Amity Business Journal
2013, Vol. 2, No. 1

Copyright 2012 by ABS,
Amity University Uttar Pradesh, Lucknow Campus (ISSN 2278-0904)

At Cross Roads: A case of an Indian Auto Component Manufacturer

Manoj Mishra*

India has over 100 Million Entrepreneurship firms and over 90% of them are in MSME (Micro Small and Medium Enterprise) sector. In addition to assured market and competition pressures from Chinese products, the challenges of Technology, Quality, Capital for operations and Capital Expenditure, Management Band width and Talent retention have been the key impediments to their growth.

Auto Industry has globally proven to be driver to a country's growth and India post liberalisation of 1991, has witnessed a stupendous growth in Indian auto vehicle and component industry. Auto component industry is the back bone of the Auto OEMs. Most of the auto majors have a supply chain of 250 to 750 suppliers and 90% of it is SME sector firms who face most of above referred challenges.

With sales in the range of Rs 10 million/Year to 1 billion / per Year, they need to upgrade quality, Technology, year on year cost reduction pressures and faster development pressures of OEMs to survive. Some times issues related to Partners splitting add to the challenges. The good thing has been the support of OEMs to help them implement global quality and Manufacturing systems to upgrade these auto component suppliers to meet the competition from global players.

With India already at 6 th position in global auto market and with second to China growth in last 5 years, it would reach the coveted #3 position by 2016 contributing to 10% of GDP from currently 5 % with 160 Billion US$ revenue.

In light of this, the case of an auto component MSME player's journey of last 25 years, how it has survived and grown and how should it carve its growth plans in future attains significance and would be great learning for students in strategic planning, entrepreneurship, auto industry, profitability and working of SME. The case build on the dilemma of promoter of M/S Galaxy Components Private Limited, Pithampur, India: Mr. Sudhanshu Sharma(SS) after 25 years of his existence on how should he improve his company's operations to world class levels, improve profitability to over 10% Profit after tax (PAT) and grow to become Rs 1 Billion Company in next 3 to 5 years. These parameters will take care of manpower productivity to Indian best performing companies levels, and also ensure sustainable growth for making Galaxy a large organisation.

Keywords: Entrepreneurship, Indian Auto Component Industry, SME, Strategic and Growth Planning, Auto Component Profitability, Competitive Advantage

Introduction

Mr. Sudhanshu Sharma (SS) had a gala time, full of fun and frolic for the last 3 days at the silver jubilee function of the engineering graduation. He graduated in 1982 from G S Institute of Technology, Indore- a premiere town of central province -MP, India. Today he had an industrial visit with his three engineer friends-Pramil, Pankaj and Vineet. They had planned to see together his own factory and the factories of Pramil and Pankaj. Pramil 's factory was a small scale unit with Rs 240 million /year sales .It was started by Pramil two years before with Rs. 20 million investment for manufacturer of Soya products. Pankaj's factory (Avtec limited) was a large scale, Rs. 5000 million automobile engines and driveline manufacturing company, where Pankaj was working as Vice President. His third friend Vineet worked as Chief Operating Officer of Rs. 2000 million net shaped forged gears company at Delhi. SS's own factory ***"Galaxy Components Private limited (here after referred as "Galaxy")*** was setup in 1991 as ancillary to Eicher Motors for Supply of sheet metal parts for their truck. For the current year, Galaxy is expecting a sale of Rs. 45 Million.

Vineet and Pankaj had rich and global experience of auto industry while Pramil's experience was in food industry. During the visit, they gave lot of inputs to SS regarding the trends in the auto industry and gave many suggestions for improvement in Galaxy. Their comments during visit about improvement, productivity, technology and the opportunities in Indian auto sector were quite thought provoking for SS.

While returning home after the factory visit, SS was thinking on how should he improve his company's operations to world class levels, improve profitability to over 10% Profit after tax (PAT) and

* *CEO, and President, Omax Autos Limited, Gurgaon (India)*
Email: manoj_mishra_ind@yahoo.com

grow to become Rs 1 Billion Company in next 3 to 5 years. These parameters will take care of manpower productivity to Indian best performing companies levels, and also ensure sustainable growth for making Galaxy a big organisation.

To explore his quest further, he decided to speak to Vineet for seeking his advice on how should he proceed further to accelerate improvements, raise profitability, explore expansion / diversification options and prioritise these objectives. Vineet although agreed to help him out in working out the action plan to come out with the solution on above issues, he requested SS to plan a trip to Delhi for

A) Understanding the best practices in small and large scale manufacturing units in sheet metal and other technology by visiting them and

B) Visiting Auto Expo 2008 being scheduled from 12 Th to 18 Th Jan, 2008 .He explained to SS "In Auto Expo, various Indian and global automobile original equipment manufacturer (OEM), component manufacturer and large auto component export houses will be displaying their products. It will provide an excellent opportunity for understanding Indian and Global Auto Original Equipment Manufacturer (OEM) and component manufacturers and their business potential."

He asked SS to come to Delhi, fully prepared with data on Galaxy's existing operations on profitability, sales and cost break-up, organisation structure, issues for survival and growth. To help preparing expansion plans, he further advised SS to study auto production trends and do opportunity assessment of Indian auto OEM including his existing customers and other global OEMs setting shops in India.

Next 2 weeks kept SS busy consolidating information about his company. He studied details of Galaxy's operations, background of the company, understanding financials of his operations to identify break up of his sales, profitability and issues facing Galaxy. He also worked hard studying trends of growth of Indian auto industry in last few years and assessing the Indian and Global auto industry potential for future.

Promoter's back ground and History of Galaxy

SS's family was in trading business which had low risks and sales variations. The business had peculiarities like assured profitability, tied up supplies by parent company and stable sales. He passed out in 1982 as Mechanical Engineer and thought of starting a manufacturing unit. In order to get industrial experience, he started his career working as a Graduate engineer trainee (GET) in 1982, in a large scale gear manufacturing company "Gajra Gears", Dewas (Dewas is an Industrial town near Indore, located in Madhya Pradesh- central province of India). During the training period, he always thought of starting his business. At that time in Indore, most of the units started by engineers were simple and small units with general purpose machines like Lathe, drill, shaper, milling etc. Considering family psyche of doing assured, low risk business, starting the manufacturing business which gave assured sales to a customer, was his focus. He thought of getting a subcontracting work of Gajra Gears or Kirloskar Brothers -a water pump and electric motor manufacturer in the area. He was successful in getting the assembly work of Kirloskar Brothers for their Electric motor mfg. In 1986, SS started with a friend-Bhupesh, a small scale general purpose machine shop. Bhupesh was also of SS's age and an engineer with 1 year work experience. .The unit had very small investment of Rs 200000 and it did not do well initially for reasons related to difficulty in handling purchases of parts from many other units. It was very difficult for a small scale unit to supply assemblies regularly. Their main difficulty was in procuring parts from various suppliers which were located all over India e.g. Stators and Rotors from sourced from Karnataka, Bearings from Bombay, Capacitors from Kerala etc.. In 1st year of full operation, they could make an annual sale of only 350 motors against a customer requirement of 2000 assemblies. Later on the whole project was converted into job work (all parts were supplied by Kirloskar and only assembly and final machining was to be done at Galaxy). They could make 400 motors every month and could wipe out all the losses of previous years.

Meantime during 1986-87 Pithampur, an Industrial area, 35 Kilometre from Indore was being developed by Madhya Pradesh State Industrial Development Corporation (MPSIDC). Four large

auto OEMs were being set up in this industrial area. SS thought of setting up an auto component manufacturing unit in this area. Bhupesh agreed to partner with SS in this new venture also. They discussed with all four OEMs for setting up a manufacturing unit for these OEMs and requested for assured supplier status as ancillary. They got the chance of getting the ancillary supplier status from Eicher Motors Ltd (here after referred as *"Eicher"*) and thus ***Galaxy Components Private Ltd.*** was born in 1991. Sheet metal items supplies was the priority at Eicher and was also easy to be handled by Galaxy, Eicher allocated 90 parts of sheet metal to Galaxy to be developed and supplied to Eicher in next 24 months in phases to decided by Eicher and Galaxy mutually. SS and Bhupesh decided to set up the unit near Eicher.

In 1986, Eicher started manufacturing Light commercial vehicle (LCV) in Joint Venture (JV) with Mitsubishi Motors Corporation of Japan. The LCV being a new concept for India at that time was getting acceptance slowly. Eicher had trouble in achieving their ambitious plans in initial years (till 1992) and made 4000 Trucks only in year 1992 against a target of 10000.Finally Pithampur got established as a key auto hub (after Pune) with 4 major auto OEM units and later was termed as Detroit of Asia. OEMs who had their plants at Pithampur were Eicher Motors Limited, Bajaj Tempo (later renamed as Force Motors), Hindustan Motor (later renamed as AVTEC) and Kinetic Honda (a JV of Honda Motors, Japan for manufacture of scooters).

Owing to experience of working in engineering companies, SS and Bhupesh could handle well functions like Product development, Machine selection, Plant setting up and Production. Out of three key activities of a manufacturing unit, they were hands on in Production and Finance but lacked experience of third key activity namely Marketing. Galaxy being ancillary unit was assured of a particular off-take from Eicher and hence lack of Marketing experience did not pose any hurdle in their initial years. As Galaxy did not have to do any marketing, they focussed on development of parts and supplies to Eicher.

The project was financed as below(Rs in, Million)

1. Promoters Contribution
   1.15 (contributed equally by Bhupesh and SS)
2. Seed capital 0.3
3. Secured loan from financial institution 3.55
4. Margin money for working capital is included in the cost of project

Although the operations started in early 1991, sales did not pick up as projected. Sales plan was envisaged based on Eicher's projected requirements. Immediately after they started the production in 1991-92, there was a big slowdown in Indian Commercial Vehicle (CV) industry. There was a drop in production at Eicher and thus Galaxy achieved very less sales in spite of 30 parts of phase 1, being ready for supplies. Galaxy immediately shifted focus for acquiring business from other local customers like Bajaj Tempo, Kinetic Honda & other big off highway vehicle manufacturer-Larsen and Toubro (L & T). They got some success in getting orders and kept their manufacturing shop running.

When asked, what the learnings from the slowdown were; SS explained following:

"Learning from this slowdown has been the realisation of our core competencies of meeting requirements of Commercial Vehicle and off highway vehicle segment. We also realised our limitations in supplying to Car and Two wheeler OEMs. We discovered that two wheeler OEMs prefer having suppliers very near to them due to their high production volume. Also for various reasons two wheeler OEMs were selecting suppliers who were family members of top management team. Car manufacturers also preferred suppliers in proximity to them, they additionally needed suppliers with large plants, to meet their requirements .Thus both these sectors came out to be offering no potential for growing the business and hence formed growth philosophy of Galaxy to restrict to CV and off highway vehicles like Tractors, Earth Moving Equipments etc."

Over the years, although Galaxy has grown many folds, Eicher still remains to be its major customer with 85 % share of sales. Galaxy has developed 250 parts for all customers in the vicinity of 200 Kilometres, which includes150 parts developed for Eicher, Pithampur requirements.

The financial result of first 3 years of operation and of recent 3 years is given below:

Equity-Loan, Sales and profitability for first 3 and recent 3 years (All figures in Indian Rupees)							
Year	31.03.07	31.03.06	31.03.05		31.03.93	31.03.92	31.03.91
Equity Capital	807000	807000	807000		462000	462000	900000
Secured Loans	2696872	2306674	2636612		2915863	3122499	1913459
Unsecured Loans	679246	741451	1171051		630924	620248	547863
Gross Sales (incl. duty and taxes)	50276660	616076790	567789240		40488100	21544190	
Net sales (excluding duties and taxes)	40272901	492913107	454278797	0	32430684	17298726	
Profit Before Tax	406465	547121	611445		-429630	-603221	
Profit After Tax (PAT)	203112	405131	357659		-429630	-603221	
PAT as % of Gross sales	0.50	0.08	0.08		-1.32	-0.34	

Galaxy's current business scenario, improvement actions under implementation and local business opportunities

a) **Galaxy's current business scenario:** Over the years, Galaxy had its own struggle in coping up with ups and downs of Eicher. Galaxy has also expanded customer-base with Force Motor and few bus / cargo body manufacturers of Eicher. It has started supplies to Eicher's tractor unit in Bhopal, which is located 200 Kms from their current plant. It has also succeeded in a small way, in exporting few Canter parts through a large export house. Galaxy had a set back in year 2006, when Bhupesh decided to discontinue his partnership with Galaxy to set up his own manufacturing unit in Pithampur thereby becoming Galaxy's competitor. Bhupesh's going had brought lot of additional responsibility of production, tool manufacturing and product development on SS which Bhupesh was looking after. SS has also discovered lapses in financial controls which were managed by Bhupesh and were putting drain on the profits. Although Bhupesh's exit resulted in a temporary set back and additional responsibility on SS; it also gave insights to SS for improvement of financial performance.

SS's son Varun, who has completed a course in Bachelor of Engineering in Information Technology, has joined Galaxy last year and has proven to be a big support to SS. After understanding the operations over 6 months, Varun has now started taking responsibilities of production and customer interaction. This has allowed SS to spend time on issues related to organisational improvements for survival and planning for long term growth.

Eicher has achieved sales of 28000 trucks for the year 2007 and plans to increase it to 50000 nos/ year in next 2 years. It commands third position in Indian CV industry and its products are well accepted in the Indian market. Although Eicher has been a demanding customer, but it has been supporting Galaxy through its management team in the areas of cost reduction, rejection control, delivery improvements and new parts development. Recently, Eicher Motors has sold some of its equity capital to a major Swedish truck manufacturer "Volvo" - world's third biggest CV manufacturer. Volvo holds now over 50% of Equity capital of Eicher. Volvo will help Eicher in developing super heavy duty trucks (over 35 tons load carrying capacity) and also in developing large platform buses. This tie up has also provided all Eicher suppliers an opportunity to grow locally and also explore supplying to Volvo worldwide operations. At the same time this change has also posed a threat to their survival arising due to possibility of Eicher discontinuing Galaxy in case Galaxy is not able to meet their high expectations. Volvo's requirements from its key suppliers on productivity, development time, and system hygiene i.e. house keeping, quality control, improvements and also cost reductions are expected to be very high and Galaxy is required to improve fast.

SS has no choice but to immediately improve hygiene and other Eicher -Volvo requirements to survive and also look at capitalising the opportunity of gaining higher business share by developing new parts for them. If Galaxy

improves fast and reaches to Volvo's expectations, Volvo can also take Galaxy on pool of its global suppliers and can source parts for their global requirements from Galaxy. In case Galaxy does not improve, it can also stop buying from Galaxy.

Galaxy is a small scale unit and has a high attrition rate in workman category. It also has not been able to develop a good management bandwidth of supervisors and managers who can do improvements immediately as well as work on expansion program without sacrificing the current production requirements. To meet Eicher's increasing requirements Galaxy has added 5 presses and welding machines in 2000 to original pool of 4 presses and 3 welding machines installed in 1991(Refer list of machines in annexure 1).The overall capacity utilisation of most of the machines is between 75 to 85% on a two shift basis. (Refer capacity utilisation in the annexure 2 below).

Currently Galaxy outsources few operations due to lack of expertise in these processes and to save capital investments. It is not able to earn value addition on these outsourced processes. The outsourced processes are:

1. Transportation of in-bound and out-bound materials
2. Tool manufacturing-precision operations (preliminary machining, assembly and trials are done in-house)
3. Machining of Pins going into Shackle assy.- a high value high quantity part supplied to Eicher (This part has 10% sales share of Galaxy and has high export potential as mentioned by an export house)
4. Case hardening of Arm Clutch Release- a high value, low volume part having high export potential
5. Painting and plating of few parts

b) Improvement actions under implementation: Galaxy has recently taken up improvement programs like Total productivity maintenance, Kaizen and 5S (house keeping) with Eicher's support. It still has a long way to go before these programs bear fruits and become part of Galaxy's work culture. It has also expanded factory shed to provide for additional machines and storage area and plans to expand tool room to develop self sufficiency in tool manufacturing and speedier development of parts.

c) Local business opportunities: Just 6 months back Force Motors has also started an additional plant in Pithampur, in Joint Venture with MAN Trucks of Germany for manufacture of 10000 heavy trucks /yr. Force Motors has also scaled up its existing vehicle manufacturing targets by 100% to 20000/year of LCV and passenger vehicle range. In engine and gear box assembly manufacturing sector, even AVTEC plans to increase its sales to 150000 drive lines, to meet requirements of its existing customers General Motors and Ford Motors. It further also plans to export its assemblies to Europe and USA. This will offer Galaxy an opportunity to diversify into machining and forging sectors. Another big company in Pithampur namely L&T is engaged in the business of Off highway vehicles i.e. Earth moving equipments, dumpers, bull dozers etc. L&T has also indicated a huge potential of outsourcing fabrication of 16000 tons/yr. To boost exports of the state, Madhya Pradesh Government has also planned many Special economic zones (SEZ) in Pithampur in various sectors like IT, textile, auto, chemical and pharmaceutical etc. For the units being set up in SEZ, government offers many incentives like 10 year income tax holiday, easy man power policies, duty free imports etc. Thus SEZ also offers good opportunity for Galaxy for expansion and diversification. The only condition to locate unit in SEZ and receive SEZ benefit is that the sales have to be from exports only. Although development of Pithampur industrial area started in 1983 onwards, basic infrastructure still needs to be developed. Good hotels, restaurants, IT industries and supportive businesses for tool and Raw material purchases etc. are not well developed. Thus there exists an opportunity for diversification in these sectors also.

Having realised the increasing needs of business, SS has been consciously working to empower and expand his team, so as to allow him more time for concentrating on strategic issues viz. Performance improvement and Growth. To bring clarity in working and establish proper accountability, SS has recently finalised the organisation structure, roles and responsibilities of all employees of Galaxy. (Refer annexure 3)

Targets and quality objectives 2008-2011 and mid term focus (3 to 5 years)

SS has a quality policy and quality objectives (refer annexure 4 and 5). Last year, he had chalked out the following targets for sales and quality for 2008-2011:

Year	Quality PPM	Training Hrs/ person	PAT% Sales, Rs Million*	Sales, Rs Million
2008	250	48	4	80
2009	100#	60	8	200
2010	70	72	10	600
2011	50	80	12	1000

#Additionally Galaxy has planned to acquire TS 16949 certification to align its systems to world class quality standards.

*Current manpower productivity is Rs 0.9 million /year /man which is targeted to be increased to 1.5, 2.5 and 3.5 million/ year/ man, for year 2009, 2010 and 2011 respectively.

The above plan was made keeping in mind the stretched capabilities of Galaxy in terms of finance, management bandwidth and machines available. Even time required to build the experience of handling large presses and other technologies/sectors etc. have been taken into account while setting above targets. Once Galaxy achieves annual sales of Rs 1 Billion, it may build Galaxy's confidence in grabbing many other domestic- opportunities in auto and other fields. To grow further beyond Rs 1 Billion, Galaxy may establish plants all across India as well as capture opportunities through globalisation. As per SS, the focus for next 3-5 years is to concentrate on local customer development in the related sector for business growth to reach Rs 1 Billion sales and also improve hygiene/ quality systems to world class levels. Later he plans to accelerate growth by expansion/diversification after reaching mid term target of Rs 1 Billion. Considering the increase in capacities planned by domestic auto manufacturer and new global auto manufacturers setting up shops in India; there is a huge potential to grow once Galaxy gathers a critical mass and becomes Rs 1 Billion Company. It needs to acquire good quality system and management band width in the first place to accelerate growth.

Delhi visit for getting exposure to units having best practices for planning improvements and identifying growth opportunities for expansion/ diversification of Galaxy

As planned with Vineet at Indore, SS visited Delhi for visiting few SSI (Small scale industrial) and MSI (Medium scale industrial) units in auto component manufacturing sector which had good practices of manufacturing. Additionally, for opportunity assessment and gathering ideas for expansion/ diversification; he also planned a visit to Auto Expo. (an exhibition where Automobile OEM and parts manufacturers from all over India and Globe participate.)

a) **Performance improvement mission:** SS and Vineet visited various factories, whose details, areas of excellence and possible learning opportunities from these units for Galaxy are summarised below:

1 **Sona Steering** - a Steering gear and column manufacturer, with sales of Rs. 8 billion. Sona Steering has been honoured with "Best Japanese practice award" called Deming quality award, Japanese Quality Medal (JQM) and Total Productivity Maintenance (TPM) award in addition to having best house keeping and kaizen culture.

2 **Jay Bharat Maruti-** a Rs. 5 Billion, 1400 employee, sheet metal assy. Manufacturing unit with large presses and assy. Operations. It is a JV with Car Manufacturer 'Maruti Suzuki' (MUL) and supplies daily 250000 parts to MUL. The unit has best practices of efficiency in press parts production, welding and related sheet metal technology which Galaxy has been involved for all these years for smaller parts.

3 **JBM tools-** a large size press tool manufacturing unit - with sales of Rs. 1.2 Billion and a capacity of manufacturing 100 large press tools /month. This would help SS to understand how he should plan in-house tool manufacturing facilities. As realised by SS, tool manufacturing capability will be the key differentiator for achieving faster business growth. This

capability will bring higher reliability in parts development and shorter product development time; which is demanded currently by all auto OEMs.

4 **AG manufacturing-** a medium size, 350 persons, Rs 800 Million Company, supplying sheet metal parts to 2 wheeler motor cycle manufacturer "Hero Honda Motors Ltd (HHML)" –India's no. 1 two vehicle manufacturers. SS saw at AG, production and supply levels of 10000 parts/ day of various types to meet HHML production of 10000/day motorcycle. AG manufacturers almost 20 parts for HHML. SS might learn from here the management of high productivity.

b) **Growth Mission:** When SS visited Delhi, for opportunity assessment, he requested Vineet to plan a visit to office of SIAM (Society of Indian auto component manufacturer) and ACMA (Automotive component manufacturer's association).They also expected to get here, the trend of vehicle production by various manufacturers in India, future plans of Indian OEMs as well as of component manufacturers,

On visit to Delhi on January 12 Th, 2008; they first visited the manufacturing units. SS was astonished to see these world class manufacturing units that were state of art, highly efficient units working in India. He immediately started thinking on improvements to be done at Galaxy in the areas of cost reduction, productivity improvement, employee involvement, TPM, Just in time manufacturing, tool and product development times, house keeping etc. He thanked Vineet for the great exposure, and he thought he should have taken this exposure at the time of start of Galaxy. He further felt that the exposure has come timely to him, as he is on a survival struggle and is also planning to embark upon an big expansion plan.

The next day, they visited Auto expo with the purpose of exploring expansion opportunities and for building awareness of products and plans of Indian and Global auto OEM and component manufacturer. They saw over 1000 OEM and component manufacturers, and realised that a unit has to have a MSI scale of operation for being sustainable and a growing company. In order to expand, SS felt that he should add related products with higher value addition in Galaxy (e.g. assemblies like wiper assembly, cabin tilt linkages, door regulator assembly etc which has predominantly sheet metal parts).To acquire technology for these products, they met Chinese, Taiwanese and European manufacturers of sheet metal assemblies in Auto Expo. With these suppliers, SS was exploring with them a possibility of having a JV or tie up for technology transfer so as to have self sufficiency in new product development. SS thought of using his newly acquired, vacant factory shed of 20000 Sq. Foot for this new project, in case it is decided to start the new product. To their surprise, none of the Chinese and Taiwanese manufacturers of these assemblies was ready to give technology or enter into JV. Few European companies have agreed to discuss in coming months the matter with Galaxy for setting up a JV or for Technology transfer. SS also could meet up with various export houses who offered a great opportunity to export parts from existing range of products as well as order new parts. Various OEMs have displayed their products recognising the huge potential in demand of Automobile in India .Some OEMs were scouting for suppliers from India to tap India's advantage of being low cost Country (LCC) in order to reduce total cost of product in their country by way of cheaper sourcing from India.

The visit to SIAM and ACMA also came out to be very fruitful in terms of understanding the trend of growth of Indian auto Industry , the existing capacity and expansion plans of OEMs already present in India as well as plans of new global OEM players for entering India. The growth trend of OEMs collected from SIAM is summarized in Annexure 6. The existing capacity and capacity build up plans of various OEMs (excluding two wheelers) at their different locations taken by SS at SIAM are summarized in Annexure 7.

Before leaving for Delhi, with the objective of comparing and benchmarking the Galaxy's profitability with respect to other sectors, SS had asked Varun to study the latest annual reports of few good companies in different sectors like IT, Food, Real State, Auto forging/casting, assembly etc.. SS felt that this would be very helpful to decide diversification to other sectors where the PAT may be much higher as compared to PAT in their existing sheet metal manufacturing operations. The consolidation of PAT and EBIDTA (Earning before Interest, depreciation and Taxes) was sent by Varun to SS in Delhi and is given in Annexure 8.

In the evening, SS and Vineet had an extended discussion on various inputs they received through visit to manufacturing units, analysis of data of Galaxy's existing operations, Auto Expo Visit, ACMA/SIAM data of Indian Automobile Scenario as well as Varun's data of PAT/EBIDTA of different industries.

SS had to leave back for Indore the next day. On his flight back to Indore, SS was still confused as to which option/s should he choose out of available options for performance improvement and growth, and how should he go about implementing them. He scheduled a meeting with Vineet next week at Pithampur to work out improvement plan, expansion /diversification plan and also prioritization of these two activities.

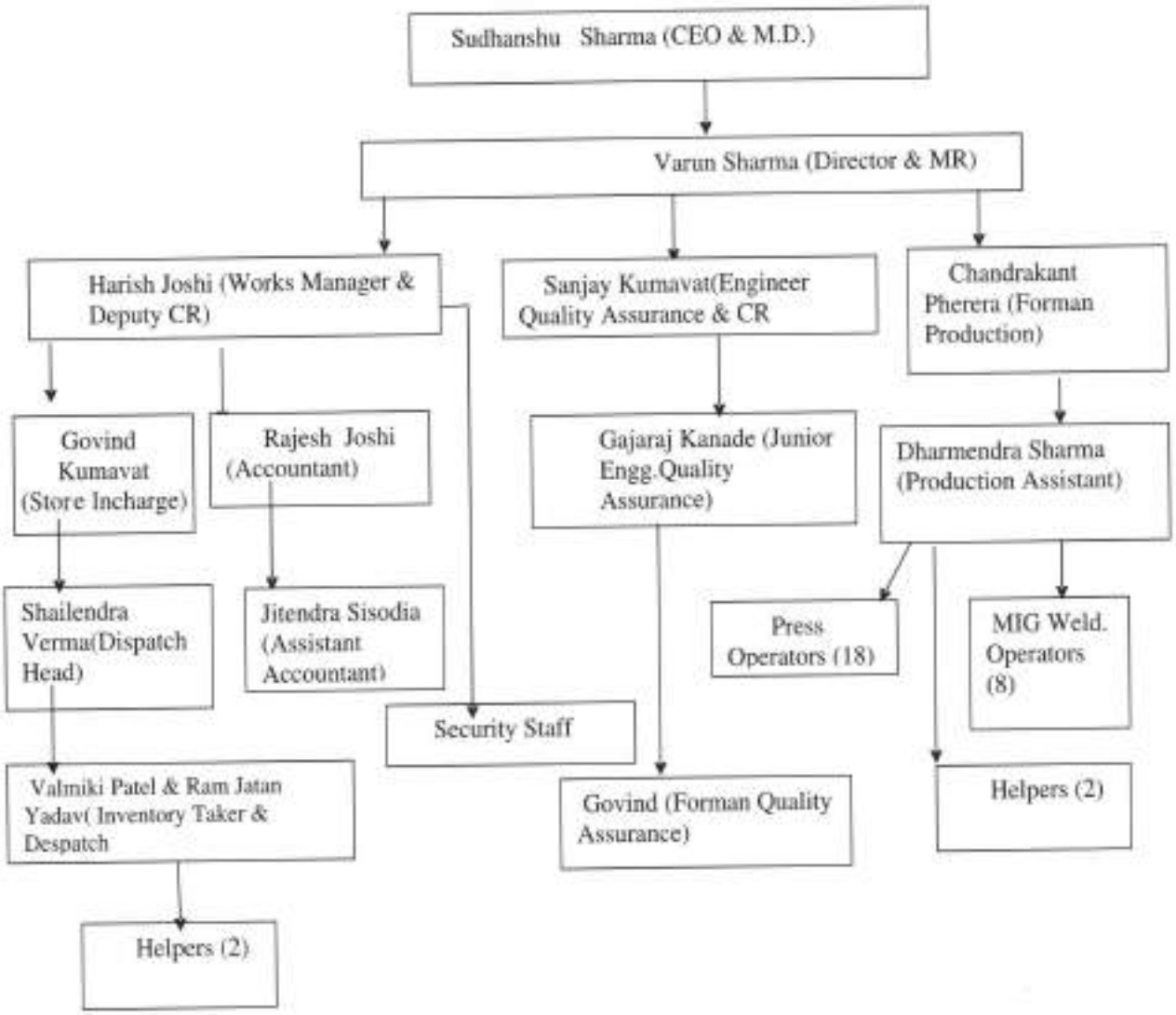
Annexure 1 :List of Machines and equipments

S.No.	Machine/Equipment	Yr of purchase	Make/Model	Capacity/Specification
1	Power Shearing	2000	Shadaab Engg.	1500mm*6mm
2	Power Parting	2000	Shadaab Engg.	550*6 mm
3	Power Press	2000	Shadaab Engg.	150 T
4	Power Press	1991	Ravi	100T
5	Power Press	2000	Shadaab Engg.	100T(New)
6	Power Press	1991	Shadaab Engg.	50T
7	Power Press	2000	Shadaab Engg.	50T(New)
8	Power Press	1991	Shadaab Engg.	30T(I)
9	Power Press	1991	Shadaab Engg.	30(P)
10	Power Press	2000	Shadaab Engg.	10(P)
11	MIG Welding 220 Amps.	1991	Mogra Cosmic P.Ltd.	220 Amps.
12	MIG Welding 220 Amps.	1991	Mogra Cosmic P.Ltd.	220 Amps.
13	MIG Welding 220 Amps.	2000	Mogra Cosmic P.Ltd.	220 Amps.
14	MIG Welding 220 Amps.	2000	Mogra Cosmic P.Ltd.	220 Amps.
15	Centre Lathe	1991	Bharat Engg.	3 Ft.
16	Pillar Drilling	1991	Dynamic	25 mm
17	Surface Grinder	1991	Burnish	1.5 H.P.

Annexure 2: Capacity utilisation (peak month)

Shearing & Parting M/C		150Ton	100Ton	75Ton	50Ton	40Ton	30Ton(I)	30Ton	10Ton	10Ton	Total
Actual strokes req. as per schedule.	247780	134700	78050	99500	106400	78150	68400	55800	32250	25900	926930
Total Strokes available in one Shift	187200	114400	57200	65000	130000	65000	65000	65000	78000	78000	904800
90% Efficiency	149760	102960	51480	58500	117000	58500	58500	58500	70200	70200	795600
Actual Strokes available	37440	11440	5720	6500	13000	6500	6500	6500	7800	7800	109200
No of Shifts required	1.65	1.31	1.52	1.70	0.91	1.34	1.17	0.95	0.46	0.37	1.17

Annexure 3: Galaxy Organogram with responsibilities



Annexure 4: Quality Policy

We shall take pride in delighting our customers by providing values for money and supplying components with total reliability in user-friendly conditions.

In order to achieve this, we must continuously strive for

1. Elimination of waste from all the activities,
2. Creating cordial atmosphere for empowered and talented work force.
3. Maintain and continually improve the quality management system,

---Signed-

Managing Director

June 1st 2002

Annexure 5: QUALITY OBJECTIVE (April 07 to March 08)

1) **Reduction in product cost through process improvement.**
   a) Tool modification for fast production, training to operator for Quick tool setting and support tools to be added for quick tool setting.
   b) Sales per person per month 0.75 L.

2) **Reduction in rejection level.**
   a) In-Process rejection <250 PPM.
   b) Customer rejection <250 PPM.

3) **On time delivery to customer**
   a) 95% on time delivery
   b) 100% supply of daily requirements

4) **Increase in the man power productivity.**
   a) 0.75L/person/Month.

5) **Continuous training of employees.**
   48 Hrs training per year.

Annexure 6: Total Vehicle Production Trend of Last Six Years

	1999 - 2000	2000 - 2001	2001 - 2002	2002 - 2003	2003 - 2004	2004 - 2005	2005 -2006
Car	577,243	504,654	564,126	557,709	781,764	960,505	1,045,881
MUV, VU	124,308	125,938	123,748	163,260	205,776	249,149	263,032
M &HCV	112,311	88,210	90,849	120,081	166,102	211,143	219,297
LCV	61,213	63,869	55,348	82,865	109,122	138,890	171,781
CV	-	-	-	202,946	275224	350,033	391,078
III Three Wheeler	203,147	212,996	212,753	271,224	340,729	374,414	434,424
Tractors	241,216	173,572	118,419	0	0	204,670	239,182
TOTAL	1,319,438	1,169,239	1,165,243	1,396,085	1,879,717	2,138,771	2,764,675

Annexure 7: Existing capacity and plans of Auto OEMS- Non Two Wheelers

Srl	Name	Product	Locations	Capacity		
				Existing	New by 2010	Total
1	Tata	Car/SUV	Pune	250000	100000	350000
			Singrur	250000	250000	500000
		LCV	Pune	300000	200000	500000
			Utrakhand	0	200000	200000
		MCV/HCV	Lucknow	100000	50000	150000
			Pune	100000	100000	200000
			Jamshedpur	150000	100000	250000
2	Leyland	MCV/HCV	Chennai	80000	50000	130000
			Hosur	20000	20000	40000
			Alwar	10000	10000	20000
		LCV	Chennai	0	50000	50000
3	Eicher	MCV/HCV	Pithampur	5000	15000	20000
		LCV	Pithampur	25000	40000	65000
4	Bajaj	3 Wheeler	Pune	400000	200000	600000
		Car/SUV	Pune		250000	250000
5	Maruti	Car/SUV	Gurgaon	900000	600000	1500000

Srl	Name	Product	Locations	Capacity		
				Existing	New by 2010	Total
6	Mahindra	Car/SUV	Nasik	150000	50000	200000
		Tractor	Mumbai	20000	0	20000
			Utrakhand	50000	25000	75000
			Nagpur	20000	10000	30000
		3 Wheeler	Utrakhand	100000	50000	150000
			Zahirabad	25000	25000	50000
		LCV	Zahirabad	10000	20000	30000
		MCV/HCV	Pune		20000	20000
7	Hyundai	Car/SUV	Chennai	300000	600000	900000
8	Toyota	Car/SUV	Bangalore	60000	140000	200000
9	GM	Car/SUV	Halol	80000	20000	100000
			Pune	50000	50000	100000
10	Ford	Car/SUV	Chennai	50000	50000	100000
11	Mercedes	Car/SUV	Pune	5000	5000	10000
12	Nissan	Car/SUV	Chennai		400000	400000
13	Hero-Daimler	MCV/HCV	To decide		100000	100000
14	Sonalika	Tractor	Hoshiarpur	50000	50000	100000
		Car/SUV	Baddi	20000	30000	50000
15	Punjab tractor	Tractor	Chandigarh	50000	0	50000
16	New Holland	Tractor	Noida	30000	20000	50000
17	Mitsubishi	Car/SUV	Chennai	10000	10000	20000
18	BMW	Car/SUV	to decide	5000	5000	10000
19	Volkswagen	Car/SUV	Pune	5000	5000	10000
20	Audi	Car/SUV	Aurangabad	5000	5000	10000
21	Skoda	Car/SUV	Aurangabad	20000	10000	30000
22	Fiat-Tata	Car	Ranjangaon	0	300000	300000
22	Off highway-Terex, Tatra, L&T, JCB, Class etc	Bull dozer, Dumper, etc	North and west India	10000	10000	20000
	Total			**3715000**	**4245000**	**7960000**

Annexure 8: Industry wise PAT & EBIDTA of Top three companies

S no	Industry	Average PAT	Average EBIDTA
1	Galaxy	0.4%	6%
2	Sheet Metal Assembly	6%	14%
3	Forging/ Casting	8%	16%
4	High-tech Assembly	10%	18%
5	Precision Machining	12%	22%
6	IT- Software	20%	26%
7	Real Estate-construction	30%	40%
8	Food -catering	25%	30%
9	Food - Restaurant	35%	42%

TEACHING NOTE

Case Objective:

To study the issues faced by Galaxy-an MSME, which is wanting to grow after meeting its survival challenges and come out with a Strategic action plan for performance improvement and growth.

Synopsis/Case Summary:

Galaxy Components Private Limited (Galaxy) is an MSME started in 1991 by two young engineers as an ancillary supplier for supply of 150 sheet metal parts to Eicher Motors Limited (Eicher), a Light Commercial Vehicle (LCV) manufacturer. Eicher started its operations in 1986 as OEM (Original equipment manufacturer) in Joint Venture (JV) with Mitsubishi Motors Corporation of Japan. To get experience of the manufacturing industry before starting their own company, both the promoters had worked for over 5 years in different manufacturing industries. By Eicher's definition, an ancillary supplier used to be a supplier of parts, who was assured of a committed business volume by Eicher and was also privileged in terms of supply share as compared to other normal suppliers. An ancillary was offered over 60 % of share of total requirement of Eicher for any parts supply and in return 60% of a supplier's capacity used to be reserved for Eicher. Galaxy over the years had grown in sales on average @15% annually while its profitability has remained less then 2% all these years of existence. The industry PAT is 3 to 12 % depending on value addition, size, technology sector, customer segment catered to, etc.

Galaxy is faced with following issues:

1. Limited funds for capital expansion
2. Limited management band width to control key functions
3. High attrition rates
4. Partnership split
5. Lack of grand vision
6. Customer's rising expectation on quality improvement and cost reduction
7. Need for minimum world level standards of quality systems like ISO9000, TS16949 quality system etc
8. Urgent need for implementation of world class operation and performance management systems
9. Survival at stake due to above expectation of quality and cost

Although there are many issues, the situation presents a great opportunity for growth for any good auto component company due to boom in auto sector in India. Due to excessive dependence on Eicher, Galaxy also feels the need to de-risk by diversifying the customer base as well as diversify the industry sector. This will propel Galaxy to move to higher PAT and more value added sectors as compared to their existing business. Mr. Sudhanshu Sharma-CEO of Galaxy (SS) decided to visit Delhi to see few good auto component manufacturers for benchmarking, awareness of best practices and identifying improvement actions. He also made a plan to visit Auto-Expo (an exhibition of auto OEM and parts manufacturers held once in 2 years in Delhi), and to collect data on status and plans of Indian/Global auto Industry. This would help SS doing opportunity assessment and exploring options for growth-expansion/ diversification for Galaxy.

Courses for which case can be used:

Corporate Planning, Strategic Planning, Operations Management, Management of Micro, Small and Medium Enterprises and Entrepreneurship

Teaching objective and Theoretical underpinnings:

This case on Galaxy raises issues faced by a Company during its transition from small scale to medium scale unit. The students/readers are expected to carry out opportunity assessment in the fast growing auto industry in India, make decisions related to growth through expansion and/or diversification and identify competitiveness advantages. The case can also be used for teaching scenario building, resource based view, competitive advantage identification, developing and exploiting SWOT-SWAN analysis and building Vision-Mission-Strategy-BHAG (Big Hairy Audacious Goal). Thus the case may be used in teaching above topics in Corporate Planning, Strategic Planning, Resource based view, Opportunity Assessment, Management of Small Scale Enterprises and Entrepreneurship.

Suggested student assignment:

1. Why is the survival of Galaxy at stake? List issues Galaxy is facing that are forcing it to improve performance on top priority.
2. What issues should be considered to ensure survival and growth? Prepare SWOT, SWAN, and BHAG of Galaxy.

3. Why has Galaxy sales grown @ 15% CAGR over the years and has a PAT of just 0.4% last year?
4. List the issues, which are hindering the growth of Galaxy?

Suggested Teaching approach and Discussion questions:

a) Discussion questions:

1. Performance Improvement or growth by grabbing opportunitywhat should be Galaxy's priority and why?
2. What should be Galaxy's growth strategy? Should it grow in the same sector, related sector or diversify to other sectors? Should it de-risk on Customer and Sector front?
3. Should Galaxy look at PAN India expansion or remain local (around the same existing unit)?
4. How will you use resource based view going from inside to outside, for identifying, developing and exploiting core competence?
5. If you are consultant to Galaxy, what will be your advice for its strategic planning over next 5 yrs horizon?

b) Timing for introducing this case during the course and guideline for group strength:

I suggest, splitting the discussions in two stagesone related to survival and another related to growth. The total students may be broken into various groups of 5 to 6 members/ group. During the discussion session, participants may also be asked to prepare the final SWOT/SWAN of the group to bring out all issues, consensus on these issues and their consolidation. I propose to raise the issues as mentioned in the discussion questions one by one to enrich the understanding of the issues raised in the case and workout the action plan. Through last discussion question, I propose to synthesize the learning related to both issues of survival and growth as well as prioritization between them.

The overall plan proposed is to ask students to discuss and consolidate the answers and then teacher/facilitator should impart the gaps in understanding; if any, for higher level of learning. The last question is proposed to be answered individually (preferably in writing) so as to consolidate the learning.

Although every participant is supposed to individually prepare his responses to study questions for higher involvement and enriched learning in discussion, the discussion on the case is suggested to be accomplished in a group of 5 to 6 participants each. After all groups have done their discussion questions, final question as consultant can be presented individually and discussed in larger group for assimilating the learning. In between, participants in their own group need to consolidate SWOT, SWAN and BHAG to capture all points and build consensus.

Analysis (Notes, explanation and analysis for discussion questions):

Question No.1*. Performance Improvement or growth by grabbing opportunitywhat should be Galaxy's priority and why?*

After having prepared in the study question 1, the participants are clear of the need of the survival why is it felt and why should it be on top priority? The students in this question will discuss the need for the two vital deliverables of any manager for his organisation. They will also learn to evaluate the threats, weakness and need for survival and understand that it is driven by the existing customer's expectation of change on urgent basis. The changed circumstances of major customer's (Eicher's) acquisition by another international global player (Volvo), poses threats for survival for Galaxy. Eicher -Volvo may put stringent conditions of hygiene (systems of quality assurance) on Galaxy .In case not improved up to their expectations; Galaxy may be discontinued as supplier. At the same time, participants are advised to not ignore another vital business need of growth. Galaxy may split the management team to focus on both objectives but prioritize the improvement actions. Since the management band width is less, company may also prioritize the improvements and put a tight time frame of 6 months to 1 year for completing the same. It may also acquire additional business from existing customer rather then spending time and energies on new customer acquisition. This may be led by CEO's sona young engineer and CEO may only oversee this. Parallely, Galaxy may also scout for opportunity, by building a small core team under experienced CEO. The opportunity for expansion, are not going to die, since auto sector is booming but improved systems will provide the quality and cost advantages and will become Galaxy's competitive advantage. Students may conclude either to only focus survival or growth and

facilitator needs to reason out as above for working on both initiatives. The core issues of management band width must be attacked at the earliest being key to survival and more so for growth. The participants, using the data given in the case, should also come out with a recipe for survival strategies- e.g. Quality improvement, Cost reduction plan, and House keeping improvement (5S plan as suggested by Eicher). Students may also add actions like Productivity improvement by Total productive maintenance (TPM), TQM and JIT, Increasing involvement of team by launching kaizen improvement schemes, etc. The growth will require funds and also a profitable operation in the first places, students may also be asked separately to list PAT improvement actions for deeper insights for financial performance improvement.

Question No.2. *What should be Galaxy's growth strategy? Should it grow in the same sector, related sector or diversify to other sectors? Should it de-risk on Customer and Sector front?*

This question will help participants think on expansion strategy and will make them chalk out modes of expansion. They will also be expected to deliberate all modes of expansion; related/unrelated diversification; de-risking by customer addition, sector change, product value addition increase, and going to other geographies at a later date. The option of moving up the value chain by going to assembly-manufacturing; through a Joint venture, Technology transfer or Franchisee/licensing etc may also be discussed. The diversification, with the objective of reaching higher levels of PAT may also be appropriate to be introduced, by facilitator, to de-risk the business and generate more surpluses for further growth.

Question No.3. *Should Galaxy look at PAN India expansion or remain local (around the same existing unit)*

Through this question, students are expected to understand the expansion issues related to Centralization v/s Decentralization and Single v/s Multi location strategy. Many auto OEM customers expect the supplier to be located in close proximity for ease of communication, low inventory levels, just in time (JIT) supplies, faster response and support in case of any quality or supply issue and high supply reliability. Thus through this question students will understand various aspects related to decision on location for expansion. Even issues of managing multi-location growth through management band width, loss of synergy v/s advantages of JIT manufacturing, proximity to customer, better communication etc will be brought out in discussion.

As Galaxy is struggling for survival, first priority is to improve the efficiencies. And then explore considering deciding location for expansion-local or Pan- India. As many auto OEMs setting up plants all across the country, the Pan India expansion, if planned and managed well, will accelerate the growth in a big way.

Question No. 4. *How will you use resource based view going from inside to outside, for identifying, developing and exploiting core competence?*

In terms of customer segment to be targeted, after analyzing core competencies and resources, students may also discuss merits to focus on Commercial vehicle, Car, off highway vehicle segment. Considering the volume of Cars and Two wheelers produced in India, Galaxy must develop competence to address to their demands of cost, volumes and proximity. This then will open a great bag of opportunities and will help Galaxy achieving vision of Rs 1 Billion Company in next 3 to 5 years. The resource based view, of identifying resources and competencies, using inside out approach will be dealt through this question.

Galaxy having developed 300 parts in sheet metal, and reached sales of Rs 80 million last year, it has many competencies and resources e.g.

a) Committed customers (being ancillary for Eicher)

b) Low cost machines with small cost of project

c) Low cost of operation and hence cost advantage over large players

d) Support system for outsourcing keeping it's costs low for these process

e) In-house tool assembly with outsourced pre machining for tool manufacturing resulting into faster development of parts

f) SS being local resident having advantage of networking with government, industry and suppliers

g) Motivated team and

h) Good growth potential with local industries.

With these strengths, Galaxy may first increase the capacity utilization and add machines in the same plant to achieve economies of scale. It may also develop tool room for faster parts development and also get additional orders from other untapped local

customers (e.g. L&T) keeping low cost of operation (hence higher profitability). Even the new shed, which Galaxy has purchased, can be used to expand the business at the same location for existing and other new customers. The Resource based theory and Theory of competitive advantage advocates the related diversification/expansion to use the core competencies. Thus Galaxy may realize higher value addition by going to assemblies with sheet metal parts going in those assemblies and also improve PAT of existing operations. Better and efficient utilization of existing resources will lead to higher profitability and faster growth.

Question No. 5. *If you are consultant to Galaxy, what will be your advice for its strategic planning over next 5 yrs horizon?*

This question will make each participant learn the decision making as CEO and will assimilate the total learning from the case. The knowledge acquired in discussion and through study and discussion questions, will be consolidated while answering this question. It is suggested that each student answers this questions separately and depending on the time available, the presentation by each can be made on their proposed strategic plan.

The development of strategic plan will first force students to develop Mission for the organisation and then translate the mission to Vision, Strategy and BHAG based on the opportunities, strengths and needs. A plan to mitigate threats, weaknesses and risks also need to be built in above strategic plan with short, medium and long term perspective. The objective of this question is to consolidate learning and make students learn strategic planning process of laying out Mission - Vision -Goal and Objective.

The short term strategic plan (1 to 3 years horizon) needs to focus on planning actions, which will improve performance by improving systems and hygiene so as to combat threats to survival. It should also focus on building management band width, utilizing and expanding capacities, customer and product diversification and scouting for opportunities. Medium term plan (3-5 years horizon) should be built around making Pan India presence and become Medium Scale Industrial Unit (MSI) with annual sales of Rs 1 Billion. Long term plan (5-10 years horizon) should look at going global after achieving a critical mass having sales over Rs.1 Billion. The opportunity of M&A, using global sourcing offices of global players in India, setting units overseas for Indian players going global and at the same time meeting growing domestic customer need should be the focus of long term strategic plan to accelerate growth.

Suggested further readings:

1. Auto Mission Plan government of India 2016
2. E&Y-SIAM Indian auto Industry 2020
3. Hitt, M., Ireland, D., and Hockinson, (1990), *Strategic Management*, Cambridge, MA: Harvard University Press
4. Holt, D.., H. (2004), *Entrepreneurship: New venture creation*, Boston: Harvard Business School Press