree 0	☐ Strongly Disagree 1	□ Disagree 2	☐ Agree 3	☐ Strongly Agree 4	☐ Very Strongly Agree 5				
13	Leadership Qual	lity								
13	☐ Excellent 0	☐ Very Good 1	\square Good 2	☐ Moderate 3	□ Poor 4	□ Very Poor 5				
1.4	Knowledge Gap									
14	☐ Very Low 0	\square Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5				
15	Workplace Cult	ure								
13	☐ Excellent 0	☐ Very Good 1	\square Good 2	☐ Moderate 3	□ Poor 4	□ Very Poor 5				
16	Relationships at	Work								
	☐ Excellent 0	☐ Very Good 1	☐ Good 2	☐ Moderate 3	□ Poor 4	☐ Very Poor 5				
17	Environmental (
	☐ Excellent 0	□ Very Good 1		☐ Moderate 3	□ Poor 4	□ Very Poor 5				
18	Unrealistic Dead	llines and Time Pre	essures			□ Enternale				
14	☐ Very Low 0	□ Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5				
10	Unrealistic Expectations of Efficiency due to Technological Advancement									
19	\square Very Low $_0$	\square Low $_1$	☐ Moderate 2	\square High $_3$	\square Very High 4	\Box Extremely High 5				
	Intense Pressure	to Perform at Peak	Levels all the time							
15	□ Very Low 0	\square Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5				
	Unethical Pressu	are from Top level	Executives (inside b	oanks), Politician, C	Govt. High level Exe	ecutives				
21	□ Very Low 0	□ Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5				
III. Ple	ase fill up the fol	lowing table regar	ding Physical Hea	lth (Unfitness)						
	Weight (Kg):			Height (Inch)	:					
11	According to B	MI please select the	e appropriate scale							
	□ 18.5-24.9 ₀	□ 25-29.9 1	□ 30-34.9 ₂	□ 35-39.9 ₃	□ 40-44.9 ₄	□ 45+ ₅				
12	Do you have A	llergies/Skin Proble	ems (Rashes etc.)?			Yes 1				

	If Yes, Select the level.				
	☐ Very Low 0 ☐ Low 1 ☐ Moderate 2 ☐	High 3	□ Very High	4 🗆 Extrei	mely High 5
	Have you been suffering from blood pressure?			\square Yes $_1$	\square No $_0$
13		☐ High Pressure ₁	Range ir	n mm Hg:	
	If yes, mention the type and range.	□ Low	Range ir	n mm Hg:	
		Pressure ₂	6		
14	Do you have LDL cholesterol problem in blood?			□ Yes 1	□ No 0
1.	If yes, please mention the level.				
	Do you have HDL cholesterol problem in blood?			□ Yes 1	□ No 0
15	If yes, please mention the level.				
	Do you have Chronic Heart Disease (coronary artery dis	ease heart rhythi	m problems	□ Yes _	
	heart valve disease, Disease of the heart muscle, heart in		in problems,	1	No o
16	If Yes, please select the severity level.				
	□ Very Low 0 □ Low 1 □ Moderate 2	☐ High 3	□ Very High	4 🗆 Extrei	mely High 5
	Have you been suffering from diabetes?			□ Yes 1	□ No 0
17	If Yes, Select the level.				
	\square Very Low $_0$ \square Low $_1$ \square Moderate $_2$ \square	High 3	□ Very High	4 □ Extrei	mely High 5
	Do you have eye sight/vision problem?			□ Yes 1	\square No $_0$
18	If Yes, Select the level.				
	\square Very Low $_0$ \square Low $_1$ \square Moderate $_2$ \square	High 3	□ Very High	4 🗆 Extrei	mely High 5
	Do you have Spondylosis problem?			\square Yes 1	\square No $_0$
19	If Yes, Select the level.				
	-	High 3	□ Very High		mely High 5
	Have you been suffering from back pain?			☐ Yes 1	□ No 0
20	If Yes, Select the level.	, TT' 1	- W W		
	· · · · · · · · · · · · · · · · · · ·	High 3	□ Very High	4 □ Extrei	mely High 5
	Have you been suffering from Chronic Headache/Migrat problem?	me/ Floidilged fi	eadache	\square Yes 1	□ No 0
21	If Yes, Select the level.				
	•	High 3	□ Very High	4 🗆 Extrei	mely High 5
	Have you been suffering from Spinal Cord problem?			☐ Yes 1	
22	If Yes, Select the level.		- 17 17 1	- - -	
	•	High 3	□ Very High		mely High 5
	Have you been suffering from Liver Disease?			☐ Yes 1	□ No 0
23	If Yes, Select the level.				1 77' 1
		High 3	□ Very High		mely High 5
	Have you been suffering from Upset Stomach/Digestive If Yes, Select the level.	rroblem!		☐ Yes 1	□ No 0
24		☐ High 3	□ Very High	n 🗆 Extr	emely
	L voly Low 0 Llow 1 Llow 1 Llow 2	_ 111gii 5	4	High	1 5

	Have you been suffering from Gastrointestinal Diseas	$\square Yes_{\ 1} \qquad \square No_{\ 0}$	
25	If Yes, Select the level.		
	\Box Very Low $_0$ \Box Low $_1$ \Box Moderate $_2$	☐ High 3 ☐ Very High	Extremely High 5 □
	Have you been suffering from Chronic Kidney Diseas	e?	\square Yes $_1$ \square No $_0$
26	If Yes, Select the level.		
	□ Very Low 0 □ Low 1 □ Moderate 2	☐ High 3 ☐ Very High	4 □ Extremely High 5
	Have you been suffering from Thyroid Dysfunction?		□ Yes 1 □ No 0
27	If Yes, Select the level.		
	□ Very Low 0 □ Low 1 □ Moderate 2	☐ High 3 ☐ Very High 4	□Extremely High 5
	Have you been suffering from Respiratory Problems (a	asthma, nasal or chest	□ Yes 1 □ No 0
28	congestion, cold, catarrh pneumonia)? If Yes, Select the level.		
20		□ II:-l- □ V II:-l-	□ Extremely
		☐ High 3 ☐ Very High 4	High 5
	Have you been suffering from Musculoskeletal Proble joints)?	m (body pams, muscular, bone	\square Yes $_1$ \square No $_0$
29	If Yes, Select the level.		
	□ Very Low 0 □ Low 1 □ Moderate 2	☐ High 3 ☐ Very High 4	☐ Extremely High 5
	Have you been suffering from Carpal Tunnel Syndron	e?	\square Yes $_1$ \square No $_0$
30	If Yes, Select the level.		
	\square Very Low $_0$ \square Low $_1$ \square Moderate $_2$	☐ High 3 ☐ Very High 4	☐ Extremely High 5
31	How much time do you take exercise per day?		
32	Do you take balanced food regularly?	□ Yes 1 □ No 0	
33	Do you have a habit of taking fast food regularly?	□ Yes 1 □ No 0	
34	Are you a smoker?	□ Yes 1 □ No 0	
35	Do you take alcohol regularly?	□ Yes 1 □ No 0	
36	How many types of medicine you have to take regularly?		
37	Are you addicted to drug?	□ Yes 1 □ No 0	
38	Do you have Health Insurance Policies?	\square Yes $_1$ \square No $_0$	
36	If yes, who ensured it?	\square Bank $_1$ \square Self $_2$ \square	Both 3
39	Others (Please mention)		

Please tick ($\sqrt{}$) all that Please tick ($\sqrt{}$) all that **Physical Problem Physical Problem** Apply Apply Back Pain High Blood Pressure

IV. Please tick ($\sqrt{ }$) the physical problems that have been developed after joining the job.

Eyesight Problem Sleeping Problem Migraine High Cholesterol Weight Gain Fatty Liver Headache Anxiety/Tension Acidity Others (Please Mention)

V. Pleas	se select the follov	wing options regar	ding Mental Healtl	h (Unhappiness)				
	Personal and fan	nily problems (that	discourage you to pe	erform better job).				
1	☐ Very Low 0	\square Low $_1$	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
	Financial Difficu	ılties						
2	☐ Very Low 0	\square Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
	Residential Prob	lems						
3	□ Very Low 0	\square Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
	Transportation C	Complications (Less	Facilities)					
4	□ Very Low 0	\square Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
	Social Status							
5	☐ Excellent 0	\square Very Good $_1$	\square Good 2	☐ Moderate 3	□ Poor 4	☐ Very Poor 5		
	Loss of Interest i	n Job						
6	☐ Very Strongly Disagree 0	☐ Strongly Disagree 1	☐ Disagree 2	☐ Agree 3	☐ Strongly Agree 4	☐ Very Strongly Agree 5		
	Sleeping Problems							
7	□ Very Low 0	\square Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
	Fatigue/Tirednes	SS						
8	□ Very Low 0	□ Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
	Trouble Concent	trating						
9	☐ Very Low 0	\square Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
	Social Withdraw	val/Social Isolation						
10	□ Very Low 0	□ Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
	Using Alcohol or	r Drugs to Cope						
11	☐ Very Low 0	□ Low 1	☐ Moderate 2	☐ High 3	□ Very High 4	☐ Extremely High 5		
12	Family Time Sha	aring						
12	☐ Excellent 0	\square Very Good 1	\square Good 2	☐ Moderate 3	□ Poor 4	☐ Very Poor 5		

13	Recreation at Home (TV/Movie/ Music, etc.)							
-13		Moderate 3 ☐ Poor 4 ☐ Very Po	or 5					
14	Addiction to Social Media Uery Low 0 Low 1 Moderate 2	High 3	ely					
	Visiting Home and Abroad	riigii 5						
15	□ Verv	Rarely 3						
1.0	Frustration/Depression							
16	\Box Very Low $_0$ \Box Low $_1$ \Box Moderate $_2$ \Box	High 3	∌ly					
	Tension							
17	\Box Very Low $_0$ \Box Low $_1$ \Box Moderate $_2$ \Box	High 3	∍ly					
10	Habit of Reading of Books/Novels							
18	\square Regularly $_0$ \square Very \square Occasionally $_2$ \square	Rarely $_3$ \square Very Rarely $_4$ \square Never $_5$						
	Habit of Reading Newspapers	•						
19	□ Regularly 0 □ Very Frequently 1 □ Occasionally 2 □	Rarely 3 \Box Very Rarely 4 \Box Never 5						
	Habit of Reading Journals/Articles/Magazines							
20	$\ \square$ Regularly $_0$ $\ \square$ Very $\ \square$ Occasionally $_2$ $\ \square$	Rarely 3						
21	Average Sleeping Hour per day.							
22	Approximate distance of office from home (KM)							
23	How many hours you have to work at office including extra hours?							
24	How much time do you give to your family per day?							
25	Do you have enough time to visit home and abroad with your family members for recreation?	□ Yes 1 □ No 0						
23	If yes, how many times you visited interesting places last year?	Home: Abroad:						
26	For how many years you have been in the same post?							
27	Do you think that relatives of high level executives/board members (employed/unemployed) unethically provide pressure to your job?	Yes No o						
28	Do you believe that your immediate bosses are less qualified than you?	☐ Yes ☐ No o						
VI. Ple	ase select the following options regarding Financial Health (Sal	ary and other Benefits)						
	Please select your monthly gross salary in Bangladeshi Taka.							
	□ Below 25,000 $_{1}$ □ 25,001-50,000	2 □ 50,001-75,000 ₃						
1	□ 75,001-1,00,000 ₄ □ 1,00,001-1,50,0	000 5						
	□ 2,00,001-2,50,000 ₇ □ 2,50,001-3,00,0	000 8 3,50,001-4,00,000 9						
	\Box 4,50,001-5,00,000 $_{10}$ \Box 5,50,001-6,00,0	\bigcirc Above 6,00,000 ₁₂						
2	Economic Status	H MILL CL - H C						
	\square Poor $_1$ \square Lower Middle Class $_2$ \square Middle Class $_3$ \square Upper Middle Class $_4$ \square Upper Class $_5$							

3	Dwelling Status			Rental 1	Own 2	Others 3					
4	Monetary benefi	t (salary	y, bonus	s, loan and	d others) in your	bank					
4	□ Very Poor 0		or 1		☐ Moderate 2	□ Go	od 3	□ Very (Good ₄ □ I	Exceller	nt 5
5	Non -monetary b	Non -monetary benefits (insurance, treatment, maternal and paternal leave, etc.) in your bank									
3	☐ Very Poor 0		or 1		☐ Moderate 2	□ Go	od 3	□ Very (Good ₄ □ I	Exceller	nt 5
6	Monetary and no	Monetary and non-monetary benefits after retirement (PF, gratuity, leave encashment, etc.) in your bank									
U	\square Very Poor $_0$ \square Poor $_1$ \square Moderate $_2$ \square Good $_3$ \square Very Good $_4$					Good 4 🗆 l	Exceller	nt 5			
II. Please fill up the following table regarding Educational Background.											
S. No	Title (2roun/Subject) Pagult (Division/Crade/C2PA)									PA)	
1	SSC/ O-Level								If CGPA of	A, Out	□ 4 □ 5
2	HSC/ A-Level								If CGPA of	A, Out	□ 4 □ 5
3	Bachelor								If CGPA of	A, Out	□ 4 □ 5
4	Masters 1								If CGPA of		□ 4 □ 5
5	Masters 2								If CGPA of	A, Out	□ 4 □ 5
6	Doctorate								NA		
7	Post Doctorate								NA		
8	Others										
	Please provide in CFA, CA, etc.)					rtification (C	сен,	CISA, CI	SSP, DBA,	CCNA	A, MCSE,
S. No	Professional Certification			(Institu	is received,	Location	1		Source of F	und	
1						☐ Home 1☐ Abroad	2	Own 1	□ Bank 2	□ Pre Em	vious ployer 3
2						☐ Home 1 ☐ Abroad	2	Own 1	□ Bank 2	□ Pre Em	vious ployer 3
3						☐ Home 1☐ Abroad		Own 1	□ Bank 2	□ Pre Em	vious ployer 3
4						☐ Home 1☐ Abroad	2	Own 1	□ Bank 2	□ Pre Em	vious ployer 3

 \square Home 1

☐ Abroad 2

 $\quad \square \ Own \ 1$

Please add additional pages, if needed.

5

 \square Bank 2

 \square Previous

Employer 3

IX. Please provide information regarding Training received Since January, 2018 to September, 2019.

S. No	Title	Institution (If abroad, mention country)	Location	Source of Fund	Duration (Days)		Satisfaction Level (0-5)*				
1			☐ Home 1☐ Abroad 2	 □ Own 1 □ Bank 2 		0	1	2	3	4	5
2			☐ Home 1 ☐ Abroad 2	□ Own 1 □ Bank 2		0	1	2	3	4	5
3			☐ Home 1☐ Abroad 2	□ Own 1 □ Bank 2		0	1	2	3	4	5
4			☐ Home 1☐ Abroad 2	 □ Own 1 □ Bank 2 		0	1	2	3	4	5
5			☐ Home 1 ☐ Abroad 2	☐ Own 1 ☐ Bank 2		0	1	2	3	4	5

^{*}Very Poor: 0 Poor: 1 Moderate: 2 Good: 3 Very Good: 4 Excellent: 5

X. Please provide information regarding Workshop/Seminar/Conference attended Since January, 2018 to September, 2019.

S. No	Title	Institution (If abroad, mention country)	Location	Source of Fund	Duration (Days)	Satisfaction Level (0-5)*		n			
1			☐ Home 1☐ Abroad 2	\square Own $_1$ \square Bank $_2$		0	1	2	3	4	5
2			☐ Home 1☐ Abroad 2	☐ Own 1 ☐ Bank 2		0	1	2	3	4	5
3			☐ Home 1☐ Abroad 2	☐ Own 1 ☐ Bank 2		0	1	2	3	4	5
4			☐ Home 1☐ Abroad 2	□ Own 1 □ Bank 2		0	1	2	3	4	5
5			☐ Home 1 ☐ Abroad 2	\square Own $_1$ \square Bank $_2$		0	1	2	3	4	5

^{*}Very Poor: 0 Poor: 1 Moderate: 2 Good: 3 Very Good: 4 Excellent: 5

XI. Please mention the types of training needed for you in upcoming days.

S. No	Title	Expected Location		Name of the Institution you would like to Attend	Duration (Days)
1		☐ Home 1	□ Abroad 2		
2		☐ Home 1	☐ Abroad 2		
3		☐ Home 1	☐ Abroad 2		
4		☐ Home 1	☐ Abroad 2		
5		☐ Home 1	☐ Abroad 2		

XII. Please mention the areas (Hardware, Software, Netwo	ck, Audit, Security, Project Management, Database, etc.)
where you have developed your skills and expertise.	

S. No	Areas	Experienc e in Years	Skills Level (0-5)*					
1			0	1	2	3	4	5
2			0	1	2	3	4	5
3			0	1	2	3	4	5
4			0	1	2	3	4	5
5			0	1	2	3	4	5

^{*}Very Poor: 0 Poor: 1 Moderate: 2 Good: 3 Very Good: 4 Excellent:5

S. No.		Institution		D	esignation	Job Experience in Years
1						
2						
3						
4						
5						
			I	Tot	al Years of Experi	ence
(V. P		_	action level for Worl	« Environment		
V. P	lease select the appl	ur job.	action level for Worl	x Environment	;	
	Job rotation in you	ur job.	☐ Moderate 2	x Environment □ High 3	□ Very High 4	□ Extremely High 5
	Job rotation in you ☐ Very Low 0 Opportunity to use	ur job. Low 1 e skills and abil	☐ Moderate 2	☐ High 3	□ Very High 4	
1	Job rotation in you ☐ Very Low 0 Opportunity to use ☐ Very Poor 0	ur job. Low 1 e skills and abil Poor 1	☐ Moderate 2 ities in your job. ☐ Moderate 2			
1	Job rotation in you ☐ Very Low 0 Opportunity to use	ur job. Low 1 e skills and abil Poor 1	☐ Moderate 2 ities in your job. ☐ Moderate 2	☐ High 3	□ Very High 4	
2	Job rotation in you ☐ Very Low 0 Opportunity to use ☐ Very Poor 0	ur job. Low 1 e skills and abil Poor 1	☐ Moderate 2 ities in your job. ☐ Moderate 2	☐ High 3	□ Very High 4 □ Very Go	· · ·
2	Job rotation in you □ Very Low 0 Opportunity to use □ Very Poor 0 The level of Job se □ Very Low 0	ur job. Low 1 e skills and abil Poor 1 ecurity you bea	☐ Moderate 2 ities in your job. ☐ Moderate 2 r in the job. ☐ Moderate 2	☐ High 3 ☐ Good 3 ☐ High 3	□ Very High 4 □ Very Go	ood 4

	5	Disciplinary procedures practiced in your bank							
	5	\square Very Poor $_0$ \square Poor $_1$ \square Moderate $_2$ \square Good $_3$ \square Very Good			cellent 5				
	6	The existence of the formal and friendly atmosphere with fellow workers and higher autho (Work Environment and Culture)	rities ii	n your	bank				
		$\begin{tabular}{lll} \square Very Poor $_0$ & \square Poor $_1$ & \square Moderate $_2$ & \square Good $_3$ & \square Very Good $_3$$	od 4	□ Ex	cellent 5				
	7	Work load assigned on you in your bank							
	,	$\begin{tabular}{lll} \square Very Low $_0$ & \square Low $_1$ & \square Moderate $_2$ & \square High $_3$ & \square Very High $_4$ \\ \end{tabular}$	□Е	xtreme	ely High 5				
	8	Transfer practices norms and rules in your bank							
L	Ü	\square Very Poor $_0$ \square Poor $_1$ \square Moderate $_2$ \square Good $_3$ \square Very Goo	od 4	\Box Ex	cellent 5				
	9	The safety measures provided by bank.							
		\square Very Poor $_0$ \square Poor $_1$ \square Moderate $_2$ \square Good $_3$ \square Very Good	od 4	\Box Ex	cellent 5				
	10	The monotonous duties assigned in the job, which you do not like.							
L		\square Very Low $_0$ \square Low $_1$ \square Moderate $_2$ \square High $_3$ \square Very High $_4$	□ E	Extrem	ely High 5				
	11	Grievance handling mechanism.							
L		\square Very Poor $_0$ \square Poor $_1$ \square Moderate $_2$ \square Good $_3$ \square Very Good	od 4	□ Ex	cellent 5				
ΧŊ	/I. Ple	ase select the appropriate option regarding Talent Acquisition							
	1	Does your bank give advertisement before any fresh recruitment?	□ Y	es 1	□ No o				
	2	Do you think that your bank follows proper selection process before appointing an employee at any level?	□ Y	es 1	\square No $_0$				
-	3	Do you think that Head of HR is independent to take HR recruitment decision?	□ Y	es 1	□ No 0				
<u>L</u>									
X	VII. I	Please select the appropriate option regarding Talent Development							
	1	Have you been asked by the HR department before getting nominated in any training program?	□ Y	es 1	□ No o				
	2	Is there any scope to consult with your Manager/ Line-Manager/ HRD for getting any specific training nomination?	□ Y	es 1	\square No $_0$				
	3	Have you experienced transfer or promotion (to concern department) by the HR after	□ Y	es 1	□ No o				
F		completing any specific training?							
L	4	Have you/your colleague ever faced forced resignation?	□ Y	es 1	□ No 0				
	5	Did you receive career counseling from your superior?							
	6	Number of training program conducted in your bank/Training Facilities							
	Ů	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$							
	7	The training provided in the job improves the efficiency to do the job.							
		\square Very Low $_0$ \square Low $_1$ \square Moderate $_2$ \square High $_3$ \square Very High $_4$ \square Extremely High $_5$							
	8	Recognition for creativity in your bank							
L		$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$							
X	VIII. I	Please select the appropriate option regarding Talent Motivation		1					
L	1	Did you receive job description and job specification from HR?	□ 3 2	_					
	1	Did you receive job description and job specification from Fix?	⊔ I	es 1	□ No 0				
	2	Are you satisfied with your current performance appraisal system (ACR)/APR?		es 1	□ No 0 □ No 0				

The recognition (prizes and awards) for a well done job by the management.									
4	□ Very Poor 0	□ Poor 1	☐ Moderate 2	•	· ·	Very Good	4 □ E	xcell	ent 5
_	Promotion/ Caree	r opportunities in	your bank			-			
5	☐ Very Poor 0	\square Poor $_1$	☐ Moderate 2	\Box G	ood 3	Very Good	4 □ E	xcell	ent 5
6	Level of motivation	onal schemes (spe	orts, cultural activitie	s, pic	nic, health suppo	rt, social acti	vities, et	tc.)	
U	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$								
XIX. Plo	IX. Please select the appropriate option regarding Leading the Talent								
1	Do you have a visionary map for becoming top executive (e.g. MD, DMD, AMD) of your bank?								
2	Have you ever been participated in any leadership/ motivation/ team management training program?						□ No 0		
3	Do you think tha	at there is an abse	nce of good/ethical l	eader	in bank?		□ Ye	S 1	□ No o
4	Do you think tha	at right persons ar	e placed in the right	place	s?		□ Ye	S 1	□ No 0
,			W	•					
			egarding Talent Ma ce rule (ESR) from t						
1	your bank?					□ Yes	1		No ₀
2	Do you think that protect your right		ciation (like Trade U	nion)	is necessary to	□ Yes	1		No o
3	Level of Employe	ee Association (te	echnical professional	socie	ty) activities in tl	ne bank.			
3	☐ Very Poor 0	□ Poor 1	☐ Moderate 2		□ Good 3	□ Very Go	od 4	□ Б	Excellent 5
XXI. W	hat are your curre	ent problems rela	ated to job and how	can v	we overcome the	ese?			
S. No.		Problems	•			Remedies	.		
1									
2									
3									
4									
5									
vvII v	What males can be a		-4	l44		44			
XXII. V	vnat roies can be j	played by the cer	ntral bank for your	bette.	r career and to j	protect your	rights?		
XXIII.	Additional mess	sages that you we	ould like to share w	ith B	IBM for the bett	erment of y	ou dutie	s.	

Appendix-B

Less than 100 mg/dL*	Optimal	0
100-129 mg/dL	Near optimal/above optimal	1
130–159 mg/dL	Borderline high	
160–189 mg/dL	High	
190 mg/dL and above	Very high	5

Cholesterol level	HDL cholesterol category	0
Less than 40 mg/dL	Low (representing increased risk)	
60 mg/dL and above	High (heart-protective)	5

BMI (Body Mass Index)

The BMI is expressed in kg/m², resulting from mass in kilograms and height in meters.

$$BMI = \frac{Mass \ in \ Kg}{(Height \ in \ Meter)^2}$$

BMI provides a simple numeric measure of a person's thickness or thinness, allowing health professionals to discuss weight problems more objectively with their patients. BMI value 18.5 to 24.9 kg/m^2 may indicate optimal weight, lower than 18.5 may indicate underweight, 25 to 29.9 may indicate overweight, and 30 or more may indicate obese.

Appendix-C

Table-1: List of the Banks Responded to the Questionnaire

State Owned Commercial Banks (SOCBs)

- 1. Sonali Bank Limited
- 2. Janata Bank Limited
- 3. Rupali Bank Limited
- 4. Agrani Bank Limited

Private Commercial Banks (PCBs)

- 1. The City Bank Ltd.
- 2. Islami Bank Bangladesh Ltd.
- 3. Brac Bank Ltd.
- 4. Eastern Bank Ltd.
- 5. Dutch-Bangla Bank Ltd.
- 6. United Commercial Bank Ltd.
- 7. AB Bank Ltd.
- 8. Bank Asia Ltd.
- 9. Mutual Trust Bank Ltd.
- 10. Prime Bank Ltd.
- 11. Trust Bank Ltd.
- 12. Social Islami Bank Ltd.
- 13. Exim Bank Ltd.
- 14. Southeast Bank Ltd.
- 15. NRB Bank Ltd.
- 16. One Bank Ltd.
- 17. NRB Commercial Bank Ltd.
- 18. National Credit and Commerce Bank Ltd.
- 19. Shahjalal Islami Bank Ltd.
- 20. First Security Islami Bank
- 21. Mercantile Bank Ltd.
- 22. Union Bank Ltd.
- 23. Pubali Bank Ltd.
- 24. IFIC Bank Ltd.
- 25. The Premier Bank Ltd.
- 26. Jamuna Bank Ltd.

Table-2: List of HoITs Attended the FGD

Sl. No.	Name	Bank Name
1.	Hasnain Ahmed	One Bank Limited
2.	Md. Saiful Islam	Bank Asia Limited
3.	Mohammad Emdadul Haque Khan	Dutch Bangla Bank Ltd.
4.	Engr. Shamsur Rahman Chowdhury	NCC Bank Ltd.
5.	Zahidul Haque	Eastern Bank Limited
6.	Abu Md. Sabbir Hassan Chowdhury	NRB Bank Limited
7.	B. M Zahid-Ul Haque	Brac Bank Ltd.
8.	Shyamol B. Das	Mutual Trust Bank Ltd.
9.	Khandaker Khaled Hassan	Southeast Bank Ltd
10.	Md. Mahbubul Alam	EXIM Bank Ltd.



Price: BDT 300.00 USD 8.00