Report On

Analyzing Various Retirement Saving Plans: A Complete Study on Data-Path Ltd.

By

Kazi Nazmul Haque
Student ID: 18204071

An internship report submitted to the BRAC Business School in partial fulfillment of the
requirements for the degree of
Bachelor of Business Administration

BRAC Business School
Brac University
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Declaration

It is hereby declared that

1. The internship report submitted is my/our own original work while completing degree at Brac University.

2. The report does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.

3. The report does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.

4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

_____
Kazi Nazmul Haque
Student ID: 18204071

Supervisor's Full Name & Signature:

_____
Mohammad Mujibul Haque, PhD
Professor and Associate Dean, BBS
BRAC University

Letter of Transmittal

Mohammad Mujibul Haque, PhD

Professor and Associate Dean

BRAC Business School

BRAC University

66 Mohakhali, Dhaka-1212

Subject: Submission on internship report on "Analyzing various Retirement saving plans: A complete study on Data-Path Ltd".

Dear Sir/Madam,

I am pleased to submit the following Internship Report on "Analyzing various Retirement saving plans: A complete study on Data-Path Ltd" in partial fulfillment of the requirements for the Bachelor of Business Administration degree. Everything I learned and did as an intern at Data-Path Ltd is detailed in this report. Interning at Data-Path Ltd. was a fascinating and motivating experience for me. Data-Path Ltd.'s "Business Process Outsourcing" division, one of the company's most important, is the primary focus of this research. I worked hard to ensure that this report complied with all of your specifications. I truly appreciate your help because I would not have been able to complete this report without it. If you approve my report and help me finish my degree, I will be eternally grateful.

Sincerely yours,

_____

Kazi Nazmul Haque

Student ID: 18204071

BRAC Business School

BRAC University

Date: August 27th, 2023

Non-Disclosure Agreement

Data-path Ltd. and the undersigned BRAC University student agree that throughout the course of

the internship, the undersigned would not use any confidential information or trade secrets

belonging to either party.

Acknowledgement

I'd want to thank my esteemed supervisor Mr. **Mohammad Mujibul Haque** sir for all of his patience, guidance, and interest as I worked on my internship report under his watchful eye.

I'd like to thank my team leader, **Md. Khaja Ahamed**, for all of his help and guidance during my internship. Next, I'd want to express my gratitude to my assistant team leader, **Md. Mazidul Islam**, who has been an invaluable source of information on the many retirement programs available in the United States. Without the help of my coworkers, this would not have been feasible. I will be forever indebted to them for the guidance and encouragement that helped me develop into the professional I am today. While working at Data-Path Ltd for the past 4 months, I have gained invaluable experience and knowledge in my field.

Executive Summary

The internship concluded in a paper titled "Analyzing various retirement saving plans of Data-Path Ltd." that reflected the intern's newfound expertise and knowledge. In this paper, we aim to show how the plan processing at Data-Path Ltd. Furthermore, it exemplifies TPA's international business practices. The report is broken up into three sections.

The first chapter describes the internship in general with information of me and the information of the internship organization. Also, detailed job description on how to process a retirement plan from report collection to Annual reporting Package. Furthermore, discussed the outcome of the internship and the difficulties that I faced during my internship period.

The second chapter provides a broad overview of Data-Path Ltd. It also provides a summary of the company's history and management practices within the sector. Therefore, discussed the marketing practices of 401(k) industry. Worked on the financial performance and accounting practices of T. rowe Price. And discussed operation management & information system practices and industry analysis.

The report's intent and scope are covered in Chapter 3. Analyzing of various retirement saving plans of the American Retirement Plan. Covered both DC and DB plans. And with my finding discussed why DC plan is better also with mathematically reasoning. Showed cost benefit analysis and proving the DC plan is better. Briefly discussed and compare the USA and Bangladesh's contribution plan.

It also provides insight into the operations of TPA firms and the processing of retirement plans. The report's conclusion and my recommendations for fixing the issues I raised all appeared in the same chapter. This paper provides an overview of the 401(k) market.

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List of Acronyms

IRS   Internal Revenue Service

DOL   Department of Labor

RK   Record Keeper

ASSPA   American Society of Pension Professionals & Actuaries

BPO   Business Process Outsourcing

TPA   Third Party Administrator

HCE   Highly Compensated Employee

NHCE   Non-Highly Compensated Employee

ERISA   Employee Retirement Income Security Act

IRC   Internal Revenue Code

RPF   Retirement Provident Fund

ACP   Average Contribution Percentage

ADP   Average Deferral Percentage

Chapter 1

Overview of Internship

1.1 Student Information
Name: Kazi Nazmul Haque

ID: 18204071

Program: BBA

1st Major: Finance

2nd Major: Computer Information Management (CIM)

1.2 Internship Information

1.2.1 Period, Company Name, Department & Address

Period: May 15th -September 15th, 2023

Company Name: Data-Path Ltd

Department: Business Outsourcing Process (BPO)

Address: Ambon Complex, 13th & 15th Floor, 99 Mohakhali Commercial Area, Dhaka-1212, Bangladesh

1.2.2 Internship Company Supervisor's Information

Name: MD. Khaja Ahamed

Designation: Team Leader, BPO

1.2.3 Job Scope – Job Description

As soon as I started working at Data Path, I received 15 days of theoretical training on the American Retirement Plan Fundamentals. Then I began my practical training for a further two weeks so that I could become accustomed to the Job and the Sector. My 15 days of training are primarily devoted to the subjects covered in the book "Retirement Plan USA." I was put in a "Business Process Outsourcing (BPO)" department after the training sessions and exams. The customers of Data-Path Ltd.'s parent business, July Business Services, are given priority by the BPO division. The fact that this department has additional TPAs like July Business Service and BPO, which have more than 34 TPA Clients, sets it apart from other departments. Additionally, Data Path Ltd.'s BPO processes more than 4000 retirement plans annually. A retirement plan must be processed effectively through a number of processes. The steps are given below:

1. **Report Collection**

These reports are given to the Retirement Professionals in charge of processing the plan by the client who is responsible for sponsoring the plan.

❖ Employee Census (Employee information, Compensation, Contribution Etc.)
❖ Investment Summary of the employees
❖ Form 5500 Copy from Prior year (Govt. Form of Retirement plan)
❖ Further information on the plan's sponsor

2. **Review Plan Document & Plan Specification Update**

After collecting all of the required paperwork from the clients, I was given the plan document to peruse since it serves as a guide for processing the plan. The plan paper also includes details on how and how much participants can expect to earn in benefits. The ASC software has to be updated with the new specifications when the plan document has been analyzed. Therefore, the plan document as a whole must be studied to ensure proper processing.

3. **Employee Census review & census update on Software**

We then prepare an employee census using data from the plan sponsor and compare it to the same data from the previous year; if any discrepancies are identified, the client is contacted immediately and requested to assess the situation. The data is next subjected to a series of

verification checks by hand to ensure it is in accordance with IRS standards. At last, the information is sent into the ASC software.

4. Calculation of contributions of employer

In the Employee census of the current year the information is given also in the plan document, where it is mentioned how and how much the employee will get from the employer after employee contribution is being made. We have to calculate the contribution according to IRS guidelines.

5. Plan testing

We conduct compliance testing involving the export of various reports from the ASC software after the contribution calculation. These reports demonstrate that the plan complies with IRS regulations. Then we do the ACP/ADP testing, which primarily focuses on nondiscrimination.so that every employee can get contribution from employer appropriately without facing discrimination. Additionally, top-heavy testing to distinguish between employees with high and low salaries.

6. Trust Accounting and Asset import

Trust accounting is financial activity of the overall retirement plan of a company at a year end. Basically, it is a balance sheet with the total amount of assets, liabilities, contributions, loans and receivable. After doing the trust reconciliation we have import the assets information the ASC software.

7. Valuation of the Assets

We conduct valuation. We carry out valuation following trust reconciliation. From multiple record keeper summaries, all financial data for invested money is compiled and inserted into ASC. This information includes any gain or loss, fees, or other income from the invested funds in the account.

8. **Government Fillings**

A Pension or Welfare Benefit Plan Covered by ERISA is maintained by the Employer or is administered by the Plan Administrator. To report details about the plan's eligibility, financial situation, investments, and activities, we have to fill out the Form 5500 through online in a USA government-based website.

1.3 Internship Outcome

1.3.1 Student Contribution to the Company

After I started working at Data-Path Ltd. as an intern, the extent of my participation was limited because during the internship period, the vast majority of time is spent on training, both theoretical and practical. So, I worked hard on my training, and I became familiar with the fundamentals of the 401(k) sector. In addition, I am self-assured about my work and understand the comprehensive process that is being followed when the retirement plan is being processed. So why, both the leader of my team and my supervisor were happy with how I performed. Up to this point, I've worked on multiple live plans and finished them inside the allotted time.

1.3.2 Benefits to the Students

I have learned at Data-Path Ltd. after joining here. However, processing a 401(k) plan as a whole is what matters most. After working here, I understood that this could be a full-time profession and that there was a chance to work abroad in July as a full-time employee. However, it is challenging to learn the abilities and knowledge needed to be a plan admin. But because of the motivating professionals at Data-path and the supportive environment for learning, I was able to swiftly grasp the workings of the 401(k) sector.

❖ **Excel Expertise:** Microsoft Excel is one of the tools that Data-path heavily depends on.so, by working in live plans I have gained an advanced level skills in excel. I can use short-cuts of the program while working and leaned many functions as possible. And sure, it made me faster in excel.

❖ **Financial Analysis:** Retirement plans have all the financial calculations needed. So, I am pretty confident about my skills in finance. It also requires accuracy in which I have been consistent.

❖ **Time Management:** In Data-Path Every plan has a deadline which we have to meet. Otherwise, the clients have to pay extra fee. So, working in a live plan made my time management much better than before.

❖ **Coping with Pressure:** Data-Path Ltd. was constantly under pressure to complete a lot of work in a short period of time since we had to work inside the US fiscal year and other IRS requirements. This thus put increased demand on my capacity to work hard under stress. My supervisors put the pressure on me gradually, which allowed me to initially come up with coping strategies before it got to be too much. I've been able to adapt and move more quickly as a result, even under really stressful circumstances.

1.3.3 Problems/Difficulties

❖ **Work-life Balance**

Even as an intern, I arrive at the workplace around 9am, and it closes at 7 or 8pm. So, it takes up the majority of my time. With so much time left in the day, it is challenging to balance work-life.

❖ **Understanding Retirement plan industry**

The American pension system is thorough. Since every company may offer retirement plans to their staff as a benefit.so. I initially attempted to compare everything to the pension system in Bangladesh, but following training sessions, I quickly realized that it was different. As a result, in this case, I found it challenging to understand the entire US retirement sector and how it operates.

1.3.4 Recommendation

1. In addition to the industry being extremely new to us, the training program is very rigorous. Therefore, the training program should be comprehensive and simple to change to suit the situation.

2. Since we are operating remotely from Bangladesh, the entire process is reliant on the Internet. Therefore, the Internet speed should be faster.

Chapter 2
Organizational Part

2.1 Introduction

The report of this internship focuses further into the outsourcing sector, which transfers RPF accounting tasks from the US to Bangladesh. Therefore, it is crucial to know how the RPF helps retired Americans under present-day policies of the government.

You can lower your tax liability while investing for retirement with a 401(k) plan. You receive tax exempted incomes that are automatically deducted from your salary which makes it hassle free. Additionally, there are many firms that will give a share of their workers deferral and Roth contributions, giving their employees' retirement savings a free boost. Furthermore, Americans have an awful pattern of blowing excessive amounts of money without considering the long term. So, investing in 401(k) and also getting contribution from the employer. So, it's a win-win situation.

401(k) plans and other tax-exempt retirement funds provide employees with two important benefits. The first is the obvious tax advantage. Secondly, employees have a means of preventing inflation from reducing the real purchasing power of their retirement assets. So, the 401(k) Retirement Plan was developed by the IRS, DOL, and ERISA as a comprehensive and modern retirement plan to help US people who have retired. However, for reasons of security, no employer or corporation is allowed to process its own plan; as a result, the organizations are sent to a third-party administrator for processing. These TPAs are also referred to as third-party administrators. All American firms are now obligated to provide their employees with 401(k) plans, giving them additional benefits. It is not required in any other case. Moreover, it would be extremely difficult, perhaps even impossible, to use retirement insurance for personal benefit through legal means due to how numerous and complicated the laws and regulations set for sustaining the plans are.

2.1.1 Objective

The primary goal of this research is to improve readers' understanding of the foundations of the American Retirement Plan and the outsourcing business. Moreover, the detailed objectives are:

- ❖ Learn all you can about the ins and outs of the company's pension plan.
- ❖ To understand the inner workings of a 401(k) plan.
- ❖ To learn about the inner workings of Third-Party Administrator (TPA) companies.
- ❖ To learn the steps involved in analyzing and implementing a plan.
- ❖ To understand the marketing and management practices of 401(k) industry.
- ❖ To grasp the financial performance and accounting practices of 401(k) industry.

2.1.2 Methodology

I Used primary method for the 2nd chapter of the report. Therefore, used 2 sources for information to gather.

1. Primary source: Frequent conversations with the superior and other senior staff. Also, in-person observations made as a plan is implemented and instruction for carrying out a plan, including both theoretical and practical instruction.

2. Secondary Source: Mainly relied on information provided by Data-Path Ltd. Also, Online article, papers and Books. Additionally, going through the rules of American retirement plan policy.

2.1.3 Scope of the Study

The term "scope" refers to the examined area. Data-path's retirement plan process and administration are the focus of this paper. For the purposes of my study, I focused on the Allocation section of the retirement plan. I was able to put together the study report with the support of the staff, their knowledge, memorandums, and gone plan reports. The current US

restrictions on retirement plans are highlighted in this study as well; any changes to these regulations will render the corresponding sections of the report irrelevant.

2.1.4 Limitation

- Some samples and background info are left out to protect anonymity. employer contribution or profit-sharing formula, participant's Social Security number (SSN), salary, and amount of salary deferral, among other factors. Neither company records nor client information may leave the building under any circumstances.
- There is a severe lack of published information about the retirement plan sector.
- It was challenging to conduct in-depth interviews with people because of their busy schedules.
- It is difficult to incorporate all updated regulations due to the frequency with which Congress modifies them in response to shifts in economic and fiscal policy.

2.1.5 Significance

This section may have an effect on Bangladesh's recent foray into the business. Datapath's operation in accordance with the requirements of the American Retirement Plan industry and the 401(k)p and other plans' processing in Datapath will be discussed. The organizational structure of this facility is also included. Anyone can also easily learn everything there is to know about how these TPA firms in Bangladesh function.

2.1 Overview of Data-Path Ltd

2.2.1 Origin of Data-Path Ltd

The first officially recognized outsourcing company in Bangladesh is Data-Path Limited, which uses July Business Service to conduct business. Data-Path's parent business, July Business Service, is owned by John Humphrey and Jim Hudson. July Service is undoubtedly is the prestigious and renowned businesses in the USA. Leading national retirement plan provider July Business Service provides high-touch, tech-enabled retirement plan services and recordkeeping options to thousands of organizations and their employees. This company was established in 1994. And serving about 94,000 people in all 52 states of the United States.

The most prominent TPA company is July Business Services, which offers customers retirement plans to Data-Path Ltd. and Data-Path Processes the plans for July Business Services. Additionally, Data-Path began its journey in 2006 as an experimental outsourcing business. But the owners were impressed. Data-Path thus began its official journey in 2008 on a floor of a building, initially with 6 people.

After conducting the operation in July effectively, Data-Path Ltd. has greatly increased its workforce with 50 people at its new location in Gulshan. In 2015, the company decided to outsource its resources to other TPAs who needed them. Many TPAs in the USA saw this as an opportunity to outsource their work and seized it. Data-Path Ltd. currently manages over 34 distinct TPAs in addition to serving as the administrative center for July Services. In addition to the other TPAs, Data-Path Ltd. currently employs more than 500 people, with the goal of reaching 1,000 employees by 2025.

2.2.2 Mission and Vision

Through innovation, knowledge, and service, we will fulfil our objective of revolutionizing small business retirement plans and realize our vision of enhancing lives by influencing the course of retirement. To fulfil the aim of assisting people in achieving retirement success, it takes a team of individuals who are genuinely passionate about what they do. JULY it is. (July Business Service, 2023)

2.2.3 Core Values

The beliefs that direct and frequently push an organization's mission and objectives are known as its core values. The core values of Data-Path Ltd are given below:

- ❖ Independence
- ❖ Objective
- ❖ Passion
- ❖ Knowledge
- ❖ Respect
- ❖ Excellence
- ❖ Result

2.2.4 Company Objective

To realize your company's long-term vision, you must set and work towards goals. There are objectives in Data-Path Ltd.

1. Become self-sufficient in processing the plan entirely on own. Because right now in order to process plan they have to depends on software like ASC, Relius, and DatAir.
2. By 2025 cross the thousand employee mark.

2.2.5 Key Partners

Data-Path Ltd. and them share the same important partners as July Business Service's Outsourcing office. All of the partners arrived in in different ways, some by Data-Path Ltd. and others by July Business services. All of our major partners are regarded as valuable because they can contribute to our expansion and effectiveness.

Money and earnings must be stored at the Record Keeper's. They manage all of the money in the plan and operate like specialized banks. The law makes this requirement in order to maintain transparency and security. While the actual funds are kept in RKs, TPA companies handle the retirement activities and manage the funds. Some of the RK that data-path work with:

- ❖ **Empower**
- ❖ **Fidelity**

- ❖ **Epic**
- ❖ **Merrill Lynch**
- ❖ **Nation Wide**

The first TPA in the USA to outsource a business process to a foreign nation is July Business Service. And they achieved great success. They save money and resources by outsourcing the entire process. Additionally, July held the opportunity once they realized they have the staff and resources to provide an excellent service to other TPAs. The BPO division of July Business Services and Data-Path Ltd. currently employs over 350 individuals and generates a great deal of the company's revenue. Furthermore, 34 other TPA clients of Data-Path Ltd. use the company to outsource a significant portion of their business's work.

2.2.6 Customer Segment & Services they provide

In the United States of America, Data-Path Ltd. mostly focuses on TPA companies like July Business Service. The other TPA companies seek out successful and effective service providers. Additionally, Data-Path offers a wide range of services for retirement plans. Also, each TPA has a unique procedure for processing retirement plans. Data-Path Ltd. carries out all of that. Currently, Data-Path Ltd. processes 401(k) plans for 34 TPA clients.

The services we provide are mentioned below in the order in which we process retirement plans:

- ❖ Our retirement plan design takes into account all IRS and government regulations and requirements. That's why it's crucial to start with a solid foundation when creating a 401(k)-retirement plan. Clients who want a retirement plan but are unfamiliar with the process engage with our TPA's Business Team, who explains the 401(k) plan and everything related to it. therefore, this is essentially a counseling session for those clients. It is necessary to create a retirement strategy before it can be executed. Because each employers have different pattern of elements to add up in the retirement plan.
- ❖ **Setting up a plan**: For setting up a retirement plan, everything has to be mentioned in details in the document. The steps are given below:
    1. Preparing Essential Documents
    2. Plan setup

- ❖ **Plan Administration**: The core services provided by Data-Path Ltd. are those of the Plan Administration team, which is staffed by a number of experts in their field and experienced in 401(K) planning. Their offerings include the following:

    1. **Processing Plan**: Data-Path process the entire plan including eligibility, contributing calculation, vesting calculation and non-discrimination calculation.
    2. **Tax**: handle all the necessary filings and government form including form 5500.
    3. **Non-discrimination Testing**: A 401(k) plan can't benefit highly compensated employees (HCEs) or significant personnel (such as owners) in order to allow everyone, the chance to save for the future. Tests for nondiscrimination ensure that everything is balanced.

- ❖ **Solo 401(k) plans**: Solo plans are Self-employed individuals have an effective retirement savings strategy. Participants must be business owners without workers (aside from spouses) and are not limited in age or income.

2.3 Management Practices of Data-Path Ltd

2.3.1 Leadership Style

The management approach data-Path Ltd It's democratic to follow. Because the owner thinks it fosters a favorable and welcoming workplace. The workers feel valued and heard in this workplace. This facilitates decision-making and problem-solving. Additionally, this kind of leadership can encourage staff creativity and boost output. We implement a variety of retirement plans here, each of which is unique in its own way. Therefore, there is always a difficulty with which an employee is stuck, and they share their solutions. The leadership is a big part of how well the team works together. This makes solving difficulties simpler and more effective. The advantages of cooperation and democratic leadership techniques go beyond that, too. Due to the fact that most decisions are based on everyone's input, the technique also lessens conflicts among the staff.

2.3.2 Human resource Planning

Internships are the only method used by Data-Path Ltd to hire personnel. They examine the intern after four months and decide whether to hire them for a permanent position. Because there aren't enough experienced workers, the hiring process uses interns. The IT, software development, and HR divisions, however, do have a few exceptions. They use regular, seasoned workers. Data-Path Ltd.'s hiring process is notably different from that of other organizations in Bangladesh in that it places a high value on candidates' dedication to the organization over other factors, such as higher analytical and IT abilities.

2.3.3 Compensation System

Each designation at Data-Path Ltd has a base wage. For instance, the pay for interns is 10,000 Taka; for regular employees, it is 28,000 Taka; and so forth. However, the corporation assesses each employee's performance in July of each year and decides on their wage or raise for the next year. Employees also receive incentives based on their success.

2.3.4 Training and Development

Data-Path Ltd. teams face a wide variety of problems every day, and they must always find effective solutions. Therefore, workers are always expanding their horizons with new information. With that said, the DOL and the IRS have laid out the basics, so all employees receive the same theoretical and practical training. When a new client comes on board or a previously studied topic needs to be covered, Data-Path Ltd. employs training sessions and tests to educate their employees.

2.3.5 Hierarchy of the organization
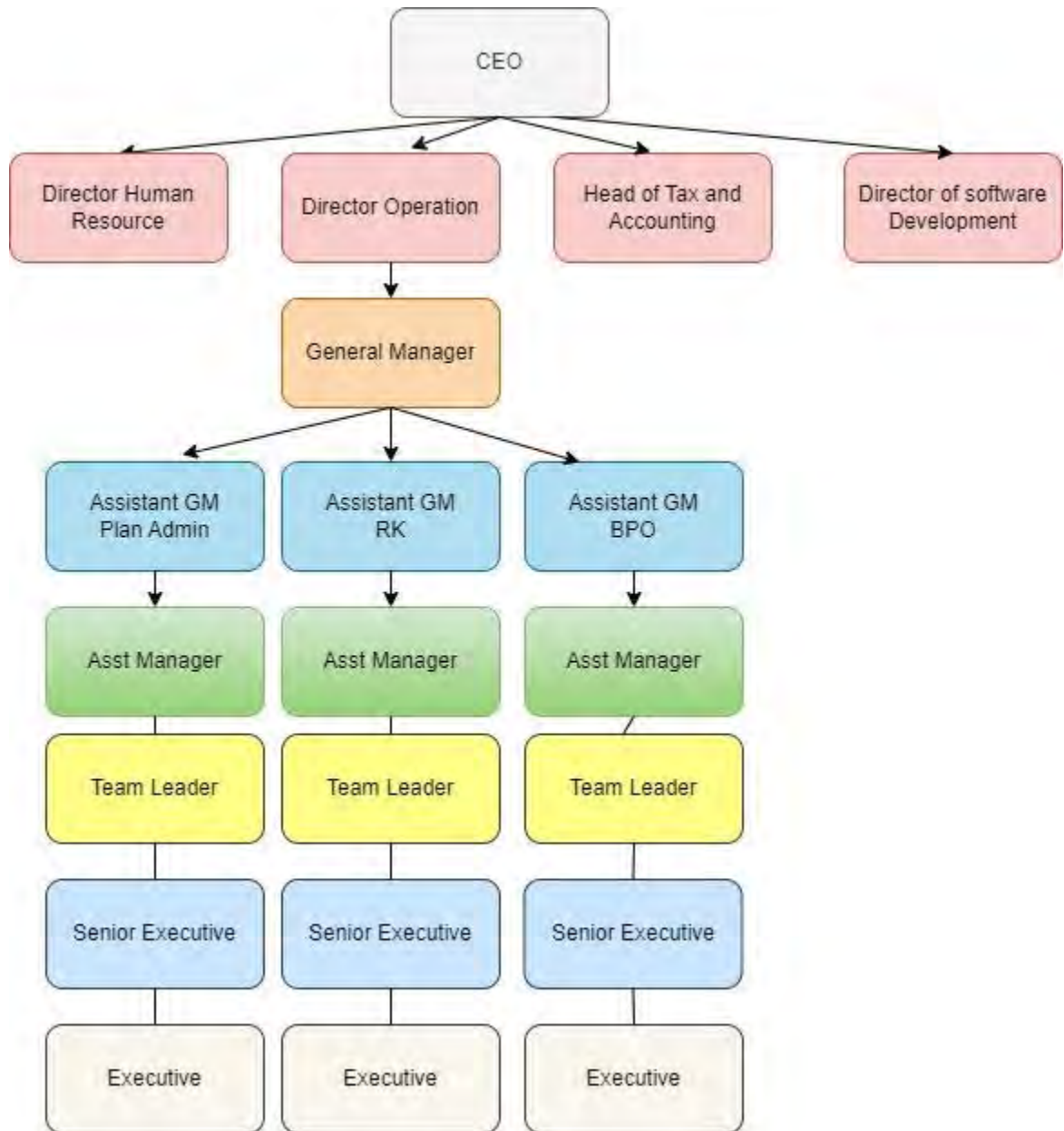
Figure 1 Organizational Hierarchy

2.4 Marketing Practices

Since Data-Path Ltd is in under the wing of July business service. And July outsources their work in Bangladesh. So, July brings the customer to Data-Path Ltd. And Data-Path doesn't even have the marketing department also, any sorts of marketing strategy.

So, in order to complete this part, I used data of generally 401(k) industry in USA.

2.4.1 Marketing Strategy

The Following industry follows mainly 2 types of marketing strategies. Educational and relationship marketing.

❖ **Educational Marketing**: Everyone outside of the 401(k) sector finds the industry itself to be confusing. A retirement plan includes several different parts. And the strategy isn't exactly simple to grasp. Therefore, providers frequently employ instructional advertising to better acquaint potential customers with the benefits and operations of their services. For employees to feel at peace and see the value in investing in their future, education is crucial. However, it's likely that your staff members aren't 401(k) gurus.

❖ **Relational Marketing:** establishing reliable communication with the employers who make the final plan selection. Employees are also customers in this case. Neither one would be sufficient to carry out the strategy, yet each is essential.

2.4.2 Target Customer

There are 2 types of target customer here

❖ **Primary:** The employers who offer the retirement plan to the employees

❖ **Secondary:** The employees, who take offer and help execute the plan.

2.4.3 Marketing Channels

❖ **Business2business**: LinkedIn, B2B seminar, industry conference and trade publication target employees.

❖ **Business2customer**: Webinars, Informative sites, customer helpline and target single employees.

2.4.4 Product/ New product development and competitive practices

❖ **Robo-Advisor:** Robo-advisors are online services that mimic the functions of traditional financial advisors but are entirely automated and guided by algorithms. Employees' portfolio management is facilitated by the incorporation of automated investment platforms. so that workers have access to the procedure whenever they like and fully grasp it without any more explanation.

❖ **Customizable Plan**: 401(k) plans in a series of categories also capacities to see the requirements of businesses of totally different shapes and sizes. So, offering the plan with understanding of the business process. This way the employers are more approachable offering the plan as their business needs.

❖ **Low-fee models:** offering plans with lowest possible rates according to the business.

2.4.5 Advertise and Promotional Strategies

1. **Content Marketing:** Content such as blogs, articles, and videos that highlight the value of retirement savings, the benefits of a 401(k), and the features that set their product apart. And think of all the benefits they'll reap! And the significance of retirement savings lies in the fact that it will aid them during their retirement years. More importantly, how individuals might achieve independence and worry-free financial stability.

2. **Social Media and Digital Marketing:** For business-to-business interactions, try LinkedIn; for business-to-consumer interactions, check out social media sites like Facebook and Twitter. Share stories of inspiration and people who have successfully planned their retirement on social media.

3. **Referral Program**: Getting your current customers to recommend you to other possible customers. And reward people who send you business. People will be inspired to accomplish it in this way.

4. **Seminars and Workshops:** Putting up seminars aimed at educating both employers and workers. The 401(k) sector is big and complex, therefore sufficient education in the field is necessary to meet participant needs.

2.4.6 Critical marketing Issues and Gaps

❖ **Lack of knowledge:** Lack of familiarity with the field prevents many workers from making full use of their 401(k) plans. Even if they are enrolled in a plan, many American workers are unaware of the advantages they are receiving. Retirement planning is intricate and requires in-depth conversation with an expert. If not, they won't be able to exclaim the right notion.

❖ **Digital Integration:** A fragmented customer experience results from companies' varying degrees of technological advancement.

- ❖ **Transparency Issues:** The industry has been criticized for its lack of openness and hidden fees, which has led to a trust gap.
- ❖ **Competition:** There are a lot of service providers out there, so it might be difficult to set yourself apart while still making money.

2.5 Financial Performance and Accounting Practices

There is no financial report on the company's website, and their financial analysis is highly confidential. So, I tried to analysis with the financial data of T. Rowe Price of 3 years. One of the Record keeper companies of 401(k) industry.

2.5.1 Liquidity Ratio
- ❖ **Current Ratio = Current Assets/ Current Liabilities**

	2022	2021	2020
Current Ratio	4.81	7.81	5.40

The current Ratio of T Rowe Price are 4.81%, 7.81% and 5.40%. The ratios are really good especially in 2021. Normally, the current ratio is good between 1.2 – 2 but in our case, it is more than double the standard mark. Which indicates that the company has more current asset then liability. Hence its safe.

- ❖ **Quick Ratio = (Cash and equivalents + Marketable Securities + Accounts Receivable)/ Current liabilities**

	2022	2021	2020
Quick Ratio	2.31	2.46	4.95

T. Rowe Price appears to have sufficient liquid assets given that its quick ratio is more than 2.0. This indicates that the company can cover its short-term debt obligations.

2.5.2 Solvency Ratio

❖ **Debt To Equity = Total Debt/ Total Equity**

	2022	2021	2020
Debt to Equity	0.22	0.24	0.18

The debt-to-equity ratio is less than 0.3 as a result. It is a very debt-free company that gets the majority of its funding from the assets of its shareholders. The company has not used debt financing in the past. A low ratio indicates that a company is not capitalizing on the value or profit that could be attained through the utilization of borrowed funds to expand current operations.

❖ **Debt To Assets**

Debt to Asset = Total debt/ Total asset

	2022	2021	2020
Debt to Asset	0.17	0.18	0.13

In the current and previous 2 year the ratios are less than 0.5 or 50% that indicates a fair level of risk the company is at. If the ratio is more than 0.5 than it is also a concern because company have higher level of risk.

2.5.3 DuPont Analysis

The DuPont analysis methodology provides a more all-encompassing view of a company's underlying performance. Profit margin, asset turnover, and financial leverage relative to industry averages are the building blocks of the DuPont analysis framework, which is derived from the return on equity ratio. Since T. Rowe Price and Principle are both financial services providers, I decided to go with Principle. I have used data from 2022 annual report.

DuPont Analysis = Net Profit Margin x AT x EM

	Formula	T. Rowe Price	Principle
Net Profit Margin	Net Income / Revenue	**22.34%**	27.50%
Asset Turnover	Revenue / Avg. Asset	**8.55**	10.05
Equity Multiplier	Avg. Total Asset / Avg. Shareholder's E	**4.5**	4.68

So, DuPont Analysis (T. Rowe Price) = 22.34% x 8.55 x 4.5 = 8.59%

And, DuPont Analysis (Principle) = 27.50% x 10.05 x 4.68 = 12.93%

Interpretation: Comparing net profit margins, we find that Principle is more profitable than T. Rowe Price. However, Principle's asset turnover ratio is higher than T. Rowe Price's, indicating that the company makes better use of its assets to produce revenue.

Furthermore, both companies are highly indebted, although Company Principle's level of leverage is slightly higher. This suggests that the financial risks faced by both companies are comparable, though slightly higher for Principle. Also, principle looks to be performing better than T. Rowe Price in terms of return on equity (ROE), according to the DuPont analysis, which was driven mostly by stronger profitability and superior asset efficiency. Although both companies have leverage, potential investors should be cautious of this and other risks before making a commitment.

2.5.4 Accounting Practices

2.5.5 Core Accounting Principle

Financial statements for 401(k) providers must be ready under the guidelines of GAAP. Therefore, similar guidelines used by other American firms. In U.S. GAAP provides an outline for how monetary transactions should be logged and stated. 401(k) providers typically adhere to GAAP for the following reasons:

1. **Consistency and Comparability:** Investors, regulators, and other stakeholders can all benefit from GAAP since it allows for a standardized approach to accounting.

2. **Regulatory Compliance:** The U.S. SEC mandates that public limited companies must prepared income statement under the guidelines on GAAP. Compliance with GAAP may be necessary for a 401(k)-service provider to do business with clients who are publicly traded even if the provider itself is not publicly traded.

3. **Credibility and Trust:** Financial statements can gain credibility when they are ready under the guidelines of GAAP. Providers of 401(k) plans may find this helpful in establishing and sustaining rapport with their clientele, investors, and plan members.

4. **Audit Requirement:** Large 401(k) plans, as was previously indicated, are often audited once each year. The US auditing community has extensive experience with GAAP-based financial statements and routinely use auditing standards developed specifically for this purpose.

5. **Risk Mitigation:** Businesses can lessen their vulnerability to legal or regulatory action by adopting GAAP. If you don't follow GAAP, you can have to pay penalties and lose investor trust. This is especially crucial for 401(k) providers, as they manage the bulk of many people's retirement funds.

6. **Shareholder's Expectation:** The use of GAAP in the preparation of financial statements is widely expected by investors, creditors, and other interested parties. Meeting these

requirements might be critical for the success of 401(k) providers who work with several organizations (the plan sponsors) and employees (the plan participants).

2.5.6 Method of Accounting

As was previously noted, GAAP is the standard accounting framework utilized by firms in the United States, including those in the 401(k) industry, and accrual basis accounting is a major principle of GAAP. The accrual basis of accounting is preferred over the cash basis because it more accurately reflects an organization's true financial state. The following are some of the main justifications for the widespread adoption of accrual basis accounting by 401(k) providers:

1. **Improved Alignment Between Income and Expenditures:** Using accrual accounting, businesses may more accurately account for the costs directly related to generating sales. This is critical for 401(k) providers so that they can appropriately balance the fees and other revenues they generate from managing retirement plans with the costs they incur.

2. **Dealing with Complicated Financial Matters:** Plan contributions, dividends, investment income, and administration fees are just some of the many types of money changing hands in the 401(k) sector. With accrual accounting, transactions can be recorded and reported even though no currency has physically changed hands.

3. **Budgeting and Economic Analysis:** In order to successfully manage cash flow, plan for expansion, and make sound investment decisions, 401(k) service providers need the information provided by accrual basis accounting.

2.5.7 Accounting Cycle

The accounting cycle used by 401(k) providers is consistent with that used by the vast majority of organizations. From recording a transaction through creating financial reports and finally closing the books, there are several phases involved in the accounting cycle. The normal accounting cycle followed by a 401(k)-service provider or financial institution that manages 401(k) plans is briefly described below:

1. **Identifying the Transaction:** Contributions, dividends, management fees, and investment income are all tracked and documented as part of the 401(k) plan.

2. **Journal Entries:** Journal entries are produced in the general ledger to reflect these adjustments. For convenience, 401(k) payments may be credited to a liability account before being invested.

3. **Posting to Ledger Account:** The journal entries are recorded in the appropriate journals and ledgers. Assets, liabilities, equity, revenues, and expenses are all recorded in the appropriate ledgers as a result.

4. **Adjusting Entries:** Any accruals, deferrals, or estimates are accounted for by making the appropriate adjusting entries. An adjusting entry would be made, for instance, to account for the firm's unrealized investment income.

5. **Financial Statement:** There are few types of financial reports: the income statement, the balance sheet, and the statement of cash flows. Since 401(k) service providers have fiduciary responsibilities, it is essential that they have access to these documents that provide an overview of the company's financial status.

6. **Reconciliation & Review:** Accounts of particular importance, such as cash on hand and investments, may undergo a reconciliation process. All accounting transactions should be reviewed to guarantee that they were documented and reported correctly.

2.5.8 Depreciation Method

Many organizations, including those in the 401(k) sector, use straight-line depreciation for various reasons. While each business's unique circumstances will ultimately determine which depreciation method is best, here are a few examples of why a 401(k) administrator would favor a straight-line approach:

1. **Simplicity:** The straight-line method is the quickest and easiest way to estimate wear and tear. In comparison to the double decreasing balance and the sum of the years' digits approaches, this one is easier to calculate. Straight-line depreciation can be appealing because of the relative ease with which it compares to the potentially complex financial procedures of 401(k) firms.

2. **Consistency:** It can be easier to prepare for and stick to a budget when depreciation costs are spread out evenly across the asset's useful life. Depreciation costs that are consistently charged can help simplify the analysis of financial outcomes for both internal and external stakeholders.

3. **Consistent with Market Conditions:** Straight-line depreciation is an appropriate strategy to match the cost of the item with the revenue it helps create if the asset's utility is projected to remain largely constant over its useful life.

2.5.9 Accounting disclosures

- Certain information about 401(k) plans must be made public in accordance with ERISA and other laws. The plan's performance, fees, and risks must all be disclosed to participants through sponsor of the plan.

- The government filing of the plan is an annual report submitted with the Department of Labor detailing the 401(k) plan's financial records, including the Net Assets report Accessible for Paybacks and the Changes report in Net Assets Available for Benefits, which have both been reviewed by independent auditors.

- Participants will have the data so that they can make appropriate investment worthy decisions thanks to these disclosures, which promote openness and honesty.

2.6 Operation Management and Information System Practice

As an outsourcing company and having simultaneously working in both countries Bangladesh and USA must overcome challenges in communicating and coordination in order to run efficiently. Therefore, Data-Path Ltd has always concerned and have the best solutions for communication and work coordination. For communication purposes in Bangladesh, they use Microsoft teams and to remotely communication for the clients of USA they use outlook and teams. For coordinating the work, they use shared space "Amazon Cloud" and it is also accessible through "Amazon

Workspace". All the necessary files are there for both of the parties to work simultaneously. Another tool that they use it "PensionPro". PensionPro BUSINESS is designed for innovative TPA companies who wish to maximize their operations. It comes with everything required to advance and develop. There are many features in this app. One of them in "Client Relationship Management" which is to ensure complete access to your data, centralize the Client, Plan, and Contact information. The CRM feature allows complete access to crucial information while gathering all of the data in one place. Improve customer service and boost productivity by easily managing relationships and data.

Another best feature is "power Tools" which is the ability to import your data in a single sheet using import tools has made getting started with PensionPro simpler than ever. Making manual changes takes time and is painful, and at PensionPro we understand how valuable your time is. We concur, which is why we provide Power Tools to let you not only import data but also make broad modifications to your data throughout the system. By using imports and power tools, PensionPro may be kept up to date with ease. Which makes the work easier.

2.7 Industry and Competitive Analysis

2.7.1 Porter's Five Forces

1. Threats of New Entrants: Competition from new entrants is not a major concern in the 401(k) market. While there are no major financial challenges to entrance, new entrants may find it difficult to build a loyal customer base and a reputable brand name. It is challenging for new entrants to quickly obtain market share because existing companies have already built ties with employers and benefit from economies of scale.

2. Bargaining Power of Buyer: In the 401(k) economy, employers and plan sponsors do have some leverage. Customers who select and manage 401(k) plans for their staff have

leverage in negotiating with service providers about pricing, features, and investment choices. However, a buyer's negotiating leverage may fluctuate based on factors such as the size of the employer or sponsor and the ease with which they can switch service providers.

3. Bargaining Power of Suppliers: Suppliers in the 401(k) market often have considerable leverage in negotiations. Managers and service providers in the investment industry give clients with access to various investment vehicles, as well as administrative services and record-keeping. When dealing with a large number of plan participants, large investment firms and service providers may be able to negotiate better terms.

4. Threat of Substitute: Substitutes pose little of a threat. For a long time, traditional 401(k) plans were the only real choice for those looking to save for retirement. There are alternatives to 401(k) plans, such as individual retirement accounts (IRAs), but they may not provide the same tax benefits or employer contributions.

5. Rivalry Among Existing Competition: Competition in the 401(k) market is fierce between reputable companies. There is a lot of competition among the many banks, asset managers, and retirement service providers. Many of these businesses compete for customers by providing unique investment opportunities, technological advancements, and learning materials.

2.7.2 SWOT Analysis

1. Strength

Secure software and IT-based services; Long-term corporate growth; Low-cost, trained labor. Also, bringing in much-needed funds for the Bangladeshi economy. American RPF industry trustworthiness is high, and there is less local competition.

2.Weakness

Challenges include: a lack of skilled workers, high costs to keep operations running smoothly, a shortage of cutting-edge Software, and a lengthy learning curve for new employees.

3.Opportunitues

Making more positions available in the labor market also, growing Bangladesh's service sector and sustaining partnerships with international corporations operating in the United States.

4.Threats

Competition from new entrants in the market; reliance on unrestricted US TPAs; the relative unfamiliarity of this service sector in Bangladesh; the possibility of a data leak; and so on.

2.8 Summary and Conclusion

As the outsourcing business grows, countries like Bangladesh are also succeeding. There are a lot of outsourcing firms in Bangladesh, but Data-Path is one of the few that is doing well. Data-Path has been proving since 2008 its rapid expansion inside the information technology market. It is acquiring all of the tools necessary to dominate the BPO outsourcing market. Based on my internship experience, this report provides a comprehensive overview of Data-route and the specific services they offer to people in the United States as a third-party administrator.

To administer the pension plan, the Business Process Organization (BPO) was created. ERISA-eligible retirement accounts are shielded from lawsuits, bankruptcy, and creditor claims. Your retirement funds are safe if your employer files for bankruptcy. Additionally, the money in your retirement account cannot be used to pay off debts to creditors. These retirement plans are quite beneficial and completely safe.

BPO involves delivering participants with important information regarding the terms and finances of the plan. They also offer fiduciary responsibilities for people in charge of managing and controlling plan assets and specify least contribution for employees. Various forms of retirement plans, including PS, SH, and PS retirement plans, remain processed for clients by the Data-Path team BPO. Company with limited liability, Firm, Solo Corporation, and other employers are covered by the plans. Clients choose from them the plans that are best for their businesses or themselves. Also, we completely rework the plan. Plans must be executed flawlessly, without any difficulties or mistakes.

I'm glad I was able to perform my internship at Datapath and learn about this business, which I wouldn't have been exposed to otherwise. I sought direction from my supervisor and team leader. They have my deepest gratitude.

2.9 Recommendation/Implication

❖ **More Advertising:** Data-Path ltd. is never ever mentioned in the media. When questioned, they claimed that they had no clients in Bangladesh and hence saw no need in advertising there. But I think it's important to do more than just attract clients with the publicity. Good, talented people are attracted to publicity, too. For instance, I had never heard of data-path Ltd. before starting work here. The name of the firm is completely unfamiliar to me. I noticed a few circulars and resumes out of nowhere. That's why I think data-path may benefit from doing more advertising: it could bring in more people with the right mix of skills.

❖ **Develop Software:** Data-Path Ltd. boasts an expert staff of programmers. Despite this, there is certain software they need that they can't yet create. We occasionally had to convert large amounts of data from PDF files to Microsoft Excel, for instance. However, you cannot copy the content from the PDF. They utilize substandard pdf scanning software. They'll be able to create superior programmes. In addition, they can learn to programme in Microsoft Excel to automate tasks like census verification, FICA calculation, and so on.

❖ **Training Program enhancement:** During our four months of training, we have encountered a wide variety of challenges. The organization can improve its training program if these issues are resolved. For instance, there were no recordings of the offline training sessions. Thus, even if we wanted to, we would not have access to the recorded classes. The BPO department is broken up into groups. When it comes to RPF processes, the teams all use slightly different applications. When we originally started, we were not assigned to a specific team, so we received training on all of the teams' software. But then they assigned me to only one group. It followed that there was no need to instruct the software. Some instructors did not bother to prepare course materials in advance. As a result, their instruction sessions were incomprehensible. They always have the option of getting the training materials ready in advance.

Chapter 3
Project Part

3.1 Introduction

ERISA protects three distinct types of plans. The difference between a DB (Defined Contribution) and DC (Defined benefit)

Firstly, Defined benefits Plan promises monthly payments to employees. The idea could give you $100 a month when you retire. Or, it may use a method that requires income and years of employment period into account, such as for every year of assistance, you will get 1% of your average pay for the previous five years. Normally benefit plans are insured via federal insurance. Secondly, Retirement pension security is not always assured with a specific benefit in defined contribution plan. Contributions to a participant's plan account may be made by either the employee or the employer, typically a percentage of compensation, such as 5%. These funds are often invested by the company. The worker's balance is based on the contributions they'd make also investment gains/losses. The value of investments is a factor in the total balance. There are many types of defined contribution plan, for example, profit sharing plan etc.

Furthermore, Retirement is a natural progression of life that requires financial security and liberty. In this phase, income declines but expenses remain or may even rise due to unexpected medical bills or other outlays. During this significant period, it's essential to make plans and set aside money wisely. Analyzing Retirement Savings Plans is an in-depth look at the many options available to those who want to retire with financial security and peace of mind.
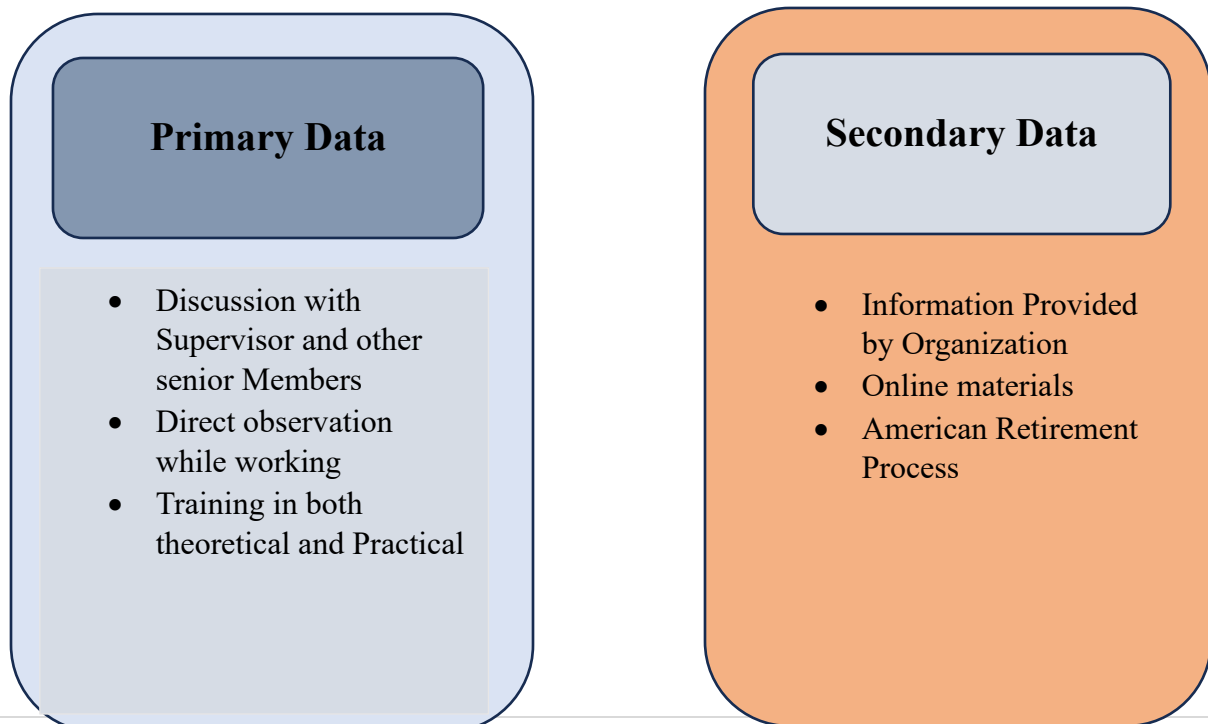
3.3.1 Objective

This report will focus on the various type of retirement saving plans. And will analysis each of the plan so that, employees have the better understanding when choosing the employment opportunity based on the retirement plan. Additionally, specific goals are:

❖ To evaluate the risk and return characteristics of different retirement-saving processes

❖ To comprehend Retirement Savings plans.

❖ To evaluate compare a retirement plan's benefits and advantages

❖ To point out the significance of long-term planning when taking a retirement plan into account

3.1.2 Significance of the Issue

The recent industry entry from Bangladesh may be impacted by this report. The 401(k)plan's operation and the American Retirement Plan industry will both be covered in the report. A comprehensive understanding of how these TPA companies operate in Bangladesh is also accessible to everyone. The report will discuss the current Laws on retirement plans. Also, the reader will able to select the appropriate retirement plan with analysis.

3.2 Methodology

Primary Data	**Secondary Data**
• Discussion with Supervisor and other senior Members • Direct observation while working • Training in both theoretical and Practical	• Information Provided by Organization • Online materials • American Retirement Process

Figure 2 Preliminary Methodology

3.3 Finding and Analysis

3.3.1 Defined Contribution plan and Defined Benefit plan

Defined Contribution (DC) plans and Defined Benefit (DB) plans are two of the most frequently discussed entities in the realm of retirement planning. Both have both benefits and cons, but they are fundamentally different ways to save for retirement. The primary distinctions lie in the allocation of risk, the calculation of benefits, and the administration of contributions.

Contributions are what give defined contribution plans their identity. Participants, often employees, contribute a certain amount into an individual account, with the company sometimes matching that money. Both the total amount contributed and the return on the participant's investment choices will affect the final retirement benefit. The standard example is the American 401(k) plan. Here, the onus of investment success or failure is squarely on the shoulders of the investor.

In contrast, defined benefit plans (DB) guarantee retirees a set amount of money. The amount of this benefit has already been calculated based on variables such as the employee's wage history and length of service. This class includes the more common types of pensions. The burden of ensuring there are adequate money to pay these future obligations, and the associated investment risk, rests squarely on the shoulders of the employer.

A table of comparison is given below

Perspective	DC Plan	DB Plan
Definition	Plan for retirement to which both the individual and, in some cases, the employer makes regular contributions. The final reward will be determined by how well the investments do.	A pension plan in which the employer commits to providing a defined benefit to the retiree at some point in the future.
Risk	The cost of risk is on the employee. The final gain could be lower than expected if assets underperform.	The majority of risk is shouldered by the company. Could bankrupt the whole plan.
Contribution	Contribution varies because of the all options	Fixed contribution
Benefit Calculation	On the basis of deposits and earnings on investments.	often calculated using a formula that takes into

		account income, length of service, and other variables.
Freedom of Investment	Provide a menu of investment vehicles from which employee can pick.	Everything depends on employer.
Transparency	The contribution amount is known in advance, making budgeting easier for employees	More complex since the contribution amount is not pre-defined.
Profitability	The majority of the time, it is easier to transport. Rollovers to a new plan or an individual retirement account (IRA) are common for employees.	Limit portability. Possible lump sum payments and/or transfer rights are provided by some.
Employee Visibility	Regular access to account balance information and management is typically provided to employees.	Employee may only be able to see information about their future pension, not their actual benefits right now.
Taxation	Until the money is withdrawn, taxes are normally not paid on contributions.	The plan itself is taxed on contribution.
Popularity	Increasing demands because of the lower cost	Declining because of the high cost

3.3.2 Why Defined Contribution plan is better

Employees in a DC plan, such as a traditional 401(k) or non-profit organizational 403(b), put away a predetermined dollar amount or a percentage of their earnings into a retirement savings account. As a bonus, the sponsoring firm may also match a percentage of the employee's contributions.

In some cases, employers will contribute to their employees' defined contribution plans. Some organizations match employee contributions same as their own contribution, generally between 4% and 6%, although the utmost typical employer matching contribution is $0.50 for every $1 donated up to a specific percentage. As this is effectively bonus contribution that will grow over a certain time period then benefit you in retirement, it is ideal to donate at least the maximum amount your employer will match.

Participant enrollment, contribution increases, hardship withdrawals, loan provisions, and catch-up payments for workers over age 50 are some of the other common aspects of defined contribution plans.

In defined benefit plan employees have limited access to their retirement assets until they are distributed after retirement. Therefore, defined-benefit plans have very high administrative expenses due to the need for extensive actuarial forecasts and insurance for guarantees. This means that defined-benefit plans are quite unusual in the private sector.
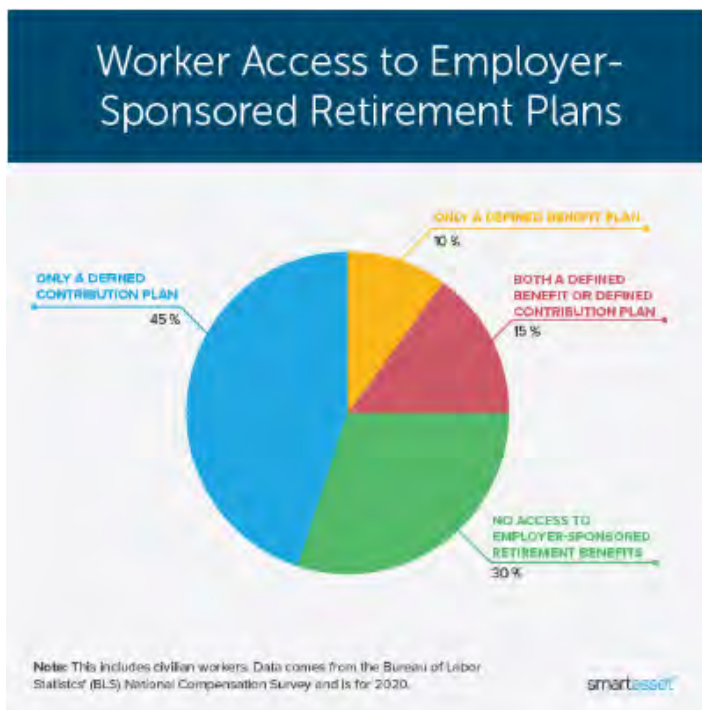

Figure 3 Acceptance rate of Defined Contribution plan in USA

3.3.3 Contribution Limit

In 2023, 401(k) defined contribution plan participants under the age of 50 can put away up to $22,500, while those beyond the age of 50 can put away up to $7,500 in catch-up contributions. So, in total $27,000. On the other hand, Age, salary, and length of service in business all play a

role in determining how much of an annual contribution you can make to a DB Plan. For example, A DB Plan can pay out a lump amount of up to $3.4 million to a retiree once they reach age 62. The cap increases gradually over a decade to account for both deposits and investment returns. Therefore, DB plan contribution is based on the age, salary and years of service. So, if we take a look at an example, john is 25 years old and working in a company for 3 years and salary is $50,000. He can contribute in his DB plan $5,000 and on the other hand, his boss is 30 years old, working for company for 2 years and salary is $2,25,000. he can contribute in his DB plan $70,000. in both cases the matching amount will be based on the contribution they made. So, it is not fair in DB plan for participants to contribute.
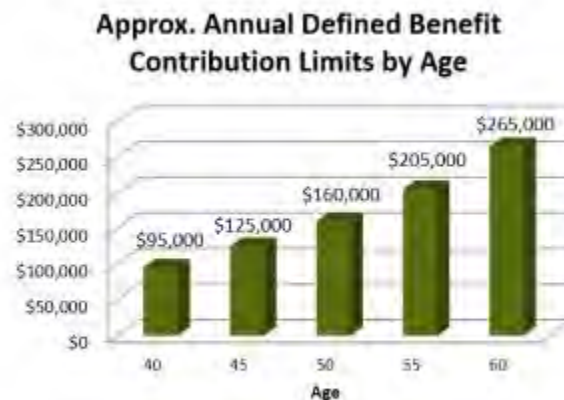

Figure 4 DB plan Contribution Limit

If the employee is highly compensated employee (HCE), they have the biased advantage over non-highly compensated employee (NHCE). HCE employees will always maximum employer contribution for their high limit contribution. Therefore, NHCE will get less employer contribution. Thats why DC plan have contribution limit and HCE and NHCE have the same employee contribution limit. And making it the fairest and non-discrimination plan.

Advantages:

1. **Automated Retirement Savings:** When an employee enrolls in a defined contribution plan, their contributions will be taken out of their salary on a predetermined schedule. This facilitates the automation of retirement savings for plan members. However, the DB plan participants have to manually contribute to the plan.

2. **Tax Benefit:** Both the regular and the Roth defined contribution plans offer tax benefits, and until the money is withdrawn in retirement, your assets can grow tax-free. On the other hand, in DB plan the tax benefit is only getting employer not employee.

3. **Less Expensive to Maintain:** Defined contribution plan is less expensive compared to defined benefit plan

3.3.4 Why Defined Benefit Is not a good option

Retirement benefits under a DB plan are predetermined by the owner. Companies may use a variety of formulas. However, in most cases, the length of work and income are included. Determining how much money would be set up for a pension reserve and how many pensions you would get each month upon retirement is a crucial component of creating the benefit plan.
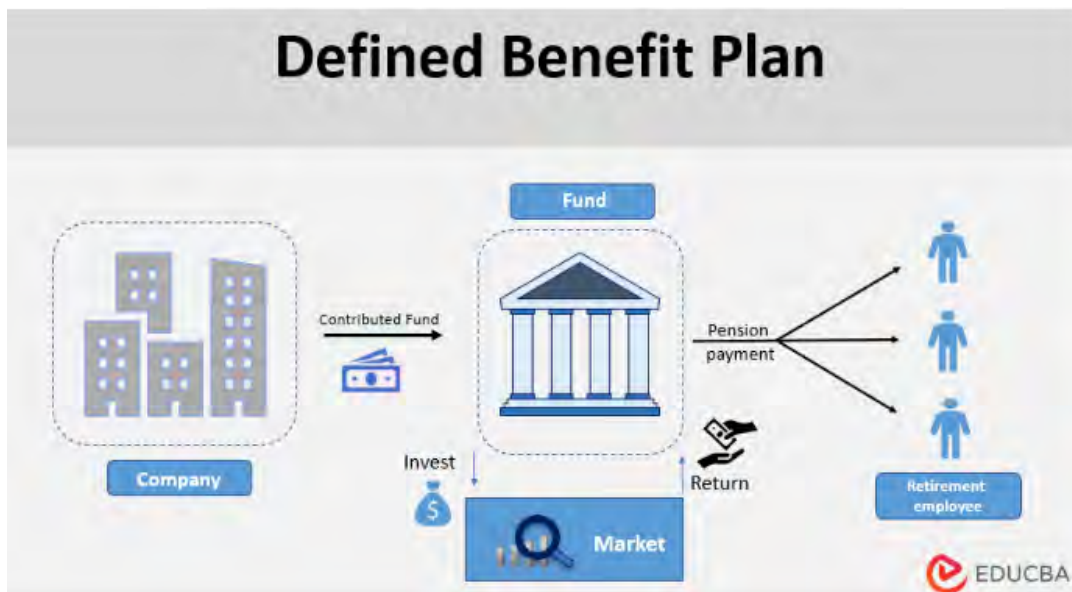

Figure 5 Defined Benefit Plan Process

3.3.5 Contribution and Benefit comparison

Let's say you're a recent college grad making $50,000 a year at the age of 25. Your company participates in the Defined Benefit plan and deducts $150 every month from your pay times the number of years you've been employed. Assuming that you plan to retire at age 60. Therefore, this results in a 35-year career tenue. So, end of the tenure you'll get $63,000 net without investment return. Investment return is not predictable so, not calculated in net amount.

On the other hand, following example you are in a defined contribution plan and you contribute annually (150*12) = $1800 so, after 35 years you'll get $63,000 only your net amount but each year depending on the plan type of DC. so, of the plan is Profit sharing Plan then, the employer will contribute from the profit according to the revenue that year. also, employer will contribute in a form of matching to employee contribution. matching amount is sometimes as same as employee contribution. additionally, if the plan is safe harbor plan than the employee gets 3% non-elective contribution for employee allocated compensation. and last but not least, you can also invest your net contribution amount in stock or mutual fund. The investment scope of USA is high now since the market is rising up again. And In DC plan you have the control of your investment. So, you can invest in a market of share where you seem fit or more profitable.
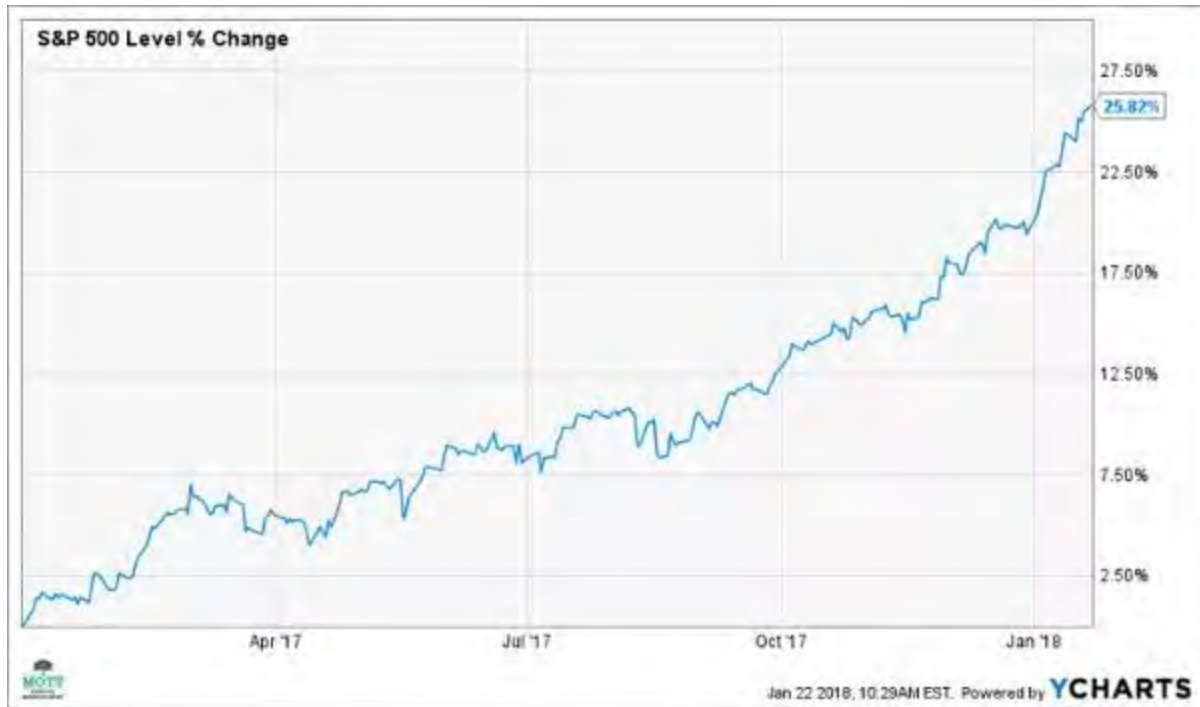
Figure 6 Increasing level of stock market USA

this can make a lot of money because you not only have your only your $63,000 but also contributions from the employer. So, you can imagine why Defined benefit plan is not a better option.

3.3.6 The limitations of DB plan if modified, it would also be a better option

❖ Employees cannot control the funds as well as the investment. In this rising economy an employee not being able to invest in their preferred stock or market is not a positive thing. Additionally, the employees cannot even take loan from the fund where DC plan employee can. This limitation is a huge downfall because not many employees can survive in a costly place such as USA with their limited income. And loan is somewhat necessary for many employees. It is a benefit that employee take with obviously interest.

❖ The retirement payout in a defined benefit plan is determined by factors such as salary at retirement and number of years of service. An employee's flexibility in planning for

retirement may be constrained by this predetermined formula. Unlike with a DC plan like a traditional 401(k), a DB plan does not give employees the freedom to raise their retirement income by making more contributions or selecting different investments. So, the DB plan should modify this rule a bit to give freedom to employees.

❖ Employee raises and promotions later in their careers may not have a large effect on their DB benefit because of the way retirement benefits are calculated, which takes into account things like final average income and years of service. This can cause an employee's retirement benefit to undervalue their higher wages and professional advancement. Therefore, the formula that calculate DB plan should be adjusted accordingly so this issue can be addressed.

❖ Employees' retirement security is directly related to the financial health and decisions of the business because the employer is responsible for funding the plan and managing the investment risks. The long-term viability of the defined benefit plan and the safety of employees' retirement benefits may be at stake if the company experiences financial difficulties. So, the whole structure should be decentralized in order to protect the future of the plan.

❖ The job and career pathways of workers may evolve throughout time. It is possible that a former employee will not receive any benefits from the DB plan if they leave the company before they are eligible to receive them. With a defined contribution plan, employees get to keep their money even if the company closes.

3.3.7 Comparison of Both Plan with mathematical reasoning
The retirement benefit in a DB plan has already been calculated and is based on characteristics including salary, age, and length of service. The onus of making sure there are sufficient money to provide promised benefits rests squarely on the shoulders of the employer. On the other hand, the amount of the contribution is predetermined in a defined contribution plan. The eventual

advantages will be determined by how well these contributions perform in the investing market. The employee takes all the risk here.

Let's look at the mathematical reasoning for why some people would think the defined contribution plan is better option:

1. **Individual Power and Choice:** Contribution Plans (DC) give employees greater control over their retirement savings and investing strategies. An employee with financial knowledge can maximize rewards in line with their individual risk preferences and market expectations.

   Let R_{DB} denote the guaranteed profit from a DB strategy and R_{DC} denote the potential profit from a DC strategy in a mathematical sense. A DC plan gives an individual the chance to achieve $R_{DC} > R_{DB}$ through careful asset selection.

2. **Transparency:** Employees may see exactly how much they have saved or invested at any one time thanks to the real-time tracking made possible by DC plans.

   The connection between payments and balances is straightforward in DC plans. The formula for the future value FV after n years, given the contribution C and the rate of return r, is $FV = C(1+r)^n$. Benefits under a DB plan are not directly proportional to investment returns but rather to a predefined formula.

3. **Portability:** Transferability is typically greater with DC designs. When a person changes jobs, they can often transfer their pension into an individual retirement account (IRA).

   Let's compare the both plans. The value of DC plan and DB plan as V_{DC} and V_{DB} after working for x years in the organization. Any employee leaving an organization without being fully vested in DB plan (say, y years), they'll only receive certain fraction f of V_{DB} or none. With DC plans, employees have more freedom to take their entire VDC with them when they depart.

4. **Decreased Employer Risk:** Since the employer's only responsibility under a DC plan is to make a fixed annual contribution rather than a future benefit promise, the employer has a clearer picture of its financial commitments in any given year.

Let's say E is the employer contribution and N is the number of employees. So, in order to calculate DC plans employer liability, we have to multiply E x N. however, Liabilities for a DB plan must be calculated using actuarial valuations, which take into account things like participants' life expectancy, salary growth, and investment returns. These tend to be a lot vaguer and have the ability to grow in size.

3.3.8 Cost Benefit Analysis of DB and DC plan

We'll assume some things and use data to compare the costs and benefits of DB and DC plans mathematically. This example is simplified to show the financial dynamics between the two schemes, but in reality, there are many more variables to think about.

Assumptions:

- ❖ **Years of employment= 30 years**
- ❖ **Salary increment annually = 3%**
- ❖ **Salary = $50,000**

Assumptions For DC plans

1. **Employer contribution 6.5% of the annual salary of employer**
2. **Average rate of return 7.51%**

Contribution (DC) = 0.065 x 50,000 x $(1+ 0.03)^{30}$ = $7888.60

With 30years of compound interest

Future value = 7888.60 $(1+ 0.751)^{30}$ = $69,257.86

So, DC plan holder will get approximately $69,257.86 more or less after 30 years

Assumptions For DC plans

1. Employee's final salary of 1.5% will be multiplied by years of service

Benefit (DB) = 0.015 x 1,21,363.12 x 30 = $54,613.40

(After 30 years of increment of 50,000 = 1,21,363.12)

The Difference Between DC and DB plan benefit = ($69,257.86 - $54,613.40)

$$= \$14,644.46$$

The difference is $14,644.46. After retirement every penny is important. And having the difference of $14,644.46 is huge. This is why DC plan is better option in retirement plan.

3.3.9 Analyzing various Defined contribution plans

In the United States, workers and business owners can choose from a number of different defined contribution plans. The rules, contribution caps, and tax breaks for each plan vary widely. Some of the most popular categories are shown below, along with subjective ratings for how well they typically meet various criteria ("Better," "Good," or "Not Good").

Traditional 401(k) plan

Rating: Better

Reasons:

1. Annual 401(k) contributions are significantly higher than IRA contributions. Previously the employee contribution was $20500, and currently it increases to $22,500. An additional "catch-up" contribution can be made by those who are 50 or older. For the years 2022 and 2023, the maximum catch-up contribution is $6,500.

2. Employee get matching contribution. Employer contributions to a 401(k) plan that match employees' contributions are known as "matching contributions." Employee contributions are matched up to a certain proportion of the employee's annual salary, usually between 25% and 100%. So, it is basically free money.

3. In this plan, employee gets broad range of options for investment. Your 401(k) contributions will be invested in accordance with the options you select from those provided by your employer. Mutual funds that invest in stocks and bonds, as well as target-date funds that seek to minimize the impact of market fluctuations on your retirement savings, are typical examples of such choices.

Drawbacks:

1. Employee gets penalty for early withdrawal of the contributions. Traditional 401(k) plans typically impose a 10% penalty on early withdrawals from an account until the account holder reaches age 59 12 or becomes permanently disabled and unable to work.

2. Usually, this type of plan has high fees. The size of a business's 401(k) plan, the number of employees participating in the plan, and the fees charged by the plan's provider can all affect the total amount an employer pays in 401(k) fees each year. According to the Center for American Progress, the typical yearly fee imposed by funds is 5%.

457(b) Plan

Rating: Good

Reasons:

1. High contribution limits similar to 401(k).

2. Normally employee gets penalty for early withdrawal. Even if you leave your job. But here you can withdraw your contribution from a company that you to leave and won't have to pay penalties for that.

3. This plan is often used by government employees. Public servants, municipal employees, law enforcement officers, and other members of the public safety community are the primary beneficiaries of a 457(b), a tax-advantaged retirement plan. In addition to state and local government employees, 457(b) plans are open to executives at hospitals, charities, and unions, as well as some independent contractors.

Drawbacks:

1. Typically, a 457(b)-plan participant is only able to invest in mutual funds and annuities. For instance, a 457(b) account won't let you invest in equities or exchange-traded funds (ETFs). Even people who have 401(k)s may invest in retirement a little differently than this in practice: Mutual funds and other investment vehicles are popular among 401(k) plan participants. TDFs are available under the 457(b) plan. These funds invest in a variety of other mutual funds, some of which may not rebalance as your retirement date approaches.

2. May not offer match contribution. Employer matching is the practice wherein an employer matches a portion of an employee's contributions. Employer contributions to plans have been shown to boost employee morale and retention, recruit top talent, and save businesses money. Setting employer match contribution limitations, reviewing the IRS's contribution

limits, and including vesting provisions are all necessary when establishing a matching program.

Simple IRA Plan

Rating: Not Good

Reasons:

1. The contribution limit is lower than other plans. Both employers and workers can contribute to a SIMPLE IRA, and all contributions are tax deductible in the year they are made. In 2023, employees can contribute up to $15,500 annually to their SIMPLE IRAs, up from the $14,000 cap in 2022. If their plan permits it, workers aged 50 and above can contribute an additional $3,500 in 2023 (up from $3,000 in 2022).

2. Employer contributions are lower than 401(k) contributions. In 457(b) employers should match their workers' contributions dollar for dollar, up to a maximum of 3% of each worker's pay. Whether or whether an employee makes contributions, the company should put in 2% of their pay (the first $330,000 in 2023, up from $305,000 in 2022) into the retirement plan. The matching percentage can be lowered by employers who choose to participate below 3%. The match can be reduced in as little as two of every five years, but it must be at least 1%.

CONTRIBUTOR	SIMPLE IRA	401(K)
Individual	$15,500	$22,500
With catch-up contributions	$19,000	$30,000
Employer	Matching contributions of up to 3% of any salary, or 2% elective contribution on up to $330,000 in income	Total limit (including employee and employer contributions) is $66,000, or $73,500 with catch-up contributions

Figure 7 Contribution differences between 401(k) & 457(b)

Drawbacks:

1. Major drawbacks of 457(b) is limited investment options. Plan sponsor holds all the power and maintain the plan giving less control to the employees. Therefore, they can't invest on their own.

2. When compared to other tax-advantaged retirement plans, the 457(b) has a significantly higher penalty for early withdrawals. The money can be taken out without paying the 10% penalty to the IRS if the worker quits or retires early. Except in cases of extreme hardship, the penalty is typically applied to early withdrawals from retirement accounts. (For a period of two years during the COVID-19 epidemic, the penalty was suspended.)

3.3.10 Comparing Contribution plans in USA and Bangladesh

Bangladesh, like many other developing nations, has difficulty providing for her elderly population, and this is going to become a major problem in the not-too-distant future. In Bangladesh, pensions are only available to government employees. There are 7.53 lakh people who are pension-eligible this fiscal year, according to data from the finance ministry. A total of 1.15 billion people would benefit from social welfare programs. Budget documents for the 2016-2017 fiscal year state. However, the US government does care about workers' access to retirement benefits. The federal government of the United States provides tax breaks to businesses who offer retirement plans to their workers. Organizations in the United States have a rigorous process for meeting regulatory standards for retirement programs. Assets in public and private defined contribution (DC) plans in the United States totaled $26 trillion as of 2018. This makes the American retirement market the largest in the world.
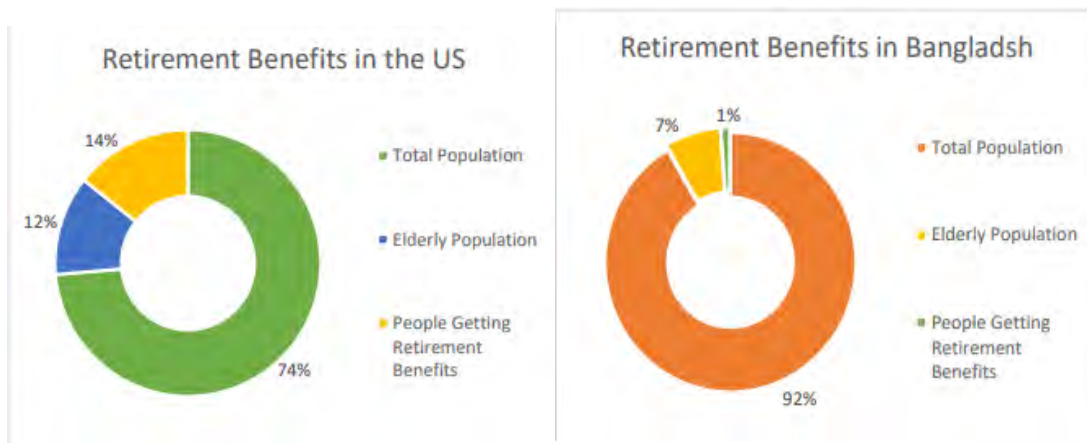

Figure 8 Comparison between USA and Bangladesh in Contribution plans

Direct Conparison of both Countries

Retirement Plan in USA	Retirement Plan in Bangladesh
Mandatory for both the public and private industries.	Only public servants are eligible for the pension; private sector workers must rely on employer benefits.
Strictly governed by the Internal Revenue Service, the American Privacy Act, etc. The company's retirement plans are managed by a separate Third-Party Administrator (TPA).	The only pensions subject to government oversight are those of public servants. The Bangladeshi government's Ministry of Finance handles pensions for government workers. Provident funds for employees in the private sector are managed by the companies themselves.
To ensure that lower-paid workers are not unfairly treated, each plan must pass specific non-discriminatory requirements.	There are no neutral evaluations available.
Each plan participant is fully informed of the whereabouts, investment strategy, and balance of his or her account. The IRS mandates that companies deposit RK contributions within 3 or 7 days.	Workers are kept in the dark regarding the whereabouts of payroll deductions. This payment is contingent on their retirement or separation from service.
Individuals can defer as little or as much as they like, or even choose not to contribute at all.	Every month, workers must set aside a predetermined amount of their pay.
Matching, profit sharing, and other employer contributions are made on behalf of all plan members. Safe Harbor Non-Elective plans allow for employer contributions even if participants/employees do not make contributions for the plan year. Furthermore,	Each month, the employer and employee each put in the same predetermined percentage of their paychecks.

the employer and employee contribution amounts must be the same.	
When an employee retires or leaves their company, they are entitled to a distribution, or a withdrawal of their funds. Because of government oversight, there is no possibility of failure to receive payment.	Both governmental and private sector workers in Bangladesh frequently have difficulty collecting their retirement benefits.
When an employee leaves one company for another, he or she has the option of taking all of his or her retirement savings in cash or rolling them over to the new employer's retirement plan.	When an employee leaves one company for another, they cannot simply continue using the same bank accounts.

Table 1: comparison between USA and Bangladesh

3.3.11 New Universal pension plan in Bangladesh

As in other developing nations, Bangladesh faces challenges when it comes to providing for her elderly population. In Bangladesh, only government workers are entitled for retirement benefits. There are 7.53 lakh people who are pension-eligible this fiscal year, according to data from the finance ministry. A total of 1.15 billion people would benefit from social welfare programmes. According to fiscal 2016–17 budget documents, no pension or gratuity scheme covers more than 87% of the working population. Bangladesh's government recognized this issue, and consequently instituted a pension programme that covers all citizens.

The elderly population in the country is expanding, and the universal scheme's major goal is to include them in a social safety net and give them a monthly stipend to help with their living costs.

Eligibility:

On the basis of their national identity cards, all nationals of Bangladesh, both at home and abroad, aged 18 to 50 will be eligible for the benefit. Pensions are now only available to workers in Bangladesh who are employed by government, semi-government, or autonomous institutions. Citizens over the age of 50 will be given preferential access to the pension programme.

Types of Pension Plans:

Four distinct pension schemes exist.

To include people from all areas of life in the pension system, we have four of these plans (Progoti, Surokkha, Somota, and Probash).

1. **Progoti**: Employees of private enterprises are eligible for this programme. Participants can be either employees of a private company or the company's owner.

Monthly instalment	Tk 2,000	Tk 3,000	Tk 5,000
Instalment period (in years)	Probable monthly pension (in Tk)		
42	68,931	1,03,396	1,72,327
40	58,400	87,601	1,46,001
35	38,374	57,561	95,935
30	24,932	37,398	62,330
25	15,910	23,864	39,774
20	9,854	14,780	24,634
15	5,789	8,683	14,472
10	3,060	4,591	7,651

Figure 9 Progoti Pension Plan

2. **Surokkha**: Farmers, rickshaw pullers, labourers, blacksmiths, potters, fisherman, and weavers are just some of the informal workers who can join the programme.
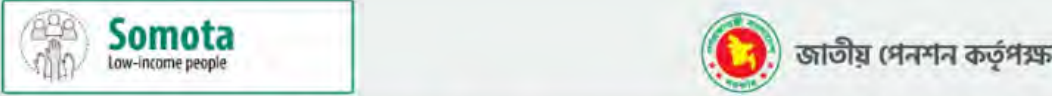
Monthly instalment	Tk 1,000	Tk 2,000	Tk 3,000	Tk 5,000
Instalment period (in years)	Probable monthly pension (in Tk)			
42	34,465	68,931	1,03,396	1,72,327
40	29,200	58,400	87,601	1,46,001
35	19,187	38,374	57,561	95,935
30	12,466	24,932	37,398	62,330
25	7,955	15,910	23,864	39,774
20	4,927	9,854	14,780	24,634
15	2,894	5,789	8,683	14,472
10	1,530	3,060	4,591	7,651

Figure 10 Sukkha Pension Plan

3. **Somota**: Those with annual incomes of up to Tk 60,000 (about $1,500) are eligible to take part in this programme, which aims to help those living in poverty. The Bangladesh Bureau of Statistics has announced the income threshold that will be used to identify those living below the poverty line.

Monthly instalment	Tk 1,000 (depositor Tk 500+ govt Tk 500)
Instalment period (in years)	Probable monthly pension (in Tk)
42	34,465
40	29,200
35	19,187
30	12,466
25	7,955
20	4,927
15	2,894
10	1,530

Figure 11 Somota Pension Plan

4. **Probash:** Any Bangladeshi person working or living abroad who deposits the required amount in foreign currency can take part in the programme.

Monthly instalment	Tk 5,000	Tk 7,500	Tk 10,000
Instalment period (in years)	Probable monthly pension (in Tk)		
42	1,72,327	2,58,491	3,44,655
40	1,46,001	2,19,001	2,92,002
35	95,935	1,43,902	1,91,870
30	62,330	93,495	1,24,660
25	39,774	59,661	79,548
20	24,634	36,951	49,268
15	14,472	21,708	28,944
10	7,651	11,477	15,302

Figure 12 Probash pension Plan

Pros & cons of universal pension plan:

The Universal Pension Scheme (UPS) of Bangladesh is a government-run pension programme for the elderly. Personal experiences, day-to-day obstacles, and socioeconomic benefits and drawbacks would all factor into a Bangladeshi citizen's assessment of the Universal Pension Scheme (UPS). The benefits and drawbacks are listed below.

Benefit:

1. **Financial Security in old Age:** By guaranteeing that all senior citizens receive some form of financial assistance, a UPS alleviates concerns about retirement finances. In old age, every dollar counts for everything. So, if they are guaranteed a certain sum once they reach retirement age, they may relax and enjoy their golden years.

2. **Respect and Autonomy:** Having a secure retirement income might help the elderly avoid having to rely on others financially or emotionally. You and your spouse have 30-35 years of living expenses to cover after you retire. No one can guess how much money they will need in retirement. Your financial demands are always up in the air. Consequently, a pension plan facilitates crisis management and permits independent living.

3. **Growth in Business and Industry:** The ageing population has the potential to boost local economies through increased consumer expenditure if they gain access to more disposable money.

4. **Improved Physical and Mental Health:** The health, nutrition, and general well-being of the elderly could be enhanced by increased financial security.

5. **Decreased Stress on Families' Budgets:** There would be less of an economic burden on families to provide for their senior family, especially those in the lower income brackets.

Drawbacks:

1. **Trust and Authenticity Concerns:** The problem of registration and establishing credibility has several faces. Due to administrative inconsistencies and unequal distribution of resources, the people of Bangladesh are naturally skeptical of their government. Due to inefficient registration procedures, many citizens have had trouble receiving benefits from prior assistance programmes. Therefore, it is crucial to get acceptance for the new UPS system. Citizens need to be made aware of the benefits and eligibility requirements of the scheme, thus there must be clear and transparent registration processes and strong marketing efforts.

2. **Mental shift of savings:** It is a major problem to alter people's perspectives on saving and retirement in Bangladesh. Traditionally, people have saved for things like emergencies or short-term needs, rather than for long-term stability. Workshops and other forms of education centred on the value of saving for retirement and the UPS could help address this issue. Pension scheme success stories can serve as role models for those considering retirement.

3. **Acknowledging vulnerable Groups:** River erosion and natural disasters are a problem in Bangladesh because they cause people to lose their land and become economically and socially vulnerable. It is vital to identify these at-risk populations and include them in the UPS. Finding and helping these people may need some creative methods, such as utilizing community-based organizations and local government entities. Higher benefit pension plans tailored specifically for vulnerable populations can protect them from life's unpredictability and assure their membership in the UPS.

4. **Population and Gender Variation**: There are significant differences in life expectancy between the sexes in Bangladesh. Women outlive males on average, but they are also less likely to work outside the home. Therefore, UPS should compensate for these differences by providing advantages that are more appropriate for women. Gender equality in social protection plans can be achieved by measures like allowing for flexible retirement ages and providing for the financial needs of single and elderly women.

3.4 Summary/Conclusions

It is clear that both defined contribution plans and defined benefit plans have their advantages and disadvantages after careful consideration. When contrasting the two, however, it becomes clear that defined contribution plans are more suitable for today's mobile workforce. To begin with, the increased freedom provided by these plans allows participants to better match their investment approach to their personal risk preferences and long-term goals. This individualization has the potential to boost retirement savings. The flexibility of defined contribution plans is another perk. The capacity to easily transfer retirement assets is especially important in today's world of frequent job changes and widespread relocation. Last but not least, these plans typically provide participants more say in how their retirement money is invested and managed.

3.5 Recommendations/Implications

For Employer

1. Employers should focus on providing defined contribution plans as a means of accommodating employees' changing needs in light of increased job mobility and a desire for greater control over investments. Not only are these plans simpler to administer, but they also tend to be more popular among today's younger, more transient workforce.

2. Employers who offer defined contribution plans should provide employees with access to financial education resources so that they can make informed investment decisions. Both the company and the staff will gain in the long run from the employees' increased ability to make well-informed choices.

For Employee

1. Be financially literate and learn about your investment choices if you have a defined contribution plan. You may tailor your portfolio to your unique needs by learning the fundamentals of stock, bond, and mutual fund investing.

2. Due to the ever-changing nature of financial markets, it is important to regularly review your portfolio and rebalance your holdings if necessary. If you want to make sure your retirement savings plan is on track, you need to keep an eye on it and rebalance it on a regular basis.

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