IMPACT OF WORKING CAPITAL MANAGEMENT ON THE PROFITABILITY OF MAYAJAAL ENTERTAINMENT LTD

by

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Under the guidance of

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A PROJECT REPORT
submitted

In partial fulfillment of the requirements
for the award of the degree

of

MASTER OF BUSINESS ADMINISTRATION

Kumaraguru College of Technology
(An autonomous institution affiliated to Anna University, Coimbatore)
Coimbatore - 641 049

September, 2012

BONAFIDE CERTIFICATE

Certified that this project report titled **"IMPACT OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY OF MAYAJAAL ENTERTAINMENT LTD**" is the bonafide work of Ms. **SOWMIYA.A** who carried out the project under my supervision. Certified further, that to the best of my knowledge the work reported herein does not form part of any other project report or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

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Submitted for the project viva voce examination held on ____________

Internal Examiner	External Examiner

Date: 07.08.2012

TO WHOM SO EVER IT MAY CONCERN

This is to certify that **Ms.SOWMIYA.A (ROLL NO: 11MBA044)** KCT Business School, Coimbatore, has successfully completed her project on **"IMPACT OF WORKING CAPITAL MANAGEMENT ON PROFITABILITY OF MAYAJAAL ENTERTAINMENT LTD"**. She has worked in our Organization gathering data, analyzing from 26.06.2012 to 07.08.2012, as a part of her academic curriculum. She has submitted to us a copy of her findings and we find that the analysis done by her is quite useful to us.

Her performance and conduct during the period has been good and we wish her all the success in her future endeavor.

For **MAYAJAAL ENTERTAINMENT LTD**

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DECLARATION

I hereby declare that the summer project titled **"IMPACT OF WORKING CAPITAL ON PROFITABILITY OF MAYAJAAL ENTERTAINMENT LTD"** with special reference to Mayajaal Entertainment Limited, ECR Road, Chennai. Submitted to Anna University in partial fulfillment for the award of the degree of Master of Business Administration, is a record of original research submitted by me under the guidance of **Mr. A.Senthil Kumar** during the period of study in KCT Business School, Coimbatore.

I also declare that this project is the report of my own effort and has not been submitted to any other university or institution for the award of any degree or diploma.

Place: Coimbatore **SOWMIYA.A**

(Reg No: 1120400087)

ACKNOWLEGEMENT

Learning is a continuous process. I am indeed thankful to our chairman Arutchelvar **Dr. N. Mahalingam** constantly engaged in propagating the cherished values of our great predecessors, be it in politics, education, philanthropy, business, literature or art.

I express my heartfelt thanks to **Dr.VIJILA KENNEDY** our Director who has been a support of moral strength and continual encouragement to us.

My heartfelt thanks to my project guide **Mr.A.SENTHIL KUMAR** Assistant Professor Senior Grade, for his availability, friendly approach, encouraging support and guidance in carrying out the project successfully.

I express my proud gratitude to project in charge **Mr. Prabhakaran** Charted Accountant of Mayajaal Entertainment Limited for spending their valuable time in helping me a lot and providing me good training.

I affirm my renewed thanks to everyone who in one way or the other helped me to complete this project.

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SYNOPSIS

The study is being carried out to identify the impact of working capital on profitability of the company and to find out which component of Working Capital have more impact on profitability of the company. Working capital related ratios like current ratio, quick ratio, inventory turnover ratio, debtors' turnover ratio, current assets to total assets ratio, current assets to sales ratio, cash turnover ratio and networking capital leverage are calculated. Data collected for calculation are from balance sheet and profit and loss account of the company. The study has been conducted for the last five financial years. To identify which elements of working capital have more influence on return on investment this is taken as a measure of profitability in this study, regression analysis is done after calculating the ratios. The study showed that inventory turnover have much influence on return on investment while comparing to all other variables. Following inventory turnover ratio, debtors' turnover ratio has more influence on return on investment. Thus it can be concluded that the company makes sales as soon as possible, avoiding obsoleteness of the product and also the money is not blocked in from of inventories. The company also follows good credit policy to its customers. Still terms could be reviewed by credit worthiness of customers, financial soundness and ability to repay debt, policies can be framed.

CHAPTER 1
INTRODUCTION

1.1 ABOUT THE STUDY

Working capital is an important issue during financial decision making since its being a part of investment in asset that requires appropriate financing investment. However, working capital always being disregard in financial decision making since it involve investment and financing in short term period. Further, also act as a restrain in financial performance, since it does not contribute to return on equity. Though, it should be critical for to a firm to sustain their short term investment since it will ensure the ability of firm in longer period.

The crucial part in managing working capital is required maintaining its liquidity in day-to-day operation to ensure its smooth running and meets its obligation. Yet, this is not a simple task since managers must make sure that business operation is running in efficient and profitable manner. There are the possibilities of mismatch of current asset and current liability during this process. If this happens and firm's manager cannot manage it properly then it will affect firm's growth and profitability. This will further lead to financial distress and finally firms can go bankrupt.

"Working capital is the difference between the inflow and out flow of funds." It other words it is the net cash inflow. It can be defined as excess of current assets over current liabilities and provision. It is net current asset or net working capital.

Impact of working capital management on the profitability of Mayajaal Entertainment Limited, the study is being carried out to know whether there is any relationship between working capital management and the profitability of Mayajaal Entertainment limited. Study helps to find which part of working capital is most influencing return on investment.

The Working capital and liquidity of the company is found by calculating ratios related to working capital, like current ratio, quick ratio, inventory turnover ratio, debtors' turnover ratio, current assets to total assets ratio, current assets to sales ratio, working capital turnover ratio, cash turnover ratio, and net working capital leverage. The profitability is found by calculating return on investment.

1.2 ABOUT THE ORGANIZATION

1.2.1 Industry Profile

In 2011, the Indian Media & Entertainment (M&E) Industry registered a growth of 12 percent over 2010, to reach INR 728 billon, says the FICCI-KPMG report. The growth trajectory is backed by strong consumption in Tier 2 and 3 cities, continued growth of regional media, and fast increasing new media business. Overall, the industry is expected to register a CAGR of 15 percent to touch INR 1,457 billion by 2016. The report will be formally released at the inaugural session of FICCI FRAMES 2012 on March 14, 2012. 2011 has been a challenging year not just for the Indian M&E industry, or even the Indian economy, but for the larger world economy. While India is still expected to grow at a healthy pace, growth is projected to be lower than earlier expectations.

As per March 2008 report, India's entertainment and media industry has recorded a robust growth in recent years. In 2007 industry was way ahead in performance in comparison to a whole lot of other domestic industries. It recorded a 17% growth in 2007 with an estimated volume of Rs 513 billion. Comparable figure was Rs 438 billion in previous year. This industry attracted a substantial volume of foreign direct investment amounting to Rs 8.5 billon in concerned reference period. Indian entertainment industry is estimated to reach a targeted Rs 1.157 trillion by year 2012

1.2.2 Company Profile

Mayajaal Entertainment Ltd was originally incorporated as West Bank Garden Farm Clubs Private Limited on 9th July, 1997. Name of the Company was changed to Hotel Whales Private Limited with effect from 28th December, 1999.

The name of our Company was further changed to Mayajaal Entertainment Private Limited with effect from 11th January, 2001. Company was subsequently converted to a public limited company and the name was changed to Mayajaal Entertainment Limited, pursuant to a resolution passed at a shareholders meeting held on 22nd April, 2002

Mayajaal Entertainment Limited operates as an entertainment company in India. The company owns and operates e.joy, a family entertainment centre.

E Joy

The e.joy comprises.

1. Ten screens multiplex
2. Eight lane bowling alley
3. Video games arcade
4. Food court
5. Shopping mall
6. Convention hall.

It also owns an onshore resort, including rooms, suites, and cottages; forest themed bar and multi-cuisine restaurant; and conference and convention halls.

The Champ

Mayajaal's The Champ Sports village is the one of its kind destination for sportainment (Sports + Entertainment) for Chennaites. 'The Champ' Sports village located within the same campus offers the leisure of playing sports with a niche infrastructure.

1. Cricket Ground (Cricket Pavilion)
2. Indoor Cricket Net
3. Swimming Pool
4. Fully Fledged Gym
5. Squash Court
6. Badminton Court

7. Tennis court
8. Indoor Games Room
9. Gallery
10. Conference halls

Further, it involves in the content creation and delivery business and provides pre-production, production, and post production services for animation and action films. Additionally, Mayajaal Entertainment Limited operates an online multilingual entertainment portal with approximately 30 television channels, multilingual radio channels, multilingual press, interactive events, live events, and stage plays on its Website www.numtv.com. The company was incorporated in 1997 and is based in Chennai, India. Mayajaal Entertainment Limited operates as a subsidiary of Pentamedia Graphics Limited.

SHOPPING MALL

In Maya Mall, we can find goodies like T-shirts, toys, stationeries, games, fun and party stuff. Music, fashion, jeweler, paintings, curios and many imported stuffs.

1. **Family Consumption/ Food Zone**

   Perishables: Processed such as fruits, frozen edible/food items including red meats.

   Non perishables: All packed edible items such as biscuits, chocolates, snacks, short eats, tetra packs, bottle drinks, tin packed items, baby foods, pet food etc.,

   Groceries: Branded packed items.

2. **Personal care Zone**

   Men, women and kids toiletries.

3. **Home ware Zone**

   Crockery/Cutlery items, cooking ranges, soft furnishing, wall clocks, Paintings, wall hangings, portable fountains, and other small utility items such as door/floor mats, stickers etc.

4. **Attire Zone**

Men's Zone: Suits, formal, semi formals, party, casual wears

Women's Zone: Western, ethnic, party, casuals

Family: Bed/ Pillow covers, towels etc.

5. **Fashion Zone**

Men's: Sunglasses, watches, perfumes, ties

Women's: Makeup kits, hand bags, sunglasses, watches and perfumes, small accessories, caps, clips, dots etc.

Fashion jewelry: Women and Children

6. **Foot Zone**

Foot wears for men, women and children. Necessary provisions for demonstration, trial are provided.

7. **Kiddy Zone**

Electronic toys, soft toys

Books: Comic/fun, educational

CD's: Educational, entertainment stationeries

Kid's utilities such as boxes, school bags, bi-cycle etc.

8. **Tech Zone**

Hardware

Display racks for laptops, palm tops, desktops and accessories. Technology and education based CD's.

Software

Software package displays with group racks for segments such as finance/ accounting, HR, Purchase, General management.

9. **Entertainment /Electronic Zone**

Cell Zone

CTVs, Audio players, washing machines, refrigerators, DVD players and other electronic items.

10. Film & Music Zone

Music: CD's and cassettes segregated based on album, star and genre.

DVD: Hollywood, bollywood and kollywood movies. Video music albums.

11. Book Zone

Classified as magazines/journals, books- IT, management, current updates etc.

12. Stationery Zone

Diaries, files, special note books, calendar, pens, office hangings, table-tops etc.

Shareholding Pattern

NO.	NAME OF THE HOLDERS	PERCENTAGE OF HOLDINGS
1	PENTAMEDIA GRAPHICS LIMITED	37.89
2	VESA HOLDINGS PRIVATE LIMITED	3.80
3	UDEEP BOGOLLU	0.45
4	SUMATHI SRIDHARAN	0.45
5	ANITA CHANDRASEKARAN	2.92
6	V.CHANDRASEKARAN	5.12
7	NIRMALA CHANDRASEKARAN	2.24
8	PUBLIC	27.16
9	OTHERS	19.97

1.3 Statement of the Problem

The aim is to study the impact of working capital management on profitability of the company.

Identifying the most influential component of working capital affecting the return on investment is taken as a problem to be studied upon.

1.4 Scope of the study

- ✓ The study finds out the element which in most influencing the profitability of the company
- ✓ The financial position of the organization like liquidity position through working capital related ratios.
- ✓ The study also helps in identifying which component of working capital helps in improving the profitability.

CHAPTER 2

REVIEW OF LITERATURE

1. Vivek U. Pimplapure and Pushparaj P. Kulkarni (2011) conducted a study on 'Working Capital Management: Impact of Profitability'. There is significant association between ROI and CR The correlation coefficient between ROI and LR is negative but found to be statistically significant. There is a negative relationship between the ROI and QR

2. Debasish Sur and Kaushik Chakraborty (2011) conducted a study on 'Evaluating Relationship of Working Capital and Profitability: A Study of Select Multinational Companies in the Indian Pharmaceutical Sector'. A positive relationship between efficiency of inventory management and profitability was observed in 86.60% cases, and in only 38.46% of these cases the relationship was found to be significant. Both significant favorable and adverse effects of the performance of debtor management on profitability was present

3. Ghosh and Maji (2003) made an empirical study on 'The relationship between utilization of current assets and operating profitability in the Indian cement and tea industries'. The study concluded that the degree of utilization of current assets is positively associated with the operating profitability of all the companies under study.

4. Bardia (2004) conducted a study on the issue pertaining to 'The relationship between working capital management and profitability of Navaratna steel manufacturing public sector enterprise'. This study revealed favorable influence of the liquidity of the company on its profitability.

5. Mallik *et al.* (2005) also carried out a study on the same issue with reference to some selected companies in the Indian pharmaceutical industry noticed that the joint influence of liquidity, efficiency of inventory management and that of credit management on the profitability was found statistically significant in 9 out of 17 pharmaceutical companies under study.

6. Julius Enqvist, Michael Graham, Jussi Nikkinen (2012) conducted a study on ‘The impact of working capital management on firm profitability in different business cycles: Evidence from Finland’ by The study examines the role of business cycles on the working capital profitability relationship using a sample of Finnish listed companies over an 18 year period. Study came to conclusion that the impact of business cycle on the working capital profitability relationship is more pronounced in economic downturns relative to economic booms. We further show that the significance of efficient inventory management and accounts receivables conversion periods increase during periods of economic downturn.

7. Dr Ioannis Lazaridis (2006) conducted as study on ‘The relationship between working capital management and profitability of listed companies in the Athens Stock Exchange’ by using a sample of 131 companies listed in the Athens Stock Exchange for the period of 2001-2004. The purpose of this study is to establish a relationship that is statistical significant between profitability, the cash conversion cycle and its components The results of research showed that there is statistical significance between profitability, measured through gross operating profit, and the cash conversion cycle.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Research Design

The research design is purely and simply the framework plan for a study that guides the collection and analysis of data. The function of researcher is to ensure that requires the data collected are accurate and economic. Analytical type of study is being carried out.

3.2 Objectives of the study

The objectives of the study are

3.2.1 Primary Objective

To know the impact of working capital management on profitability of Mayajaal Entertainment Ltd.

3.2.2 Secondary Objectives

1. To study the liquidity position of the company.
2. To study the relationship between various components of working capital on the profitability of the company.

3.3 Data and sources of data

The data collected for the study is collected from annual reports, balance sheet and profit and loss account.

3.3.1 Primary Data

Personal contacts are made with the officials and staff members of the finance department in the form of discussions and collection of reports.

3.3.2 Secondary Data

The data are collected from the annual reports, mainly from balance sheet and profit and loss account of the company.

3.4 Period of study

The study has been made for a period of five financial years from 2006-2007 to 2010-2011.

3.5 Tools used

- ✓ Ratio Analysis
- ✓ Regression Analysis

3.6 Limitations of the study

- ✓ The project is mainly based on information gathered from secondary data, mainly Balance Sheet and Profit & Loss A/C.
- ✓ The study does not take into account the various stages of business cycle.
- ✓ Study does not take into account the risk-return tradeoff.

CHAPTER 4

ANALYSIS AND INTERPRETATION

4.1 CURRENT RATIO

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Table 4.1.1 Current Ratio

Year	Current Assets In Rupees	Current Liabilities In Rupees	Ratio (In Times)
2006-2007	33,45,27,000	39,97,1,000	8.36
2007-2008	26,73,29,000	3,74,62,000	7.13
2008-2009	42,85,36,943	6,18,34,203	6.93
2009-2010	44,92,30,463	4,62,70,155	9.70
2010-2011	46,02,57,117	5,71,67,377	8.05

Table 4.1.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.340	.116	-.179	.03533

Table 4.1.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.000	1	.000	.392	.576
Residual	.004	3	.001		
Total	.004	4			

Table 4.1.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.241	.129	1.875	.158
CR	-.010	.016	-.626	.576

INTERPRETATION

The table 4.1.1 shows that the current ratio is 8.36 from 2006-2007, it decreased in the year 2007-2008 to 7.13, and in 2008 to 2009 further decreased to 2008-2009. In the year 2009-2010 increased to 9.7 and in 2010-2011 again decreased to 8.05. The standard norm for current ratio is 2:1. The company has current ratio of 8.05 which is satisfactory.

This table 4.1.2 provides the R and R^2 value. The R value is 0.340, which represents the simple correlation and, therefore, indicates a low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, current ratio. In this case, 11.6% can be explained.

The table 4.1.3 compares the significance level is compared with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable current ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable Current ratio does not predict the dependent variable return on Investment.

The table 4.1.4 presents the unstandardized coefficients of the regression equation as:

Return on investment=.241-0.10(current ratio) +e

It means that for every increase in current ratio, -0.10 percent decrease in return on investment is predicted.

4.2 QUICK RATIO

$$\text{Quick Ratio} = \frac{\text{Liquid Assets}}{\text{Current Liabilities}}$$

Table 4.2.1 Quick Ratio

Year	Liquid Assets (In Rupees)	Current Liabilities (In Rupees)	Ratio(In Times)
2006-2007	58,95,000	3,99,71,000	0.14
2007-2008	19,68,000	3,74,62,000	0.05
2008-2009	69,35,260	6,18,34,203	0.11
2009-2010	21,67,441	4,62,70,155	0.04
2010-2011	45,79,522	5,71,67,377	0.08

Table 4.2.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.136	.019	-.309	.03721

Table 4.2.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.000	1	.000	.057	.827
Residual	.004	3	.001		
Total	.004	4			

Table 4.2.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.171	.042	4.048	.027
QR	-.105	.441	-.238	.827

INTERPRETATION

The table 4.2.1 shows the quick ratio is 0.14 in the year 2006-2007, it decreased to 0.05 in the year 2007-2008. It increased to 0.11 in the year 2008-2009 and in the year 2009-2010 it decreased to 0.04. Finally it increased to 0.08 in the year 2010-2011. The standard norm for quick ratio is 1:1. The firm has 0.08 in the year 2010-2011 which is below the normal standards.

The table 4.2.2 provides the R and R^2 value. The R value is 0.136, which represents the simple correlation and, therefore, indicates a low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, quick ratio. In this case, 1.9% can be explained.

The table 4.2.3 compares the significance level with alpha level (0.05) which is greater than 0.05, so it can be concluded that the independent variable quick ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable quick ratio does not predict the dependent variable return on Investment.

The table 4.2.4 presents the under unstandardized coefficients of the regression equation as:

Return on investment=.171-0.105(Quick ratio) +e

It means that for every increase in quick ratio, -0.105 percent decrease in return on investment is predicted.

4.3 INVENTORY TURNOVER RATIO

$$\text{Inventory Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Inventories}}$$

Table 4.3.1 Inventory Turnover Ratio

Year	Cost of Goods Sold (In Rupees)	Inventories (In Rupees)	Ratio(In Times)
2006-2007	2,58,94,000	12,96,22,000	0.19
2007-2008	4,27,11,796	12,90,21,000	0.33
2008-2009	8,86,91,464	17,25,08,758	0.51
2009-2010	3,14,81,664	18,28,09,435	0.17
2010-2011	2,20,83,034	17,90,29,016	0.12

Table 4.3.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.686	.470	.294	.02734

Table 4.3.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.002	1	.002	2.664	.201
Residual	.002	3	.001		
Total	.004	4			

Table 4.3.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.123	.026	4.694	.018
ITR	.142	.087	1.632	.201

INTERPRETATION

The table 4.3.1 shows the inventory turnover ratio is 0.19 for the year 2006 to 2007. It increased to 0.33 in the year 2007-2008. In the year 2008-2009 increased to 0.51. It decreased to 0.17 in the year 2009-2010. Finally again it reduced to 0.12. A low inventory turnover implies over-investment in inventories, dull business, and poor quality of goods, stock accumulation, and accumulation of obsolete and slow moving goods. The inventory turnover ratio is also an index of profitability, where a high ratio signifies more profit, a low ratio signifies low profit.

The table 4.3.2 provides the R and R^2 value. The R value is 0.686, which represents the simple correlation and indicates a moderate degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, inventory turnover ratio. In this case, 47% can be explained.

The table 4.3.3 compares the significance level with alpha level (0.05) is greater than 0.05, so it can be concluded that the independent variable inventory turnover ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable inventory turnover ratio does not show significant relationship with the dependent variable return on investment.

The table 4.3.4 presents the unstandardized coefficients of the regression equation as:

Return on investment=.123+.142(Inventory turnover ratio) +e

It means that for every increase in inventory turnover, 0.142 percent increase in return on investment is predicted.

4.4 DEBTOR'S TURNOVER RATIO

$$\text{Debtors Turnover Ratio} = \frac{\text{Sales}}{\text{Sundry Debtors}}$$

Table 4.4.1 Debtors Turnover Ratio

Year	Sales (In Rupees)	Sundry Debtors (In Rupees)	Ratio(In Times)
2006-2007	15,74,16,000	2,98,68,000	5.27
2007-2008	20,15,57,000	3,26,22,000	6.17
2008-2009	30,73,58,476	1,74,80,182	17.58
2009-2010	23,27,69,403	1,94,78,214	11.95
2010-2011	25,47,30,649	1,12,85,985	22.57

Table 4.4.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.620	.385	.180	.02946

Table 4.4.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.002	1	.002	1.876	.264
Residual	.003	3	.001		
Total	.004	4			

Table 4.4.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.127	.029	4.445	.021
DTR	.003	.002	1.370	.264

INTERPRETATION

The table 4.4.1 shows the debtors turnover ratio of 5.27 in the year 2006-2007. It increased to 6.17 in the year 2007-2008. In the year 2008-2009 again it increased to 17.58. It reduced to 11.95 in the year 2009-2010. Debtors' turnover ratio is high in the year 2010-2011.

The table 4.4.2 provides the R and R^2 value. The R value is 0.620, which represents the simple correlation and, therefore, indicates a moderate degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, debtors turnover ratio. In this case, 38.5% can be explained.

The table 4.4.3 compares the significance level with alpha (0.05) which is greater than 0.05, so it can be concluded that the independent variable debtors turnover ratio does not show significant relationship with the dependent variable return on investment. The independent variable debtors' turnover ratio does not predict the dependent variable return on Investment.

The table 4.4.4 presents the unstandardized coefficients of the regression equation as:

Return on investment=.127+0.03(Debtors turnover ratio) +e

It means that for every increase in debtors' turnover, 0.03 units increase in return on investment is predicted.

4.5 WORKING CAPITAL TURNOVER RATIO

$$\textbf{Working Capital Turnover Ratio} = \frac{\textbf{Cost of Sales}}{\textbf{Net Working capital}}$$

Table 4.5.1 Working Capital Turnover Ratio

Year	Cost of Sales (In Rupees)	Net Working Capital (In Rupees)	Ratio(In Times)
2006-2007	2,58,94,000	29,45,56,000	0.08
2007-2008	4,27,11,796	22,98,67,000	0.18
2008-2009	8,86,91,464	36,67,02,740	0.24
2009-2010	3,14,81,664	40,29,60,308	0.07
2010-2011	2,20,83,034	40,30,89,740	0.05

Table 4.5.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.616	.379	.172	.02959

Table 4.5.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.002	1	.002	1.834	.269
Residual	.003	3	.001		
Total	.004	4			

Table 4.5.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.129	.027	4.716	.018
WCTR	.250	.184	1.354	.269

INTERPRETATION

The table 4.5.1 shows the working capital turnover ratio, 0.08 in the year 2006-2007 and it increased to 0.18 in the year 2007-2008 and further it increased to 0.24 in the year 2008-2009. In the year 2009-2010 it decreased to 0.07 and further decreased to 0.05 in the year 2010-2011. A high ratio indicates efficient utilization of working capital and a low ratio indicates inefficient utilization.

The table 4.5.2 provides the R and R^2 value. The R value is 0.616, which represents the simple correlation and, therefore, indicates moderate degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, working capital turnover ratio. In this case, 37.9% can be explained.

The table 4.5.3 compares the significance with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable working capital turnover ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable working capital turnover ratio does not predict the dependent variable return on Investment.

The table 4.5.4 presents the unstandardized coefficients of the regression equation as:

Return on investment=.129+0.250(working capital turnover ratio) +e

It means that for every increase in working capital turnover ratio, 0.250 percent increase in return on investment is predicted.

4.6 CURRENT ASSETS TO TOTAL ASSETS RATIO

$$\text{Current Assets to Total Assets Ratio} = \frac{\text{Current Assets}}{\text{Total Assets}}$$

Table 4.6.1 Current Assets to Total Assets Turnover Ratio

Year	Current Assets (In Rupees)	Fixed Assets (In Rupees)	Total Assets (In Rupees)	Ratio (In Times)
2006-2007	33,45,27,000	55,69,28,000	89,14,55,000	0.37
2007-2008	26,73,29,000	71,03,08,000	97,76,37,000	0.27
2008-2009	42,85,36,943	66,67,24,615	1,09,52,61,558	0.39
2009-2010	44,92,30,463	62,89,78,376	1,07,82,08,839	0.41
2010-2011	46,02,57,117	68,00,34,785	1,14,02,91,902	0.40

Table 4.6.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.311	.097	-.204	.03570

Table 4.6.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.000	1	.000	.322	.610
Residual	.004	3	.001		
Total	.004	4			

Table 4.6.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.095	.117	.814	.475
CATAR	.177	.312	.567	.610

INTERPRETATION

The table 4.6.1 shows the current assets to total assets ratio which indicates the proportion of current assets investment to total investment in assets. The table reveals that the company maintains its Current Assets approximately 37% of its Total Assets by every year.

The table 4.6.2 provides the R and R^2 value. The R value is 0.311, which represents the simple correlation and, therefore, indicates low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, current assets to total assets ratio. In this case, 9.7% can be explained.

The table 4.6.3 compares the significance level with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable current assets to total assets ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable current assets to total assets ratio does not predict the dependent variable return on Investment.

The table 4.6.4 presents the unstandardized coefficients of the regression equation as:

Return on investment=.095+0.177(current assets to total assets ratio) +e

It means that for every increase in current assets to total assets ratio, 0.177 percent increase in return on investment is predicted.

4.7 CURRENT ASSETS TO SALES RATIO

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$$\text{Current Assets to Sales Ratio} = \frac{\text{Current Assets}}{\text{Sales}}$$

Table 4.7.1 Current Assets to Sales Ratio

Year	Sales (In Rupees)	Current Assets (In Rupees)	Ratio(In Times)
2006-2007	15,74,16,000	33,45,27,000	2.12
2007-2008	20,15,57,000	26,73,29,000	1.32
2008-2009	30,73,58,476	42,85,36,943	1.39
2009-2010	23,27,69,403	44,92,30,463	1.92
2010-2011	25,47,30,649	46,02,57,117	1.80

Table 4.7.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.577	.333	.111	.03068

Table 4.7.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.001	1	.001	1.498	.308
Residual	.003	3	.001		
Total	.004	4			

Table 4.7.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.255	.077	3.286	.046
CASR	-.054	.044	-1.224	.308

INTERPRETATION

The table 4.7.1 shows current assets to sales ratio. It indicates efficiently with which current assets turn into sales. A lower current asset to sales ratio implies by and large a more efficient use of funds. The table reveals that on an average of the Current Assets to Sales is approximately 1.71.

The table 4.7.2 provides the R and R^2 value. The R value is 0.577, which represents the simple correlation and, therefore, indicates moderate degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, current assets to sales ratio. In this case, 33.3% can be explained.

The table 4.7.3 compares the significance level with alpha level (0.05), which is greater than 0.05 so we can conclude that the independent variable current assets to sales ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable current assets to sales ratio do not predict the dependent variable return on Investment.

The table 4.7.4 presents the unstandardized coefficients of the regression equation as:

Return on investment=.255-0.054(current assets to sales ratio) +e

It means that for every increase in current assets to sales ratio, -0.054 percent decrease in return on investment is predicted.

4.8 CASH TURNOVER RATIO

$$\textbf{Cash Turnover Ratio} = \frac{\textbf{Cost of Sales}}{\textbf{Cash}}$$

Table 4.8.1 Cash Turnover Ratio

Year	Cost of Sales (In Rupees)	Cash (In Rupees)	Ratio (In Times)
2006-2007	2,58,94,000	58,95,000	4.39
2007-2008	4,27,11,796	19,68,000	21.70
2008-2009	8,86,91,464	69,35,260	12.78
2009-2010	3,14,81,664	21,67,441	14.52
2010-2011	2,20,83,034	45,79,522	4.82

Table 4.8.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.240	.057	-.257	.03647

Table 4.8.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.000	1	.000	.183	.698
Residual	.004	3	.001		
Total	.004	4			

Table 4.8.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.149	.034	4.435	.021
CTR	.001	.003	.427	.698

INTERPRETATION

The table 4.8.1 shows that cash turnover fluctuates, in the year 2006-2007, its 4.39 and in the year 2007-2008 it increased to 21.70 and in 2008-2009 it decreased to 14.52 and in the year 2010-2011 it decreased to 4.82. It can be concluded that the company turn over its cash balance more times in the year 2008-2009.

The table 4.8.2 provides the R and R^2 value. The R value is 0.240, which represents the simple correlation and indicates low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, cash turnover ratio. In this case, 5.7% can be explained.

The table 4.8.3 compares the significance level with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable cash turnover ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable cash turnover ratio does not predict the dependent variable return on Investment.

The table 4.8.4 presents the unstandardized coefficients of the regression equation as:

Return on investment=.149+0.01(cash turnover ratio) +e

It means that for every increase in cash turnover ratio, 0.01 percent increase in return on investment is predicted.

4.9 NET WORKING CAPITAL LEVERAGE RATIO

$$\textbf{Net Working Capital Leverage} = \frac{\textbf{Net working Capital}}{\textbf{Total assets}}$$

Table 4.9.1 Net Working Capital Leverage

Year	NWC	Total Assets	NWCL
2006-2007	29,45,56,000	89,14,55,000	0.33
2007-2008	22,98,67,000	97,76,37,000	0.23
2008-2009	36,67,02,740	1,09,52,61,558	0.33
2009-2010	40,29,60,308	1,07,82,08,839	0.37
2010-2011	40,30,89,740	1,14,02,91,902	0.35

Table 4.9.2 Model Summary

R	R SQUARE	ADJUSTED R SQUARE	STD. ERROR OF THE ESTIMATE
.239	.057	-.257	.03647

Table 4.9.3 Anova

MODEL	SUM OF SQUARES	DF	MEAN SQUARE	F	SIG.
Regression	.000	1	.000	.182	.698
Residual	.004	3	.001		
Total	.004	4			

Table 4.9.4 Coefficients

MODEL	UNSTANDARDIZED COEFFICIENTS		T	SIG.
	B	STD. ERROR		
(Constant)	.114	.112	1.012	.386
NETWCL	.146	.342	.427	.698

INTERPRETATION

The table 4.9.1 shows the net working capital leverage ratio. It shows the proportion of net working capital to total assets. The net working capital leverage ratio is 0.33 in the year 2006-2007 and it decreases to 0.23 in the year 2007-2008. In the year 2008-2009 again it increased to 0.33. it increased to 0.37 in the year 2009-2010. Further it decreased to 0.35 in the year 2010-2011.

The table 4.9.2 provides the R and R^2 value. The R value is 0.239, which represents the simple correlation and indicates low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, net working capital leverage. In this case, 5.7% can be explained.

The table 4.9.3 compares the significance level with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable net working capital leverage does not show statistically significant relationship with the dependent variable return on investment. The independent variable net working capital leverage does not predict the dependent variable return on Investment.

The table 4.9.4 presents the unstandardized coefficients of the regression equation as:

Return on investment=.114+.146(net working capital leverage) +e

It means that for every increase in net working capital leverage, 0.146 percent increase in return on investment is predicted

CHAPTER 5

5.1 Findings

Current Ratio

Current ratio is 8.36 from 2006-2007, it decreased in the year 2007-2008 to 7.13, and in 2008 to 2009 further decreased to 2008-2009. In the year 2009-2010 increased to 9.7 and in 2010-2011 again decreased to 8.05. The standard norm for current ratio is 2:1. The company has current ratio of 8.05 which is satisfactory.

The R value is 0.340, which represents the simple correlation and, therefore, indicates a low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, current ratio. In this case, 11.6% can be explained.

The significance level is compared with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable current ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable Current ratio does not predict the dependent variable return on Investment.

The unstandardized coefficient of the regression equation is:

Return on investment=.241-0.10(current ratio) +e

It means that for every increase in current ratio, -0.10 percent decrease in return on investment is predicted.

Quick Ratio

The quick ratio is 0.14 in the year 2006-2007, it decreased to 0.05 in the year 2007-2008. It increased to 0.11 in the year 2008-2009 and in the year 2009-2010 it decreased to 0.04. Finally it increased to 0.08 in the year 2010-2011. The standard norm for quick ratio is 1:1. The firm has 0.08 in the year 2010-2011 which is below the normal standards.

The R value is 0.136, which represents the simple correlation and, therefore, indicates a low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, quick ratio. In this case, 1.9% can be explained.

The significance level is compared with alpha level (0.05) which is greater than 0.05, so it can be concluded that the independent variable quick ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable quick ratio does not predict the dependent variable return on Investment.

The unstandardized coefficient of the regression equation is:

Return on investment=.171-0.105(Quick ratio) +e

It means that for every increase in quick ratio, -0.105 percent decrease in return on investment is predicted.

Inventory turnover ratio

The inventory turnover ratio is 0.19 for the year 2006 to 2007. It increased to 0.33 in the year 2007-2008. In the year 2008-2009 increased to 0.51. It decreased to 0.17 in the year 2009-2010. Finally again it reduced to 0.12. A low inventory turnover implies over-investment in inventories, dull business, and poor quality of goods, stock accumulation, and accumulation of obsolete and slow moving goods. The inventory turnover ratio is also an index of profitability, where a high ratio signifies more profit; a low ratio signifies low profit.

The R value is 0.686, which represents the simple correlation and indicates a moderate degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, inventory turnover ratio. In this case, 47% can be explained.

The significance level is compared with alpha level (0.05) and is greater than 0.05, so it can be concluded that the independent variable inventory turnover ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable inventory turnover ratio does not show significant relationship with the dependent variable return on investment.

The unstandardized coefficient of the regression equation is:

Return on investment=.123+.142(Inventory turnover ratio) +e

It means that for every increase in inventory turnover, 0.142 percent increase in return on investment is predicted.

Debtors' turnover ratio

The debtors' turnover ratio is 5.27 in the year 2006-2007. It increased to 6.17 in the year 2007-2008. In the year 2008-2009 again it increased to 17.58. It reduced to 11.95 in the year 2009-2010. Debtors' turnover ratio is high in the year 2010-2011.

The R value is 0.620, which represents the simple correlation and, therefore, indicates a moderate degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, debtors turnover ratio. In this case, 38.5% can be explained.

The significance level is compared with alpha level (0.05) which is greater than 0.05, so it can be concluded that the independent variable debtors turnover ratio does not show significant relationship with the dependent variable return on investment. The independent variable debtors' turnover ratio does not predict the dependent variable return on Investment.

The unstandardized coefficient of the regression equation is:

Return on investment=.127+0.03(Debtors turnover ratio) +e

It means that for every increase in debtors' turnover, 0.03 units increase in return on investment is predicted.

Current assets to total assets ratio

The current assets to total assets ratio reveals that the company maintains its Current Assets approximately 37% of its Total Assets by every year.

The R value is 0.311, which represents the simple correlation and, therefore, indicates low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, current assets to total assets ratio. In this case, 9.7% can be explained.

The significance level is compared with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable current assets to total assets ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable current assets to total assets ratio does not predict the dependent variable return on Investment.

The unstandardized coefficient of the regression equation is:

Return on investment=.095+0.177(current assets to total assets ratio) +e

It means that for every increase in current assets to total assets ratio, 0.177 percent increase in return on investment is predicted.

Current assets to sales ratio

The table reveals that on an average of the Current Assets to Sales is approximately 1.71.

The R value is 0.577, which represents the simple correlation and, therefore, indicates moderate degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, current assets to sales ratio. In this case, 33.3% can be explained.

The significance level is compared with alpha level (0.05), which is greater than 0.05 so we can conclude that the independent variable current assets to sales ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable current assets to sales ratio do not predict the dependent variable return on Investment.

The unstandardized coefficient of the regression equation is:

Return on investment=.255-0.054(current assets to sales ratio) +e

It means that for every increase in current assets to sales ratio, -0.054 percent decrease in return on investment is predicted.

Cash turnover ratio

The cash turnover fluctuates, in the year 2006-2007, its 4.39 and in the year 2007-2008 it increased to 21.70 and in 2008-2009 it decreased to 14.52 and in the year 2010-2011 it decreased to 4.82. It can be concluded that the company turn over its cash balance more times in the year 2008-2009

The R value is 0.240, which represents the simple correlation and indicates low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, cash turnover ratio. In this case, 5.7% can be explained.

The significance level is compared with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable cash turnover ratio does not show statistically significant relationship with the dependent variable return on investment. The independent variable cash turnover ratio does not predict the dependent variable return on Investment.

The unstandardized coefficient of the regression equation is:

Return on investment=.149+0.01(cash turnover ratio) +e

It means that for every increase in cash turnover ratio, 0.01 percent increase in return on investment is predicted.

Net working capital leverage ratio

The net working capital leverage ratio is 0.33 in the year 2006-2007 and it decreases to 0.23 in the year 2007-2008. In the year 2008-2009 again it increased to 0.33. it increased to 0.37 in the year 2009-2010. Further it decreased to 0.35 in the year 2010-2011.

The R value is 0.239, which represents the simple correlation and indicates low degree of correlation. The R^2 value indicates how much of the dependent variable, return on investment, can be explained by the independent variable, net working capital leverage. In this case, 5.7% can be explained.

The significance level is compared with alpha level (0.05), which is greater than 0.05 so it can be concluded that the independent variable net working capital leverage does not show statistically significant relationship with the dependent variable return on investment. The independent variable net working capital leverage does not predict the dependent variable return on Investment.

The unstandardized coefficient of the regression equation is:

Return on investment=.114+.146(net working capital leverage) +e

It means that for every increase in net working capital leverage, 0.146 percent increase in return on investment is predicted

5.2 Suggestions

1. Company can go for sourcing money through debt which is the cheapest source rather than sourcing from banks for working capital requirements.

2. Maintenance can be made rather than building new projects.

3. Debt policy can be reviewed so that company will have enough time to meet their dues to pay to creditors.

4. Sales can be increased, by following different strategy because in malls things may become out of fashion and stock may become blocked which leads to blocking of working capital

5. Sales can also be increased by giving credit to buyers.

6. Credit period for customers can be provided but the customers should be financially sound enough to repay

7. Current assets like cash, marketable securities can be utilized more effectively.

8. Attracting more customers by following different strategies of promoting, even though they have a good image in the minds of customers.

5.3 Conclusion

Inventory turnover ratio has moderate correlation of 0.686 with return on investment. Debtors' turnover ratio has of 0.620 with return on investment. Working capital turnover ratio has moderate correlation of 0.616 with return on investment. Current assets to sales ratio have r value of 0.577 which is moderately correlated with return on investment.

Inventory turnover ratio is the most influencing variable while comparing to other variables. Therefore it can be concluded that company turns out stock to sales and hence less money is required to finance the inventory.

Debtor's turnover ratio is the causal variable next to inventory turnover ratio, the debtors are more liquid and chances of bad debts are low. Debtors can be easily converted into cash again.

Therefore the study is concluded that the working capital has a causal influence on the profitability of the firm measured through return on investment.

5.4 Scope for Further Study

- ✓ Study can be conducted by considering how many days of working capital is held by companies in India
- ✓ Study can also be used to determine whether working capital turnover days vary from company to company and how does it vary over a period of time.
- ✓ By considering business cycles or trade cycle, the optimum need for working capital requirements can be analyzed
- ✓ Extended study can be done by comparing with industrial manufacturing sector and services sector where working capital plays a major role.

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