

Aci

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ACI Limited

Internship Report

on

“Capital Investment Decision in ACI Limited”

(with a sample study of the investment decision of Twinkle Baby Diaper).



United International University

QUEST FOR EXCELLENCE

Course: Internship

Course Code: INT 4399

Submitted to:

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Letter of Transmittal

November 18, 2018, 2018

Zinnatun Nesa

Assistant Professor-Finance

United International University

Subject: Submission of Internship report on “Capital Investment Decision in ACI Limited (with a sample study of the investment decision of Twinkle Baby Diaper)”.

Dear Madam,

I am pleased to submit the report that you asked for & gave me the authorization to work on “Capital Investment Decision in ACI Limited” (with a sample study of the investment decision of Twinkle Baby Diaper). This report is an essential part of my course; I tried my best to work on it carefully and sincerely to make the report informative.

The study I conducted enhanced my knowledge to make an executive report. This report has given me an exceptional experience that might have immense uses in the future endeavors and I sincerely hope that it could fulfill your expectations.

I have put my sincere effort to give this report a presentable shape and make it as informative and precise as possible. I thank you for providing me with this unique opportunity.

Sincerely yours,

Rehana Sultana

111 141 455

ACKNOWLEDGEMENT

⁸
In performing my report, I had to take the help and guideline of some respected persons, who deserve my greatest gratitude. The completion of this report gives me much knowledge. I would like to show my gratitude to Zinnatun Nesa, Course Instructor, and United International University for giving me a good guideline for report throughout numerous consultations. I would also like to expand my deepest gratitude to all those who have directly and indirectly guided me in writing this report.

In addition, thank you Mam, who introduced me to the Methodology of work, whose passion for the report on “Capital Investment Decision in ACI Limited” had lasting effects. I would like to give special thanks to my supervisor of ACI Limited, Mr. Harunur Rashid (Manager Accounts), for giving me the guidelines for preparing the report.

¹⁶
And many people, especially my colleagues and team members of itself, have made valuable comment suggestions on this proposal which gave me an inspiration to improve my assignment. I thank all the people for their help directly and indirectly to complete my report.

Executive Summary

This Report “Capital Investment Decision in ACI Limited (with a sample study of the investment decision of Twinkle Baby Diaper).” has been prepared to share my experience as an intern at ACI Limited during my internship period. I was given a major duty to analyze the Capital Investment. The Purpose of the report is to analyze the capital investment of ACI Limited.

For Analyzing the Capital Investment, I have classified this report into four chapters. I have given introduction in first chapter where I have discussed about the background of the report, the purpose for the report and the objectives of the report. I have also mentioned about the historical background of ACI Limited, its vision, mission and different policies and my responsibilities as an intern. Then I have discussed about Capital Investment, its features, its objectives. Then I talked about the capital investment named Savlon Twinkle Baby Diaper of ACI Consumer Brands. I analyzed its market condition, SWOT and Sales which is below discussed. I also talked about capital budgeting process, techniques in 3rd chapter descriptively. And I have analyzed Data which gives positive net present value, internal rate of return, profitability index & payback period. Finally I talked about Break Even Analysis in Capital Budgeting in last chapter.

This report may help others to understand about the Capital Investment of ACI Limited because this report is done by taking the real data regarding capital investment. This report provides an analysis and evaluation of the Capital Investment of ACI Limited. This report also gives an overview of Capital Investment of ACI Consumer Brand. It gives the proper information about Capital Budgeting Techniques.

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Chapter 1

Introduction

Generally Capital investment means purchasing the fixed asset such as manufacturing plants and machinery that is expected to productive over many year for the purpose of furthering its business objectives. The goal of capital investment is to provide benefits to a company over the long term. The term capital investment has two usages in business. First, capital investment refers to money used by a business to purchase fixed assets, such as land, machinery, or buildings. Secondly, capital investment refers to money invested in a business with the understanding that the money will be used to purchase fixed assets, rather than used to cover the business's day-to-day operating expenses. There are main three reasons for a business to make capital investments- 1) acquiring additional capital assets for expansion, enabling the business to, for example increase unit production, create new products, or add value; 2) taking advantage of new technology or advancements in equipment or machinery to increase efficiency and reduce costs 3) replacing existing assets that have reached end of life- for example, a high mileage delivery vehicle or an aging laptop computer

This assignment is prepared on “Capital Investment Decision in ACI Limited” (with a sample study of the investment decision of Twinkle Baby Diaper). ACI Limited engages in manufacturing pharmaceuticals, Consumer Brands, Livestock & fishers Products & marketing them along with fertilizer, seeds and other agricultural items.

ACI Pharmaceutical Business has achieved a commendable 17% growth in 2015 over the previous year. Pharmaceuticals are exported to 30 countries of 4 continents. The Consumer Brands Division grew 11% & 18% in 2015 and 2016 respectively. ACI Fertilizer has had 34% growth in 2015 over the previous year while the growth has been recorded 21% at the mid of 2016 over the same period last year.

With continuous process of business efficiency, ACI Limited has invested in human capital & service quality for the improvement of Business. The Net income of ACI Limited over last year was 84.59%, Capital Spending was 108.25% and Revenue was 23.01%.

1.1 BACKGROUND OF THE REPORT

This internship report has been prepared so that a student can understand the real work environment and can gain practical knowledge about organizational activities and also can relate the practical knowledge with the academic theoretical knowledge. This internship report has been prepared on the topic of Capital Investment Decision in ACI Limited (with a sample study of the investment decision of Twinkle Baby Diaper”).

ACI Consumer Brand launched the Twinkle Baby Diaper on 20th May, 2017. ACI Consumer Brand produces the diaper at own factory. It is one the new project of ACI Limited; I have selected this one to analyze the capital investment of this project. I have analyzed the strength and weakness of capital budgeting techniques, evaluated the capital projects using capital budgeting techniques and discounted cash flows and also measured the profitability of the project. While preparing the report I had a great opportunity to know about capital investment of ACI Limited.

1.2 OBJECTIVES OF THE REPORT

The leading objective of this report is to analyze the Capital investment of ACI Limited to fulfill the requirement of BBA Program. From this report I get a practical knowledge about my learning in the Finance, On the other hand I have gained an excellent knowledge about Capital Investment & Capital Budgeting. From this report, I get an organizational overview about ACI Limited.

1.3 LIMITATIONS OF THE STUDY

I cannot cover all the information which was needed to prepare this report. But, I tried to cover as much as possible. I cannot have much ways in our hand to collect the adequate data. I tried my best to make this report more accurate. My main limitation was time constrain and another limitation was unavailability of adequate data. Information that is collected from those was not detailed. Time was not also adequate. Finally this is my first experience in making a report “Capital Investment of ACI Limited.” So my knowledge especially in such a research study is limited.

1.4 METHODOLOGY OF THE REPORT

Type of Research:

This report is both quantitative and qualitative type of research in nature and it administered by collecting both primary and secondary data. It has tried to use both the primary and secondary sources of collecting information and some are to make the report presentable with as less abstraction as possible.

Types of data collection:

In order to attain the objective of the report, all-necessary information's are prepared by collecting both primary & secondary sources of data. These are:

Primary data: Primary data collected directly from ACI Limited companies through face-to-face interaction. Several sources of data collection are used to make this report. The source of data are-

- Face to face communication.
- Telephone interview.

Secondary data: Some secondary data collected to make the report more concrete. These data has been collected from:

- ACI Limited annual report.
- Web site: www.aci-bd.com

1.5 DATA ANALYSIS TECHNIQUES

- Accounting Rate of Return
- Net Present Value
- Profitability Index
- Internal Rate of Return
- Payback Period

Chapter 1	• Introduction
Chapter 2	• Company overview
Chapter 3	• Capital Investment (Twinkle Baby Diaper)
Chapter 4	• Literature Review and Research
Chapter 5	• Date Analysis & Interpretation

Table 1.1 Report Outline

Chapter 3

Capital Investment

3.0 Capital Investment of Savlon Twinkle Baby Diaper

In every year, ACI Limited invested in many capitals for the business purpose. Capital Investment decision is one the key decision of financial management which relates to the investment selection and course of action that will generate returns in the future over the lifetime of the project. As ACI Limited consists of 4 businesses, I am going to focus on one capital of Consumer Business.

Savlon Twinkle Baby Diaper is one of biggest project of ACI Consumer Brand. It is the product of Hygiene section of ACI Consumer Brand. Savlon Twinkle Baby was launched on 20 may in 2017.

ACI Consumer Brand has purchased full servo T shapes Baby Diaper Machinery for the Diaper Project in 2017. The Initial Investment of this project is 100668104. Its P & M was 113,466,679 and the Sub Station was 4750000.



3.1 Market Analysis of Diaper

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Marketing Analysis is a study of the dynamism of the market. It is the attractiveness of a special market in a specific industry. Marketing analysis is a business plan which presents information that related to the market in which someone is operating in.

- The first Diaper was introduced in 1961 in England. It was known as Pampers Baby Diaper. It is the product of P & G Company which started their journey as subsidiary company in Bangladesh in 1996. The Market size of the diaper is increasing day by day. The market size of baby diapers in the country is around TK 4 billion a year according to market players. And it grows by more than 40% year on year. Local companies are meeting 50 % domestic demand for baby diapers and Multinational are fulfilling the rest of the demand in Bangladesh.
- The composition of baby diaper has evolved in past few days. The technology used has greatly changed; the size has become smaller yet efficient. Economic growth spurred increased the use of diapers in Bangladesh. Bangladesh mostly imports diapers from Australia, China, Algeria, Iran, Egypt and Japan etc. Two local Manufacturers, ACI Consumer Brand and Bashundhara contribute small but significant amount to the diaper market recently. Currently the annual market for baby diapers stands nearly Taka 300 crore, registering more than 40% growth a year. Bangladesh is expected to be one of the biggest markets for baby diapers by 2020, according to industry. Given the composition and how it is discarded makes it harder to dispose. Though the cellulosic materials are considered as biodegradable, their assimilation by the environment takes a few years to few hundred years. The market for baby diaper is worth between taka 250 crore and Taka 350 crore a year, growing at 25 percent to 35 percent a year, according to industry insiders in Bangladesh.
- The Special features of Savlon Twinkle Baby Diaper are wetness indicator, elastic waist band and side tape, Velcro belt, comfortable embossed design and anatomic Shape. ACI Consumer Brand is giving the best quality to the mothers for their new born babies. Because of women's involvement in jobs, increasing of purchase capability and health awareness, the usage of Savlon Twinkle baby diaper is increasing. Currently, the twinkle baby diaper is selling across the country.

- The real competitors of this product are Pampers, Chu Chu and Super Mom. ¹³ Imported diapers still dominate the market, but locally made ones are gaining ground by competing in terms of price and quality.
- The Sale of Baby Diaper is increasing. The Net Sales income of Diaper was 942764 on May 2017 whereas The NSI is now 5310958. So the market position is Savlon Twinkle Baby Diaper is getting high.
- The fund for this project was taken from Bank. Bank provided loan for this capital investment. ACI Limited has taken overdraft loan & offshore Loan for this Savlon Twinkle Baby Diaper.

3.2 SWOT Analysis of Savlon Twinkle Baby Diaper

SWOT Analysis refers to strength, Weakness, Opportunity and Threat. This analysis plays a vital role for the improvement of the business growth. It is a framework that used to evaluate a company's position. The SWOT Analysis of Savlon Baby Diaper is following:

Strengths	Weaknesses
✓ Strong Brand Image ✓ High Quality	✓ New product ✓ Price is Comparatively high
Opportunities	Threats
✓ Diversified market segmentation ✓ Growth of consumer demand	✓ Entrance of new Brands ✓ Existing Brands

3.3 Capital Budgeting

Capital Budgeting is very important for a company for number of reasons. Increasing the revenues and decreasing the cost expenses, Capital Budgeting plays a vital role. Many Corporations creates ² an annual budget which will help management to evaluate the total performance of the organization. On the other hand, Capital Budgeting focuses more on the long term investments.

Features

- ¹ Exchange of current funds is involved for the benefits to be achieved in future
- Future Benefits of capital investment are expected to be realized over a series of years
- Huge funds are involved in capital investment
- Decisions of capital investments are irreversible
- High degree of risk is involved in capital investment
- Capital Investment has long term and significant effect of probability of the concern

A Capital Budget helps the management in:

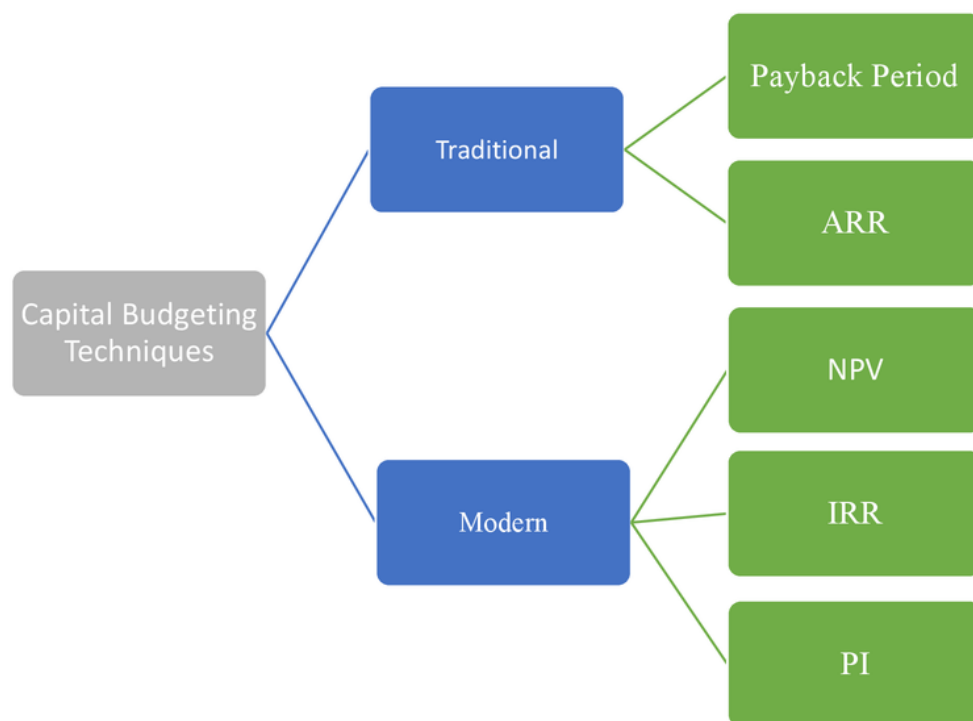
- ✓ achieving capital goals & determine in which ² level the company is at
- ✓ assisting in ranking of projects according to their true profitability
- ✓ calculating the future cash flow
- ✓ making a choice for long term investments
- ✓ ² controlling of expenditures and monitoring of crucial aspects of project execution

Major steps of Capital Budgeting:

- ✓ Estimate of cash flow
- ✓ Assessment of risk
- ✓ Calculating the discount rate
- ✓ Calculate the PV of the expected CF
- ✓ Accept or Reject the project

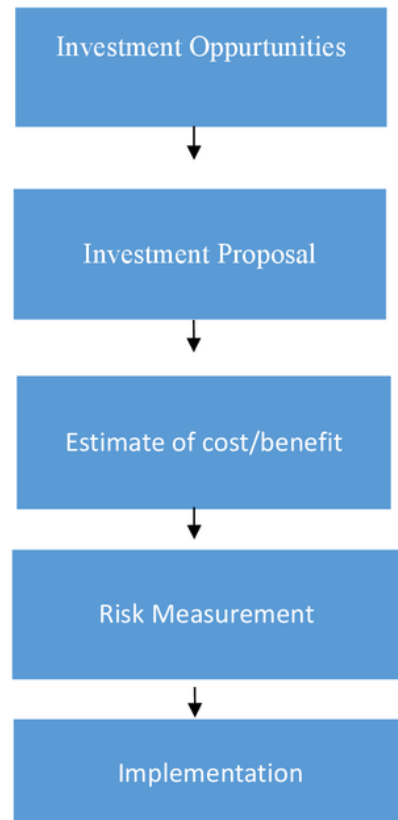
3.4 Capital Budgeting techniques

Evaluating the potential benefits and risk of large expenses, Capital Budgeting is very important for the investors. There are different Techniques for budgeting which is given below:



3.5 Capital Budgeting Process:

Steps for Capital Budgeting process as follows



Chapter 4

Literature Review and Research

4.0 Literature Review and Research of Savlon Twinkle Baby Diaper

Capital investment performance has a great influence on an organization's value and it can increase the growth and overall returns on which the capital is invested. For building winning portfolios, the best companies exercise a clear capital allocation strategy. The Capital Investment is calculated as % of GDP and the purchases of new plant in Bangladesh. The GDP of Bangladesh increased to 7.3 % in 2017. According to IMF, the average growth of GDP is 4.9% for emerging and developing countries. Therefore, the GDP growth of Bangladesh has been outstanding compared to outgoing markets. So Bangladesh is in a good position for the capital investment. Today's capital investment decisions will influence the developed world's chronic unemployment situation and economic recovery.

² *Charles T Horngreen* has defined as “Capital Budgeting is the long term planning for making and financial proposed capital outlays”

³ Capital Budgeting is one of the most important areas of financial management. Different techniques are used to evaluate capital budgeting projects; The Net Present Value, the Internal Rate of Return and the Payback Period. ³ *Graham and Harvey (2002)* highlight that financial managers favor methods such as the IRR or non-discounted Payback period. The results of this research revealed that Payback period, followed by net present value, is the most used method. The more complex methods are most favored by the large enterprises. The principal weakness of the evaluation process is the definition of cost of capital; approximately 70% of the enterprises considered use non-quantitative techniques to consider risk. This study provides those evaluating investment projects or conceiving capital budgeting manuals or policies with knowledge about common pitfalls that, if acted upon, could improve decision making. This study is exploratory research and the results represent a basis for further research.

Literatures show that capital budgeting practices have been extensively studied in the developed markets and in emerging markets. Literature of finance reports that the net present value and IRR Techniques are the most used in capital budgeting techniques in the developed countries. (Graham & Harvey, 2001; Brounenetal, 2004; Drury & Tayles,1997). Payback Period and Accounting rate of return were used than net present value and Internal Rate of Return in few developing countries. (Patterson, 1989; Rishi & Rao, 2005). Some other studies prove that both discounted and non-investment methods were used together at the same time.

Data Analysis

Chapter 5

5.0 Cash Flow

Cash flow refers to the net amount of cash and cash-equivalents being transferred into and out of businesses. ²⁰ Cash flow is the money which moves (flow) in & out of the business in a month. It does flow in 2 ways-

- If the customer buys the product or services and ²⁰ don't pay at the time of purchase, the cash flow will come from collections of accounts receivable as cash is coming from customer.
- Cash goes out for the expenses such as rent, loan payments etc. If the cash is going out than coming, the organization will suffer from negative cash flow; the organization will need to find money to cover the overdrafts. And if the cash flow is coming than going out, the organization will achieve positive cash flow. To cover up the shortage cash flow, the company should have raised the working capital.

¹⁹ All the capital projects are thoroughly analyzed on the basis of their cash flows forecast. Capital Budgeting provides the framework for evaluating, classifying and ranking both mutually exclusive and independent long term-investments. While dealing with mutually exclusive investments, capital budgeting determines the appropriate investments. ¹⁹ Management uses capital budgeting for determining the scope of cash flow risks which associated with different investments.

5.1 Activities of Cash flow

Cash flows can be classified into three activities. It includes operating, financing or investing activities which depends on the nature of the transaction. They are discussed below-

- 1) ¹² Operating activities: Operating activities include cash activities which are related to net income. Cash generated from sale of goods which is revenue and cash paid for

lender which is expense are the example of operating activities. This revenue and expense are included in net income.

- 2) Investing activities: Investing activities also include cash activities which are related to noncurrent assets. Long term investment, property, plant and equipment & the principal amount of loans are included in noncurrent assets. Cash generated from the sale of asset and cash paid for investment are the example of investing activities.
- 3) Financing activities: Financing activities include cash activities related to noncurrent liabilities and owners equity. The principal amount of long term debt, stock sales and repurchases & dividend payments are included in Noncurrent liabilities and owner's equity items.

5.2 Classification of Cash flow

The Cash flow can be classified into three types. They are Initial Investment, Operating Cash flow and Terminal Cash flow. They are discussed below:

Initial Investment: The initial investment is an outlay of cash which takes place in initial period. When an asset is purchased, it will be 0. Before the asset is put to use, the initial investment comprises, primarily, of cost of new asset for purchasing building, machinery, land etc including expenses on freight, loading and unloading, installation cost, insurance cost and expenses on repairs and modification etc.

The Initial Investment of Baby Twinkle Diaper is 100668104 to buy the machinery of this project.

Operating Cash Flows: Each investment in capital assets is expected to generate future benefits in the form of net annual cash flows (CF) from operations. After tax basis, these annual CF should be estimated. In general words, Net annual CFs refer to the annual net profit before depreciation & after taxes.

Tax, being a cash expense, has to be deducted to determine the net annual cash flows. And depreciation being a noncash charge is added back to the earning before tax.

The net annual cash flow-

Net annual cash flows = Cash revenues - Cash Expenses - Tax or Net Annual Cash flows = Net Earnings after tax + Depreciation - Tax

The data regarding Operating Cash flow of Savlon Twinkle Baby Diaper is collected from estimated Market Data. I have shown operating cash flow using the market data. Then I analyzed the capital budgeting techniques with the help of operating cash flow.

Terminal Cash flow: At the end of the economic life of a capital asset, there is some value in the asset left in the last year when the asset is terminated. At that point of time, it may have some salvage value. This inflow to a firm in the last (terminal) year is called terminal cash flow. The Terminal Cash flow represents the discounted value of all subsequent cash flow. The terminal value is used after the terminal year. This is the point at which the asset's useful life ends or beyond which CF estimation becomes difficult.

For calculating the Terminal Cash flow of Savlon Twinkle Baby Diaper, I have used full depreciation cost salvage value as this project is new and it has no salvage value.

Terminal Cash flow is determined as follows:

Terminal Cash flow = Salvage Value + Working Capital recovered

5.3 The Required Estimation of this project

As I discussed before, the Savlon Twinkle Baby Diaper is totally a new project of ACI Consumer Brand and it is launched in 2017. The initial investment of this project is 100668104. Entering the market, the biggest competitors are Pampers, Huggies (multinational brands), Super mom & Chu Chu (local).

Investing the capital in the right project effectively is very important for the successful project. To evaluate the strength and weakness of the project, Capital Budgeting Techniques have been used. I was unable to collect all the information regarding capital budgeting so I estimated some data for the capital budgeting techniques with the help of my monitor.

I estimated profit before depreciation and Tax for 5 years. The depreciation rate, Present value and tax rate are followed by the Company Policy. The profit before tax and depreciation (PBDT) is determined half of estimated budget in the first year and it increases to 7000000, 8000000, and 7000000 & remain same in 5 years respectively.

ACI Consumer Brand determined the discounted rate as same as the bank loan rate. The Debt of Savlon Twinkle Baby Diaper is 20 Crore and Equity is 80 Crore. I have calculated the discount rate estimating the required rate return of debt & equity. To calculate the Terminal Cash flow, I needed Net Working Capital. The Total Net Working Capital of Hygiene Product is 216000000. I take one third of this amount as net working capital for Savlon Twinkle Baby Diaper to calculate the Terminal Cash flow.

5.4 Capital Budgeting Techniques Analysis of Twinkle Baby Diaper:

The estimated budget of this Twinkle Baby Diaper is 11 Crore. The Depreciation rate is 20%, Interest rate is 12%, and the tax rate is 35% which is normally followed by the corporate houses. I have calculated the Cash flow of after tax of 5 years with the help of projected Cash flow.

2 Calculation of Cash flow after tax (CFAT)

Year	1	2	3	4	5	Total
PBDT (Profit Before Dep. & Tax)	55,000,000	62,000,000	70,000,000	77,000,000	77,000,000	341,000,000
Less Dep @20%	22,000,000	22,000,000	22,000,000	22,000,000	22,000,000	110,000,000
PBT	33,000,000	40,000,000	48,000,000	55,000,000	55,000,000	231,000,000
Less Tax @35 %	11,550,000	14,000,000	16,800,000	19,250,000	19,250,000	80,850,000
PAT	21,450,000	26,000,000	31,200,000	35,750,000	35,750,000	150,150,000
Add: Dep	22,000,000	22,000,000	22,000,000	22,000,000	22,000,000	110,000,000
CFAT	43,450,000	48,000,000	53,200,000	57,750,000	57,750,000	260,150,000
CCFAT	43,450,000	91,450,000	144,650,000	202,400,000	260,150,000	

Calculation of Payback Period

The Payback Period is the time required to recover the initial investment. It is important as it can evaluate the risk associated with a proposed project. An Investment with a shorter payback period is better.

The payback Period lies between 2 and 3 years.

$$\text{Payback Period} = \text{Base Year} + \frac{\text{required CFAT}}{\text{Next Year CFAT}}$$

$$= 2 + \frac{110,000,000 - 91,450,000}{53,200,000}$$

$$= 2.35 \text{ years}$$

Interpretation: In this Savlon Twinkle Baby Diaper Project, the payback period comes out positive. We can recover the investment within a short period.

Calculation of Accounting Rate of Return (ARR):

ARR determines the percentage value with rate of benefit which an asset can generate over its lifetime. ARR measures the profitability of the investments. It is determined by the information taken from Financial Statements

$$\text{ARR} = \left(\frac{\text{Average Annual PAT}}{\text{Average Investment}} \right) * 100$$

$$= \left(\frac{30030000}{55000000} \right) * 100$$

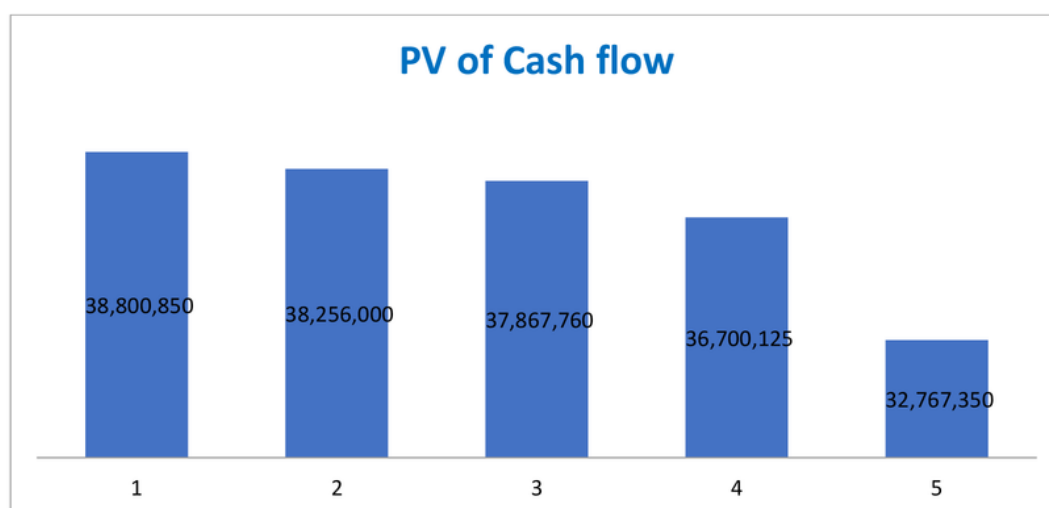
$$= 54.6\%$$

Interpretation: The more ARR is preferable for a Project. The ARR of Savlon Twinkle Baby Diaper is 54.6 % which is good.

Calculation of Net Present Value (NPV):

Net Present Value is the difference between the cash inflow and cash outflow in which the profitability of investment is measured.

Year	Cash flows	PV 12%	PV of cash flows
0	110000000	1	110000000
1	43,450,000	0.893	38,800,850
2	48,000,000	0.797	38,256,000
3	53,200,000	0.7118	37,867,760
4	57,750,000	0.6355	36,700,125
5	57,750,000	0.5674	32,767,350
		Total Cash flow	184,392,085
		NPV	74,392,085



Interpretation: The NPV will be accepted if the cash inflow is greater than cash outflow. In this Project, The Cash Outflow was 11 crore whereas the cash inflow is 184,392,085. As the NPV of this Project came out Positive, The Project is accepted.

Therefore I increase the rate to decrease the Cash flow. So the ²new rate will be 15%

Year	Cash flows	PV 15%	PV of cash flows
0	110000000	1	110000000
1	43,450,000	0.87	37,801,500
2	48,000,000	0.756	36,288,000
3	53,200,000	0.658	35,005,600
4	57,750,000	0.572	33,033,000
5	57,750,000	0.497	28,701,750
		Total Cash flow	170,829,850
		NPV	60,829,850

²
NPV = PV of Cash Inflow - PV of Cash Outflow

PV of Cash flow = 12% = 74,392,085

PV of Cash Outflow = 11 crore

Calculation of Internal Rate of Return (IRR)

The interest rate which equates the PV of CF inflow with the PV of Outflow of a project is called as Internal Rate of Return.

²
IRR: = $R_i + (PV \text{ of CF at } R_i - PV \text{ of COF} / PV \text{ of CF at } R_i - PV \text{ of CF at } R_h) * (R_h - R_i)$

= $12 + (184392085 - 110000000 / 184392085 - 170829850) * (15 - 12)$

= 28.46%

Interpretation: For the acceptance of a project, The IRR should be greater than the cost of capital. So I can say that, this Project is accepted as the IRR is higher than the Cost of Capital. The IRR of this project is 28.46% whereas; the cost of capital/ discount rate is 12%.

Profitability Index

Profitability Index measures the Value of costs and value of benefits of a project. The PI helps in giving ranks to the projects on the basis of its value.

$$\text{Profitability Index} = \text{PV of Cash Inflows} / \text{Initial Cash outlay}$$

$$= 184392085 / 110000000$$

$$= 1.68 \text{ Times}$$

Interpretation: The profitability index of this project is 1.68 which exceeds 1. If the PI exceeds 1 then the project will be accepted. So I can say that, this project is accepted as PI is greater than 1 value and the investment will be recovered within the short period of time.

5.3 Discount Rate

A discount rate is the part of the calculation of present value when doing a discounted cash flow analysis. It is the rate at which an investment's revenues and costs are discounted in order to calculate its present value. Discount rate are also called the cost of capital or required rate of return; is the expected rate of return for an investment.

A discount rate is formed from three main components: the first is the interest rate which is the reward of delaying consumption. The second component is inflation rate, by which the purchasing power of money declines and the third is risk premium which is related to the specifications of the investment case

There are a number of methods that can be used to determine discount rates. A good approach is to use the weighted average cost of capital (WACC) – a blend of the cost of equity and after-tax cost of debt. A company has two primary sources of financing – debt and equity – and, in simple terms, WACC is the average cost of raising that money. WACC is

calculated by multiplying the cost of each capital source (debt and equity) by its relevant weight, and then adding the products together to determine the WACC value:

5.4 Calculation of Discount Rate- (WACC)

Equity= 80 Crore

Debt=20 Crore

Required rate of return Debt =14%

Required rate of return Equity= 6.20%

Tax=35%

Weighted Average Cost of Capital= [(Equity/Debt + Equity)*Rd] + [(Debt/Debt + Equity)*Re*(1-t)]

= [(80/80+ 20) * .140] + [(20/80+20)*0.062*(1-.35)]

=0.112+ 0.00806

=12 %

5.5 Terminal Cash Flow

-The purchase value of the capital: 100668104

-Salvage value: 20133620 (20% of asset)

-Net Working Capital: 72000000

Terminal Cash flow= Salvage Value +Working Capital recovered

=20133620 + 72000000

=92133620

Chapter -6

Findings, Suggestions & Conclusion

6.1 FINDINGS

The Savlon Twinkle Baby Diaper is generating CF for Five years. The initial investment of this project is 110000000.

Some points are observed from this capital Investment which is following:

- ✓ The discounted payback ²period is 2.35 Years.
- ✓ NPV and IRR are Positive.
- ✓ The profitability index is greater than 1.

Suggestions and Recommendations

My some Suggestions regarding this project is following

In this project, The NPV and IRR are positive. The PI is ²also positive. This is risky project and the returns are high. The project is accepted.

6.2 Breakeven point Analysis:

A Break Even Point measures the safety zone of a company based on collected revenues and corresponding costs. The Profit will be zero in level of sales in breakeven point. Total Sales equals to total cost in breakeven point. If a company is unable to cover variable and fixed costs, it will have to bear losses.

The Calculation of Breakeven point & the Income Statement regarding Savlon Twinkle Baby Diaper is given below:

	Total	Unit	Percentage of Sales
Sales	9427464	60	100%
Less: Variable Expense	<u>6750000</u>	<u>45</u>	<u>?%</u>
Contribution Margin	2677464	<u>15</u>	<u>?%</u>
Less: Fixed Expense	1851300		
Net operating income	<u>826164</u>		

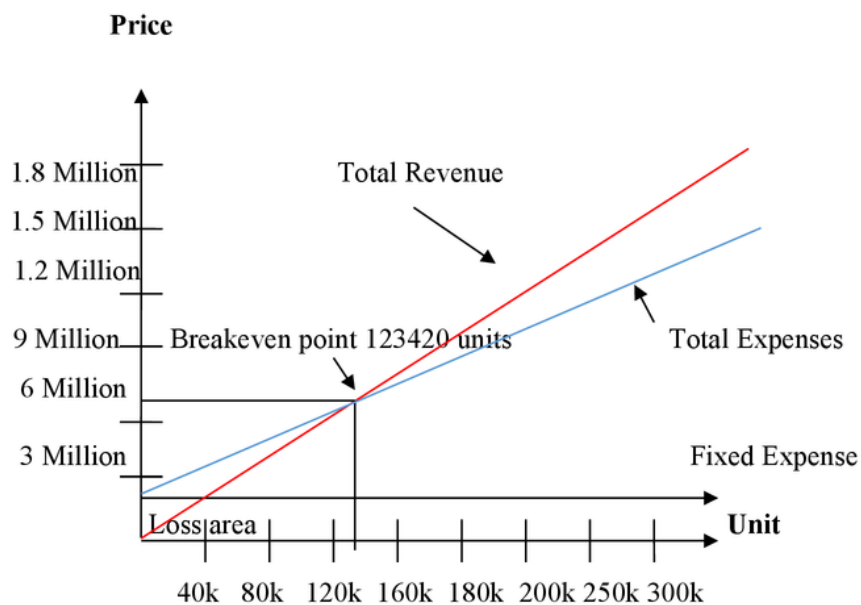
Sales = Variable expenses + Fixed expenses + Profit

$$60Q = 45Q + 1851300 + 0$$

$$15Q = 1851300$$

$$Q = 123420 \text{ units or at } 60 \text{ per unit, } 74,05200$$

Break Even Point Graph



This Graph is representing the breakeven point of Savlon Twinkle Baby Diaper Project. X axis shows the Units, whereas Y Axis represents the Price. The Breakeven Point is 123420 units sold in which the price of Baby Diaper is 7405200. The Red Straight line shows the Total Revenue and the blue one shows the Total Expenses.

Conclusion

For determining the long term goals, new opportunities, estimating the current and future Cash flows, Capital Investment is widely used. Capital Budgeting measures the risk uncertainty and project performance (the acceptance or rejection of a project). Capital Budgeting affects the future growth and profitability of the firm. It is continuous process so Companies should have take decision from incremental cash flow as it will give the right decision. Capital Budgeting is important for a company because it creates accountability and measurability. A company is able to create a set of decision rules if it can analyze which project should be accepted and which project should be rejected. If a business cannot measure the effectiveness of investment decisions, that business will have a little chance to survive.

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