

IMPROVING SALES DNA – AN INDIGENOUS CASE STUDY SOLUTION FROM SIX SIGMA PERSPECTIVE

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Abstract of the case

A wholesale distributor for plumbing, electrical, hardware, cleaning and recyclable plastic products have 11 sales executives covering from Coimbatore. They are assigned territories in Tamil Nadu and certain areas in Kerala and Karnataka .The wholesale distributor’s main aim is to improve the percentage of lead conversions to into actual sales. A six sigma quality improvement initiative was designed and the successful implementation of the same delivered results.

Keywords: Six Sigma, Lead conversions, Actual sales

Introduction to the case

Sri Padmavathi Sales Corporation (SPSC) was started in 2006 at Coimbatore after Manish, Muthu and Selva, completed their MBA together at a world class business school. There was a steady growth year after year. SPSC are now the wholesale distributors for reputed companies in the field for plumbing, electrical items used in buildings and maintenance, fast moving industrial consumables and hardware .They have a fantastic sales force and their entrepreneurial fire in the belly urged them to grab more orders and to have maximum number of platinum customers in their business horizon.

On Deepavali day of 2018, Manish was happy about the puja done but not about the data discussed in sales meeting which followed. Seeking solution he made a phone call to James, Director of Tuner Consultants and his daughter Dona answered his call.

“Madam, the percentage of lead conversions into actual orders in SPSC is not satisfactory. I think we need to increase the same by delivering more value to the customers through my Field sales executives (FSE’s) .Our sales team should realize that our buyers are not just buying our products..... They are buying the results that their products will get in terms of quality and precision when they buy from us” said Manish.

Solutions to the Case

A. Brain storming Stage:Comprehensive rounds of meetings were carried out at three levels with the Director, Gaja the Sales head and the Field sales executives. The detailed and exhaustive discussions that were carried out later between Manish and Dona paved way for the following recommendations.

- ⇒ Redefinition of the roles and responsibilities of the Field Sales Executives
- ⇒ Implementation of Six sigma initiative to increase the percentage of lead conversion into actual sales
- ⇒ Standardizing procedures for sustained growth and improvement
- ⇒ Implementing continuous improvements

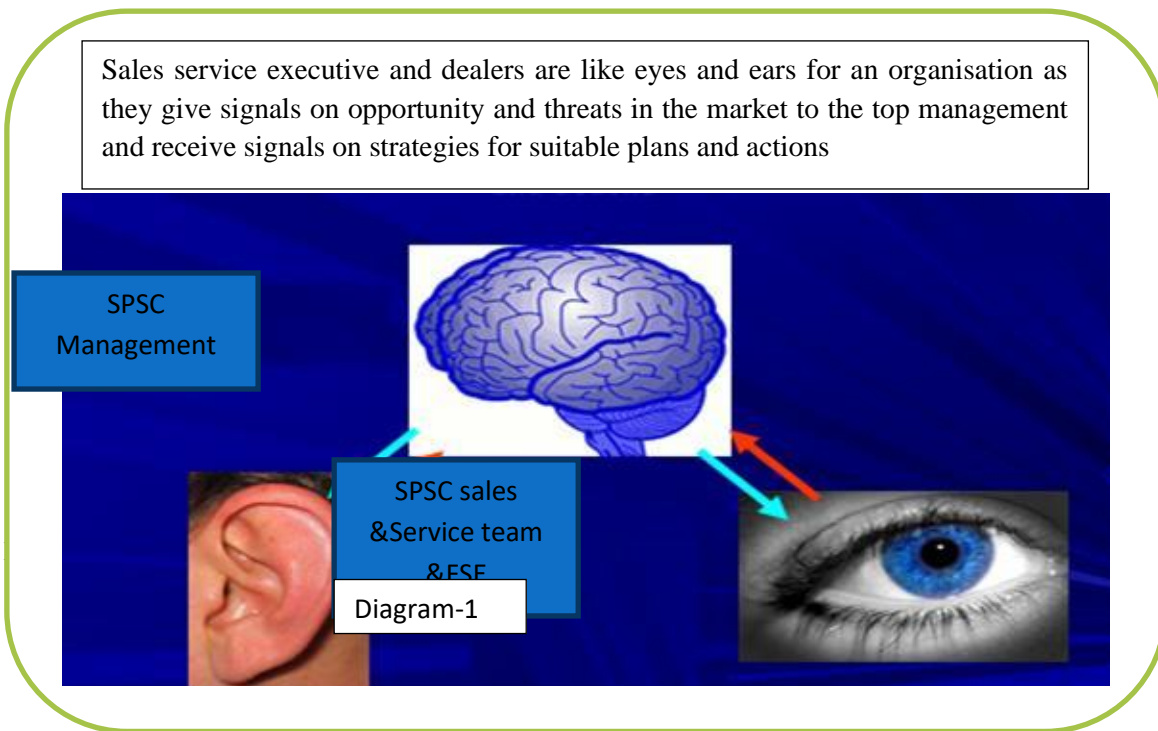
B. Implementation stage

The following recommendations of Dona were put to implementation process

Step1. Redefining the roles and responsibilities of the FSE -A conceptual model

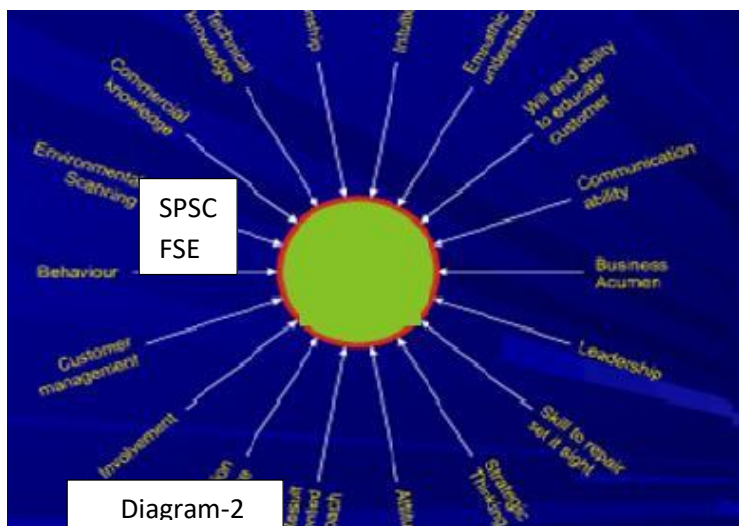
Sales service executive and dealers are like eyes and ears for an organisation as they give signals on opportunity and threats in the market to the top management and receive signals on strategies for suitable plans and actions

Diagram-



Step 2 -Redefining the qualities of a FSE - A conceptual model

FSE should be completely competent with the following qualities

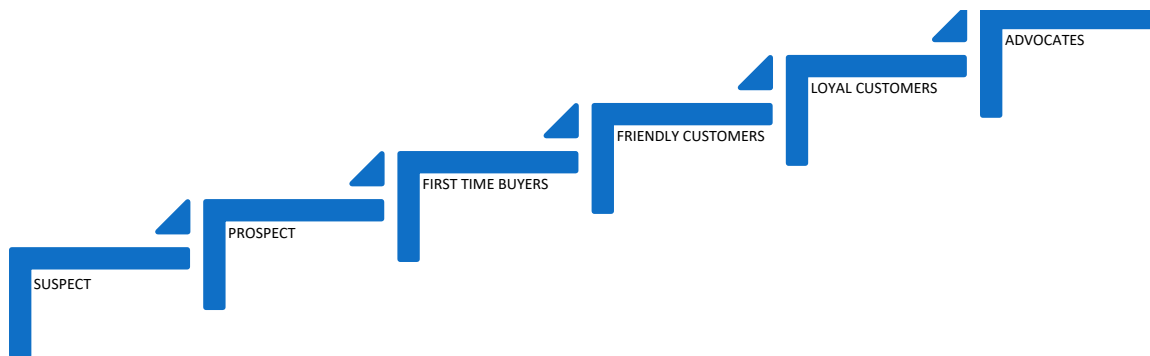


The dealers, subdealers and retailers should also act as the ears and eyes. It is the responsibility of every FSE to convert every dealer to be a spokesperson for SPSC so that he will thereafter influence the customer and recommend the brand SPSC to customers. SPSC should instill professionalism and continuous learning in FSEs

so that they are aware of the brand value would be confident enough to act as brand ambassadors at the basic level so that they have a good customer orientation and this inturn will equip them to render an excellent customer experience.

The result oriented role

DIAGRAM-3 Morphosis in customer status from "Suspect to Advocate"



Step 3- **Implementation of Six Sigma Initiative**

Six Sigma involves a breakthrough methodology called DMAIC. These are the five phases by which a Six sigma initiative can be implemented successfully

3.1-DEFINE:SPCS need to first define the following objectives very clearly

- (i) Identifying the root cause for the low percentage lead conversions of their quotationsto actual sales during the period ending 30th Sept 2018
- (ii) Continuous improvement of the conversion rates until the Six Sigma level is reached
- (i) The percentage lead conversions during the one year period ending on 30-9-18 should be measured

- (ii) Identify the various segments of the customers namely builders, industries, distributors, dealers, sub dealers, retailers and individuals and to work out a blue print where each segments lead conversion rate is improved
- (iv) Sharpening the customer orientation skills of the FSEs so that not only there is a lead conversion but at the same time SPCS should also concentrate on customer retention and repeat orders.

3.2- MEASURE: Calculations

Following are the data
 Total enquiries = 2400
 Out of which only 1223 has been converted into actual sales.
 So the Percentage lead conversion = 50.96%.
 Misfires are 2400-1223 = 1177 (49.04%) out of 2400.
 Misfires are considered as defects in 6σ terms.
 DPMO (defects per million opportunities) = 1177/2400 * 1000000= 490417.
 DPMO: 490417 (1177/2400).
For DPMO of 490417, Sigma level is= 1.524 (table value)

- (iii) The above stated measurement has to be done at all the stages in order to identify the various parameters of the root cause.

3.3- ANALYSE: The purpose here is to find out the root cause. Steps of analysis are as follows. Firstly the team has to analyze the actual performance as against the expectations.

(i).Toanalyse whether adequate field hours had been devoted by the Field Sales Executive

To analyze the above, ‘T’test has been employed on the time spent on field against expectations:

H0: There is no difference between the actual number of hours per month and the expected field hours per month the FSE is expected to spend

H1: There is difference between the actual FSE hours per month on field and the expected hours

Expected number hours per FSE on field per month = 120 hours minimum.

From records the average of 11 FSE's was 105 hours with SD of 16 hours.

$$t = \frac{120-105}{16/\sqrt{11}} = 15/4.82 = 3.11.$$

Critical or table value of t for 90% confidence and for DOF 10 is=1.372.

So H0 is rejected

Inference: Field hours spent by an FSE per month is significantly less than expected.

The Sales Head MrGaja had to be reported the same.

(ii). T test on enquiries generated in the field against expectations: hypothesis testing by t test H0:

There is no difference between the no of enquiries expected to be generated by an FSE in a month and actual average number of enquiries generated by a FSE in a month.

H1: Actual number of generated enquiries by FSE/month < expected number of enquiry generation by one FSE/month

Sales team of SPSC expects one FSE to generate at least 10 new enquiries per month

In the above period out of 2400 enquiries, only 39% were generated enquiries and the balance were regular enquiries from dealers, sub dealers, direct customers and retailers based on already established good will.

So average per month is $(2400 \times 0.39) / 12 = 78$ for 11 FSE's. Therefore the actual average number of enquiries generated by one FSE per month = $78/11 = 7.09$.

SD from records was= 3.85

$$t = \frac{10-7.09}{3.85/\sqrt{11}} = 2.91/1.1608 = 2.51. \text{ Critical value of } t = 1.372 \text{ at } 90\% \text{ CL.}$$

H0 is rejected

Inference: Enquiries generated by a FSE in a month are significantly lower than expected and has to be improved.

iii. Analysis using **Cause Effect Diagram** drawn considering all main causes and sub causes.

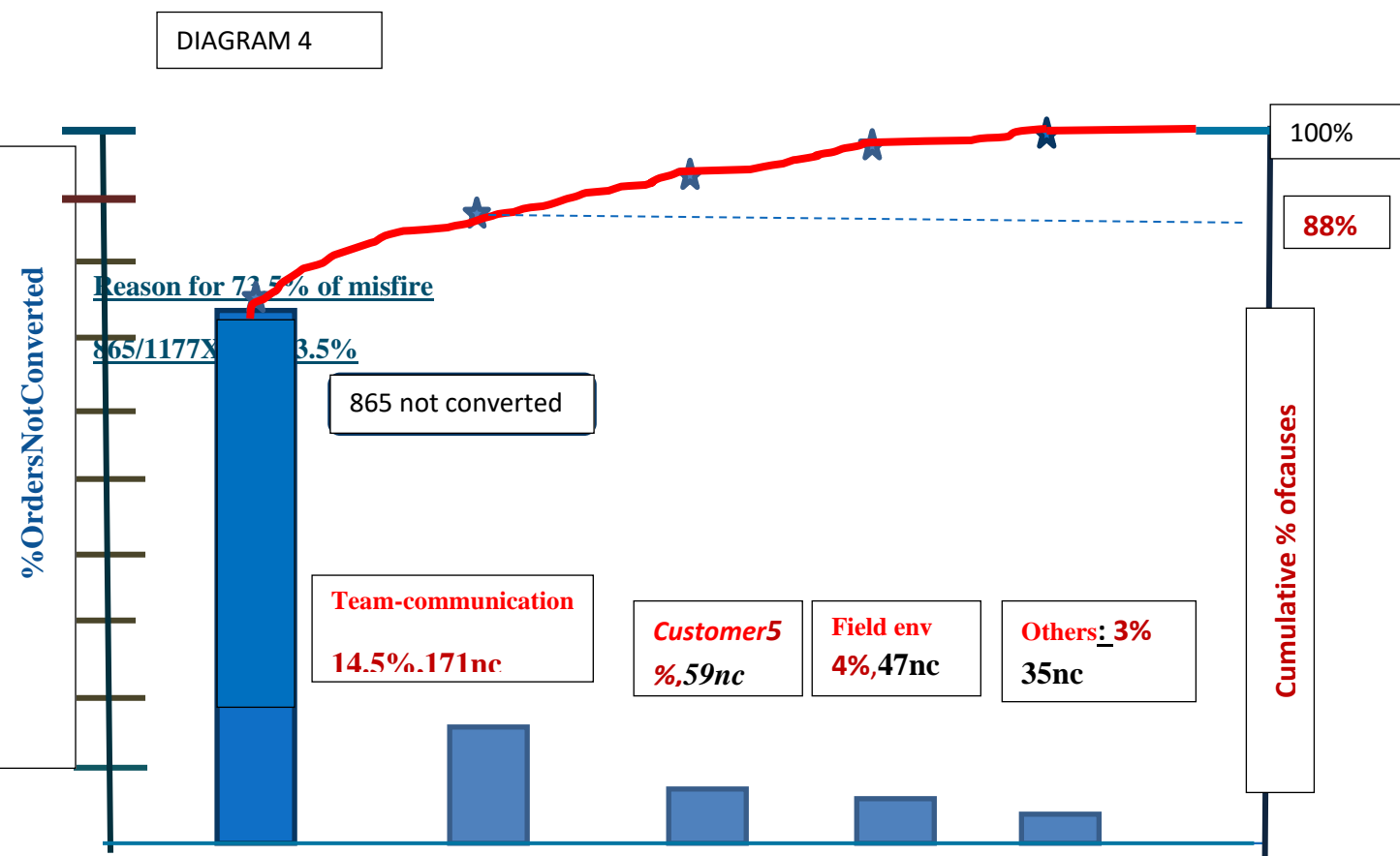
Data of orders lost due to each of the causes were arrived from books, sales reports and customer interactions and that enabled organizers to analyze further and construct a cause effect diagram Further analysis of CE diagram, sales records,

customer interactions and allotments paved way for organizers to draw **Pareto diagram** which highlights the root cause among the causes clearly.

Cause Effect Diagram enclosed as annexure

iv. Pareto chart was drawn. It exhibited the priority (ie) ROOT CAUSE, where SPSC has to concentrate.

Diagram 4: PARETO CHART BELOW DEPICTS THAT ROOT CAUSE IS LACK OF SALES DNA because it is the reason for **865 misfires out of 1177**. % of misfires 73.5



49.04% mis fire of conversion of offers into orders distributed in x axis.

v. SALES DNA OF SPSC IN DETAIL

As per Sean McHeat the Sales DNA is an aggregation of competencies or capabilities in 8 activities to be performed by a FSE to get an order successfully. The activities are mentioned as are as under

- Planning and Preparation
- Need Assessment
- Offering solutions and overcoming objections
- Closing
- Negotiating
- Follow up
- Self Development

vi. Measuring Sales DNA-initial-for each FSE which is derived from his competency in 8 areas

Sales Records, observations, achievements, interactions with customers, past incidents, customer complaints, appreciations, order analysis of individual product mixes sold to each segment and a professionally designed questionnaire were used effectively to measure the sales DNA of FSE

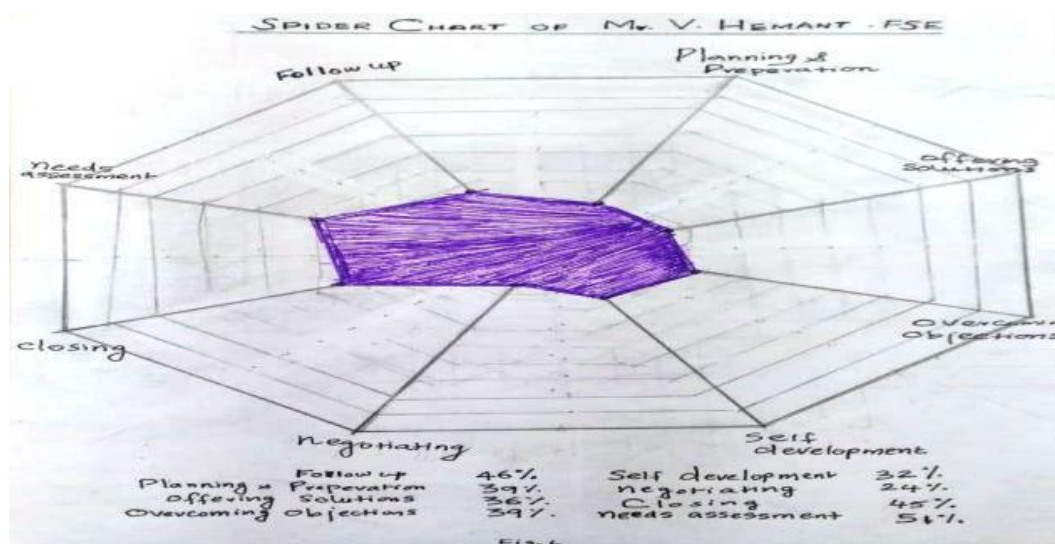
Each FSE was evaluated and a spider diagram was drawn for each of them.

Spider diagram for Mr. V.Hemant(an FSE) is given below.

He scored 39% which was arrived as below.

Diagram: INITIAL Sales DNA spider diagram for scores obtained by MR.V.HEMANT in 8 areas during the period 1-10-17 TO 30-9-18

DIAGRAM 5



Each area is evaluated out of 100.

Overall average percentage score of Mr. V. Hemant, for the period from 1-10-17 to 30-9-18 measured as on Nov 18 is $312/8=39\%$ (initial measurement).

On basis of the spider chart Mr. V. Hemant was instructed to attend the proposed sales DNA course which covers the 8 important areas. Suggestions were made to bring about overall improvements in all areas related to sales and order booking at SPSC.

Likewise all the eleven FSE's were evaluated and the respective spider diagram with report were given to each of them.

Overall average of % OF DNA of 11 executives was calculated:

Overall average DNA thus arrived was only 34.95%, which means defect level was 65.05%.

So initial DPMO for sales DNA of SPSC is 650500. Sigma level from table is 1.1167.

3.4.IMPROVE: After few rounds of discussions a complete and comprehensive program to improve SALES DNA was drafted with following steps.

(i) The overall average sales DNA for SPSC to be improved from 34.95% which is very low.

(ii) To increase the sales DNA in all the 8 prime areas

(iii) Bring about an improvement in team spirit, customer orientation and listening acumen of the FSEs

(iv) Detailed instructions team management and communications to be briefed to the Sales head Gaja

(v) Sales DNA course to be conducted for the sales head and his team of 11 FSEs every week end for the period, 15th November 2018 to 15th July 2019.

(vi) Continuous FSE evaluation programme to be designed starting from 1st April 2019 onwards.

(vii) Structure of the sales DNA will be based on Case Studies, role play exercises, customer interaction and other practical exercise

(viii) Recommendations for Improving Team communication (Gaja and team)

- To maintain organizational integrity of SPSC and to embed ethics in minds of FSE.
 - Unethical customers should not be entertained
 - Thrust on improving the FSE's learning effectiveness and its applications
 - Use "checking in" statements with regards to FSE's like "what help you need to achieve?" "How can I help you?"
 - Avoid "checking up" statements like "At what time you did you meet the customer?"
 - Let FSEs know that you "CARE"
 - Render support to them
 - Pay the FSEs promptly
 - Encourage all the FSEs to spend more hours on field.
 - Encourage the provision of presales services to the customers in order to generate more leads
 - Create a sense of belonging to the company
- (ix) Loyal customers were invited to address FSE's during sessions to share their feelings and perceptions

3.5 CONTROL – Evaluation of the effectiveness of Improvement measures

(i) Results with reference to conversion of offers into orders

Careful monitoring was done on improvement and improvements in each FSE's sales DNA and the percentage of

conversion of offers into orders were measured for the period from 1-4-19 to 31-3-20.

The results obtained in the above period are mentioned below.

Number of offers given between 1-4-19 to 31-3-20 =2590

Turned into orders = 1762 Defects or Misfire- 828. Percentage lead conversion=68%

**Improved DPMO level for conversion is= 319691
Sigma level = 1.9714.**

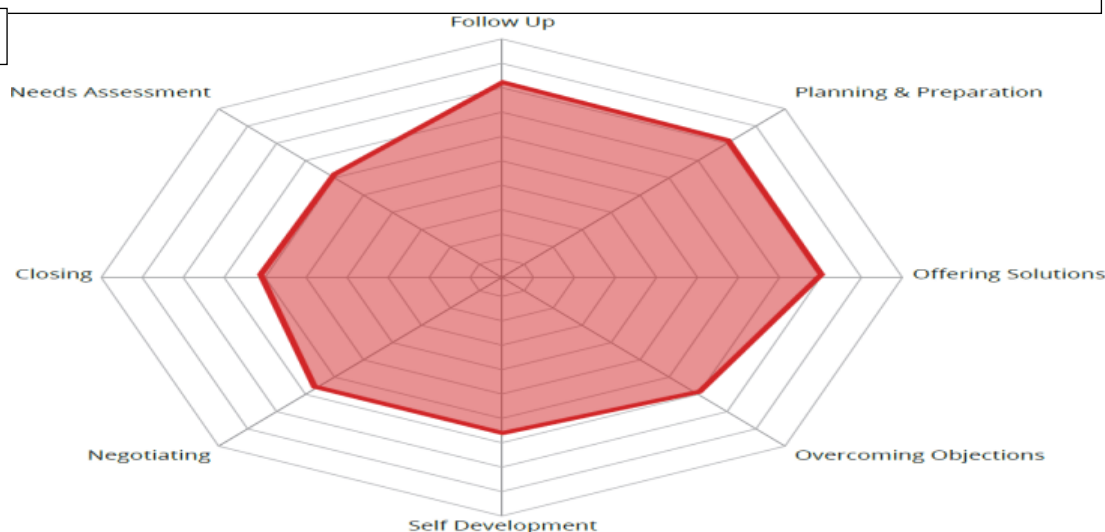
(ii) Results with reference to Sales DNA after improve phase implementations

In the same period 1-4-19 to 31-3-20, the Sales DNA of all FSE's were measured in the same manner and spider diagrams with revised reports were given to respective FSE's.

For example, Mr.V.Hemant's DNA had increased from 39% to 69.75% and the improved spider diagram of Mr.Hemant is as under.

SPIDER CHART OF V.HEMANT PLOTTED FOR PERIOD 1-4-19 TO 31-3-20 ,(During improvement implementation phase

DIAGRAM 6



Sales DNA spider diagram for V.Hemant for period 1-4-19 to 31-3-20

1 Follow Up	80%
2 Planning & Preparation	79%
3 Offering Solutions	79%
4 Overcoming Objections	69%
5 Self Development	66%
6 Negotiating	66%
7 Closing	60%
8 Needs Assessment	59%

Average score for Sales DNA of Mr. V Hemant after improvement = 69.75%

All individual sales DNA's were added and by dividing the total by 11,the overall average sales DNA of SPSC

after training was arrived.Overall average Sales DNA of team of M/SPSC thus arrived was 64.6%

Improved DPMO for sales DNA of SPSC=354000 and Sigma level is 1.8745.

(iii) Latest measurement of % conversion

The percentage of lead conversions for the period 1-4-20 and 30-9-20 is as below.

Total offers given during 1-4-20 to 30-9-20= 932 .It is less due to Covid situation.

The number converted into orders = 718= 77%. Misfire= 214= only 23%

Latest improved DPMO for conversion is 229614. Sigma level is 2.24012

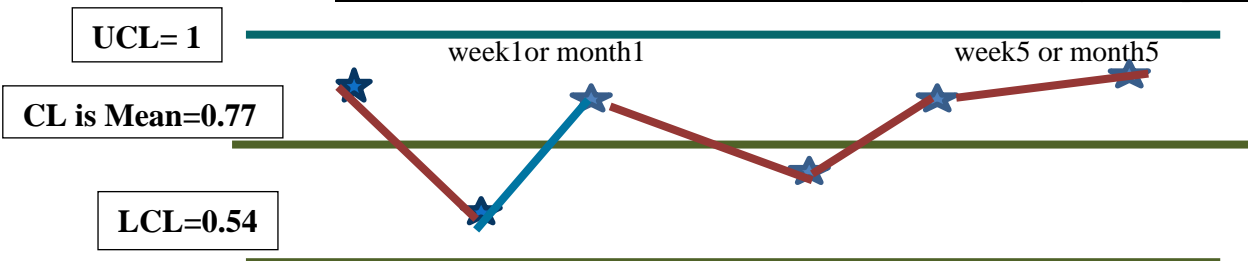
Paired t test was administered for sales DNA scores of 11 FSE's based on their scores before and after the

training which confirmed that the difference (improvement) is significant at 90% confidence level.

3.5 CONTROL STEPS FOR CONTINUOUS IMPROVEMENT.

(i) p chart :with above control limits as in diagram 8 was plotted for the overall lead conversions of the company

P chart format for A,B,C,D and E is as under in SPC: diagram 8 :p chart



The mean of latest percentage of conversion is 77%.
UCL=1. LCL=0.54

- the p chart is plotted product wise on weekly basis and monthly basis(segment wise)
- plotted for each FSE every month to assess the area wise total performance on monthly basis

(ii) **C charts** are drawn for misfires of FSE/ period. Average misfires of a FSE per month is C .Limits are arrived applying + or - $3\sqrt{c}$.Misfires/month of each FSE is plotted in C chart every month. Efforts on field will be taken to bring all values less than CL and then lesser new average will be taken as CL and exercises will continue.

- C chart for total customer complaints in also drawn in the same way.
- Run chart for each FSE on month wise Sales DNA is also drawn and monitored.

DIAGRAM 7

- Run chart for SPSC's average Sales DNA month wise
- Run chart indicating the variations in average score of SPSC in each area of .DNA.

By prompt monitoring of all the charts and by taking suitable corrective actions continuous improvement can be guaranteed

Defects are reduced and advantageous measures are further improved.

Special techniques and scales are devised at SPSC to measure all attributes of FSEs like integrity,situation intelligence,patience,listening,confidence,interest and involvement

Incentives are provided for outstanding achievements area wise, product wise, segment wise mentioning FSE's efforts. Outstanding FSEs are awarded

Step4. Tabulating the results of the effort.

Period	Conversion %	Conversion DPMO	Conv.σ level	Sales DNA%	Sales DNA DPMO	Sales DNA σlevel	%ofimprovement in conversion.wrt initialperiod
<u>Initial Period</u>							
1/10/17 - 30/9/18	50.96%	490417	1.524	34.95%	650500	1.1167	-----

<u>Imp. phase period</u> 1/4/19 – 31/3/20	68%	319691	1.9714	64.6%	354000	1.8745	33.44
<u>Latest Period</u> 1/4/20-30/9/20	77%	229614	2.24012	---	----	-----	51.1

KEY FINDINGS FROM THE CASE

1. The overall average Sales DNA of team increased from 34.95% to 64.6%, indicating an improvement of Sales DNA of the team by 84.8% from the previous level.
2. The percentage conversion of enquiries into orders increased from 50.96% to 68% in the next period and from 68% to 77% in the latest period registering an improvement of 51.1 % from the initial level.
3. The ‘T’ test parameters measured were found significantly lower than the expected in both the test.
4. The average of number of hours spent by a FSE with customer increased from 105 hours per month to approximately 117 hours per month
5. Substantial increase in the average number of enquiries from 7.09 to around 9.03 by a FSE per month was also noted.
6. The scope of improvement with regard to the sales process showed a marginal increase. The sigma scores registered an improvement from 1.524 to 2.24 sigma .This also indicates the future scope of improvement.
7. Finding of FSEs training process
 - a. The sales head noted improvements in the following parameters associated with FSEs namely level of confidence,integrity, situation intelligence, maturity, patience, listening levels, team spirit, clarity on objectives and customer orientation, convincing and initiating capabilities, of the FSEs

- b. The management also realised that the FSEs could be given 100% autonomy and still made accountable. They also understood that the existing team of FSEs are capable of bringing about a fruitful change
- c. Considerable increase in the interest levels and hard work was also noted among the FSEs
8. The success of the zero defect visits were duly communicated to the FSEs and the customers
9. The FSEs were found to be highly satisfied by the incentives provided. They sincerely expressed a feeling of trust, friendliness and a sense of belonging during the implementation phase

Conclusion

SPSC launched a DEMAIC initiative and achieved improvements. Control through monitoring and standardization measures ensure that established improvements are not lost in future periods. The directors, sales head and FSE’s jointly found that 6σ breakthrough methodology suited them as it paved way to define existing levels and targets clearly and helped them to enhance the capability of the sales process.

Sky is the limit for continuous and continual improvement initiatives. M/s SPSC have decided to go for continuous improvements until 6σ level (3.4 DPMO i.e. 99.99966%) is achieved in lead

conversionsthereby resulting in an increased brand presence and reputation.

The Six sigma process has helped SPSC to build a good brand image. The brand image of SPSC helped the company to make more sales at higher price points and with less deliberation. They also created loyal customers who tend to share their enthusiasm with others. In other words, successful branding is a salesperson’s dream come true. Branding in hand with continuous quality improvement is along game and in SPSC’s case they have proved to be success drivers.

“The reality is, the greatest companies in the world don’t sell. They brand.”—Gary Vaynerchuk

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ANNEXURES

CAUSE EFFECT DIAGRAM INDICATING MAIN AND SUB CAUSES FOR LESS % (ONLY 50.96=1223) AND FOR 49.04% MISFIRE (=1177)IN CONVERSION OF OFFERS INTO ORDERS AT SPSC DURING THE PERIOD FROM 1-10-17 TO 30-9-18

