



# ACHARYA INSTITUTE OF TECHNOLOGY

(Affiliated to Visvesvaraya Technological University, Belagavi, Approved by AICTE, New Delhi and Accredited by NBA and NAAC)

Date: 04/05/2018

## CERTIFICATE

This is to certify that **Miss Nidhi Konnur** bearing **USN 1AZ16MBA44** is a bonafide student of Master of Business Administration course of the Institute 2016-18 batch, affiliated to Visvesvaraya Technological University, Belgaum. Project report on "A Study on Implementation of Credit Rating Model for SMEs with reference to Business Toys Private Limited" is prepared by her under the guidance of **Prof. Mahak Balani**, in partial fulfillment of the requirements for the award of the degree of Master of Business Administration, Visvesvaraya Technological University, Belgaum, Karnataka.

Signature of Internal Guide

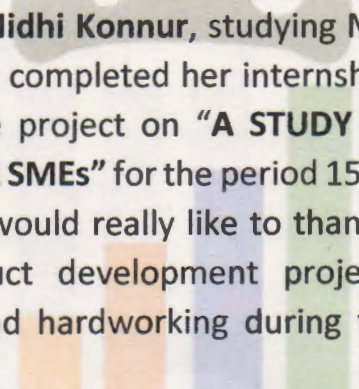
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Signature of Principal/Dean Academics  
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11 April, 2018

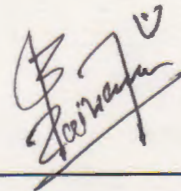
**TO WHOMSOEVER IT MAY CONCERN**



This is to certify that **Miss Nidhi Konnur**, studying MBA at Acharya Institute of Technology has successfully completed her internship at Business Toys Private Limited and completed the project on **"A STUDY ON IMPLIMENTATION OF CREDIT RATING MODEL FOR SMEs"** for the period 15 January, 2018 to 24 March, 2018. Team Business Toys would really like to thank Nidhi for her remarkable contribution in our product development project. We found her really committed, professional and hardworking during the entire duration of her internship.

We wish her every success in her career going ahead.

For, Business Toys Private Limited



Omkar Raikar  
Director – Technology & Innovations

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## ACKNOWLEDGEMENT

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I am truly grateful to my external guide Mr. Omkar, Co-founder/Director, Business Toys Pvt Ltd., and my internal research Guide, Prof. Mahak Balani, faculty of M.B.A Department, Acharya Institute of Technology for their research guidance, encouragement, and opportunities provided.

My sincere and heartfelt thanks to all my teachers at the Department of MBA, Acharya Institute of Technology for their valuable support and guidance.

Last, but not least, I want to express my deep appreciation to my parents for their unstinted support.

**Nidhi Konnur**

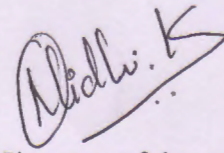
**1AZ16MBA44**

## DECLARATION

I, Nidhi Konnur, hereby declare that the Internship report entitled "A study on Implementation of Credit Rating Model for SMEs with reference to Business Toys Private Limited" prepared by me under the guidance of Prof. Mahak Balani, Faculty of M.B.A Department, Acharya Institute of Technology and external assistance by Mr. Omkar Raikar, Co-founder/Director at Business Toys Pvt Ltd. I also declare that this Internship work is towards the partial fulfilment of the university regulations for the award of degree of Master of Business Administration by Visvesvaraya Technological University, Belgaum. I have undergone a summer project for a period of Ten weeks. I further declare that this project is based on the original study undertaken by me and has not been submitted for the award of any degree/diploma from any other University / Institution.

Place: Bangalore

Date: 4 May, 2018



Signature of the student

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# CHAPTER 1 : INTRODUCTION

## 1.1 Introduction

What contributes to the strong backbone of Indian economy is the MSME sector. Around 63.7% of the jobs created by companies belonging to manufacturing and service SMEs say the industry research report published by SMERA (small and medium enterprise rating) one of India's top credit rating agency. MSMEs are present and clustered across India and has played a very crucial role post Industrial revolution. Roughly it contributes to 56% of the India's manufacturing GDP. Now a day's SMEs are making a new buzz in India's contribution to the exports and thus improving the exchange rate stability. Government has been increasingly supporting the growth of SMEs as they are the future growth enablers for Indian Economy.

Recent meltdown in India's Banking system has impacted the economy to its core. The rising tension of NPAs in public sector banks is a huge worry to Government, Banks as well as central bank. Its agreed point the majority of the chunk of NPAs has come from major large-cap players, but SMEs also have their contribution to rising NPAs. The report by RBI says the improper lending practices to stressed SMEs has also caused major harm to the Banking System. Although majority of the default cases arise due to sectoral downtrends which SMEs cannot withstand, but as a top standard policy it has increasingly become important for Banks as well as SMEs to assess their financial as well as business performance.

Along with the structural issues, SMEs also face multiple challenges like raising funds from Banks for capex and working capital, managing vendor relations so as to get their trust and establish bargaining clients, also to maintain relationships with customers and other stakeholders. Credit rating agencies have seen a big opportunity to address all the aforementioned challenges and come up with a product to address and evaluate the companies in 360-degree approach to help SMEs and well as all connected stakeholders to understand and laydown a strong foundation for world class business practices.

There are various types of credit rating in India, they are:

- **Bond Rating:**  
Rating the securities issued by companies, government and so forth is called security rating.
- **Fixed Deposit Rating:**  
Under this rating, creditworthiness of banks is being assessed by the client who wishes to keep their funds as fixed deposit.
- **Commercial paper Rating:**  
It is a rating assigned to commercial paper which enables the investors to know the creditworthiness of the issuing party.
- **Equity Rating:**  
It is a rating assigned to Equity Share which enables the investors to know the creditworthiness of the issuing party.
- **Preference share rating**  
It is a rating assigned to Preference share which enables the investors to know the creditworthiness of the issuing party.
- **Borrowers Rating**  
Ratings issued to borrowers of funds or capital is known as Borrowers Rating
- **Individual Rating**  
Ratings issued to Individual of funds or capital is known as Individual Rating
- **Structured Obligation**  
It is a rating assigned to Structured Obligation which enables the investors to know the creditworthiness of the issuing party.



Some of the Credit Rating Companies in India are:

- Fitch Ratings
- SME Rating Agency of India Ltd.
- CRISIL Limited
- Credit Analysis and Research Limited
- International Credit Rating Agency

## 1.2 Industry Profile

Small and Medium Enterprises are significant sector of the Indian economy. These are key contributors to the GDP, accounting for a significant proportion of exports. SME are significantly employment generators. Estimates, more than 51 million working enterprises employed over 117 million people and contributed nearly 37% to India's GDP by March 2015.

Further down, in 2006, according to Small & Medium Enterprises Development Act, SMEs are classified based on the nature of business is:

**Manufacturing Enterprises** - occupied with manufacture/ production of goods identified with any industry indicated in the first schedule to the industries or employing plant and machinery during the time spent esteem expansion to the last item having an all-around characterized name or character or utilize. Administration undertakings - occupied with giving or rendering of administrations.

**Service enterprises** - involved in providing or execution of services.

Within these classification undertakings are delegated as small or medium subject to the scale of investment in plant & machinery for manufacturing enterprises or equipment for service enterprises.

Till date 241 companies were listed on SME, out of which only 195 are listed as of date. Out of 195, 4 companies are suspended and 191 are eligible for trading on BSE SME. The current market capitalization of BSE SME listed companies is ₹ 11,418.53 crore and market capitalization of companies listed on SME till date is ₹ 21,740.42 crore. Between 2006-07 and 2013-14, the market value of investments made in fixed assets by SMEs increased more than 55%. To be sure, the number of SMEs has grown since, as has employment and investments in fixed assets with them.

## **Growth of SME sector**

The sector's contribution to GDP growth and employment is well below the levels seen in developed and other emerging economies. It is expected that the agenda of inclusive growth being executed by the government will lead to more support for SMEs to flourish.

Recent government programs such as 'Make in India', 'Start-Up India' and 'Stand-Up Indians' are expected to strengthen SMEs and make them competitive. The increase in investment limits proposed in the SME Amendment Bill, 2015 is a welcome move, taking into consideration, the changes in the price index and rise in input costs, and is expected to permit the incremental class of enterprises to gain and enter competition

According to latest census of the SME sector, the funding requirement of these enterprises was typically between Rs 1 lakh and Rs 25 lakh and was largely unmet. Just 5.18% of the units, both recorded and unlisted had benefited of fund through institutional sources and 2.05% from non-institutional sources, which implies an expansive 92.77% did not approach credit or relied upon self-financing.

Getting banks to extend credit facilities is a huge challenge, given SMEs' inherent shortcomings, defects in conveyance models and remaining lacks in empowering condition for financial administrations, i.e. the financial related framework covering bookkeeping and inspecting principles, credit detailing frameworks, and security and indebtedness government.

## **Future of SMEs**

By 2025, Indian Economy is expected to grow and reach \$ 5 Billion according to Prime Minister Narendra Modi's Ache Din. SME is one of the key drivers of this social economic growth. Therefore, it is considered to be the backbone of our economic development. As the SMEs are the key drivers, Prime Minister Narendra Modi has offered them many schemes under which the loan limits have been raised.

## **1.3 Company Profile**

Business Toys Private Limited is Edu-tech and Consultancy Company was incorporated in the year December 2016. Business Toys is initiated by alumnus of IIMs and corporate executives. Business Toys seek to offer cutting edge technology-based learning platform for students

through simulating the etc. Which are completely fun based yet imparts important business skills to enable students to get into top jobs in the corporate world. Apart from building games and simulation, Co-founders are into Consultancy.

Product portfolio include Gamified Online Courses, Gamified Assessments and Gamified Business simulation. The other services provided by Business toys include consultancy services in Data Science, Financial Research, Credit Ratings and Market Research. The company has its presence across South India and now penetrating in North Indian cities.

### **1.3.1 Promoters**

Promoters of Business Toys Private Limited are:

#### **Omkar Raikar**

Omkar Raikar is Co-Founder of Business Toys, Omkar spread heads retail & Institution segment. A passionate trainer Omkar, helps students & corporates build skills like financial modeling & business analytics. Omkar has 3 years of corporate experience as Rating Analyst in CRISIL & Edelweiss. He has a post-graduate management degree and holds bachelor's degree in Computer Science from NIT Goa.

#### **Uttam Tiwari**

Uttam Tiwari is Co-Founder of Business Toys and manages research & development division, He works closely with corporates in development of various skill-based industry-oriented courses. He is having 4 years of experience as Associate Fund Manager in a Buy side firm tracking pharma, Agri, Chemical and Plastic Industry. He has a post-graduation management degree and holds bachelor's degree in B. Pharmacy from University of Pune.

### **1.3.2 Vision Mission & Quality Policy**

**Vision:** Learnings celebrated is the concept which we aim to achieve in every classroom across India.

**Mission:**

- To deliver fun & activity-based learning via, games and simulations to make the classroom livelier.
- To orient students, mind to attend classes and be participative.

- To drive in corporate applications in the classroom by using technology aiming the concept of bringing corporate world to classroom.

### **1.3.3 Product / services profile**

#### **1) Foundation Programs:**

- A. Business Analysis Certification Program
- B. Financial Analysis Certification Program

#### **2) Advance Programs:**

##### A. Finance:

- Equity Research Analyst Certification Program
- Credit Analysis Certification Program
- Advance Financial Programming
- Investment Banking Certification Program

##### B. Marketing:

- Business Analytics with R-Programming
- Retail Analytics
- Digital Marketing
- Marketing Analytics

##### C. Human Resource:

- Human Resource Analytics

### **1.3.4 Areas of operation**

- Web based platform
- Institutional clients

### **1.3.5 Infrastructure facilities**

Business Toys Private Limited is a start-up which was started two years back. As the company is still in the initial stage, there is no much investment done in the infrastructure of the company. But still the company provides a better working condition to its employees to work efficiently like enough place to sit and work, proper ventilation, drinking water facility, food facility etc.

Sr. No	Particulars	Capacity
1	Seating Capacity	30 Cubicals
2	Computer Systems	25 Systems
3	Number of dedicated Wi-Fi connections	50 Connections
4	Back-up power	12 Hours

### 1.4SWOT Analysis

<b>Strength</b>	<b>Weakness</b>
<ul style="list-style-type: none"> <li>• Fun based and simulation-based learning pedagogy.</li> <li>• Expertise in strategic thinking and implementation.</li> <li>• Adapting new technologies and innovations.</li> <li>• Strong networks and Industry connections.</li> </ul>	<ul style="list-style-type: none"> <li>• Client dependency.</li> <li>• Low brand awareness.</li> <li>• Limited retail presence.</li> </ul>
<b>Opportunities</b>	<b>Threat</b>
<ul style="list-style-type: none"> <li>• To increase number of customer across India.</li> <li>• Collaborations with larger universities.</li> </ul>	<ul style="list-style-type: none"> <li>• Increasing competition through various online EdTech Companies.</li> </ul>

## **1.5 Future Growth and Prospects**

Rapidly expanding its markets and complete bootstrapped startup, Business Toys is expanding its footsteps across India by following means:

- Planning to expand its training business across cities in Andhra Pradesh, Telangana, Tamil Nadu and Kerala. It is gradually planning to expand its sales team to 25 members in order to cater to north Indian Cities like Delhi, Lukhnow, Gugao, Mumbai, etc.
- Business Toys is also making its mark into online edutech space with has been a long sighted vision of its founder. It has already launched new Eduetch product lines in Assessments which can be used by recruiters and well as Education Institutes.
- The growth plan also includes, seeking for institutional funding which will enable Business Toys to aggressively target larger market share and climb the revenue ladder as quickly as possible.

## **1.6 About Mold-Tek Packaging Limited**

MTPL was established in 1986, is the front-runner in rigid plastic packaging in India. MTPL is engaged in the manufacturing of moulded containers for lube, foods, paints and additional products. To ensure faster supplies it has three stock points and seven processing plants spread across India. MTPI, has a 20000 TPA moulding capacity. It has introduced spouts and In-Mold concepts for the paints and lube pails in India.

MTPL has an ISO 9001-2008 confirmed organization situated in Hyderabad, India, fabricate astounding plastic packaging products. It became listed (BSE) enterprise in the year 1983.

### **Following are the products:**

- Lube Packaging - Castrol CRB Turbo
- Paint Packaging - Dulux Velvet Touch
- Food Packaging Ice Cream Dairy Products Drink Powders
- Bulk Packaging – Chemicals

## **Key People of MTPL**

- J. Lakshmana Rao - Chairman & Managing Director
- Subramanyam - Deputy Managing Director
- P. Venkateswara Rao - Deputy Managing Director
- R J. Mytraeyi - Non-Executive Promoter Director
- P. Shyam Sunder Rao - Non-Executive Independent Director
- Dr. T. Venkateswara Rao - Non-Executive Independent Director
- Vasu Prakash Chitturi - Non-Executive Independent
- Director Dr. N.V.N. Varma - Non-Executive Independent Director
- Seshu Kumari - Chief Financial Officer
- M. Srinivas Rao - Chief General Manager
- Tata Sai Baba - General Manager (Operations)
- Mohan Padmanabhan - General Manager (Marketing)
- V. Srinivas - General Manager (New Projects)
- P Priyanka Rajora - Company Secretary
- Praturi & Sriram - Statutory Auditors
- GM K Associates - Internal Auditors
- P. Vijaya Bhaskar & Associates - Secretarial Auditors
- M. Radhakrishna Murthy - Legal Advisors

## **CHAPTER 2**

# **CONCEPTUAL BACKGROUND AND LITERATURE REVIEW**

### **2.1 Theoretical background of the study**

#### **Types of Enterprises:**

##### **Micro Enterprise**

A Micro Enterprise is an industrial undertaking in which the interest in settled resources in plant and hardware whether held or proprietorship terms on rent or contract buy does not surpass ₹ 25 Lakhs

##### **Small Enterprise**

A Small Enterprise is an industrial undertaking in which the interest in settled resources in plant and apparatus whether held or proprietorship terms on rent or contract buy does not surpass ₹ 5 Crore.

##### **Medium Enterprise**

Firms with investment in plant and hardware in abundance of SSI restrict and up to ₹ 10 Crore are dealt as Medium ventures.

##### **SME**

Under SME Ratings companies with turnover up to ₹ 100 crore are dealt with as SMEs. Bigger ventures with attributes of SMEs could likewise be considered.

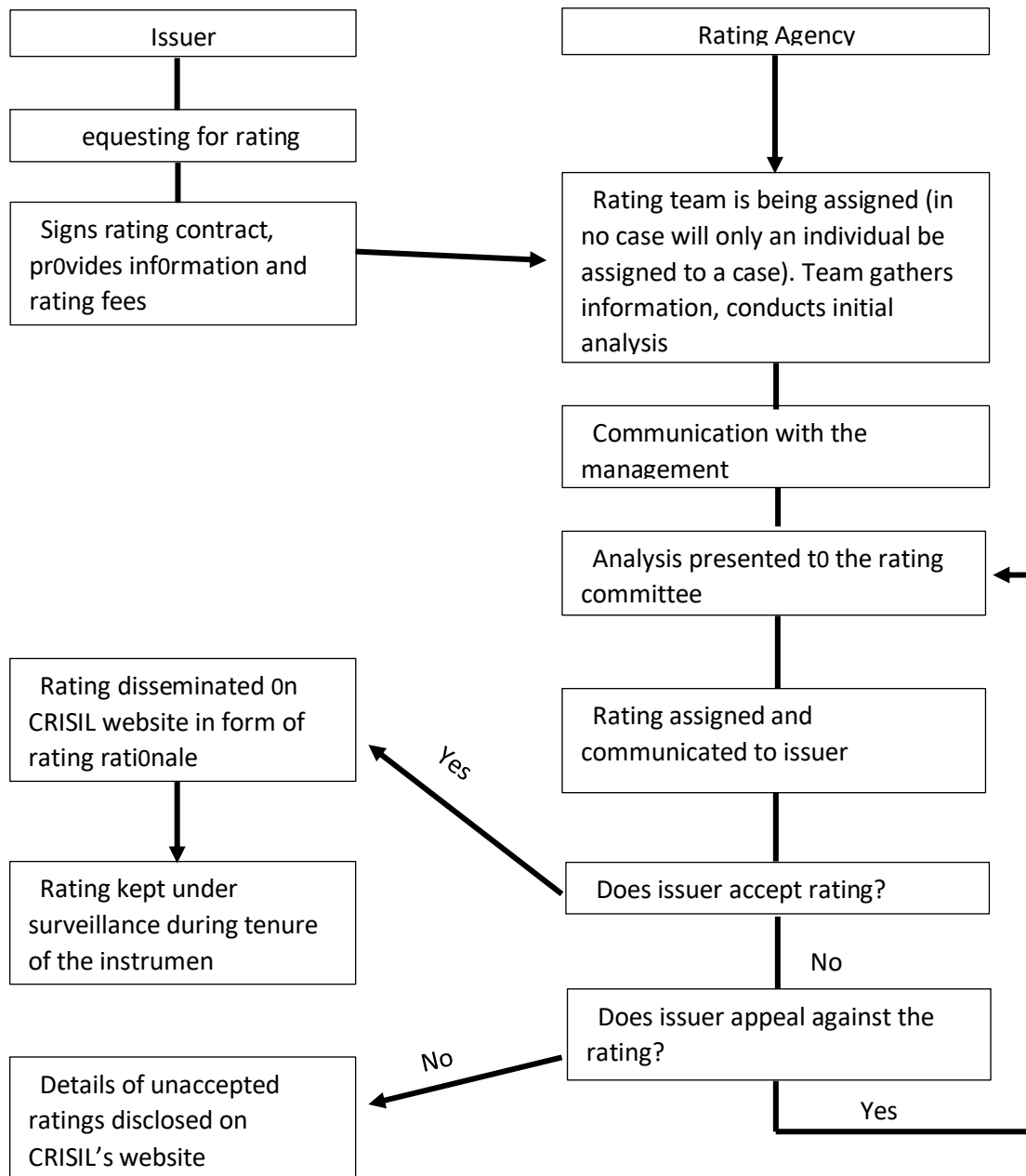
##### **Nature of Credit Rating**

Any rating construct altogether with respect to distributed data has genuine confinements and the achievement of a rating agency will depend, as it were, on its capacity to get to privileged data. Support from the guarantor and in addition their readiness to share even secret data are imperative . The rating organization must keep data of private nature had amid the rating procedure. There are many aspects that influence the credit rating, like economic conditions, efficiency of management, business and corporate strategies etc. The nature of credit ratings adopted by companies may vary based on the purpose its being assessed. The methodology



may include only financial credit worthiness or in some of the cases even the business and management performance is assessed and mapped on the rating scale.

### Rating Process



Source: Crisil Website

## Rating Scale

The new signifiers to be used for operating performance, financial strength and overall performance and credit rating of MS are as follows:

Overall creditworthiness	
Rating	Symbol Definition
SME 1	Highest creditworthiness in relation to other SME's
SME 2	High creditworthiness in relation to other SME's
SME 3	Good creditworthiness in relation to other SME's
SME 4	Above average creditworthiness in relation to other SME's
SME 5	Average creditworthiness in relation to other SME's
SME 6	Below Average creditworthiness in relation to other SME's
SME 7	Weak creditworthiness in relation to other SME's
SME 8	Poor creditworthiness in relation to other SME's

Source: Crisil website

## Performance & Credit Rating Scheme

The Ministry of Small and Medium Enterprises' flagship Performance & Credit Rating Scheme (PCRS) was launched in 2005. It is being applied by National Small Industries Corporation Limited as the denoting agency with stakeholders such as empanelled credit rating agencies, the Indian Banks' Association and small industry associations. Experience suggests the scheme has helped SMEs to improve performance and avail credit from banks/lending institutions.

Under this plan, the charge to be paid by SMEs for rating is financed by the administration to the up to 75% of the rating fee, up to Rs 40,000 (maximum limit)

CRISIL is one of the approved rating agencies operating in the scheme. NSIC CRISIL Ratings are entity specific, unlike credit ratings, which are debt obligation-specific, and reflect the creditworthiness of the SME rated. The rating fills in as a trusted outsider supposition on a unit's capacities and financial creditworthiness. A decent evaluating upgrades the worthiness of the appraised unit in the market and gives it access to speedier and less expensive credit, streamlining the cost of credit.

Guidelines on PCRS were revised recently. The guidelines now recommend evaluation of SMEs on three parameters, each of which would be assessed on an independent scale:

- Operating performance: A five-point scale to assess business risks such as technology, processes, customer, and management
- Financial strength: An eight-point scale to assess financial profitability, leverage and liquidity risk
- Overall credit worthiness: An eight-point scale that combines operating performance and financial strength

Given the importance of these units and the fact that less than 0.2 million of an estimated 51 million SMEs in the country have been rated till date, the government has increased the allocation to Rs 2 billion for fiscal 2017.

### **Advantages of SME Rating**

SME rating has been introduced with a view to inculcate a sense of financial discipline and operational efficiency among small and medium enterprises, which is for their growth and transformation into larger entities. The ratings provide both crucial tangible and intangible benefits to stakeholders.

#### **Benefits to customers:**

##### **A. Access to adequate, timely credit at competitive cost**

An independent, open-minded opinion on credit risk by CRISIL, through rating, showcases the capabilities of the rated enterprise. It provides significant comfort to banks and permits the rated entity to raise an adequate amount of debt. A good rating carries weight with lenders and may help SMEs get faster credit at competitive interest rates. The Indian Banks' Association (IBA) has inscribed NSIC-CRISIL ratings and informed member banks as well. CRISIL has working arrangements with more than 40 banks and financial institutions, many of which extend concessional pricing to borrowers based on these ratings.

##### **B. Independent third-party and fair evaluation**

Rating plays a significant role in helping the rated being identified gaps in its financial performance and operational capabilities. A fairly independent assessment can provide direction, which can be of significant value to an SME, enterprise in course correct and help expand its operations.

**C. Benchmarking/comparison with other SMEs**

Due to the unorganized nature, lack of adequate and quality research and low information available in the sector, SMEs often tend to operate without any clear performance indicator related to their peers. Ratings benchmark SMEs with other SMEs, giving a specific understanding to the rated institutions on where they stand in relative terms in the SME space.

**D. Enhanced creditability among stakeholders**

For lenders, suppliers, customers and stakeholders, it is very difficult to assess the credibility of an SME given the low level of information available on their performance track record. This restricts the ability of SMEs to reach each out to new customers across geographies, as stakeholder interest tends to be limited for lack of credibility checks. A rating enhances the credibility of the rated institution by building trust among new ratin2 stakeholders and also providing additional comfort to existing stakeholders, which can be used to negotiate better trading terms.

**E. Better visibility**

Rated enterprises get a no cost listing on CRISIL's website. The rating list is also published by CRISIL in SME Connect, which reaches all the leading banks and financial institutions, as well as over 70,000 SMEs.

**Benefits to banks:**

**A. Due diligence and detailed rating report**

The report is an independent opinion that provides detailed information about the company's key strengths, and areas of improvement. This helps bank credit officers in preparing internal credit proposals and taking funding decisions, ensuring faster processing of proposals and thereby helping save on costs as well. Also, renewal and enhancement in credit limits become easier due to the accurate risk assessment available for the rated entity.

## **B. Better risk assessment and differentiation among SMEs**

The exclusive rating scale for SMEs provides a clear assessment of bankers on the performance of a particular SME in relation to peers of similar scale. This would not be possible if the was compared with large entities instead. An objective and fair opinion on risk for entity e comparable peer level and an additional level of check besides internal credit assessments provides a valuable tool to bankers in risk assessment.

## **C. Monitoring assessment of credit portfolio**

The quality of a bank's SMF credit portfolio could he mapped regularly through rating. This provides them inputs on the risk profile of SMEs in their region and help reach out to better-quality in the target segment.

### **Impact of SME Rating**

- Better performance led to ratings upgrades.
- Sales and profits grew faster
- Despite the economic slowdown, rated SMEs were net employees
- Export grew despite challenging global economic environment

### **About- NSIC**

National Small Industries Corporation Ltd., an ISO 9001 confirmed organization, since its foundation in 1955, has been attempting to satisfy its central goal of advancing, supporting and encouraging the development of little scale ventures and industry related little scale administrations/business endeavors in the nation. Over a time of five many years of change, development and advancement, NSIC has demonstrated its quality inside the nation and abroad by advancing modernization, up degree of innovation, quality awareness, reinforcing linkages with huge medium endeavors and improving fares - activities and items from little enterprises.

NSIC works through 9 Zonal Offices, 33 Branch Offices, 14 Sub Offices, 10 NSIC Business Development Extension Offices, 5 Technical administrations Centers, 3 Extension Centers and 2 Software Technology Parks bolstered by a group of more than 500 experts spread the nation over. To oversee activities in African nations, NSIC works from its office in Johannesburg.

NSIC conveys forward its central goal to help little ventures with an arrangement of uniquely custom-made plans intended to place them in a focused and profitable position. The plans include encouraging showcasing support, credit backing, innovation backing and other help administrations.

NSIC conveys forward its central goal to help small companies with an arrangement of extraordinarily customized plans intended to place them in an aggressive and favourable position. The plans involve encouraging showcasing support, credit backing, innovation backing and other help administrations

NSIC Schemes

## **1. Marketing**

Showcasing, a vital instrument for business advancement, is basic to the development and survival of little ventures in the present seriously aggressive market. NSIC goes about as a facilitator to advance little businesses items and has concocted various plans to help little ventures in their promoting endeavors, both in and outside the nation. These plans are quickly depicted as under:

### **i. Consortia and Tender Marketing**

Small Enterprises in their individual limit confront issues to get and execute huge requests, which repress and confine their development. NSIC, in like manner receives Consortia approach and structures consortia of units fabricating similar items, in this manner backing out showcasing issues of SSIs. The Corporation investigates the market and secures orders for mass amounts. These requests are then disseminated to little units tuned in to their generation limit. Testing offices are additionally given to empower units to enhance and keep up the nature of their items adjusting to the standard particulars.

### **ii. Single point Registration for Government Purchase**

NSIC runs a solitary Point Registration Scheme under the Govt. Buy Program. Here, the enrolled SSI units get buy inclination in Government buy program, exclusion from installment of Earnest Money Deposit and so on.

- Issue of delicate sets free of cost.
- Advance suggestion of tenders issued by DGS and D.

- Exemption from installment of sincere cash.
- Issue of competency endorsement in the event that the estimation of a request surpasses as far as possible, after due check.

### **iii. B2B Web Portal for Marketing**

NSIC Infomediary is a B2B platform that has been set up to give online administrations for little and medium time shippers, exporters and specialist co-ops in India. The entryway is an activity to give business chances to independent companies, firms and little scale units to grow further. In this manner, anybody associated with business exercises and needs to use the quality and perceivability of Internet can join NSIC Infomediary. The individuals who search for advancement and prospect for their exchange and items/administrations can likewise join NSIC Infomediary.

### **iv. Marketing Intelligence**

Gathers and spread both residential and additional international marketing knowledge for the advantage of MSMEs. This phone, notwithstanding spreading mindfulness about different projects/plans for MSMEs, will particularly keep up database and scatter data.

### **v. Exhibitions and Technology Fairs**

To grandstand the skills of Indian SSIs and to catch showcase openings, NSIC takes an interest in select International and National Exhibitions and Trade Fairs each year. NSIC encourages the investment of the little endeavors by giving concessions in rental and so on. Support in these occasions opens SSI units to universal practices and improves their business ability.

### **vi. Buyer-Seller meets**

Mass and departmental purchasers, for example, the Railways, Defense, Communication divisions and huge organizations are welcome to partake in purchaser merchant meets to enhance little ventures information with respect to terms and conditions, quality benchmarks, and so forth required by the purchaser. These projects are gone for merchant advancement from MSMEs for the mass producers.

## **vii. Credit Support**

Areas of support are:

- a) The striking highlights of the Scheme are:
  - Financial Assistance for obtainment of Raw Materials up to 90 days.
  - Bulk buy of essential crude materials at aggressive rates.
  - NSIC encourages import of rare crude materials.
  - NSIC deals with every single strategies, documentation and issue of letter of credit if there should be an occurrence of imports.
- b) Financing for Marketing Activities NSIC empowers financing for displaying actives, for instance, Internal Marketing, Exports and Bill Discounting. Back through syndication with Banks keeping in mind the end goal to guarantee smooth credit stream to little undertakings, NSIC is going into key organizations together with business banks to encourage long haul/working capital financing of the little endeavors the nation over. The game plan conceives sending of credit utilizations of the intrigued little ventures by NSIC to the banks and sharing the handling expense.

## **viii. Performance and Credit Rating Scheme for small industries**

To empower small undertakings to discover the qualities and shortcomings of their current tasks and take restorative measures to improve their hierarchical quality. NSIC is working a Performance and Credit Rating Scheme through empaneled offices like ICRA, ONICRA, FITCH, CARE, BRICKWORK RATINGS and SMERA. Little endeavor has the freedom to pick any of the rating offices empaneled with NSIC. Rating organizations will charge the FICO score expense as indicated by their strategies. The advantages to small companies are as per the following:

- Facilitate guide credit choices from Banks on recommendations of SSI units.
- An autonomous, trusted outsider supposition on capacities and credit value of little endeavors.
- Good rating to improve the adequacy of the little endeavor with Banks. FIs, clients and purchasers.
- 75% of the credit assessment charge subject to a greatest of Rs. 25,000/- will be repaid to the little venture having a turnover up to Rs.50 lakh by method for gifts.
- 75% of the credit assessment charge subject to a greatest of Rs. 30,000/- will be repaid to the little venture having a turnover above Rs.50 lakh to Rs.200 lakh by method for gifts.



- 75% of the credit assessment charge subject to a greatest of Rs. 40,000/- will be repaid to the little venture having a turnover above Rs.200 laky by method for gifts.

## **2. Technology Support**

Innovation is the way to improving an organization's upper hand in the present dynamic data age. Little ventures need to create and execute an innovation procedure notwithstanding monetary, promoting and operational systems and receive the one that incorporates their activities with their condition, clients and providers. NSIC offers little endeavors the accompanying help benefits through its Technical Services Center's and Extension Center's

- Advise on utilization of new strategies
- Material testing offices through certify research facilities
- Product configuration including CAD
- Common office bolster in machining, EDM, CNC, and so forth.
- Energy and condition administrations at chose focus
- Classroom and functional preparing for expertise up degree

## **3. Infomediary Services**

Data today is winding up nearly as essential as the air we relax. We require it each moment of our working lives. With increment in rivalry and liquefying without end of global limits, the interest for data is achieving new statures. NSIC, understanding the necessities of MSMEs, is putting forth Infomediary Services which is a one-stop, one-window bundle of helps that will give data on business, innovation and fund, and furthermore display the center fitness of Indian SMEs.

- Enrollment Benefits
- Tender and Trade Information.
- Banner show on NSIC Website
- Access to an extensive variety of advancements from India and abroad.
- Access to national and universal business drives, JV openings and exchange data.
- Comprehensive data on Government arrangements, tenets and directions, plans and motivators.
- Access to mechanical databases and part's index.
- Various esteem included, specific administrations for individuals from Infomediary Service.

#### **4. Software Technology Parks**

NSIC Software Technology Parks encourage little endeavors in setting up 100% fare arranged units for programming trades. They additionally go about as nodal point to initiate programming trades straightforwardly through NSIC. These STPs expand bolster as far as the imperative framework to the little ventures to begin business tasks with a base lead time. The plan is administered by STPI controls of the Ministry of Information Technology, Government of India. NSIC set up the primary STP at Okhla, New Delhi in 1995 and second in Chennai in 2001. A few little undertakings have exploited these parks and contributed send out profit to the exchequer.

#### **5. Incubation of unemployed youth for setting up of New Micro & Small enterprises**

This program encourages setting up of new undertakings everywhere throughout the nation by making independent work open doors for the jobless people. The target of this plan is to encourage foundation of new little endeavors by method for giving coordinated administrations in the regions of preparing for entrepreneurial ability improvement, determination of little activities, planning of undertaking profiles/reports, recognizable proof and sourcing of plant, hardware and types of gear, encouraging approval of credit office and giving other help benefits so as to support the advancement of little ventures in assembling and administrations parts.

#### **6. International Cooperation NSIC facilitates sustainable international partnerships.**

The accentuation is on economical business relations as opposed to on one-way exchanges. Since its origin, NSIC has added to fortifying undertaking to-big business collaboration, south participation and offering best practices and encounters to other creating nations, particularly those in the African, Asian and Pacific locales. The highlights of the plan are:

- Exchange of Business/Technology missions with different nations.
- Facilitating Enterprise to Enterprise participation, JVs, Technology Transfer and other type of economical coordinated effort.
- Explore new markets and zones of collaboration
- Identification of new fare showcases by taking an interest in area particular displays everywhere throughout the world.
- Sharing of Indian involvement with other creating nations

## **7. International Consultancy Services**

Throughout the previous five decades, NSIC has obtained different ranges of abilities in the improvement procedure of little ventures. The intrinsic aptitudes are being organized to offer consultancy administrations for other creating nations

## **8. Insurance of Export Credit for Micro and Small Enterprises**

NSIC is encouraging smaller scale and little ventures to safeguard their fare credits by going into key organization together with Export Credit Guarantee Corporation of India Limited (ECGC). MSEs would be helped in safeguarding their fare credits through any office of the Corporation, found everywhere throughout the nation. This course of action is made to reinforce advancement of fares from little ventures.

## **2.2 Literature Review**

Literature Review of some notable studies in the area of analysing of SME was undertaken to understand research coverage and related to Mold-Tek Packaging Ltd include those of

- a) Wattanaprutipaisan, Thitapha (2003) “Four proposal for improved financing of SME development in ASEAN. Asian Development Review, 20(2), 66- 104

This study describes the problems caused to SMEs on both demand side and supply side. SME financing. Demand side proposal relates to well business planning, disclosure of all the information.

- b) Altman, Edward I., Gabriele Sabat0 – Abacus, (2005) “Effects of the Basel capital acc0rd on bank capital requirements for SMEs.”, Journal of financial services research 28.1: 15-42

This study describes the capital requirement of the SMEs and the existing Basel Capital Accord. The author has used break even analysis to find the classification between the retail and corporate SMEs for the banking organizations.

- c) Angilella, Silvia, and Sebastiano Mazzu, (2015) “The financing of innovative SMEs: A multicriteria credit rating model”, European Journal of Operational Research, 244(2), 540-554.

SMEs confront numerous snags when they endeavour to get to credit showcase. There isn't a multi-criteria credit risk model in light of delicate data for inventive SMEs. Thus, this

paper tries to fill hole by exhibiting a multi-criteria credit hazard display, particularly, ELECTRE-TRI.

- d) Altman, Edward I., Gabriele Sabato – Abacus, (2013) “Modelling credit risk for SMEs: Evidence from the US market”, *Emerging Global Standards and Regulations After the Financial Crisis*, pp. 251-279

The sole motivation behind this paper is to build up a distress prediction model particularly for the SME division and to break down its adequacy contrasted with a generic corporate model. The conduct of money related measures for SMEs is investigated and the most noteworthy factors in foreseeing the elements' credit value are chosen keeping in mind the end goal to develop a default expectation demonstrate.

- e) Berger, Allen N., and Gregory F. Udell (2006) “A more complete conceptual framework for SME finance”, *Journal of Banking & Finance*, 30(11), 2945-2966

This study describes conceptual framework for analysing the credit worthiness of the SMEs. Lending technologies are considered as the channels through which national financial structure affects the credit availability.

- f) Altman, Edward I., Gabriele Sabato – Abacus, (2007) “Modelling credit risk for SMEs: Evidence from the US market”, *Wiley online Library, Abacus 43.3: 332-357*

This study describes the variables used in predicting the credit worthiness of any entity. The author has used logit regression technique to build the model. The main purpose of this research is to identify the complete set of financial ratios to be used in the model.

- g) Berger, Allen N., and W. Scott Frame (2007) “Small business credit scoring and credit availability”, *Journal of small business management*, 45(1), 5-22

This study describes the lending technology for small businesses and also the credit availability. The authors also describe the study on the factors affecting the credit worthiness of any company.

- h) Ciampi, Francesco, and Niccolo Gordini (2008) “Using economic- financial ratios for small enterprise default prediction modelling: A empirical analysis”, *oxford Business & Economics Conference Proceedings, Association for Business and Economic Research*

The examination depicts the statistical tools that are successful in outlining a default prediction model in view of financial ratios. The author demonstrates that discriminant analysis and logistic regression are the successful devices.

- i) Kupid, Ana, and Roberto Ercegovic (2011) "Credit rationing in financing Distress: Croatia SMEs' finance approach" *International journal of Law and Management* 53.1: 62- 84

This study describes prominence of micro economic on the SME sector. The author has used multiple linear regression model to study the borrowing cost. It was found that SMEs happenstance higher borrowing cost than compared to large enterprises because of which emerges a need for credit rating.

- j) Moon, Tae Hee, Yoonseong Kim, and So Young Sohn (2011) "Technology credit rating system for funding SMEs" *Journal of the Operational Research Society* 62.4: 608-615

The author proposes a credit rating method known as cross matrix which grounded on the empirical data which is extracted from the scoring model. The information provided by rating system helps in managing the credit funds.

- k) Dainelli, Francesco, Francesco Giunta, and Fabrizio Cipollini (2013) "Determinants of SME credit worthiness under Basel rules: the value of credit history information."

This study examines and highlights the determinants of SME credit worthiness. They used credit history in addition to financial ratios and "hybrid" indicators that built by mixing credit history with financial statement data.

- l) Moro, Andrea, and Matthias Fink (2013) "Loan managers' trust and credit access for SMEs", *Journal of Banking & Finance* 37, no.3: 927-936

This paper focuses on relationship between trust and credit access. It suggests that trust reduces agency cost. SMEs that appreciate a high level of trust from advance administrators acquire more credit and there is less credit obliged.

- m) Angilella, Silvia and Sebastiano Mazzu (2017) "A credit risk model with an automatic override for innovative small and medium sized enterprise" *Journal of the Operational Research Society* 1-17

The objective of this study was to build an operational model for identifying the credit worthiness of innovative SMEs. The main finding of this research is that the proposed model can be used by the banks and financial institutions as an effective tool in finding creditworthiness of the company before lending them loan.

- n) Ciampi, Francesco (2017) “The Need for Specific Modelling of Small Enterprise Default Prediction: Empirical Evidence from Italian Small Manufacturing Firms” *International Journal of Business and Management* 12.12 :251

The study describes the importance of financial ratios for predicting the default of any company. The author has used the multivariate discriminant analysis and found that small enterprises and large enterprises must be separated to improve the prediction.

- o) Oricchio G., Lugaresi S., Crovetto A., Fontana S. (2017) *SME Credit Rating Models: A New Approach*. In: *SME Funding*. Palgrave Macmillan, London

This section depicts the technique and the estimation and approval procedure of an exclusive SME Credit Rating Model created by Capital Investment in light of mid-corporate and SME business bank databases. The exactness of the model depends on the mix of bookkeeping data and behavioural information

- p) Andrikopoulos, Panagiotis and Amir Khorasgani (2018) “Predicting unlisted SMEs default: Incorporating market information on accounting-based models for improved accuracy.” *The British Accounting Review* G33; G32; G17

The study describes: a) the risk linked with lending loan to small and medium businesses and the credit worthiness of the businesses and b) accuracy of the prediction model during the financial crisis.

- q) Borin, Elena, Fabio Donato and Christine Sinapi (2018) “Financial Sustainability of Small and Medium Sized Enterprises in the Cultural Creative Sector: The Role of Funding” *Entrepreneurship in Cultural and Creative Industries*. Springer, Cham, 45-62

The study describes the weakness in the ability of the cultural and creative sector to support the financial structure and the topic of access to bank financials that investigates standpoint of entrepreneurs as well as banks.

- r) Rao, Ananth, Malik Al Khatib and Worku B Genanew (2018) “Predicting Business Distress Using Neural Network in SME- Arab Region” *International Review of Advances in Business, Management and Law* 1.1: 68-84

The study analyses the prediction model for identifying the credit worthiness of the company and suggests that the operating cash cycle, leverage ratio and net fixed assets are the important factors that affect the decision making of the lenders.

- s) Sajjad, Faiza and Muhammas Zakaria (2018) “Credit rating as a Mechanism for Capital Structure Optimization: Empirical Evidence from Panel Data Analysis” *International Journal of Financial Studies* 6.1 : 13

This study examines the significance of credit ratings for ideal capital structure choices. The author found that the companies that are rated high and low have low level of leverage and the companies that are mid rated have a high level of leverage.

- t) Quintiliani, Andrea (2018) “Expected cost of financial distress in small and medium- sized enterprise (SMEs): A German- Italian Comparison” *African Journal of Business Management* 12.1: 21-33

The study describes the qualitative and the quantitative factors that affect the creditworthiness or financial distress of SMEs. The author proposed a model that interprets the expected cost of financial distress in SMEs.

## **CHAPTER 3**

### **RESEARCH DESIGN**

#### **3.1 Statement of the Problem**

At present the method followed by analysts to carry out the process of performance and credit rating is done manually. Hence, it takes quite a long time to assign ratings. This in turn delays the decision making of any bank or financial institution while lending loan to the SMEs. Consequently, there emerges a need to address this issue by automating and standardizing the process of performance and credit rating.

#### **3.2 Need for the study**

Small and medium enterprises are a substantial section of the Indian economy. These are key contributors to the GDP, accounting for a substantial proportion of exports. SME are significantly employment generators. As per the latest estimates, more than 51 million working enterprises employed over 117 million people and contributed about 37% to India's GDP.

Nevertheless, the sector's contribution to GDP growth and employment is considerably under the levels experienced in developed and other emerging economic systems. Expected that the agenda of inclusive rise is being accomplished by the government will lead to more support for SMEs to get.

Hence, there is a need to analyse and understand existing credit rating methodology which enables the banks to fund SMEs. This project attempts to understand a few of the models used by rating agencies by way of applying the models for analysing Mold-Tek Packaging Ltd.

#### **3.3 Objectives**

- To study well-established tools and practices that relate to SME performance and credit assessment used by top Indian Credit Rating Agencies and recommended by NSIC (National Small Scale Industrial Corporation)
- To quantify the qualitative aspects of business and management and financial aspects of historical performance by using a scoring model.



- To build a sophisticated performance and credit assessment model for Indian SMEs in manufacturing sector which can be used by Corporate lenders, banks and other financial institutions.
- To test and study the correctness of the proposed model with Credit Ratings assigned by top Credit Rating Agencies.

### **3.4 Scope of study**

This study was done based on financial statements of the company, i.e. cash flow statement, profit & loss statement and balance sheet. In order to conduct the study, company's past 5 years financial data was taken. This study has been done by creating an SME Rating Model and Multiple Role Model Analysis for the company based on the past financial data and with certain few assumptions. After creating Models, the next step is identifying the items listed in the profit & loss and balance sheet. After identifying, the next step is to create financial ratios, i.e. Operating Profit Margin, PAT Margin, ROCE, PBDIT Interest Cover, Gearing, etc. The final step is to use these ratios in the estimation of debt and its impact on ROE.

### **3.5 Research Methodology**

Since the project is about automating the process of performance and credit rating, the research methodology consists of following things:

The current research study is Empirical in nature. The research is conducted on performance and credit rating process followed by Indian Credit Rating Agencies. The research is a detailed study of standard processes proposed by National Small Scale Industrial Corporation. It aims at identifying the recurring processes and proposing a model for automating these processes. The research has gone through a process of building a model architecture to ease the process of rating and optimizing the time taken by an analyst to execute the credit rating mandate. Further, planned architecture of the model is implemented using spreadsheet technologies and making it user friendly. Finally, testing the developed model with a listed BSE/ NSE SME Company for validation and cross verifying the same with CRISIL assigned rating.

The data collected to conduct this research is mostly secondary in nature like company's annual reports, quarterly and half yearly results announced on [www.bseindia.com](http://www.bseindia.com). Although, some data was collected through conference calls with Managing Director.

### 3.6 Limitations

While implementing complex Financial Models and Credit Rating Models there are various limitations which need to be taken into considerations.

- The implemented model includes quantification of financial performance as well as qualitative information such business/management performances. Quantification has its own advantages and disadvantages. Though it (quantification of qualitative parameters) helps in standardizing the process, some information is highly subjective and very difficult to quantify. Moreover, sometimes the qualitative aspects are broadly classified which may make it difficult for analysts to actually consider the details not captured by the model.
- The process of rating is dependent on taking into the account, past or historical data. In today's dynamic world it is important to consider the real time updates by considering regular and dynamic updates in economy, political scenario, industry verticals etc. Model doesn't capture these details thus making it more static.
- Since the rating process follows passive data capturing, the actual insider details about the company may be missing because of limited or no interactions with the management. This limits the scope to understand company's capital expenditure (capex) plans which forms a key information as the part of the rating process.
- Moreover, passive data capture also leads to some missing information which should be assumed by analysts. More assumptions in the model may deviate the model accuracy leading to incorrect ratings. Care has to be taken that the data is highly authentic and verified by the management.
- Due to limited availability of time, the model was implemented to only consider and rate the companies belonging only manufacturing sector. This is big limitation as the major industry segments like services, BFSI and trading companies are excluded. Financial performance of such companies needs separate standardizations.
- Frauds in audited financial statements are not captured by the model. The model only help reducing the overall execution time of rating assignment. Hence the care should be taken by the analyst to analyse the financial statements well and then information must be entered into the model.
- Lastly, it is important to highlight that a rigorous management discussion is important to understand the business model of the company along with promoter's background research. This helps prevent lots of debt default frauds which cannot be highlighted in the model.

### **3.7 Chapter Scheme**

#### **Chapter 1: Introduction**

This part incorporates Introduction, Industry profile and Company profile: Promoters, Vision, Mission and Quality Policy, Products/Services profile zones of activity, foundation offices, SWOT Analysis, Future Growth and Prospects and about Mold-Tek Packaging Limited.

#### **Chapter 2: Conceptual background and Literature review**

This chapter describes the theoretical background of the study, Literature review.

#### **Chapter 3: Research Design**

This chapter includes Statement of problem, Need for the study, Objectives, Scope of the study, Research Methodology, Limitations, Chapter Scheme.

#### **Chapter 4: Analysis and Interpretation**

Analysis and interpretation of financial statements and financial ratios is covered here.

#### **Chapter 5: Findings, Conclusion and Suggestions**

Summary of findings, Conclusion and Suggestions is covered under this chapter.

## CHAPTER 4 1: ANALYSIS AND INTERPRETATION

### 4.1 Financial Analysis of MTPL

Financial analysis started with collecting data of MTPL through some direct and indirect sources. For that, annual reports of 5 years, starting from financial year to 2013 till 2017 was used as reference for this analysis. Data as the consolidated balance sheet, consolidated profit and loss A/c, shareholding pattern, investment plans and some other things were considered.

For analysing and evaluating the company the rating model was built by using data from various sources and annual reports.

This chapter explains the ratios which were calculated in respect of analysing a company. Analysis should be done for profit making companies.

### 4.2 Observations in Profit and Loss A/c of MTP Ltd

- **Total Revenue from Operations:** Revenue from operations of the company is increasing year on year, which shows the consistent growth of the company.
- **Cost of Goods Sold (COGS):** it includes the cost of material consumed, power and fuel expenses, stationary expense and employee benefit expense. COGS have increased from Rs. 162.4 lakhs in the year 2013 to Rs.234.9 lakhs in the year 2016.
- **Finance cost:** Variations in financial cost are unstable. They increase from the year 2013 to 2014 from Rs.5.1 lakhs to Rs.8.4 lakhs and gradually decreased from the year 2014 to 2017 of Rs.8.4 lakh to 1.8 lakhs. It says that company is completely decreasing its debt.
- **Profit/Loss before Tax:** PBT for the company is positive for all the years of analysis. In year 2013 profit of the company before tax was Rs.1.1 lakh. Whereas in 2017 profit is Rs.41.02 lakh.
- **Profit/Loss after Tax:** For the 2013 there was loss Rs.1.92 lakhs. From 2014 to 2017 company made profits of Rs.1.37 lakhs to Rs.26.99 lakhs. This says that company has a huge reserve and surplus.
- **Earnings per share:** EPS is positive in all the years and has increased from the year 2013 to 2017 of Rs.5.14 to Rs 9.75. This says that company does not hesitates to give dividend from reserves and surplus.

### **Summary:**

Current status of Profit and Loss A/c of MTPL gives the impressive image of the company finances. The profit of the company is positive from year 2014 to 2017. But there are a few points which are noticeable. Revenue from operations for the company is decreasing from the year 2015 to 2016, but it is still a profit-making year by clearing its debt and reducing interest costs. The income of the company is increasing at a faster rate than expenses, which indicate that soon the company will start increasing Earning per Share.

### **4.3 Observations in Statement of Balance Sheet of MTP Ltd**

- **Equity Capital:** Equity capital of the company is increasing for all the 5 years from Rs.11.25 lakhs to Rs.13.85 Lakhs, which says that company is going on issuing new shares every year.
- **Reserves and surplus:** Reserve and surplus of the company are increasing year on year as the company is expanding its products by starting manufacturing new huge containers. In the last 5 years, R&S is increased from Rs.37.84 Lakhs to Rs.130.17 Lakhs.
- **Total debt:** It is the summation of long term and short-term borrowings in the company. Increase/Decrease in debt is the cause of increase/decrease of financial cost for the company. Total debt in 2013 was Rs.66.5 lakhs compared to debt in 2017 of Rs.40.3 lakhs.
- **Fixed Assets:** Company is expanding its products every year. Being the manufacture sector industry, it is increasing the fixed assets of the company and concentrating more on producing its products. Inventories: Inventory is increased in the year 2013 to 2014 of Rs.23.6 lakhs to Rs. 28.3 lakhs and started declining since the year 2014 to 2016 from Rs. 28.3 lakh to Rs. 23.9 lakh and then in year 2017 it increased to Rs.36.3 lakhs. This says that the company was manufacturing more than the demand in the market, which leads to increase its rent and power cost, but gradually it's started showing decline means meeting up the demand and supply.

### **Summary:**

Balance Sheet of MTPL shows increasing of Reserves and Surplus and decreasing of total debt at a time. Increase in R&S and the reduction in debt is due to issuing new shares and making huge profits.

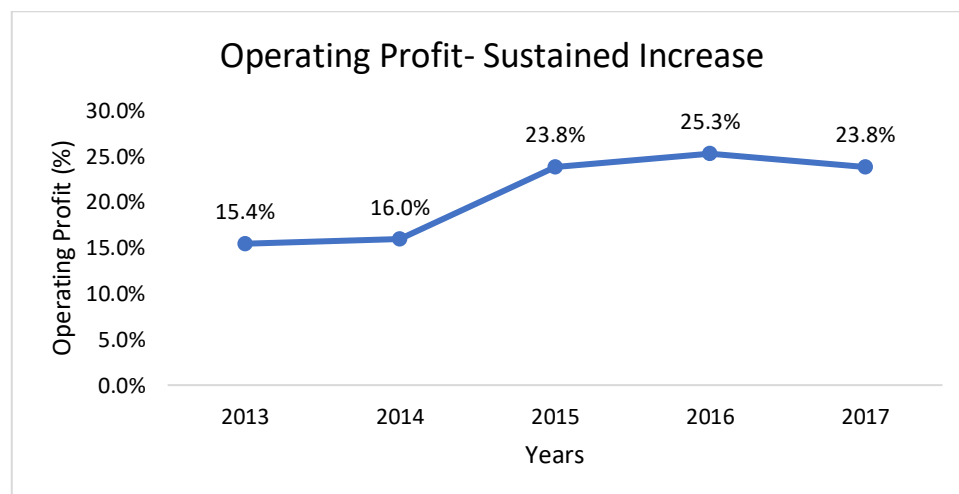
## 4.4 Ratio Analysis

Following are ratios which were calculated in the model and its interpretation:

### 4.4.1 Table Showing Operating Profit Margin

Year	Operating Profit (%)
2013	15.4
2014	16.0
2015	23.8
2016	25.3
2017	23.8

### 4.4.1 Graph Showing Operating Profit Margin



**Interpretation:** Positive operating profit margin shows that the company was able to make right decisions for profitability, the result of which was, the were left with huge money in hand after deducting major expenses. The company is taking impressive decisions by the year 2013 to 2016 which shows the rise from 15.4% to 25.3% in operating margin. This says that higher the operating margin, smaller a company's operating experience. But in year 2017, it has decreased to 23.8%

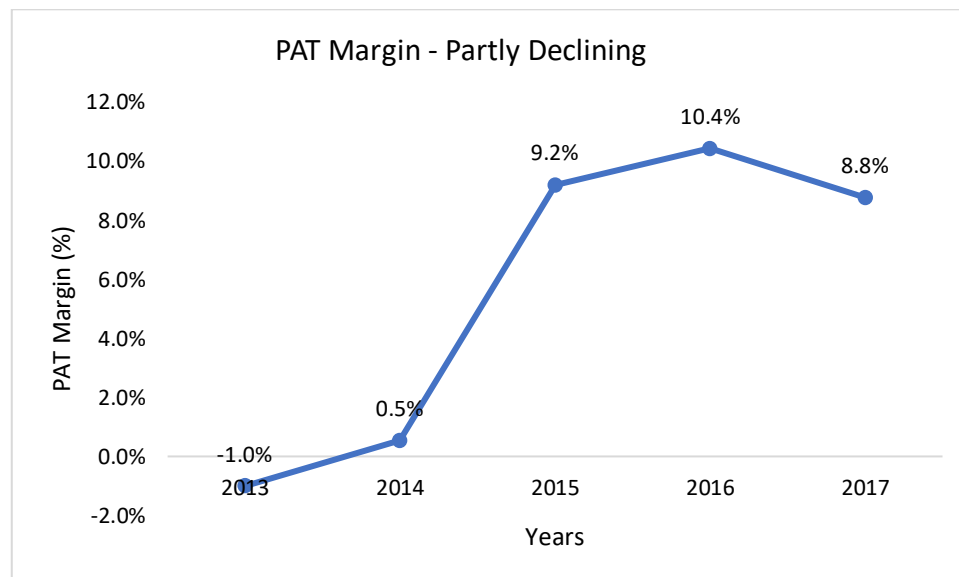
The Operating Profit Margin is calculated as,

Operating Profit margin =  $\frac{OPBDIT}{Net\ Sales}$

#### 4.4.2 Table Showing PAT Margin

Year	Operating Profit (%)
2013	-1.0
2014	0.5
2015	9.2
2016	10.4
2017	8.8

#### 4.4.2 Graph Showing PAT Margin



#### Interpretation:

This chart shows the decline in the year 2013 of 1%, but gradually started increasing since the year 2014 to 2016 from 0.5% to 10.4%, which says the company is taking the right decisions and making more profitability company every year. This also says that company is reducing its expenses and interest cost to keep more profits. Higher the profit margin, easier to take debt. But in the year 2017, it decreased to 8.8%

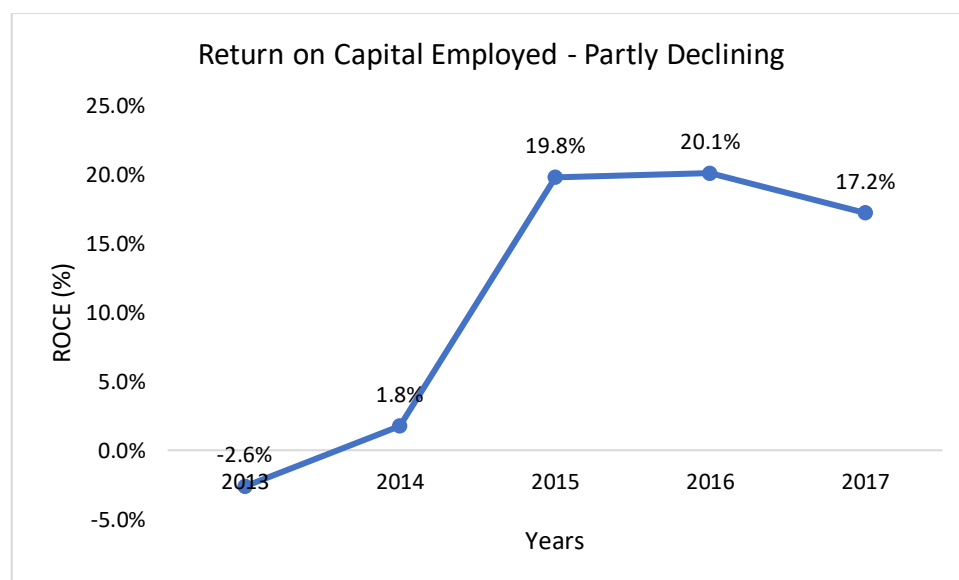
The PAT margin is calculated as,

$$\text{PAT Margin} = \text{PAT} / \text{Net Sales}$$

#### 4.4.3 Table Showing Return on Capital Employed

Year	Operating Profit (%)
2013	-2.6
2014	1.8
2015	19.8
2016	20.1
2017	17.2

#### 4.4.3 Graph Showing Return on Capital Employed



#### Interpretation:

Positive ROCE says that the company is working efficiently and profitability. In the year 2013 ROCE was negative by 2.6%, but by the year 2015 to 2016, 1.8% to 20.1% is an increment, which says the company its capital effectively and is generating shareholder value. But in 2017 it has decreased to 17.2%

The ROCE is calculated as,

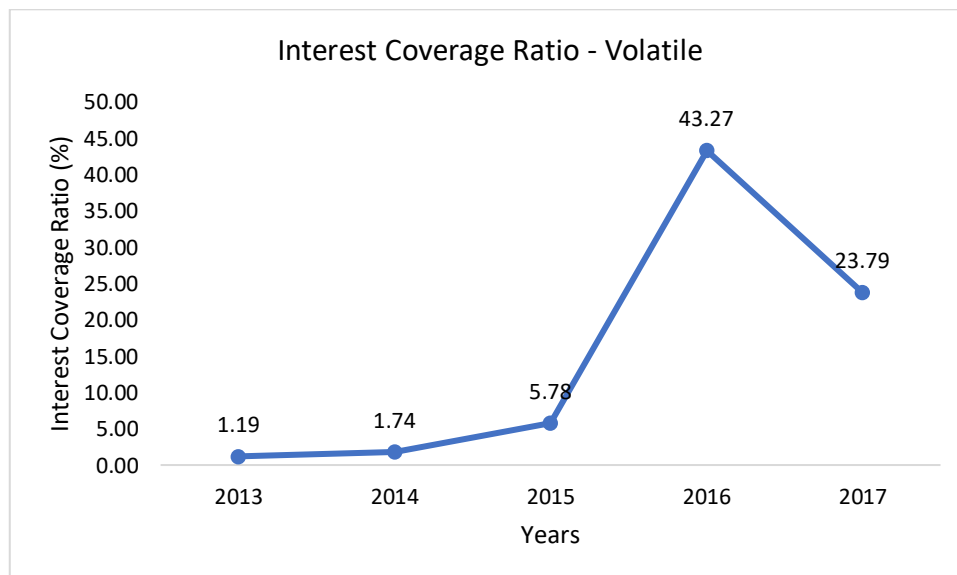
$$\text{ROCE} = \text{EBIT} / \text{Capital Employed}$$



#### 4.4.4 Table Showing Interest Coverage Ratio

Year	Operating Profit (%)
2013	1.19
2014	1.74
2015	5.78
2016	43.27
2017	23.79

#### 4.4.4 Graph Showing Interest Coverage Ratio



#### Interpretation:

Interest coverage ratio has increased from 1.19 times to 23.79 times, which says the company can pay easy their interest payments and take more debts. But in the year 2017, it decreased to 23.78 times by clearing its debts and reducing the interest amount which increased his profits. Positive Interest Cover for all the year, says that the company financial durability and more profitability pay its interest expenses.

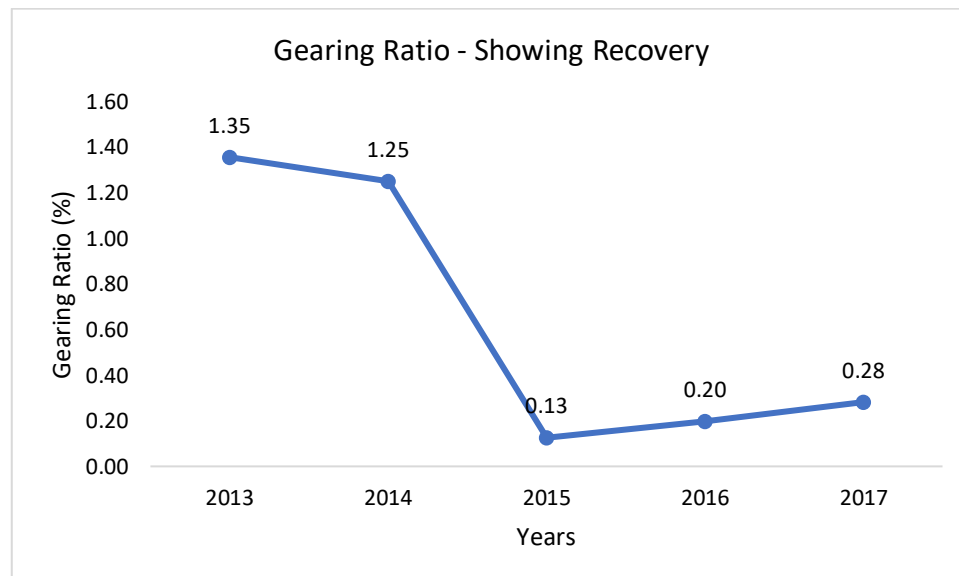
The PBDIT Interest Cover is calculated as,

$$\text{PBDIT Interest Cover} = \text{EBIT} / \text{Interest expenses}$$

#### 4.4.5 Table Showing Gearing Ratio

Year	Operating Profit (%)
2013	1.35
2014	1.25
2015	0.13
2016	0.20
2017	0.28

#### 4.4.5 Graph Showing Gearing Ratio



**Interpretation:** This chart says from the year 2013 to 2016 the Gearing ratio has come declined from 1.35 in 2013 to 0.13, but from 2016 debt is increasing to 0.20 times and in 2017 it has further increased to 0.28. This says that the company is reducing its debt and making financial leverage strong to issue new shares every year.

The Gearing is calculated as,

$$\text{Gearing} = \text{Total Debt} / \text{Equity}$$

**Highlights of the company are as follows:**

- The profitability of the company shows a positive result for the current situation.
- MTPL is a packaging company with full potential to develop in coming future
- Financial strategies of the company are very impressive
- It is occurring up with various organic growth products.
- Investors understand MTPL ability to arise more in the future, which gets them healthy investments.

## CHAPTER 5

### FINDINGS, CONCLUSIONS AND SUGGESSTIONS

#### 5.1 Findings:

- The credit rating assigned to Mold-Tek Packaging Limited is SME 3. This rating indicates that the creditworthiness of the company is better than the other SMEs.
- OPBDIT margin is 23.8% for the current year which is quiet a good percentage and this indicates high operational efficiency.
- PAT margin is 8.8% for the current year which is good enough and indicates that the company runs efficiently and provides more value in terms of profits to its shareholders
- Return on Capital Employed is 17.2% for the current year which is good enough and indicates that company is making enough profits by efficiently employing its capital.
- PBDIT Interest cover is 23.79 times for the current year which indicates that the company is able to pay their interest expenses on debt outstanding very easily as the debt is less.
- Gearing is 0.28 times for the current year which is quite good and indicates that the business is not exposed to financial risk as debt is not high.
- The Current ratio for the current year is 1.4 which indicated that the company is capable of paying back its liabilities with its assets. Therefore, the company is financially healthy.
- The days sales of inventory is 56 days for the current year which indicates that the company takes only 56 days to turn its inventory into sales.
- The days payable outstanding is 22 days for the current year which indicates that company takes only 22 days to pay its invoices from creditors, suppliers etc.
- The days receivables is 72 days for the current year which indicates that the company on an average takes 72 days to collect payment after a sale has been done.
- The indexed score on performance capability is 77 out of 100 which indicates the management is efficient in handling the business.
- The indexed score on financials is 60 out of 100 which indicates the company is financially wealthy.
-

## 5.2 Conclusion:

The detailed analysis and study of well-established practices and processes by top Credit Ratings Agencies in India like CRISIL, ICRA, ONICRA and FITCH was conducted. The study helped in understanding the key aspects, importance and applications of Credit ratings in for better functioning of the businesses.

Based on detail understanding about credit rating industry, its market size, validations, and importance various building blocks and architecture of the complex credit ratings model was formed. The architecture included a standard model which considers both the financial performance as well business and management performance. This makes the model architecture robust.

To make the model standardised, scoring model was adopted by quantifying business and management performance parameters and by assigning them different scores. The scores were decided in consultation with analysis from CRISIL and NSIC. Similar scores were assigned to quantified calculated financial ratios on 5 dimensions i.e. Liquidity, Working Capital, Profitability, Operational efficiency and Debt burden. Various ratios were calculated under these five categories and different scores were assigned to each of the ratios. The Model then consolidates all the scores and index both financial and business performances to 100. To get the final credit rating score the weighted average of financial and business performances are taken with a ratio of 70:30 i.e. 70% weightage is given to the Business and Management performance and 30% weightage is given to Financial Performance. The score was mapped to standard rating scheme proposed by NSIC.

The entire model is implemented and developed using Microsoft Excel 2013 using advanced financial modelling techniques. The key feature of the model included a Hybrid Rating scheme, Simple data & information entry interface to reduce the overall case execution time of analyst, click and drop menu and easy navigation, automated rating and calculation process and a visual risk meter to show the level of credit & business risk. Finally the model was testing using a data for listed SME – Mold-Tek Packaging Limited to assess its ratings and the same was verified and tested with rating assigned by CRISIL. Based on the analysis, SME 3 is assigned to Mold-Tek Packaging Limited which indicates that the MTPL has good creditworthiness compared to other SMEs. Based on the financial statement analysis, PAT margin is 8.8%.

## 5.2 Suggestions

Any rating process involves rigorous study on various aspects about the company, its management, industry, competition and economy as well. Since these dimensions are wide, open – ended, subjective and dynamic, this leaves big scope for improving and expanding the model leaving opportunities for further research. Following are some of the key highlights & suggestions for making the model even better:

- Because of time limitation the proposed model was built taking into account only manufacturing sector. The model can be further improved to take into account other industry sectors like services, trading, BFSI, etc. for assessing their performance and credit rating.
- This model is developed only for assessing SMEs and not large / mid cap companies. Large/Mid – cap companies are more dynamic since the trade volumes are higher which requires model to be more robust to sometimes capture real-time data. These real-time details are difficult to capture in real time and requires dedicated analyst team to monitor & track company's updates. This is especially important in cases such as insider trading and pledging of shares which largely impact the rating of companies. Model can be made robust by implementing the same of online platforms which auto-updates the information in real time.
- Again, due to time limitation performance parameters were broadly classified and quantified. Same can be taken in more details to incorporate sensitivities of parameters making model capture data even better. Better & clean data leads to precise & accurate ratings.
- Validation of any given model is very important for it to be commercially acceptable by industry at large. The implemented model was validated by analysts working in some of the credit rating companies which did not wish to disclose their details. Model can be validated by testing performance using more listed SMEs and may be sent for verification to accredited bodies like SEBI, CRISIL, NSIC, and various Banks.
- The model can be extended to incorporate and calculate credit worthiness by lending institutions which will make the credit assessment simpler and may reduce the credit default risk of banks while lending to SMEs. This may significantly reduce bank NPAs which is a major problem Indian Banks are facing today.

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## ANNEXURE

### Screenshot of the model:

<b>SME PERFORMANCE AND CREDIT RATING ASSESSMENT</b>				
	<b>Max Score</b>	<b>Model Score</b>	<b>Team's Score</b>	<b>Remarks</b>
Years in Business (company/firm)	5	5		
Concentration risk	10	9		
Customers profile	5	3		
Business Certainty	5	4		
Length of customer relationship	5	5		
Customer feedback	5	3		
Nature of technology/production facility	5	3		
Quality of utilities and infrastructure	5	3		
Raw material availability/price volatility	5	2		
Supplier feedback	5	4		
Quality certificates	5	4		
Promoters' track record	15	9		
Qualification	5	3		
Constitution	5	5		
Quality of second-tier management	5	5		
Quality of systems and controls	5	5		
Transparency/disclosure	5	5		
Gross score on performance capability	100	77		
<b>Indexed Score on performance capability</b>	100	77		
Sales (Rs. Crore)	10	8		
OPBDIT margins (per cent)	10	10		
PAT margins (per cent)	10	6		
PBDIT/Interest (times)	15	15		
Current Ratio	10	6		
Working Capital (days)	15	3		
Return on capital employed (per cent)	10	2		
Total debt to equity ratio	20	10		
<b>Indexed score on financials (base=100)</b>	100	60		
SME score		71.9		
Rating on the NSIC- CRISIL Scale for SSIs		SE 2B		
SME Rating		SME 3		
Rating recommendation		SE 2B		

Scoring pattern for NSIC-CRISIL rating			
Performance capability rating		Financial strength rating	
Score	Rating	Score	Rating
85-100	1	71-100	A
70-84	2	41-70	B
55-69	3	0-40	C
40-54	4		
0-39	5		

Scoring pattern for CRISIL SME rating	
Score	Rating
86-100	SME 1
76-85	SME 2
66-75	SME 3
56-65	SME 4
46-55	SME 5
36-45	SME 6
26-35	SME 7
0-25	SME 8

KEY FINANCIAL RATIO						
For the year ended/ as at		2013	2014	2015	2016	2017
OPBDIT margin	%	15.4%	16.0%	23.8%	25.3%	23.8%
PAT margin	%	-1.0%	0.5%	9.2%	10.4%	8.8%
Return on capital employed	%	-2.6%	1.8%	19.8%	20.1%	17.2%
Gross current assets	Days	-10	-4	65	60	42
Day inventory (on COP)	Days	52	47	44	42	56
Day receivable (on gross sales)	Days	67	60	57	73	72
Days payable (on materials)	Days	25	29	16	25	22
Current Ratio	Times	0.9	1.0	2.4	1.7	1.4
Net cash accruals/Total debt	%	-0.1	-0.1	1.4	0.8	0.4
Interest Coverage Ratio	Times	1.19	1.74	5.78	43.27	23.79
Average cost of borrowing	%	NA	1.69	2.16	8.40	1.54
Total outside liabilities/Capital	Times	1.95	2.15	0.46	0.58	0.68
Gearing - Total debt/Capital	Times	1.35	1.25	0.13	0.20	0.28

**Performance and Credit rating:**

<p>SE 4B indicates 'Weak Performance and Moderate Financial Strength' adjudge in relation t the other Micro &amp; small Enterprises</p>	<b>Financial Strength</b>			
		<b>High</b>	<b>Moderate</b>	<b>Low</b>
	<b>Highest</b>	SE 1A	SE 1B	SE 1C
	<b>High</b>	SE 2A	SE 2B	SE 2C
	<b>Moderate</b>	SE 3A	SE 3B	SE 3C
	<b>Weak</b>	SE 4A	<b>SE 4B</b>	SE 4C
<b>Poor</b>	SE 5A	SE 5B	SE 5C	

<b>FACT SHEET</b>	
<b>Name of the firm</b>	Mold-Tek Packaging Limited
<b>Year of establishment</b>	28-Feb-97
<b>Commencement of commercial operations</b>	28-Feb-97
<b>Legal status</b>	Public Limited Company
<b>Registered with</b>	RoC Hyderabad
<b>Registered number</b>	26542
<b>Managing Director</b>	J Lakshmana Rao
<b>Registered office, administrative office and manufacturing facility</b>	Plot #700, Road No. 36, Jubilee Hills, Hyderabad - 500 033, Telangana
<b>Number of employees</b>	467
<b>Number of Certifications and awards</b>	5
<b>Statutory compliance</b>	Regular
<b>Was the management transparent in disclosing information</b>	Yes
<b>Was the management discussion sufficient to understand the risk issues?</b>	No

BUSINESS PROFILE	
Nature of business	Manufacturing
Industry	Packaging
Industry prospects	Neutral
Business Description	<p><b>Business:</b> The company is engaged in the manufacturing of injection moulded containers for lubes, paints, food and other products</p> <p><b>Products:</b> Lube Packaging, Paint Packaging, Food Packaging, Bulk Packaging.</p> <p><b>Pricing:</b> Data Awaited</p> <p><b>Installed capacity:</b> Data Awaited</p> <p><b>Utilization Capacity:</b> Data Awaited</p>
Experience in the business	20
Product range	4
Degree of competition	Moderate
Plans	Data Awaited
Customer profile	Retail customers

## PROMOTERS'S PROFILE



Promoter's name	:	Lakshmana Rao Janumahanti
Age	:	58
Qualification Level	:	Post Graduate
Designation/Responsibilities	:	Chairman and MD
Previous experience	:	Founder of Mold Tek Group
Relevant Experience (years)	:	9



Promoter's name	:	Subrahmanyam Adivishnu
Age	:	63
Qualification Level	:	Graduate
Designation/Responsibilities	:	Deputy Managing Director
Previous experience	:	Director, Mold Tek Technologies Ltd
Relevant Experience (years)	:	10

Data Awaited	Promoter's name	:	Sheshu Kumari Adivishnu
	Age	:	57
	Qualification Level	:	Graduate
	Designation/Responsibilities	:	CFO & Finance Controller
	Relevant Experience (years)	:	2

## OWNERSHIP PATTERN

Partners' share of profit as on:	
Name of the Shareholder	Share in Capital (%)
Indian	35.73%
Foreign	0.11%
Institutional Public Shareholding	18.40%
Non- Institutional Public Shareholding	45.76%
Total	100%

## KEY MANAGEMENT PERSONNEL

Name	Lakshmana Rao
Age	60
Qualification	BE(Civil) & PGDM - IIM
Designation/Responsibilities	Chairman & Managing Director
Relevant experience	9 Years

Name	Subramanyam
Age	63
Qualification	BE (Mechanical)
Designation/Responsibilities	Deputy Managing Director
Relevant experience	10 Years

Name	Venkateswara Rao
Age	64
Qualification	Post-Graduation
Designation/Responsibilities	Deputy Managing Director
Relevant experience	

Decision making powers	Completely decentralized
Reporting system or MIS	Yes
Type of reporting system	ERP
Frequency of MIS/reporting	Low
Litigation against the Promoters	High
Severity of litigations	Low
Susceptibility to foreign exchange fluctuations	High
Hedging against commodity prices	No
Asset insurance	Yes

<b>BANKING FACILITIES</b>				
<b>Name</b>	<b>Length of Relationship</b>	<b>Type of facility</b>	<b>Loan amount</b>	<b>Rate (%)</b>
Citibank N.A.	Data Awaited	Cash Credit	18.08	9.50%
		Term Loan	86.78	8.70%
Yes Bank Limited	Data Awaited	Cash Credit	0.53	9.50%
ICICI Bank Limited	Data Awaited	Cash Credit	2.45	9.50%
		Bank Guarantee	0.72	NA
HSBC Bank	Data Awaited	Cash Credit	14.48	9.50%

<b>CUSTOMER'S FEEDBACK</b>		
<b>Name of the customer</b>	:	Castrol
<b>Date of the feedback</b>	:	14 March 2018
<b>Designation of the contact person</b>	:	Vasudahara
<b>Share of customer's requirements</b>	:	Data Awaited
<b>Product quality assessment</b>	:	
<b>Level of involvement</b>	:	Medium
<b>Pricing policy and credit terms</b>	:	30-60
<b>Has customer asked the rated SME for a price reduction in the past 6 months? If so, when and by how much?</b>	:	Yes
<b>Delivery delays in the past 6 months</b>	:	Yes
<b>Does the customer source products from the rated SME's group companies?</b>	:	Yes
<b>Have there been any delays in product delivery by group companies in the past 6 months?</b>	:	Yes
<b>Length of relationship</b>	:	5-10 years
<b>Overall satisfaction level</b>	:	Excellent

<b>CUSTOMER'S FEEDBACK</b>		
<b>Name of the customer</b>	:	Cadbury
<b>Date of the feedback</b>	:	17 March 2018
<b>Designation of the contact person</b>	:	Anil J
<b>Share of customer's requirements</b>	:	Data Awaited
<b>Product quality assessment</b>	:	Medium
<b>Level of involvement</b>	:	Low
<b>Pricing policy and credit terms</b>	:	60-90
<b>Has customer asked the rated SME for a price reduction in the past 6 months? If so, when and by how much?</b>	:	Yes
<b>Delivery delays in the past 6 months</b>	:	Yes
<b>Does the customer source products from the rated SME's group companies?</b>	:	Yes
<b>Have there been any delays in product delivery by group companies in the past 6 months?</b>	:	Yes
<b>Length of relationship</b>	:	0 - 3 Years
<b>Overall satisfaction level</b>	:	Good

<b>CUSTOMER'S FEEDBACK</b>		
<b>Name of the customer</b>	:	ITC
<b>Date of the feedback</b>	:	15 March
<b>Designation of the contact person</b>	:	Bajaj N
<b>Share of customer's requirements</b>	:	Data awaited
<b>Product quality assessment</b>	:	Medium
<b>Level of involvement</b>	:	Low
<b>Pricing policy and credit terms</b>	:	30-60
<b>Has customer asked the rated SME for a price reduction in the past 6 months? If so, when and by how much?</b>	:	Yes
<b>Delivery delays in the past 6 months</b>	:	Yes
<b>Does the customer source products from the rated SME's group companies?</b>	:	Yes
<b>Have there been any delays in product delivery by group companies in the past 6 months?</b>	:	Yes
<b>Length of relationship</b>	:	5-10 years
<b>Overall satisfaction level</b>	:	Good

<b>CUSTOMER'S FEEDBACK</b>		
<b>Name of the customer</b>	:	Asian Paints
<b>Date of the feedback</b>	:	21 March
<b>Designation of the contact person</b>	:	Meena Kumari
<b>Share of customer's requirements</b>	:	Data Awaited
<b>Product quality assessment</b>	:	Medium
<b>Level of involvement</b>	:	Low
<b>Pricing policy and credit terms</b>	:	30-60
<b>Has customer asked the rated SME for a price reduction in the past 6 months? If so, when and by how much?</b>	:	Yes
<b>Delivery delays in the past 6 months</b>	:	No
<b>Does the customer source products from the rated SME's group companies?</b>	:	Yes
<b>Have there been any delays in product delivery by group companies in the past 6 months?</b>	:	Yes
<b>Length of relationship</b>	:	5-10 years
<b>Overall satisfaction level</b>	:	Average



**STATEMENT OF PROFIT AND LOSS**

	<b>Particulars</b>	<b>As on 2013</b>	<b>As on 2014</b>	<b>As on 2015</b>	<b>As on 2016</b>	<b>As on 2017</b>
I.	Revenue from operations	192.02	255.12	285.03	275.67	308.33
II.	Other income	0.31	0.51	0.8	0.73	1.83
<b>III.</b>	<b>Total Revenue (I+II)</b>	<b>192.33</b>	<b>255.63</b>	<b>285.83</b>	<b>276.4</b>	<b>310.16</b>
IV.	Expenses					
	Cost of materials consumed	128.45	172.12	180.7	164.43	187.47
	Changes in Inventories of finished goods & WIP	3.85	3.85	-4.67	-2.32	-1.58
	Selling & Distribution	14.77	18.78	19.85	19.97	20.83
	Employee benefits expenses	15.32	19.67	21.26	23.97	28.13
	Finance costs	5.8	8.4	7.25	0.98	1.8
	Depreciation and Amortization expenses	5.46	6.95	8.23	8.5	9.92
	Preliminary & deferred expenses written off	0.04	0.01			
	Other expenses	17.3	18.87	18.58	19.18	22.7
	<b>Total expenses</b>	<b>190.99</b>	<b>248.65</b>	<b>251.2</b>	<b>234.71</b>	<b>269.27</b>
V.	Profit before exceptional extraordinary items and tax (III - IV)	1.34	6.98	34.63	41.69	40.89
VI.	Exceptional Items	0.23	0.19	-0.05	0.27	-0.13
VII.	Profit before extraordinary items and tax (V- VI)	1.11	6.79	34.68	41.42	41.02
VIII.	Extraordinary Items	0	0.6			
IX.	Profit before tax (VII-VIII)	1.11	6.19	34.68	41.42	41.02
X.	Tax expenses:					
	(1) Current tax	1.81	4.36	8.42	11.74	13.62
	(2) Deferred tax	1.22	0.46	0.05	0.94	0.41
XV.	Profit (Loss) for the period (XI + XIV)	-1.92	1.37	26.21	28.74	26.99
XVI.	Earnings per equity share:	10.23	16.05	14.4	17.4	19.5
	(1) Basic	5.14	8.05	7.2	8.7	9.75
	(2) Diluted	5.09	8	7.2	8.7	9.75

<b>BALANCE SHEET</b>						
	<b>Particulars</b>	<b>As on 2013</b>	<b>As on 2014</b>	<b>As on 2015</b>	<b>As on 2016</b>	<b>As on 2017</b>
	<b>EQUITY AND LIABILITIES</b>					
1	<b>Shareholders' funds</b>	<b>49.09</b>	<b>52.50</b>	<b>115.66</b>	<b>128.98</b>	<b>144.02</b>
	Share Capital	11.25	11.28	13.84	13.85	13.85
	Reserves and Surplus	37.84	41.22	101.82	115.13	130.17
	Money received against share warrants					
2	<b>Share application money pending allotment</b>			0.01		
3	<b>Non-Current Liabilities</b>	<b>24.29</b>	<b>25.25</b>	<b>0.00</b>	<b>14.06</b>	<b>13.00</b>
	Long term borrowings	21.82	19.49	10.97	6.62	4.78
	Deferred Tax Liability	1.22	4.37	4.42	5.36	5.77
	Other Long-Term Liabilities	0.23	0.22	0.30	0.34	0.23
	Long term provisions	1.02	1.17	1.30	1.74	2.22
4	<b>Current Liabilities</b>	<b>71.53</b>	<b>87.85</b>	<b>36.65</b>	<b>60.78</b>	<b>84.93</b>
	Trade payable	11.28	17.41	10.01	14.33	14.66
	Other Current Liabilities	10.34	15.86	10.88	11.20	8.23
	Short term borrowings	44.66	46.02	3.54	18.61	35.53
	Short term provisions	5.25	8.56	12.22	16.64	26.51
	<b>Total Liabilities</b>	<b>144.91</b>	<b>165.60</b>	<b>152.32</b>	<b>203.82</b>	<b>241.95</b>
	<b>ASSETS</b>					
1	<b>Non-current assets</b>					
	<b>Fixed assets</b>	<b>72.87</b>	<b>74.53</b>	<b>74.32</b>	<b>89.25</b>	<b>96.72</b>
	Tangible assets	70.28	72.04	71.54	80.66	90.45
	Capital Work-in-progress	2.59	2.49	2.78	8.59	6.27
	<b>Intangible Assets</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.26</b>	<b>0.22</b>
	Intangible assets	0	0	0	0.26	0.22
	Intangible assets under development	0	0	0	0	0
	Non-current investments	3.16	3.16	3.16	3.53	13.19
	Deferred tax assets	0	0	0	0	0
	Long-term loans and advances	2.01	2.46	3.62	4.27	10.33
	Other non-current assets	0.48	0.41	0.52	0.74	1.16
2	<b>Current assets</b>	<b>66.39</b>	<b>85.04</b>	<b>87.68</b>	<b>105.77</b>	<b>120.33</b>
	Current Investments					
	Inventory	23.61	28.29	27.65	23.88	36.25
	Trade Receivables	35.03	42.2	44.21	54.78	60.42
	Cash & cash equivalents	0.43	0.61	0.98	0.78	0.85
	Short-term loans and advances	7	7.36	13.63	25.19	20.51
	Other current assets	0.32	6.58	1.21	1.14	2.3
	<b>Total</b>	<b>144.91</b>	<b>165.6</b>	<b>169.30</b>	<b>203.82</b>	<b>241.95</b>





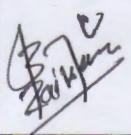
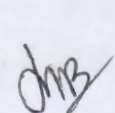
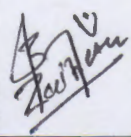
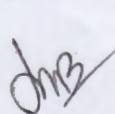
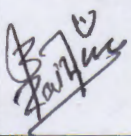
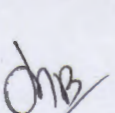
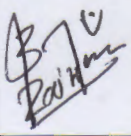
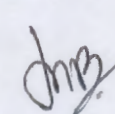
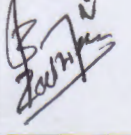
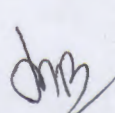
ACHARYA INSTITUTE OF TECHNOLOGY

DEPARTMENT OF MBA

INTERNSHIP WEEKLY REPORT (1AZ16MBA44)

Name : Nidhi Konnur  
Name of the Project : Implementation of Credit Rating Model for SME  
Internal guide : Prof. Mahak Balani  
USN No : 1Z16MBA44  
Specialization : Finance & Human Resource  
Company name : Business Toys Private Limited  
Company Address : #259, 60 feet road, AGB Layout 3<sup>rd</sup> Stage, Hesargatta Main Road, 560090 Bangalore.

Week	Work Undertaken	External Guide Signature	Internal Guide Signature
15-1-2018 to 20-1-2018	Understanding Structure, culture and functioning of the Organization.		
22-1-2018 to 27-1-2018	Understand products/services and the problems of the organization		
29-1-2018 to 3-2-2018	Preparation of Research instrument for data collection. Discussion with the guide for finalization of research instrument in his/her domain and present the same to the guide.		
5-2-2018 to 10-2-2018	Data Collection: Data collected will be edited, coded, tabulated and presented to the guide for suggestions for analysis.		

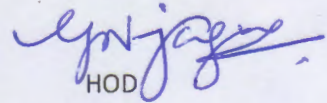
12-2-2018 to 17-2-2018	Building SME Rating Model : Use qualitative and quantitative factors for performance and financial assessment.		
17-2-2018 to 24-2-2018	Building SME Rating Model : Use qualitative and quantitative factors for performance and financial assessment.		
26-2-2018 to 3-3-2018	Building SME Rating Model : Use qualitative and quantitative factors for performance and financial assessment.		
5-3-2018 to 10-3-2018	Discussion with the management regarding the performance and ratings.		
12-3-2018 to 17-3-2018	Testing of model by taking data for SMEs: Test results will be verified from SME Portals.		
19-3-2018 to 24-3-2018	Discuss with guides, make final corrections.		



Company Seal



College Seal

  
HOD

Head of the Department  
Department of MBA  
Acharya Institute of Technology  
Soldevanahlli, Bangalore-560 107