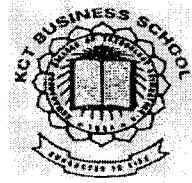
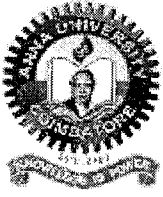


P-2882



**A STUDY ON THE IMPACT OF ECONOMIC RECESSION ON
SMALL PLASTIC INDUSTRIES WITH REFERENCE TO
PRINCE PLASTIC INDUSTRIES, CHENNAI**

A PROJECT REPORT

Submitted by

K. NALINI

Reg. No. 0820400028

**In partial fulfilment of the requirements
for the award of the degree**

Of

MASTER OF BUSINESS ADMINISTRATION

August, 2009

KCT Business School

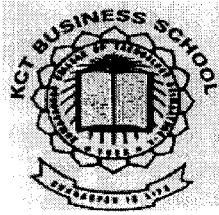
Department of Management Studies

Kumaraguru College of Technology

(An autonomous institution affiliated to Anna University, Coimbatore)

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Bonafide certificate



DEPARTMENT OF MANAGEMENT STUDIES

KUMARA GURU COLLEGE OF TECHNOLOGY (AUTONOMOUS)

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BONAFIDE CERTIFICATE

Certified that this project titled “A STUDY ON THE IMPACT OF ECONOMIC RECESSION ON SMALL PLASTIC INDUSTRIES WITH REFERENCE TO PRINCE PLASTIC INDUSTRIES, CHENNAI” is the bonafide work of Ms. K.NALINI (Reg. No. - 0820400028) who carried out this 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.

Prof. K.R.Ayyaswamy

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Prof. Dr. S.V. Devanathan

Director

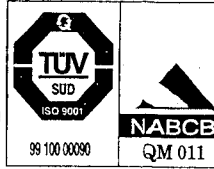
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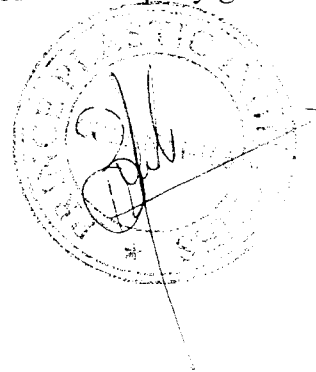
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Attendance certificate

This is to certify that Mr/Ms. K. NALINI has done his/her summer project on "A STUDY ON IMPACT OF ECONOMIC SLOWDOWN ON SMALL PLASTIC INDUSTRIES, WITH REFERENCE TO PRINCE PLASTIC INDUSTRIES" for this company, from JUNE 15, 2009 to JULY 30, 2009.

(Signature of the company guide with seal)



Declaration

DECLARATION

I, hereby declare that this project report entitled “A STUDY ON THE IMPACT OF ECONOMIC RECESSION ON SMALL PLASTIC INDUSTRIES WITH REFERENCE TO PRINCE PLASTIC INDUSTRIES, CHENNAI” done in Prince Plastic Industries, Chennai has been undertaken for academic purpose submitted for the Master of Business Administration degree is my original work and the project report has not formed the basis for the reward of any Degree, Associate ship, Fellowship or any other similar titles.

I, also declare hereby, that the information given in the report is correct to best of my knowledge and belief.

Place: COIMBATORE

Date: 10-09-09


Signature of the candidate

(K. NALINI)

Acknowledgement

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Executive summary

EXECUTIVE SUMMARY

The global recession prompted due to several causes is a terrible piece of news for each and every business in every country throughout the world. Several industries were in danger and the others were facing the threat of bankruptcy. Businesses that can survive this economic recession in a better way are basically small as well as medium scale industries as these businesses usually have streamline way of operation which minimizes the total effect of the global crisis for survival. With 40 percent share in total industrial output and 35 percent share in exports, small scale industries significantly contribute to the fiscal intensification of the country.

Plastics, one of the fastest growing industries in India, have a vital role to play. On the basis of value added, share of India's plastic products industry is about 0.5% of India's GDP. The export of plastic products also yields about 1% of the country's exports. Currently, the Indian plastic industry is highly fragmented with an estimate of around 25,000 firms and over 400,000 employees.

The Global Economic crisis made the financial position of the small and medium scale industries come down as all the sales of these industries dropped during 2007 – 08 and 2008 – 09 as there is minimum requirement from the end users.

Recession had its impact on Prince Plastic Industries, Chennai at the end of 2008 which made the organization to submit the profile to Ucal which is a Electrical industry. Prince Plastic Industries who mainly deal with the manufacturing of Plastic products, due to the impact of recession had a diversification strategy and entered into Electrical industry. Under this backdrop, it is intended to study the impact of economic recession on Prince Plastic Industries, Chennai in its net profit and sales.

The study reveals that Prince Plastic Industries has its impact due to economic slowdown but not very much affected due to recession because of diversification strategy being followed. When compared to the other competitors, Prince Plastic Industries can withstand the impact which is a sign of retention of customers. The findings and recommendations would enable the organization to further enhance the business position in the market.

Introduction

1. Introduction:

1.1: Background of the study:

The global recession prompted due to several causes is a terrible piece of news for each and every business in every country throughout the world. Millions of working people were required to quit their jobs due to the ongoing crisis. Businesses around the globe were hit so hard by the economic crisis that several businesses had to seek monetary assistance from the government in order to survive. Several industries were in danger and the others were facing the threat of bankruptcy. Almost all people were forced to make their decisions carefully when it came to buying something as everyone was clueless about when the recovery from recession will take place. Almost every business was affected by this global economic crisis but the companies that were hard hit were the companies having large scale operation along with those who provide their services at high prices.

Businesses that can survive this economic recession in a better way are basically small as well as medium scale industries. However, it does not suggest that small scale industries are not hit by economic crisis, the difference lies in the fact that small as well as medium scale enterprises have comparatively undersized operations and have the ability to maintain the operation with fewer revenues. Such business usually has streamline way of operation which minimizes the total effect of the global crisis for survival.

About Small Scale Industries:

Since independence, the small scale industries have rendered a major contribution to the gross domestic product of the country. They play a vital role in changing the industrial scenario and strengthening the industrial sector tremendously. They assist the utilization of

assets for productive purposes with minimal initial resources. SSIs have contributed greatly in nurturing private enterprise and in speeding up the economic development by generating employment, exports, and reducing local unevenness.

With 40 percent share in total industrial output and 35 percent share in exports, small scale industries significantly contribute to the fiscal intensification of the country. The progression of traditional small scale industries have made the modern industries which produce the day to day goods like hosiery products, leather products etc to more refined items like television and radio sets, electronics managing system. In a nation like India small scale industries come as boons. As per a report, currently about 273 lakh people are working in small scale industries with a turnover of about 348,059 Cr.

The main reason of a small scale industry is to achieve self reliance by utilizing the resources available and harnessing the skills of local people to lay a platform that yields a steady income. It helps the financial system in promoting equitable development of industries across all the regions of the economy and also in the efficient distribution of money. There are about 115.2 lakh small scale industries in the country which have influenced the economy of the country by a great deal. Victory stories of countless women who held on to small scale industries are widespread in recent times.

Small Scale Plastic Industries:

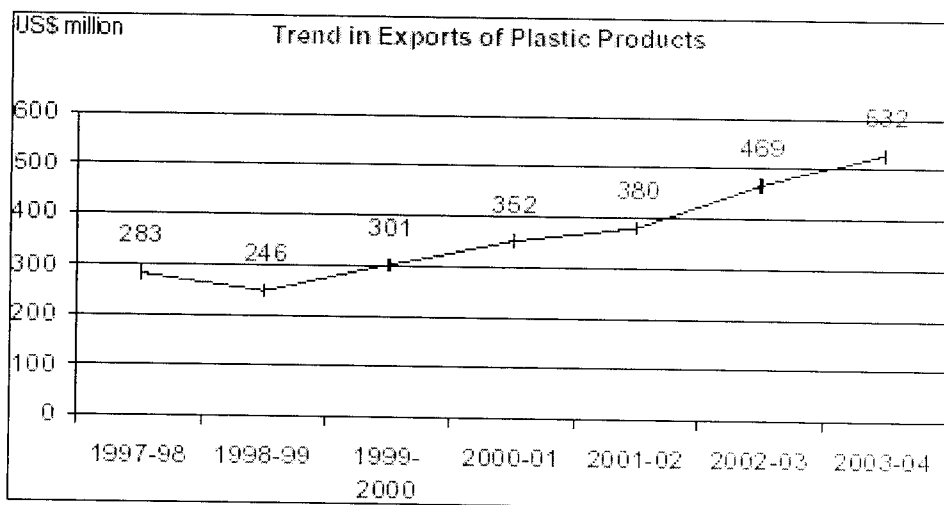
The Indian plastic industry has taken great strides. In the last few decades, the industry has grown to the status of a leading sector in the country with a sizable base. On the basis of value added, share of India's plastic products industry is about 0.5% of India's GDP. The export of plastic products also yields about 1% of the country's exports. The sector has a large presence of small scale companies in the industry, which account for more than 50%

turnover of the industry and provides employment to an estimate of about 0.4 million people in the country. Approximately Rs 100 billion are invested in the form of fixed assets in the plastic processing industry.

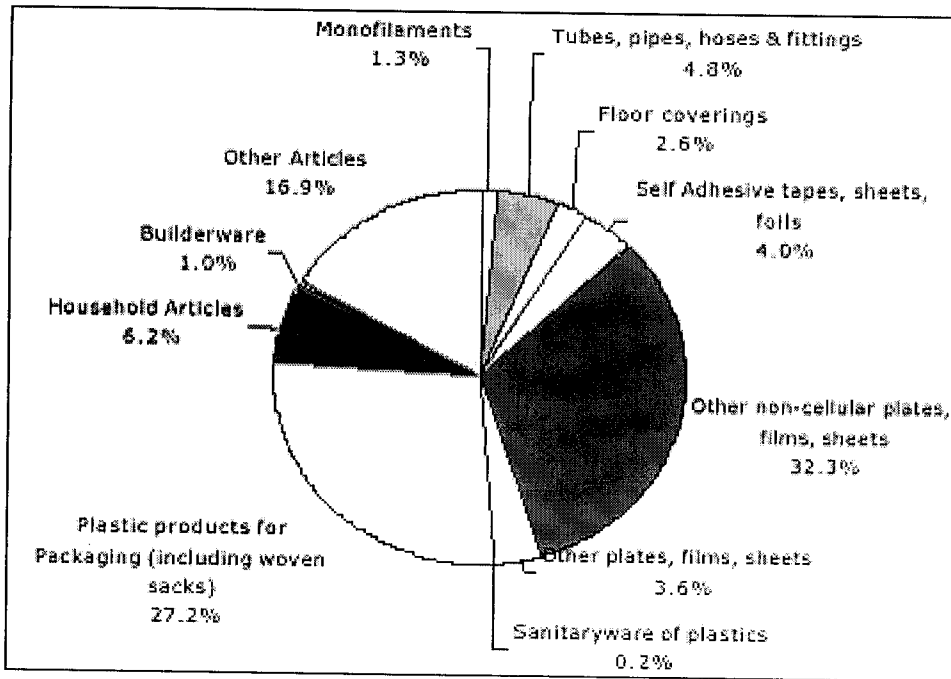
Indian plastic industry has made significant achievements in the country ever since it made a promising beginning with the start of production of polystyrene in 1957. Currently, the Indian plastic industry is highly fragmented with an estimate of around 25,000 firms and over 400,000 employees. The top 100 players of Indian plastic industry account for just 20% of the industry turnover. Barring 10 to 15% of the firms that can be categorized as medium scale enterprises, most of the units operate on a small – scale basis.

The Indian plastic exports were valued at about US\$ 532 million during FY 2004 (1st half FY2005 exports US \$ 295 million). With significant capacity additions leading to over-capacity in domestic markets during FY2001 and beyond, polymer exports have increased considerably. However, due to the lower competitiveness of the plastic products industry, polymers have been exported directly.

Trends in Indian Export of Plastic Products:



India Plastic Products Exports FY 2004 US\$ 531.6 mn:



It is projected that by the end of 2010, Ethylene capacity in Middle-East would reach to about 35 million tons per annum and Polypropylene (PP) capacity to touch about 7 million tonnes per annum.

Worldwide Plastics Industry witnessed a steady growth in the year 2007 which is reflected in the increased consumption figures of all types of Plastics materials. Asia has been world's largest plastics consumer for several years, accounting for about 30% of the global consumption excluding Japan, which has share of about 6.5%. Next to Asia is North America with 26% share, then Western Europe with 23% share in the global market.

World-wide, the plastics and polymer consumption will have an average growth rate of 5% and it will touch a figure of 227 million tons by 2015. Globally, it is projected that PET (Bottle grade) will have the highest growth rate of about 11% AAGR

Indian Plastics Industries – Perspective

Over the years, India has made significant progress in the industrial world with healthy economic growth. On purchase power parity basis, it is one of the top five global economies and is expected to be the third largest by the turn of this decade. Plastics, one of the fastest growing industries in India, have a vital role to play. Indian Plastics Industry is expanding at a phenomenal pace. Major international companies from various sectors such as automobiles, electronics, telecommunications, food processing, packing, healthcare etc. have set-up large manufacturing bases in India. Therefore, demand for plastics is rapidly increasing and soon India will emerge as one of the fastest growing markets in the world.

The next two decades are expected to offer unprecedented opportunities for the plastic industry in India. This would necessitate industry initiatives to foster investments, grow the market, upgrade quality standards, enhance global participation, encourage Indian industry, to adopt and adapt to world class technology and manufacturing practices. Despite instability in International prices of polymer materials in 2006 - 07, plastics industry in the country has consolidated its performance by consuming about 5.0 million tonnes of polymers, as compared to Chinese consumption of about 30 million tonnes in 2007.

Indian plastics industries are enthusiastic about the acceleration of the growth engine in the next 3 to 5 years due to capacity expansion of existing petrochemical complexes and setting up of new crackers in the country currently. Reliance Industries Ltd., (RIL) has about 75% share of Indian Petrochemical Cracker capacity, followed by medium sized capacity of

Gas Authority of India Ltd. (GAIL) and Haldia Petrochemicals Ltd., (HPL). RIL has ambitious plan of augmenting its PP capacity from 1010 KT to 2600 KT by the year 2010.

Indian Oil Corporation (IOC) has also planned an 800 K tonnes naphtha cracker at Panipat at an investment of Rs.6300 crores to produce 800 KT of PE and PP each at Panipat. IOC would also be setting up a production capacity 150 KT PP at Chennai by year 2009 as well as styrene, which is not being produced in India. These positive factors of availability of polymeric materials would infallibly be harbinger in accelerating the growth of plastics sector in the near future.

The Indian plastic processing industry is highly fragmented and comprises 25,000 firms. Barring 10% - 15% of the firms, which can be classified as medium scale operations, all the units operate on a small-scale basis. The top 100 players account for just 20% of the industry turnover. The total number of players in the sector is more than 25,000. However, the degree of fragmentation, worldwide, is a large and despite the small size of operations of the players, they are able to operate profitably. Further, the high growth in demand ensures that the market is able to absorb the excess capacity in quick time. Overall, the degree of competition can be considered high in the Indian plastic processing industry.

Statistics of Plastic Industries in India:

Current Status:

Major Raw Material Producers	15 Nos.
Processing Units	25,000 Nos
Turnover (Processing Industry)	Rs.85,000 Crores
Capital Asset (Polymer Industry)	Rs.55,000 Crores
Raw Material Produced approx	5.3 MMT
Raw Material Consumed approx	5.1 MMT
Employed Direct/Indirect	3.3 Million
Export Value approx	US \$ 1.90 Billion
Revenue to Government approx	Rs.7300 Crores

By 2011 – 12:

Demand Potential	12.5 MMT
Additional Employment	4.0 Million
Investment Potential	Rs.84,000 Crores

VISION 2015 – Indian Plastics Industry:

Consumption of Polymers @ 15% CARG	18.9 Ml tonnes
Turnover of plastics Industries	Rs.1.33,245 Cr
Additional Employment Generation	7 Million
Requirement of Additional Plastics Processing Machines	68113 Nos
Additional Capital Investment In Machines (2004-2015)	Rs.45.000 crores

Global Economic crisis which had an impact not only on the large scale industries but also the small and medium scale industries made the financial position of the industries come down as all the sales of the industries dropped during 2007 – 08 and 2008 – 09.

Recession had its impact on Prince Plastic Industries, Chennai at the end of 2008 which made the organization to submit the profile to Ucal which is a Electrical industry. Prince Plastic Industries who mainly deal with the manufacturing of Plastic products, due to the impact of recession had a diversification strategy and entered into Electrical industry. Under this backdrop, it is intended to study the impact of economic recession on Prince Plastic Industries, Chennai in its net profit and sales.

1.2: Review of Literature:

A 68-page report from the society of the plastics industry in **Washington, D.C.**¹, reports that the US plastics industry directly employed around 1.4 million people in 2002 and accounted for another 772000 jobs in supplier industries, for total of 2.2 million people – about 2% of the U.S. work force. The plastics industry generated shipments worth \$310 billion, plus another \$83 billion from upstream supplier industries - a total of \$393.2 billion. Yet despite its size and economic clout, the industry stumbled badly in the last recession, suffering an 8.4% decrease in employment between 2000 and 2002 and a 6.6% decline in shipments. The exceptions were makers of polystyrene foam products, which increased both employment and shipments in those years. Producers of plastic bottles also increased shipments slightly, and packaging film and sheet shipments held even. Plastics employment decreased by 4.7% annually in the 2000 to 2002 period, and shipments fell 5.4% per year. The number of plastics manufacturing facilities also dropped below 1996 levels in that time frame.

From the article of **Scott case**², it's clearly evident about the impact of recession, not affecting a particular business or community; it's all around in every market segment. But some segments are still doing well because business are trying to utilize this down trend to upgrade services and areas of focus through building their online brand. One such segment is Small Business Website designers; the recession is providing the business owner to put in enough focus for upgrading their online presence by developing a much user friendly website. Further, they also have the flexibility to look and compare the services at the

¹ www.plasticstechnology.com – Article on how plastics weathered the recession. Feb 2004.

² Recession impact on small business website design markets of India. July 21st 2009.
<http://www.articlesbase.com/web-design-articles/recession-impact-on-small-business-website-design-markets-of-india-982242.html>

comfort of sitting at home. This creates a need to have a much focused website that could increase the chance of conversions, and a pleasant user experience to help increase the chances of returning back.

Chris Oakham³, says that the recession will result in severe market contraction and wide spread closure of franchised workshops and independent garages in the UK over the next five years. This report predicts that the UK service and repair market will fall by five per cent over the next five years, equivalent to GBP400m of revenue per annum at today's prices. And this decline is on top of previous drops of 14.5 per cent from 2000-4 and 6.5 per cent from 2004-08. The impact of this downturn will last for many years. "The recession will see motorists seeking value for money to service and maintain their cars, meaning non-franchised garage chains and auto centres are among those most likely to benefit". "The common above-inflation increases in labour charge-out rates that franchised workshops have introduced to maintain revenues are unsustainable," says Oakham.

Gaynor Borade⁴, says that the effect of the downside associated with the recession in the US since 2007 is easy to recognize within the automobile industry. The industry has already shown more than half a million workers the door, to meet the challenges of the suppressed market. The US economic downturn felt within the automobile industry indicates a steep drop in payrolls corresponding to a rise in the unemployment rate. The cut in employment has in turn affected the buying capacity of the consumer and the production line result of the manufacturing process. The consistent employment contraction results are dual.

³ Trend tracker analyst and co-author of the report, Article: UK: Recession to have 'lasting impact' on after sales. Date: 4 Dec 2008. Source: just-auto.com editorial team

⁴ Article: US Economic Crisis: Impact on Automobile industry. Date: 21st March 2009

General Motors is battling huge losses amidst the slack money market and sales slump. The impact of the recession is taking a heavy toll on the automobile industry, which is facing the perils associated with lowered buying capacity of individuals and international client. The 'over-capacity' feature of the auto manufacturing industry in the US has not only reduced car buying but also made the productive capacity stagnant.

Brenda Williams⁵, says that Automobile industry has a special impact on the daily life of the modern day man, which requires fast mobility with reliability. Currently it is undergoing a recession globally. The auto industry is evolving new strategies and signing up new contracts and joint ventures in an effort to stabilize itself and avoid further slump. Automobile manufacturing sector consists of truck manufacturers, motor vehicle body manufacturers, motor vehicle parts and supplies manufacturers. Engine parts form one of the largest segments of the automotive components industry. The latest trend in this sector is of outsourcing a part of the engine to different vendors who provide good comparative technological expertise as well. Recently auto industry is going through its worst periods. The global giants are facing the toughest economical crisis. This is also resulting in heavy losses to the work force in the form of lost jobs.

JudyAnne Pfeiffer-Parm⁶, is part of a top dynamic internet marketing team of mentors. On December 19th, 2008, the White House and US Treasury announced the automotive industry bailout.

⁵ Article: Automobile Industry and the recession. Source: http://EzineArticles.com/?expert=Brenda_Williams

⁶ Article: Automobile industry impact on US industry. Article source: http://EzineArticles.com/?expert=JudyAnne_Pfeiffer_Parm

There are four significant factors significantly hindering the US Auto Industry as a whole:

Firstly, a great majority of our nation faces job-insecurity.

Secondly, even if buying a car is on your 'to-do' list, unless you plan on paying cash, getting financing can be very difficult.

Thirdly, consumer confidence in domestic automakers is in the toilet, especially with all this talk about the 'Big 3' declaring bankruptcy.

Finally, since people are not buying new cars, they are holding onto their old cars longer which means that used cars have seriously decreased in their availability.

Peter Davis⁷, says that, up to 9,300 jobs are expected to be shed by the UK plastics Industry, a survey by the British Plastics Federation (BPF) has revealed. Of those surveyed, 69% said UK sales turnover would decrease by 10% this year. Obtaining credit from banks was also highlighted as a problem by 29% of respondents. "The survey results clearly show that the recession is having effects on their industry." High bank charges and getting credit insurance are particular problems. The BPF Recession Action Group has made a number of proposals that include a 12-month freeze on business rates and the introduction of a national scheme to guarantee credit insurance to companies of all sizes. However, Davis added that the BPF has welcomed government help in the form of the Enterprise Finance Guarantee and Working Capital Scheme.

⁷ Director General of British plastic Federation. Date:27th Jan 2009. Article: BPF survey reveals impact of UK recession. Article Source: packagingnews.co.uk

Frost & Sullivan⁸, says that China has undergone rapid development in the past few years and has become one of the major plastic producing and consuming countries in the world. In 2007, the total production of plastics and plastic products were about 30.7 million tonnes and 33.0 million tonnes, with the growth rate of 18.54% and 14.48%, respectively. However, due to the world recession triggered by the US economy, the Chinese plastics industry is suffering from shrinking demand, sharp decline in plastic prices, and shutting down of plastic plants. The production of Chinese plastic products is estimated to be around 36.9 million tonnes in 2008, with a lower growth rate of 11.7 percent, compared to 14.48% in 2007. Also, she added, because of the sharp decline in crude oil price, the price of almost all kinds of the plastic declined subsequently from the historical peak.

John Clegg⁹, says that currently the most significant impacts of the global crisis can be seen in the mass-lay offs of temp workers in the Indian car industry, in the textile export and raw material manufacturing industries. Reliance Industries, the country's largest company by market capitalisation, is reported to have temporarily (four weeks) shut half its polypropylene plant at Jamnagar in Gujarat due to slow demand for the raw material that is used for packaging. Production at the plant was said to have been cut by 50%, after the company reportedly closed two of the four manufacturing lines. Industry sources said the shutdown follows a sharp decline in the demand for polypropylene. Plastic industry is facing severe demand crunch causing serious concern to the domestic industry.

⁸ Article: Government policies likely to ensure growth of plastic industry. date: 20th Jan 2009. Publication: PR Newswire.

⁹ Article: Impact of the crisis of India. Date: Nov 3, 2008.

Satish Yadav¹⁰, says that with global meltdown in financial markets beginning to shake the Indian stock markets badly, the sandstone industry of Jaipur has also come under its affect. Major clients in the US and UK have cancelled their orders following which the local markets of sandstone in Rajasthan are facing recession. About a million people, related to the sandstone industry, are confronted with the possibility of getting badly affected here. The number of people directly or indirectly faced with the crisis amounts to 70 per cent of the total workforce involved in this industry. "The economic recession in the US has affected the stone business by 80-90 percent. The volume of stone was 2,000 containers but the exporters who used to do business around 35 containers have reduced to 30-35 this time." As the companies had to reduce staff, the exporters are forced to do the same due to this recession.

While resin makers' battle a cyclical trough, U.S. plastics processors are experiencing record sales and profits, according to a study by financing company CIT group (Livingston, NJ). CIT says processors are "**nearly recession-proof**"¹¹, contending that an economic downturn would result in a modest decline in shipments as it did in 1990-91. The group notes that the Federal Reserve's 0.75% increase-rate cut last fall provides "sufficient insurance against a recession this year". CIT says that the Asian financial crisis has had a "negligible" impact on U.S. processors. "It appears that the financial crisis in Indonesia, Malaysia, South Korea, and Thailand reduced real shipment growth by just 0.1%". says CIT.

According to the Statistical Office of the Slovak Republic, industrial output took a sharp leg down in December, falling by 16.8% y-o-y, significantly lower than the 7.2% and 0.2% contractions recorded in November and October, respectively. December's data brought

¹⁰ Satish Yadav, sand stone exporter in Rajasthan. Article: Impact of Crisis in India. Date: 28th Oct 2008.

¹¹ Chemical week, March 24, 1999. Article on polymers: A boom time for plastic processors.

the 2008 average rate of industrial expansion to 2.0%, well below the 12.8% and 9.9% outturns recorded in 2007 and 2006, respectively. Of the 16 sub-components which make up the headline industrial production figure, contractions were recorded in all but two categories. The largest contractions were recorded in the production of ‘transport equipment’ (-35.7%) and ‘**rubber and plastic products**’ (-28.5%)¹².

1.3: Objectives of Study:

1.3.1: Primary Objective:

- The primary objective of the study is to assess the impact of economic recession on PRINCE PLASTIC INDUSTRIES in their sales and profit.

1.3.2: Secondary Objective:

- To study the effectiveness of the strategies implemented by the company to overcome the effect of recession with comparison to another plastic industry.
- To study the impact on net profit of the company due to the impact of economic recession

1.4: Statement of Problem:

Economic slowdown has its impact on all the sectors of the economy. The study is to analyse the impact of economic slowdown on the small plastic industries. The study is mainly concerned with the impact of economic recession on Prince Plastic Industries, Chennai in their net profit and net sales.

1.5: Scope of the Study:

- The study intends to assess the impact of economic recession on the small scale industries on a whole in particular to plastic industries
- To provide suitable suggestions for taking the recession as an opportunity and improve the performance of the industry.

1.6: Research Methodology:

Research methodology may be understood as a science of studying how research is done. It is a systematic step by step investigation or enquiry for new facts in any branch of knowledge.

The methodology adopted for the study is detailed below which includes area of the study, with population, sources of data, tools for collecting data, sampling design, field work and statistical tools for analysis.

1.6.1: Type of Study:

The research is a descriptive one where a large number of respondents are administered. This is done by a formally structured questionnaire.

1.6.2: Sampling Design:

The sampling design involved here is Judgement Sampling, where the researcher collects the data from the particular choice of subjects who are most advantageously placed or in the best position to provide the information required. Here the information is collected from the current customers of the prince plastic Industries, who were with the industry before, during and after the economic recession. The data collected from those customers will be more effective than from the other customers.

1.6.3: Method of Data Collection:

The study relies on both primary data and secondary data.

Primary Data:

The primary data is collected through specially designed questionnaire which is used to collect data from the customers of Prince Plastic industries. A copy of the questionnaire is enclosed in the annexure.

Secondary Data:

The secondary data relating to financial statements of the organization and it is collected from the records of the company. Further data related to the competitors are collected from the internet.

1.6.4: Tools of analysis:

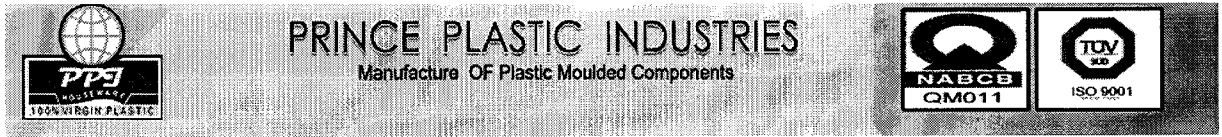
- Percentage analysis
- Ratio analysis
- Correlation analysis
- Chi-square test

1.7: Limitations of the study:

- The study is limited only to Prince Plastic Industries, so it is not possible to get a overall conclusion
- The respondents were only the customers of Prince Plastic Industries and not other plastic industries

Organization profile

2. Organization Profile:



PRINCE of the plastic kingdom

2.1. History of the Organization:

2.1.1. Company Profile:

Prince Plastic Industries was started in 1994, at that period they were running Hand Moulding machine with 5 workers. At 1997, they bought Texair Fully Auto control machine and improved their production and quality as per the industrial requirements.

In 2000, they bought another one Fully Auto Control machine. In 2004, they further developed and bought three more machines. At this time they started 2 units with 37 workers and 5 administrative staffs.

They have 9 operators for moulding and 30 female staffs for trimming section. Apart from this they have production supervisor who is technically qualified for manufacturing plastic components which is used in the Automobiles, Electrical, Electronics and major Engineering Industries.

In 2005, they bought one more CNC Injection moulding machine (screw type made in Taiwan) which is erected in their new unit at kulathoor. Chennai.

They were equipped with best infrastructure facility to manufacture high precision tooling with State of art CNC Machines. They also have In-house microprocessor based automatic injection molding machines for taking trial and production.

They are specialist for float moulding and supplying major Car manufacturing industries like Hyundai, Maruthi, Toyoto, Scorpio and 207, 407 Tempo etc.,

At present their clients are Switch International, Macer Automotive Products (P) Ltd, Multilink, southern polymers, Electromagnets, Eltron electricals etc. Presently, they were negotiating other major industries like Khyshin industries motherson Ltd., and Neyveli Lignite Corporation etc.

Currently, they were having 1 CNC Injection moulding machine 100 tons, 4 Fully Auto Control machines and 2 Semi Auto Control machines and 6 Hand operated moulding machines and test Equipments. They were conscious about Quality control and appointed technically qualified peoples to achieve the 100% quality assurance. They were also inspecting their products at all stages.

2.1.2. Quality Policy:

They were committed to satisfying customers, by supplying Quality Products On-time, on a continual improvement basis by adhering to Standard Practices. They are an **ISO 9001:2000 Certified company from M/s. BVQI**

2.1.3. Infrastructure Facilities:

- ✓ They have 35T to 200T Injection Moulding Machinery.
- ✓ Processing facility for Nylon 66(Unfilled & glass filled), Nylon 6(Unfilled & glass filled), Polycarbonate and polyacetyl
- ✓ Design centre for Mould development
- ✓ Sophisticated Inspection Facility and dedicated Mould Maintenance facility.
- ✓ State of Art CNC Machinery.
- ✓ Sophisticated tool Room with Vertical Machining centre with Series of DRO Milling, Surface Grinding, EDM and Lathe M/c.
- ✓ Excellent Quality Assurance system with latest measuring and testing equipments.
- ✓ Facility for PROTOTYPING
- ✓ 30 ton to 100 ton injection moulding machinery.
- ✓ Processing facility ton nylon 6,66 (Unfilled glass field, mineral filled, tale field) poly carbonate, polyacetyl

2.1.4. Quality Objectives:

- ◆ To achieve customer satisfaction 90% by dec '09
- ◆ To achieve customer complaints towards zero by dec'09
- ◆ To initiate 2-3 improvements every year.
- ◆ Maintain in house rejection towards 0.5% by dec'09
- ◆ To achieve 100% on time delivery.

2.1.5. Current Clients and Their End Users:

Current Clients



Electromagnets

Rotork Controls

End Users

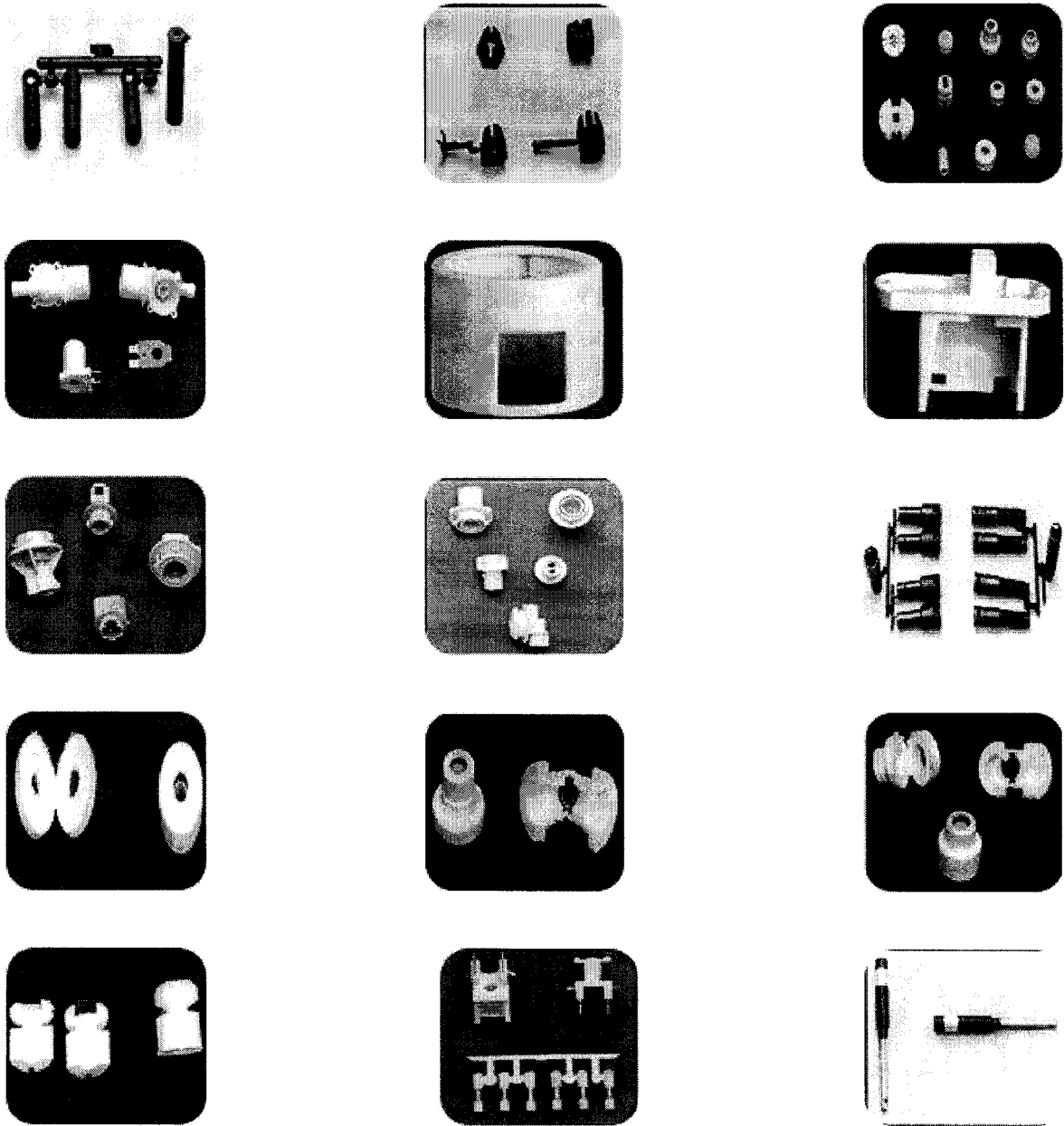


2.2: Management:

The state-of-the-art moulding facility and young team of professionals lead by Mr.B.Muthu Krishnan, who have 18 years of industrial experience ensure pioneering products moulded to excellence with latest technology giving 100% quality in products.

2.3: Products profile and market potential:

The products that are manufactured in Prince Plastic Industries are as follows:



The market potential of the products of Prince Plastic Industries is to the high extent where they were the monopoly of manufacturing floats in the market. During economic slowdown 50% of the organizations' turnover is mainly due to the floats. A market research and analysis is conducted by the organization to learn the requirement and manufacturing

process of float, which made them to be the monopoly of producing floats in the market. The competitors find it difficult at this scenario to learn the manufacturing process as it costs more and also requires a special type of machinery to be produced.

2.4: Competitors of the organization:

The major two competitors of Prince plastic Industries were G M Industrial Plastics and Akme engineering. The competitors are on par with this organization at the time of economic slowdown.

2.5: Competitive strength of the company:

The competitive strength of the organization is mainly due to manufacturing Floats, which any other competitor of Prince Plastic Industries is not manufacturing. Also during the time of economic slowdown, the competitors of Prince plastic Industries came to the position of almost shutting down the industry but it is because of the effective strategies implemented by Prince Plastic industries made them to survive in the market for a longer period.

2.6: Future plans:

Currently the organization is working under a sub-contractual basis, supplying to the clients who inturn supply to the end users like Herohonda, Hyundai, TVS and Whirlpool. The organization has future plans to expand their business and to have direct contract with the end users. According to the expectations of the organization, they can execute this from next financial year.

Data analysis and interpretation

3. Analysis and Interpretation:

3.1 Percentage Analysis:

In order to obtain meaningful information from the data collected the analysis and interpretation is carried out. The data analysis is first important step in the research process. The data are the first edited and tabulated for the purpose of analysing is an important step in the research process. The data are first edited and tabulated for the purpose of analysing them.

The analysis is conducted using the simple percentage and descriptive method using tables and charts. Finally the meaning of the data may be expected from the analysis thus conducted the conclusion summary and recommendations of research are based on the statistical analysis and inferences drawn.

Percentage analysis is a method to represent raw streams of data as a percentage (a part in 100 – percent) for better understanding of collected data. Now detailed interpretation and analysis can be considered from the following tables and charts.

**Table 3.1.1: No. of years from which the customers’
organization is established**

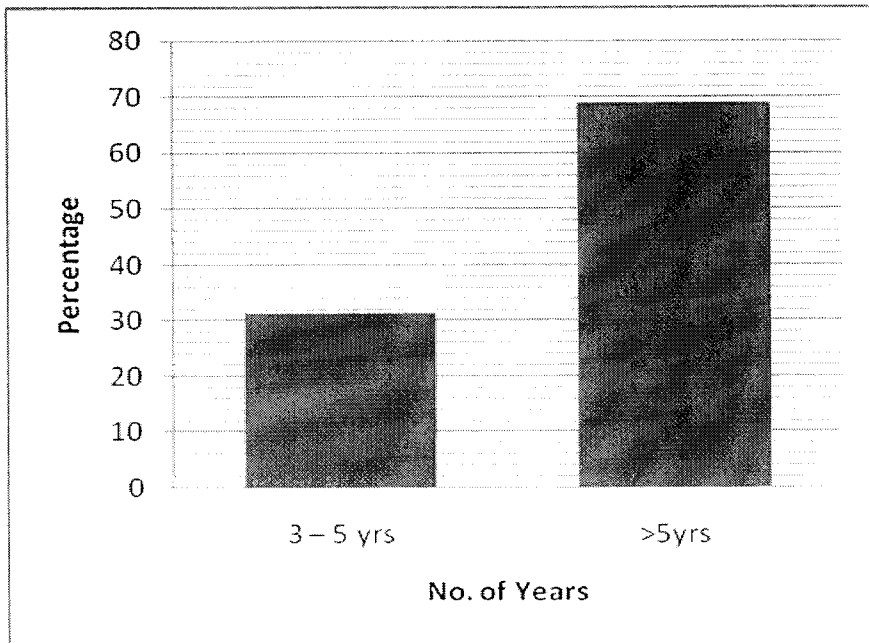
S.No	Criteria	Frequency	Percent
1	3 – 5 yrs	5	31.2
2	>5yrs	11	68.8
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table3.1.1, it is observed that, out of total customers of Prince Plastic Industries, 31.2% of the customers established their organization between 3 to 5 years and 68.8% of the customers established their organization before 5 years. This confirms that most of the customers of Prince Plastic Industries were in the industry for more than 5 years.

Chart 3.1.1: Chart representing no. of years from which the customers' organization is established



Inference:

From Table 3.1 and chart 3.1, Majority of the customers (68.8%) have established their organization before 5 years and they continue to patronize. It is a sign of retention of customers.

Table 3.1.2: No. of years from which the customers received materials from Prince Plastic Industries

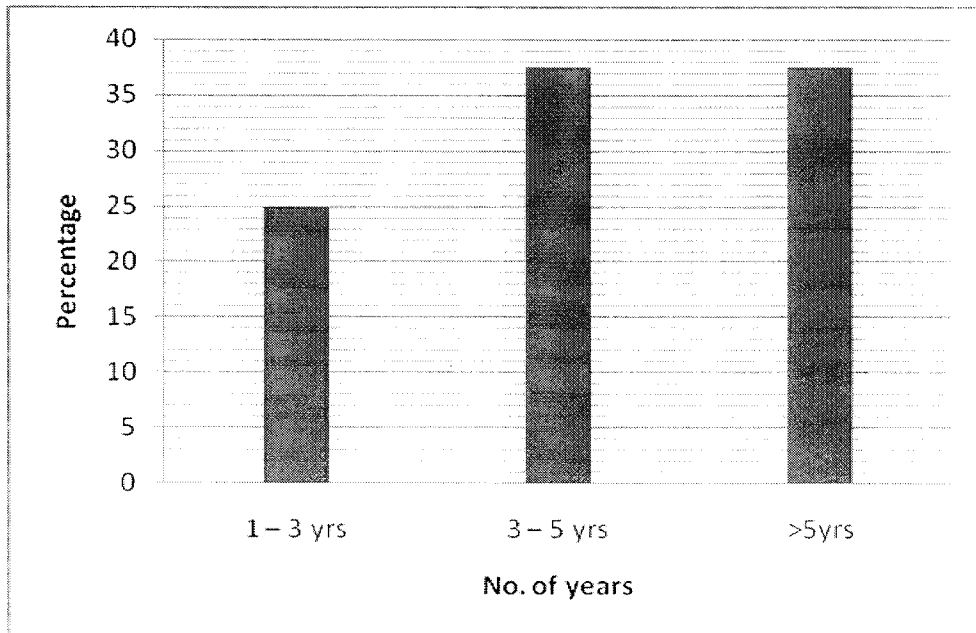
S.No	Criteria	Frequency	Percent
1	1 – 3 yrs	4	25.0
2	3 – 5 yrs	6	37.5
3	>5yrs	6	37.5
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table3.1.2, it is observed that out of the total customers of Prince Plastic Industries, 25% of the customers received materials from Prince Plastic Industries for 1 -3 years. 37.5% of the customers received materials from Prince Plastic Industries for 3 -5 years. 37.5% of the customers received materials from Prince Plastic Industries for 5 years. This shows that the customers stay with Prince Plastic Industries even at the time of recession. They were with Prince Plastic Industries before the recession, during and after the recession.

Chart 3.1.2: Chart representing no. of years from which the customers received materials from Prince Plastic Industries



Inference:

From Table 3.1.2 and chart 3.1.2, 75% of the customers get the materials from Prince Plastic industries for more than 3 years. It is an indication of that the industry is able to retain the customers even in the recession period.

Table 3.1.3: Time basis on which the materials are received

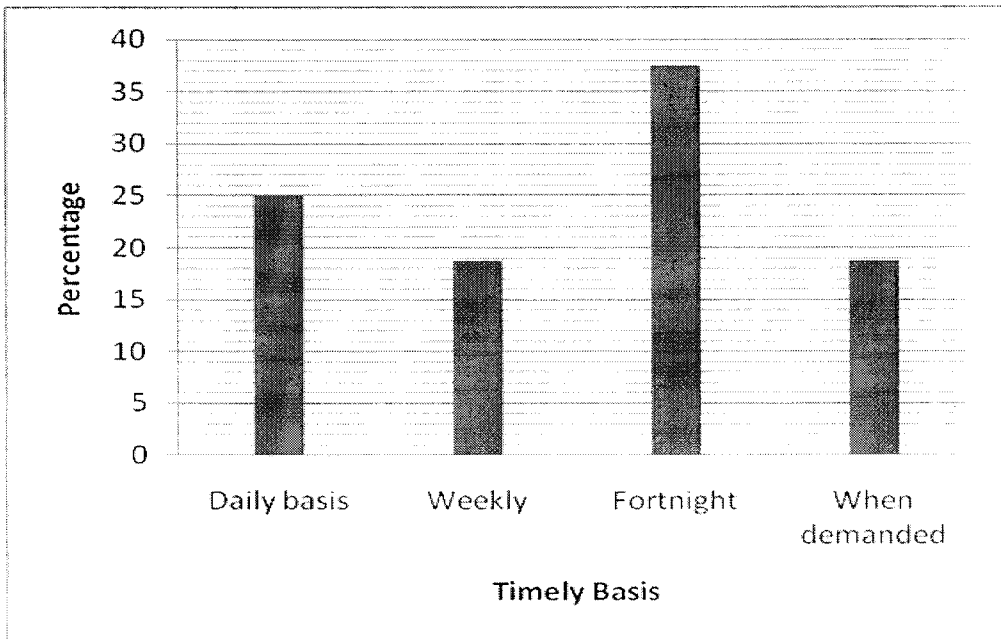
S.No	Criteria	Frequency	Percent
1	Daily basis	4	25.0
2	Weekly	3	18.8
3	Fortnight	6	37.5
4	When demanded	3	18.8
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.3, it is noted that 25% of the customers of Prince Plastic Industries get materials on a daily basis, 18.8% of the customers of Prince Plastic Industries get materials on a weekly basis, 37.5% of the customers of Prince Plastic Industries get materials on a fortnight basis and finally 18.8% of the customers get materials on demand.

Chart 3.1.3: Chart representing the time basis on which the materials are received



Inference:

From Table 3.1.3 and chart 3.1.3, Most of the customers (37.5%) get the materials from prince plastic industries on a fortnight basis.

Table 3.1.4: Basis of payment made to Prince Plastic Industries

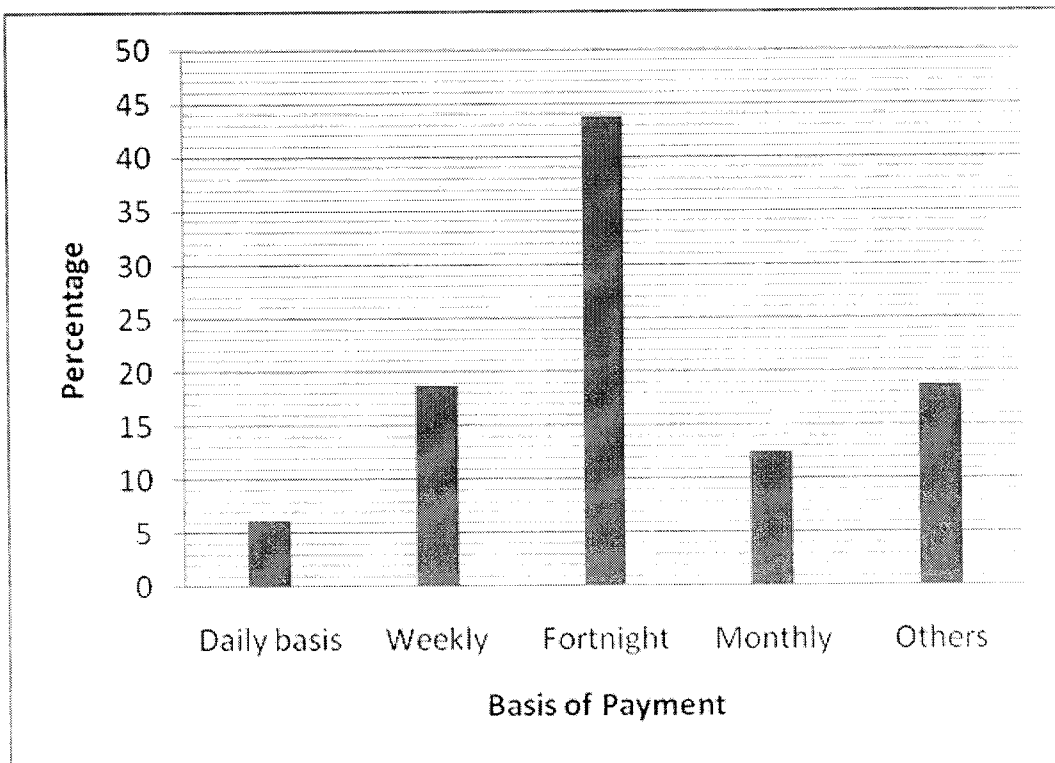
S.No	Criteria	Frequency	Percent
1	Daily basis	1	6.2
2	Weekly	3	18.8
3	Fortnight	7	43.8
4	Monthly	2	12.5
5	Others	3	18.8
	Total	16	100.0

Source: primary data

Interpretation:

From Table3.1.4, it can be noted that 6.2% of the customers pay to Prince Plastic Industries on a daily basis, 18.8% of the customers on weekly basis. 43.8% of the customers on fortnight basis, 12.5% of the customers on a monthly basis and finally, 18.8% of the customers pay to Prince Plastic Industries when they get the materials from Prince Plastic Industries. This shows that all the customers of Prince Plastic Industries make their payments promptly.

Chart 3.1.4: Chart representing the basis of payment made by the customers to Prince Plastic Industries



Inference:

From Table 3.1.4 and Chart 3.1.4, Most of the customers(43.8%) pay to Prince plastic industries on fortnight basis.

Table 3.1.5: Credit limit allowed to the customers

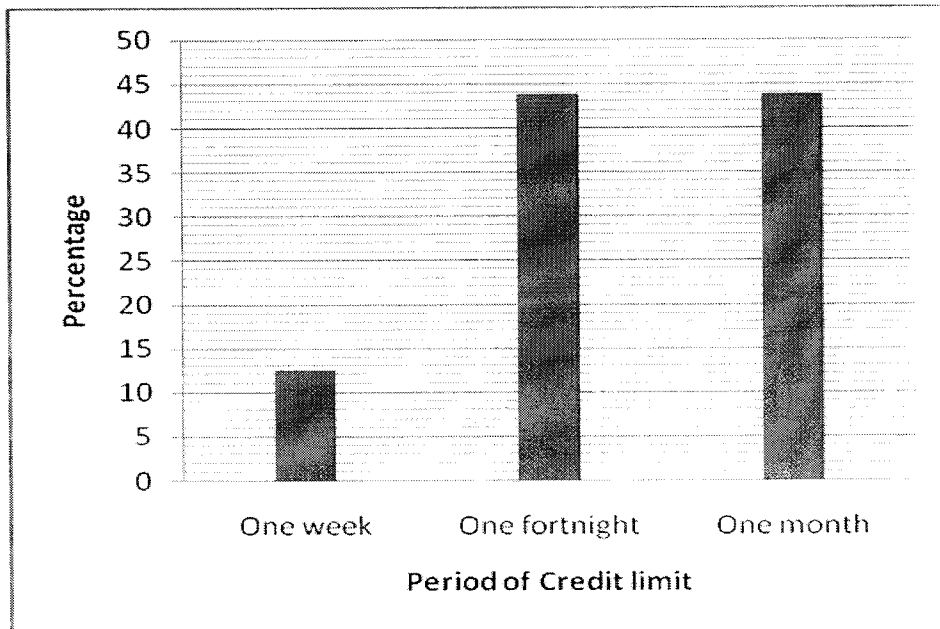
S.No	Criteria	Frequency	Percent
1	One week	2	12.5
2	One fortnight	7	43.8
3	One month	7	43.8
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.5, it can be noted that the 12.5% of the customers get the credit limit for one week, 43.8% of the customers get the credit limit for one fortnight and for one month. This shows that, prince plastic industries were not very forceful to the customers even at the time of economic slowdown. They provide the credit limit to the customers based on their necessities.

Chart 3.1.5: Chart representing the credit limit allowed to the customers by Prince Plastic Industries



Inference:

From Table 3.1.5 and Chart 3.1.5, Most of the customers (43.8%) get the credit limit for one fortnight and for one month.

**Table 3.1.6: Level of sales of Prince Plastic Industries during
Economic Slowdown**

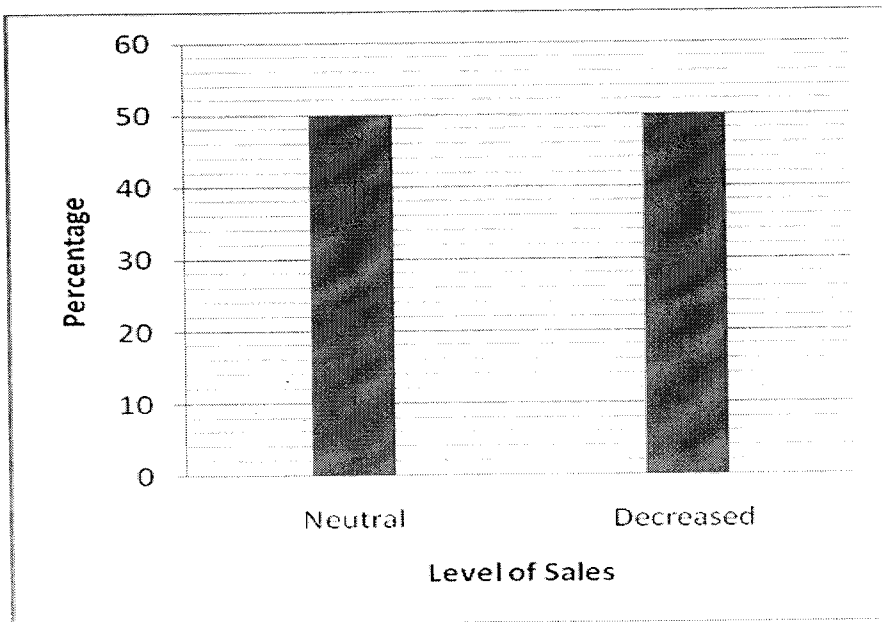
S.No	Criteria	Frequency	Percent
1	Neutral	8	50.0
2	Decreased	8	50.0
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.6, it can be interpreted that 50% of the customers have the opinion that the level of sales of prince plastic industries had been neutral at the time of economic recession and the other 50% of the customers feel that the level of sales of prince plastic industries had decreased at the time of economic slowdown. This shows that there is a negative impact of economic recession on prince plastic industries.

Chart 3.1.6: Chart representing the level of sales of price plastic industries during economic slowdown



Inference:

From Table 3.1.6 and Chart 3.1.6, Half of the customers say that the level of sales is decreased and others say that the level of sales is neutral at the time of economic recession.

Table 3.1.7: Satisfactory level regarding the quality of materials

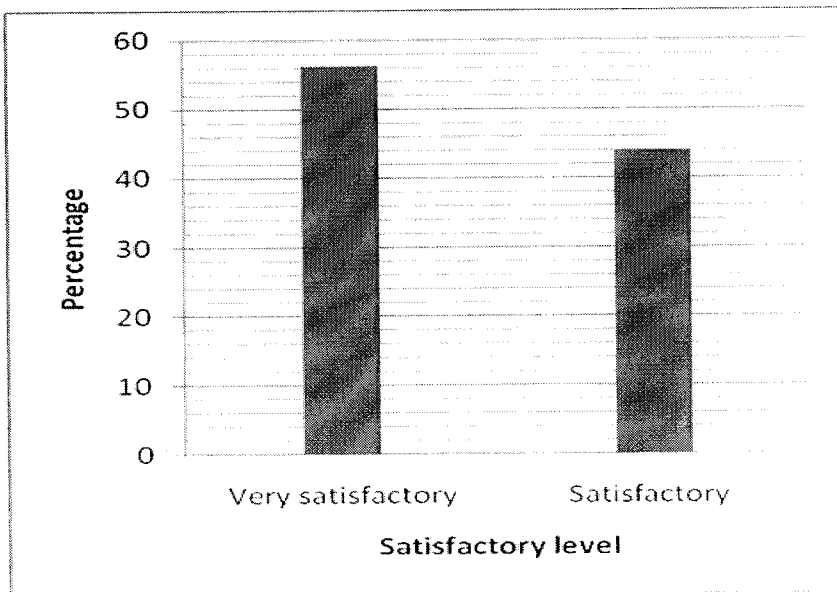
S.No	Criteria	Frequency	Percent
1	Very satisfactory	9	56.2
2	Satisfactory	7	43.8
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.7, it can be noted that 56.2% of the customers of prince plastic industries were very satisfactory regarding the quality of materials supplied to them and 43.8% of the customers say that they are satisfactory regarding the quality of materials supplied to them by prince plastic industries. This shows that prince plastic industries have to improve upon their quality of materials so that they can acquire full satisfaction of the customers.

Chart 3.1.7: Chart representing the satisfactory level of the customers regarding the quality of materials



Inference:

From Table 3.1.7 and Chart3.1.7, Most of the customers (56.2%)are very satisfactory regarding the quality of materials.

Table 3.8: If the customers of Prince Plastic Industries get materials from other suppliers

S.No	Criteria	Frequency	Percent
1	Yes	16	100.0

Source: Primary Data

Interpretation:

From Table3.1.8, it can be noted that all the customers of prince plastic industries get materials from the other suppliers. This is because prince plastic industries were not able to meet the full requirement of the customers and some of the products are not produced by prince plastic industries.

Inference:

From Table3.1.8, All the customers of Prince plastic industries get materials from other suppliers

Table 3.1.9: Satisfactory level regarding the performance of materials

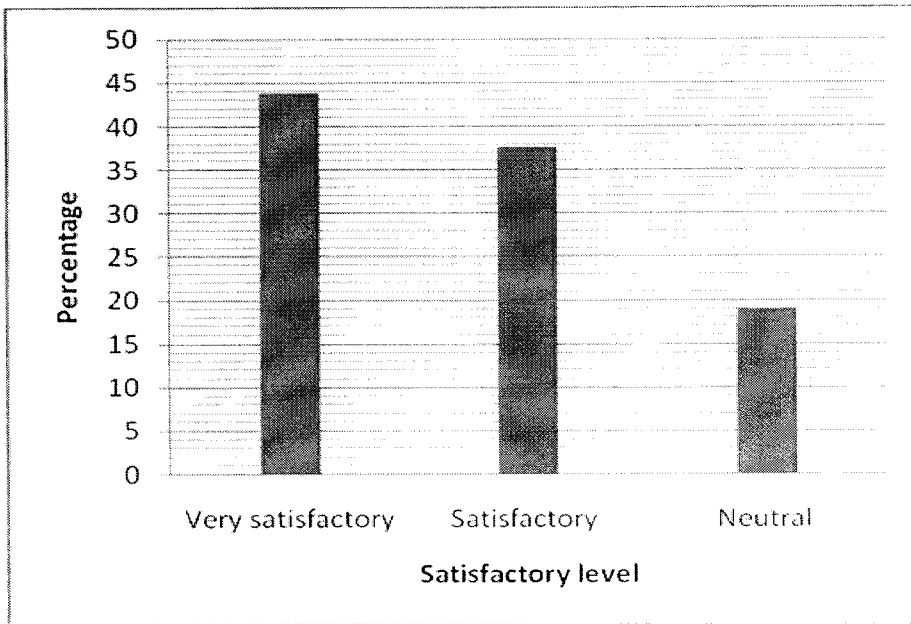
S.No	Criteria	Frequency	Percent
1	Very satisfactory	7	43.8
2	Satisfactory	6	37.5
3	Neutral	3	18.8
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.9, it can be noted that, about 43.8% of the customers are very satisfactory regarding the performance of the materials supplied by Prince Plastic Industries, 37.5% of the customers are satisfactory regarding the performance of materials and 18.8% of the customers are neutral regarding the performance of materials.

Chart 3.1.9: Chart representing the satisfactory level of the customers regarding the performance of materials



Inference:

From Table3.1.9 and Chart3.1.9, Most of the customers (81.3%) are satisfied regarding the performance of materials supplied by prince plastic industries

Table 3.1.10: Level of requirement made by the customers during recession

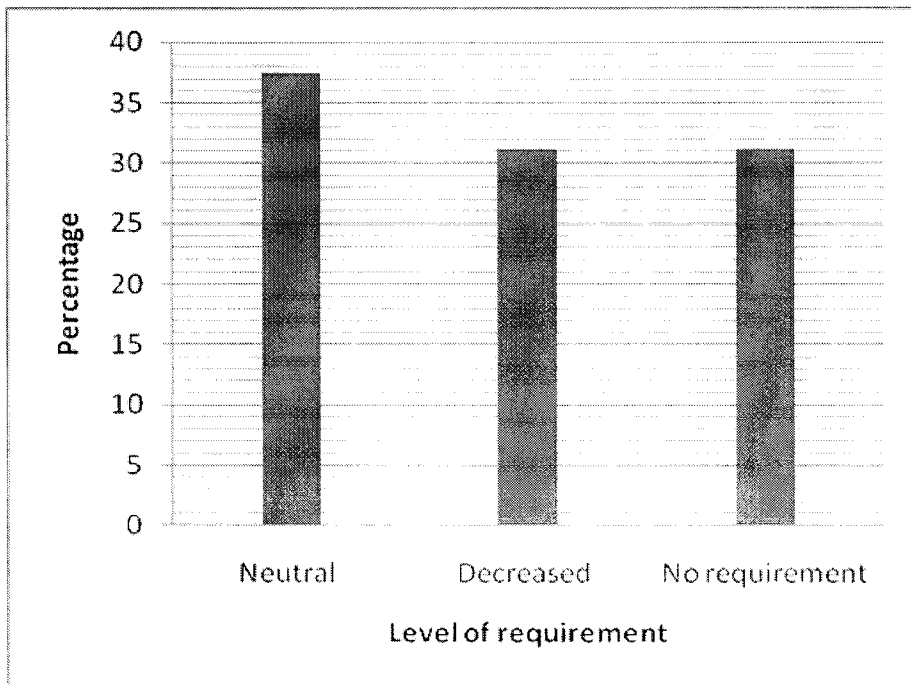
S.No	Criteria	Frequency	Percent
1	Neutral	6	37.5
2	Decreased	5	31.2
3	No requirement	5	31.2
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.10, it can be noted that about 37.5% of the customers had a neutral requirement at the time of economic recession, for 31.2% of the customers the level of requirement have decreased and 31.2% of the customers had no requirement at the time of economic recession. This shows that about 62.4% of the customers' level of requirement had been decreased or became null.

Chart 3.1.10: Chart representing the level of requirement made by the customers during recession



Inference:

From Table 3.1.10 and Chart 3.1.10, Most of the customers' (62.4%) level of requirement at the time of economic recession is either decreased or became null. This clearly evidences that the economic slowdown has a greater impact on Prince Plasic Industries in its sales. The sales figure for the year 2007 – 08 and 2008 – 09 had been decreased when compared to the year 2006 – 07 (Data in Page.56).

Table 3.1.11: Satisfaction of customers during recession

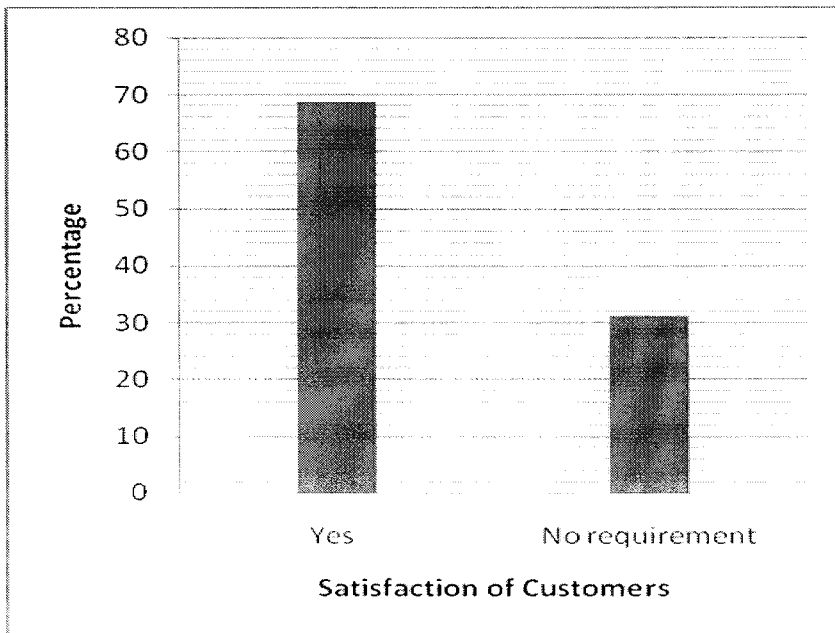
S.No	Criteria	Frequency	Percent
1	Yes	11	68.8
2	No requirement	5	31.2
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table3.1.11, it can be interpreted that 68.8% of the customers are satisfied in terms of requirement by prince plastic industries at the time of economic slowdown and 31.2% of the customers said that they had no requirement at the timeof economic recession.

Chart 3.1.11: Chart representing the satisfaction of customers during recession



Inference:

From Table3.1.11 and Chart3.1.11, Most of the customers (68.8%) are satisfied in terms of requirement by Prince plastic industries at the time of economic recession.

Table 3.1.12: Satisfaction of customers due to other suppliers

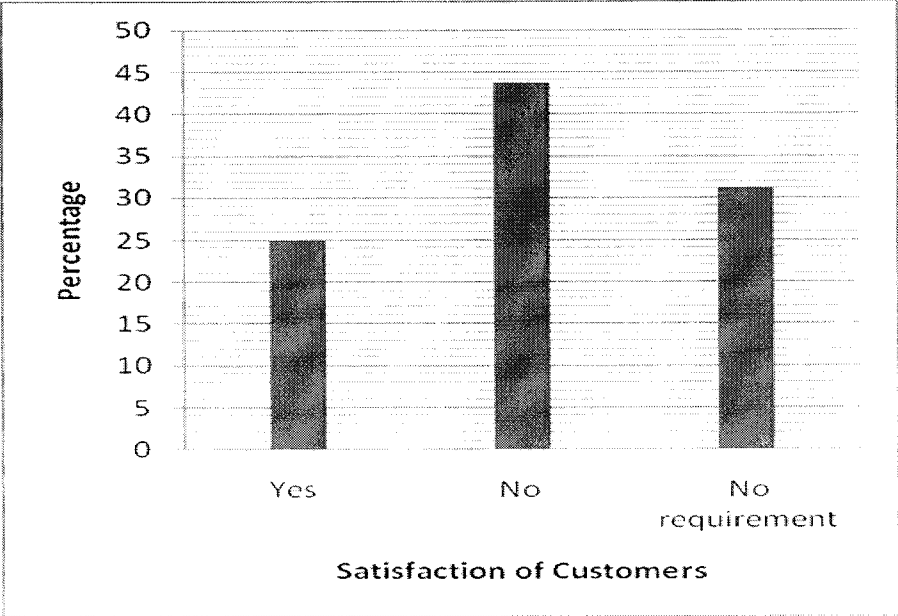
S.No	Criteria	Frequency	Percent
1	Yes	4	25.0
2	No	7	43.8
3	No requirement	5	31.2
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.12, it can be interpreted that 25% of the customers were satisfied in terms of requirement by other suppliers, 43.8% of the customers were not satisfied in terms of requirement by other suppliers and 31.2% of the customers had no requirement at the time of economic slowdown.

Chart 3.1.12: Chart representing the satisfaction of customers due to other suppliers at the time of recession



Inference:

From Table 3.1.12 and Chart 3.1.12, Most of the customers (43.8%) are not satisfied in terms of requirement by other suppliers at the time of economic recession.

**Table 3.1.13: Stability of Prince Plastic Industries during
Economic Slowdown**

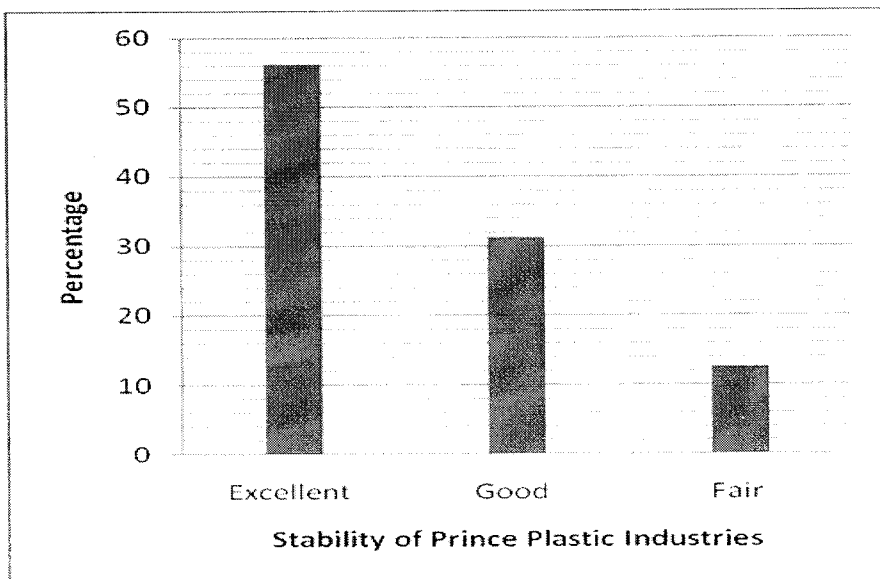
S.No	Criteria	Frequency	Percent
1	Excellent	9	56.2
2	Good	5	31.2
3	Fair	2	12.5
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.13, it can be interpreted that 56.2% of the customers said that the financial stability of prince plastic industries is excellent at the time of economic recession. 31.2% of the customers said that the financial stability of prince plastic industries is good at the time of economic recession and 12.5% of the customers said that the financial stability of prince plastic industries is fair at the time of economic recession.

Chart 3.1.13: Chart representing the stability of prince plastic industries during Economic slowdown



Inference:

From Table3.1.13 and Chart3.1.13, Most of the customers (56.2%) have the opinion that the financial stability of prince plastic industries is excellent at the time of economic recession.

**Table 3.1.14: Satisfactory level regarding the overall performance of
Prince Plastic Industries**

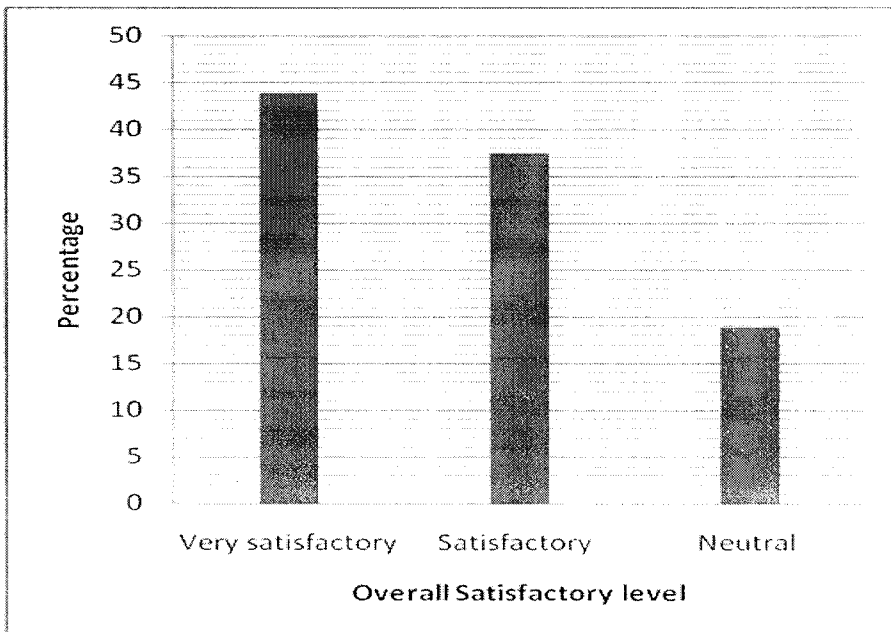
S.No	Criteria	Frequency	Percent
1	Very satisfactory	7	43.8
2	Satisfactory	6	37.5
3	Neutral	3	18.8
	Total	16	100.0

Source: Primary Data

Interpretation:

From Table 3.1.14, it can be interpreted that 43.8% of the customers are very satisfactory regarding the overall performance of prince plastic industries, 37.5% of the customers are satisfactory regarding the overall performance of prince plastic industries and 18.8% of the customers are neutral regarding the overall performance of prince plastic industries.

Chart 3.1.14: Chart representing the satisfactory level regarding the overall performance of prince plastic industries



Inference:

From Table3.1.14 and Chart3.1.14, Most of the customers (43.8%) are very satisfactory regarding the overall performance of prince plastic industries.

3.2. Ratio Analysis:

The relationship between two figures expressed mathematically is called a “Ratio”. It is a numerical relationship between two numbers which are related in some manner. Ratio analysis is a technique of analysis and interpretation of various ratios for helping in decision making.

Net Profit Ratio:

The net profit margin is indicative of management’s ability to operate the business with sufficient success not only to recover from revenues of the period, the cost of merchandise or services, the expenses of operating the business and the cost of the borrowed funds, but also to leave a margin of reasonable compensation to the owners for providing their capital at risk. The ratio of the net profit to sales essentially expresses the cost price effectiveness of the operation.

Formula for calculating Net Profit ratio:

$$\text{Net profit ratio} = \frac{\text{Earnings after interest and taxes (EAT)}}{\text{Net sales}}$$

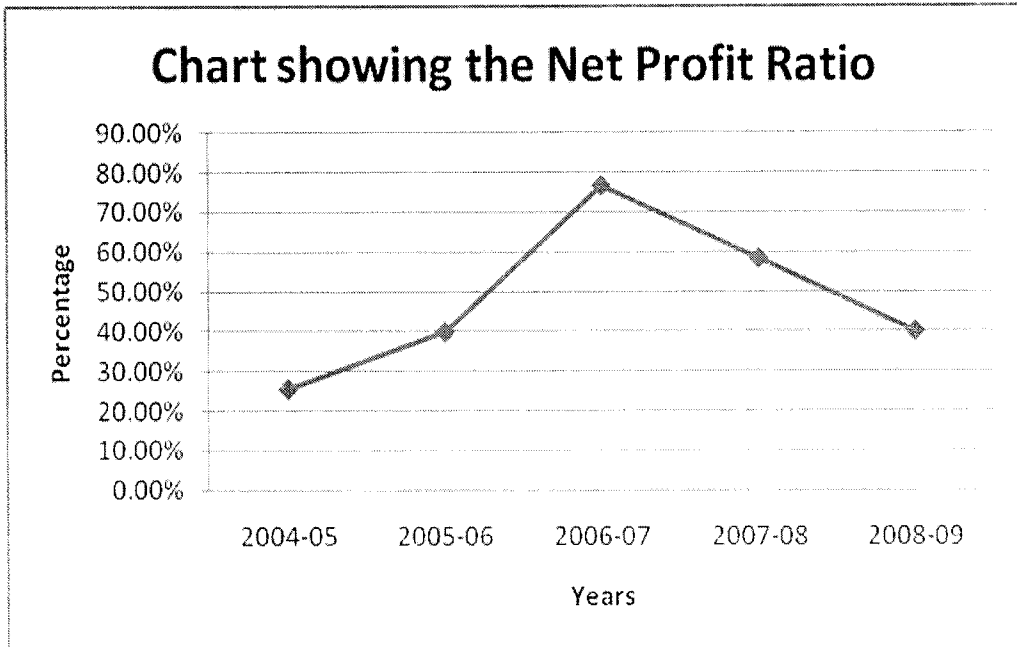
Table 3.2.1: The net profit ratio of prince plastic industries

2004-05	2005-06	2006-07	2007-08	2008-09
25.5%	39.8%	76.74%	58.39%	40.03%

Interpretation:

From Table3.2.1, it can be noted that the net profit is in increasing trend from 2004-05 to 2006-07 and following a decreasing trend from 2006-07 to 2008-09. It was in highest percentage (76.74%) during 2006 – 07 and following that, due to recession, the net profit margin came down to 40.03% in 2008-09. This shows that the impact of recession is high on the Prince Plastic Industries which is the main reason for the decline of the net profit ratio in the organization.

**Chart 3.2.1: Chart representing the net profit ratio of
Prince Plastic Industries**



Inference:

From Table3.2.1 and Chart3.2.1, The organization had a maximum net profit ratio (76.74%) during the financial year 2006 – 07, and due to the impact of recession it came down to 40.03% in 2008 – 09.

3.3. Chi Square Analysis:

Chi square analysis tests enable us to test whether more than two population proportions can be considered equal. If we classify a population into several categories with respect to two attributes, we can use chi square test to determine whether the two attributes are independent of each other.

The chi-square test was applied to validate the null hypothesis H_0 .

The test is made at 5% level of significance.

The theoretical chi-square value is given by

$$\chi_0^2 = \sum [(O-E)^2/E]$$

with $(n-1)(m-1)$ degrees of freedom

Where n is number of rows and m is number of columns.

O the observed frequency and

E expected frequency which is calculated as

$$E = ((\text{column total} * \text{row total}) / (\text{grand total}))$$

3.3.1. Defining the problem:

To test if there is any personal bias in the assessment of the quality and performance a Chi square test is applied.

Hypothesis:

H₀: There is no personal bias in assessing the quality and performance of materials supplied by Prince Plastic Industries

H₁: There is personal bias in assessing the quality and performance of materials supplied by Prince Plastic Industries

Table 3.3.1. Assessment of quality and performance of materials supplied by Prince Plastic Industries

	Satisfactory	Neutral	Total
Quality	16	0	16
Performance	13	3	16
Total	29	3	32

$$\chi^2_{\text{cal}} = 3.3103.$$

$$\chi^2_{\text{table}} = 3.841.$$

$$\chi^2_{\text{cal}} < \chi^2_{\text{table}}$$

Interpretation:

At 0.05% level of significance, since the calculated value is less than the table value, we accept the null hypothesis (H₀). Thus we can conclude that there is no personal bias in assessing the quality and performance of materials supplied by Prince Plastic Industries

3.3.2. Defining the problem:

To test whether the customer company start purchasing from the start of the company or not a Chi square test is applied.

Hypothesis:

H₀: There is no significant relationship between the year of establishment of customers' organization and the year they started purchasing materials from Prince Plastic Industries.

H₁: There is significant relationship between the year of establishment of customers' organization and the year they started purchasing materials from Prince Plastic Industries.

Table 3.3.2. Year of establishment and Year of Purchase of materials from Prince Plastic Industries

	<1 Year	1 -3 Years	3 -5 Years	> 5 Years	Total
Year of establishment	0	0	5	11	16
Year of started purchasing	0	4	6	6	16
Total	0	4	11	17	32

$$\chi^2_{\text{cal}} = 3.56$$

$$\chi^2_{\text{table}} = 7.815.$$

$$\chi^2_{\text{cal}} < \chi^2_{\text{table}}$$

Interpretation:

At 0.05% level of significance, since the calculated value is less than the table value, we accept the null hypothesis (H₀). Thus we can conclude that there is no significant relationship between the year of establishment of customers' organization and the year they started purchasing materials from Prince Plastic Industries.

3.3.3. Defining the problem:

To test whether the competitors of Prince Plastic Industries were able to satisfy the requirement of the customers or not a Chi-Square test is applied.

Hypothesis:

H₀: The competitors of Prince Plastic Industries were not able to satisfy the requirements of the customers at the time of economic recession.

H₁: The competitors of Prince Plastic Industries were able to satisfy the requirements of the customers at the time of economic recession.

Table 3.3.3.Satisfaction of the customers' due to Prince Plastic Industries and other suppliers at the time of recession

	Yes	No	No requirement made	Total
Satisfaction due to PPI	11	0	5	16
Satisfaction due to other suppliers	4	7	5	16
Total	15	7	10	32

$$\chi^2_{\text{cal}} = 10.26$$

$$\chi^2_{\text{table}} = 5.991$$

$$\chi^2_{\text{cal}} > \chi^2_{\text{table}}$$

Interpretation:

At 0.05% level of significance, since the calculated value is greater than the table value, we reject the null hypothesis (H₀). Thus we can conclude that the competitors of Prince Plastic Industries were able to satisfy the requirements of the customers at the time of economic recession.

3.4. Correlation:

Correlation is the study of the degree of relationship between two variables, if the relationship exists. The study of two variables where have in the change in the value of one variable produces a change in the value of other variable, then we say that the variables are correlated or there is a correlation between two variables. Those two variables may have a positive correlation, a negative correlation or they may be uncorrelated.

Positive Correlation:

Two variables are said to be positively correlated if for an increase in the value of one variable there is also an increase in the value of the other variable or for a decrease in the value of one variable there is also a decrease in the value of the other variable; that is the two variables change in the same direction.

If $r=+1$, implies that there is a perfect positive correlation between variables x and y

Negative correlation:

Two variables are said to be negatively correlated if for an increase in the value of one variable there is a decrease in the value of the other variable; that is the two variables change in opposite directions.

If $r=-1$, implies that there is a perfect negative correlation between variables x and y

No Correlation:

Two variables are said to be uncorrelated if the change in the value of one variable has no correlation with the change in the value of the other variable.

If $r=0$, the two variables are uncorrelated.

Simple Correlation:

The correlation between two variables is called simple correlation. The correlation in the case of more than two variables is called multiple correlation.

The formula for the correlation coefficient 'r' can be expressed in the form as follows;

$$r = \frac{\sum xy}{\sqrt{\sum x^2} * \sqrt{\sum y^2}}$$

Where, $x = X - \bar{X}$

Where, $y = Y - \bar{Y}$

Rupes in 000's

Year	Net Profit (Rs.)	Sales(Rs.)
2004-05	196	768
2005-06	228	572
2006-07	441	575
2007-08	499	855
2008-09	503	1,258

On calculation,

$\sigma_x = 281$ and $\sigma_y = 150$, where

x = sales and y = net profit

Correlation r = 0.5069

Interpretation:

There exists a positive correlation between net sales and net profit. That is Net sales and net profit move in same direction. If net sales increases, then net profit will also be in the

increasing trend

3.5. Regression:

Regression is the study of the relationship between the variables. If Y is the dependent variable and X is independent variable the linear relationship suggested between the variables is called the regression equation, of Y on X.

Regression line $\Rightarrow y = a + bx$, where

$$b = \frac{n\sum xy - \sum x \sum y}{n\sum x^2 - (\sum x)^2}$$

and, $a = \bar{y} - b\bar{x}$

On calculation, $b = 0.284$

and $a = 145.096$.

The regression line is given by

$$y = 145.096 + 0.284x, \text{ where}$$

$x = \text{net sales}$ and $y = \text{net profit}$.

Interpretation:

The regression line states that there exists a relationship between the variables net sales and net profit. The relationship is given by if the net sales increases or decrease then the net profit varies 0.284 times that of the increase or decrease of sales.

Conclusion

4. Conclusions:

4.1. Results and discussions:

- Majority of the customers (68.8%) have established their organization before five years and the majority of the customers have been with Prince Plastic Industries from five years, that is the customers are been with the industry before the recession, during the recession and after the recession.
- Most of the customers of Prince plastic industries get the materials on a fortnight basis and pay to the materials on a fortnight basis. This time period of supply and payment had not affected the organization even at the time of economic slowdown. The credit limit the customers get from the Prince Plastic industries, does not change with the impact of recession. Most of the customers get the credit limit on a fortnight and monthly basis.
- Half of the customers have the opinion that the level of sales of Prince Plastic industries have come down at the time of recession and other customers say that the level of sales have been neutral even at the time of recession.
- Most of the customers are very satisfactory regarding the quality and performance of the materials supplied by Prince Plastic Industries. This shows that the customers have a positive opinion about the materials supplied by the organization.
- All the customers of Prince Plastic Industries get the materials from other suppliers in the market.

- Most of the customers had a neutral requirement to be made at the time of recession and for some customers had no requirement at the time of recession. This is because the end users of the industry had no requirement at the time of economic slowdown.
- Most of the customers (68.8%) are satisfied in terms of satisfaction of requirement by Prince Plastic Industries at the time of economic recession and most of the customers (43.8%) are not satisfied in terms of satisfaction of requirement by the competitors of Prince Plastic Industries at the time of economic slowdown.
- Most of the customers (56.2%) have the opinion that the financial stability of Prince Plastic Industries is excellent at the time of economic recession. They were able to meet all the requirements of the customers and made the payment promptly to the suppliers at the time of economic slowdown.
- Most of the customers (43.8%) are very satisfactory regarding the overall performance of Prince Plastic Industries.
- The net profit ratio of the organization was highest (76.74%) during 2006 – 07, which gradually 58.39% in 2007 – 08 and to 40.03% in 2008 – 09.
- There is no personal bias between the customers and the organization, and all the response given the customers had no personal bias in assessing the quality and performance of the organization.
- The year the customers' organization had started had no significant relationship with the year they started purchasing materials from Prince Plastic Industries

- At the time of economic recession, the competitors also to some extent satisfied the requirements of the customers.
- There exists a positive correlation between the net profit and sales of the organization. If the sales are increased or decreased, then the net profit also increases or decreases in the same direction.
- The relationship between the net profit and sales is given as, if the net sales increases or decrease then the net profit varies 0.284 times that of the increase or decrease of sales.

4.2. Recommendations:

The following recommendations emanate from the study.

- From the findings, it is clear that the year of establishment of the customers' organization has no relationship between the years they start purchase from Prince Plastic Industries. This shows that they are not focusing on the new industries in the market. The organization should have a regular and constant update of the new industries so that they can expand their business by adding new customers.
- The customers of the organization even though have a positive opinion about the quality and performance of the materials supplied by Prince Plastic Industries, yet they purchase materials from other suppliers. The customers are not getting all the materials that are required move to the other suppliers. This shows that the organization is not able to supply goods on time. So they should improve production capacity to retain the customers.
- Due to the impact of economic recession, the organization opted for diversification to electrical industry. The organization should also concentrate on the plastic manufacturing which is the competitive strength of the organization.
- The organization instead of having the physical assets if holds the financial assets. it will be helpful for liquidation in times of requirement of immediate cash.
- The net profit and sales of the organization showed decreasing trend after 2006 – 07. If this trend is to be changed, then the productivity of the organization is to be increased and the organization should be in a position to satisfy all the requirements of the customers.

4.3. Conclusion:

The recession had its impact not only on the large scale industries but also made the small scale industries unstable in their financial position. Many strategies are been followed by the industries to come out or to have a fair stable position in the industry. Prince Plastic Industries also had a impact of recession on its financial position, which made the net profit and sales of the organization to fall down during the time of recession. On the whole the small scale industries had not much impact due to economic slowdown as such business usually has streamline way of operation which minimizes the total effect of the global crisis for survival. Prince Plastic Industries, when compared with that of the competitors, was stabilized at the time of economic slowdown in terms of financial position. Their main competitive strength is because of the diversification made at the time of economic slowdown. The customers' have a positive opinion regarding the performance of Prince Plastic Industries. The productivity of Prince Plastic Industries has to be improved upon, so that the customers will be fully satisfied to meet their requirements. Though the net profit and sales of the organization had a decline during the economic slowdown, it can be ensured that if proper measures regarding the productivity and marketing the products has been done in addition to the execution of future plans to have a direct contract with the end users the recession situation can be handled in a smooth way with out any major impact to the organization.

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Annexure

QUESTIONNAIRE TO CUSTOMERS

1. Name of the organization:

2. Number of years from which the organization is established?
 - a. Less than 1 Year
 - b. 1 – 3 yrs
 - c. 3 – 5 yrs
 - d. More than 5 yrs

3. Number of years from which you are the customer of Prince Plastic Industries?
 - a. Less than 1 Year
 - b. 1 – 3 yrs
 - c. 3 – 5 yrs
 - d. More than 5 yrs

4. On what timely basis do you receive materials from Prince plastic industries?
 - a. daily basis
 - b. weekly
 - c. fortnight
 - d. monthly
 - e. when demanded

5. What is the basis of payment you make to Prince plastic industries?
 - a. daily basis
 - b. weekly
 - c. fortnight
 - d. monthly
 - e. others

6. What is the credit limit Prince plastic industries allows to their customers?
 - a. one week
 - b. one fortnight
 - c. one month
 - d. two months
 - e. others

7. What is the level of sales of Prince plastic industries to the customers during economic slowdown?
 - a. Increased
 - b. Neutral
 - c. Decreased

8. What is your satisfactory level regarding the quality of material supplied to you?
 - a. Very satisfactory
 - b. Satisfactory
 - c. Neutral
 - d. Unsatisfactory
 - e. Very unsatisfactory

9. Do you get materials from other suppliers?
 - a. Yes
 - b. No

10. What is the satisfactory level regarding the performance of the materials supplied by prince plastic industries?
 - a. Very satisfactory
 - b. Satisfactory
 - c. Neutral
 - d. Unsatisfactory
 - e. Very unsatisfactory

11. How is the level of requirement you made to PPI during recession?
 - a. Increased
 - b. Neutral
 - c. Decreased
 - d. No requirement

12. Do PPI satisfy your requirements at the time of recession?
 - a. Yes
 - b. No
 - c. No requirement

13. Do other suppliers of your organization is able to meet your requirements during the period of recession?
- Yes
 - No
 - No requirement
14. On a five point scale how will you rate the stability of Prince plastic industries in financial terms when compared to other plastic industries?
- Excellent
 - Good
 - Fair
 - Average
 - Poor
15. What is your satisfactory level on the overall performance of PPI?
- Very satisfactory
 - Satisfactory
 - Neutral
 - Unsatisfactory
 - Very unsatisfactory