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FOSTERING SALESMEN

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What are the expected performance of sales forces of an enterprise? How can a capable salesman be brought up? What are the fundamentals in bringing them up?

1. What we expect from sales organization

It is firstly necessary to clarify what an enterprise expect from sales organization and define their missions. Then, images of desirable sales organization will automatically be identifiable to our eyes.

1-1. Sales function in enterprises

According to a dictionary, an enterprise is "an institution for managing business with the objective to gain profits," and a sales function is explained as "a continuously operating buisness organization with the objective to gain profits." The sales function mentioned in this case is comprises as a broad scope of activities related to sales. At any rate, the sales department of an enterprise undoubtedly plays the main role of the activities. It is a matter of course that an enterprise can continue to servive and develop by gaining plausible profits as a result of offering its products including goods and services to its customers.

Figure shows the basic functions of an enterprise engaged in manufacturing goods. "How to sell" which is one of major function is the most important mission assigned to sales department, as seen in the Figure.

While classic style of sales activities have been characterized by the posture of "product-out" (or production-oriented sales activities) as symbolized with "sales-clerk," it is changed now to the age of "market-in" (or market-oriented sales activities). Great expectations are held for the sales forces for collecting informations on "what to make." That is, if "to sell" is the primary mission of sales functions, the secondary mission would be "to positively participate with the manufacturing of what can be sold." Further, these missions must always be paying attention for the objective how to create profits.

1-2. Act of selling

Selling are comprised with three functions such as to strive for purchase orders, to deliver goods, and to collect the money. Among these, to get order is where we start, and the major portion of salesmen's efforts is concentrated on this function. A capable salesman is supposed to get orders in advantageous conditions and with the highest possible efficiency.

At any rate, the following points must be defined when concluding a purchase agreement:

(1) What: Determination of specifications
(2) At what price: Determination of the price
(3) How many pieces, by when: Determination of delivery schedule
(4) How to received the money: Determination of settlement conditions

Of these, for (1) of "what" sales forces must get adequate knowledge of subjected goods, especially in case of custom production, their specifications must be thoroughly examined in cooperation with technical staff, in order to prevent any troubles due to misunderstanding of the both parties.

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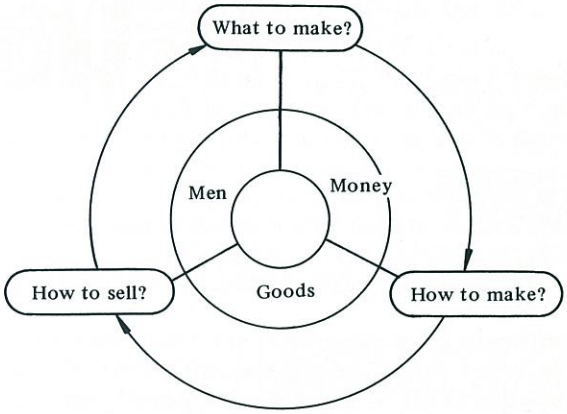

Basic functions of a manufacturing enterprise

1-3. Participation with "what to make"

This will growingly gain importance as a new mission of a sales group. In other words, this function is to promote the development of new products with the needs-oriented concept by sales force contribution. Be it a mass-sales product or an individual custom-made product, the sales group is fully expected to successfully participate with this function.

Mass-sales products such as electric appliances are usually selling together with similar products of competing manufacturers. Accordingly, it is rather easy to find out their favored points and complaints, so that the information feedback in this case is significant. The production and supply to specific users are enable to collect still more reliable information. However, since users' needs are by nature either latent or indefinable, the ability to identify them are especially to be desirable for sales-forces evident needs.

1-4. Determination of users' satisfaction

Both from the view points of the survival of an enterprise and its social responsibility, the most important matter is the continuity of the enterprise. To achieve the end, the goods produced or services provided by the enterprise must be accepted and continuously satisfied by its custtomers. That is, as long as the customers are satisfied with tangible or intangible merits, and furthermore, if these merits would contribute to the welfare and development of the society, the enterprise could be evaluated as to satisfy the requisites of continuity.

To identify users satisfaction, specific department may sometimes be established, but it is more common that these is assigned as a part of sales activities and assigned to the sales forces. The customer satisfaction survey should be desirable periodically and continually to conduct. Excessively frank and harsh comments may often be passed from some users, however, to appreciate of those comments are the best way for promoting development of the enterprise and turn those users into its own sympathetic customers.

1-5. Maintenance of profitability

While the source of profits for an enterprise lies with the customers who buy goods and services, the enterprise can never maintain the same level of profits if it lacks attention. It is indispensable to exercise daily management of every phase of business activities.

Now, the question arises as to where the profit center of an enterprise is assigned. It is normally the sales department, while the manufacturing department is assigned to be the cost center. The sales department specified specific cost and the manufacturing department evaluates its profit level in terms of the difference between the specified cost and actual cost.

On the other hand, since the profit is the difference between sales value and total cost of sales, the following expression can be applied:

Operating income = Sales − Cost of sales

(net price x sales volume)

(Manufacturing cost + administration and sales expenses)

Specific responsibility of sales department

That is, the role of sales department as profit center is to increase the sales (to increase revenues), to properly suppress particularly the sales expenses among the cost of sales, and to specify reasonable manufacturing cost. Increased revenue is feasible by raising the unit price or by increasing sales volume, or by doing the both. To enable it, it is required to produce products which are attractive to customers and to increase number of customers (or exploitation of new customers and sales network). The former is directly related to the second mission of sales forces as mentioned in the aforementioned, and the latter relates to the first mission.

2. Training salesmen

What we expect from a salesman is applicable to the same as what we expect from the sales organization of an enterprise. To foster salesmen, it is the prerequisite to ensure that they are in the position to represent the company when they meet their customers.

Like most other cases, OJT (on the job training) and Off-JT (off the job training) can be performed during education and training and it would be advisable to teach them fundamental matters by Off-JT and then train them by OJT. In either case, the curriculum should be included the following subjects:

[1] Practical knowledge
[2] Methods for successful business interviews
[3] Self-management of daily activities
[4] Tactics for market development

2-1. Practical knowledge

Knowledge of goods and that of administrative procedure constitute the two major subjects of practical knowledge required in dealing with customers and also in processing daily internal job, respectively.

(A) Knowledge and ability to handle administrative procedures

In the stage of concluding a purchase contract, it must be satisfied with the legal requirements and trade customs practiced in the buyer's region or country (special attention should be paid in overseas trading). For manufacturing department, complete absence of any mistakes is the legitimate demands for customers satisfaction concept. At any rate, as this process is the beginning of business activities, any mistakes occurred in this stage would significantly affect the business as a whole. Apart from the speed or efficiency of administrative processing, accuracy is the prime requisite.

Further, as various types of office automation equipment are used in today's offices, it is becoming another requisite for a salesman to be well versed in handling them. Accordingly, it is necessary to impart the knowledge and ability to perform speedy and timely clerical processes by making full use of such equipments.

(B) Goods knowledge

To avail adequate knowledge on products is the prime importance in directly dealing with customers. For a salesclerk, to avail product knowledge means not only his mere possession of knowledge about goods, but also his thorough understanding of the advantages of the products and the ability to recommend to his customers with confidence in his ability and knowledge as well as the products. Moreover, today's clients are not only interested in the functions and performances of a product, but also becoming more particular with the tastes and additional factors such as brand image and additional, side functions attached to a product. Accordingly, a salesclerks are desired to be armed with supplemented knowledge and attainments insuch an aspect.

2-2. Business interview

Business interview is the core of sales activities. A thorough and consistent train of education and training are necessary to begin with the interview manners and end up with after-sales services procedures.

In training manners for interviews, it is essential to have each trainee attain such techniques as the methods for making contact with a prospect, the way of persuasion, and closing a contract, in order to give a good impression to the prospective customer in the salesman's wording, behavior and attitude.

On the other hand, from the view point of client, he would be inclined to pay money only if he is sure of the purchase is advantageous for his own. Accordingly, a salesman must be convinced that he should always think about his company's prosperity through the prosperity of his client by buying his company's products that bring forth profits to the customer. Therefore, the salesclerk must fully be capable of presenting the advantages for buying out goods to his client.

2-3. Self-behavioral management

Typically, salesclerks can enjoy liberty in their daily activities and likely to differ in their performance dominancy as compared with other jobs. This indicates that the self-management comes into play a significant role in their performance.

The functions of management can be represented with the repetition of P (plan), D (do), C (check) and A (action). The steady execution by each salesman of these functions is the fundamental of self-behavioral management.

Specifically, self-management is conducted by means of the self-management by results or by setting objectives, where time allocation and utilization through activity schedule would constitute the major part of daily management. Particular significance lies with the C and A, of which poor performance is sometimes associated with a loss of an order. Inadequate analysis and countermeasure would create vital problems, which may be assimilated in the case of manufacture, where a loss of an order may corresponds to a seriously defective product. The QC techniques should first be utilized in this process.

2-4. Tactics for market development

As is frequently mentioned, the only matter we could predict means that "there will be changes." Today's drastic changes in short periods of time are observed in economic invironment, consumer needs, technical innovations, and so on. Consequently, if we are solely relying the on existing goods and customers only, we cannot possibly florish our own company, but are exposed to risk of bankruptcy without any signs.

As for countermeasures, we can think of creating more market with current customers (increase of deliveries and sales items), development of new customers, and development of new market with innovative products. As Prof. Peter F. Drucker says, an enterprise can only grow and develop only by creating market. (continued on Page 6)

WALKING TOGETHER WITH TQC

Hiroshi Noguchi, Toyobo Co., Ltd.,
Senior Staff, TQC Promotion Office

There are a large number of salesmen who dislike TQC. I myself also tended to think that TQC was rather troublesome. This was because there are some aspects of it that are rather argumentative, and then, too, there are just so many things to write and have meetings about.

Mr. A, who is a veteran salesman, goes on business trip often. Being very confident about sales activity, he does not like writing things down, nor does he make a large number of reports to his superior. His direct superior is Mr. B, who is new to his post, and while he is not satisfied completely with Mr. A, he is keeping this to himself because Mr. A's sales record is good. Mr. A had also been given a task for policy management. One day, a supervision meeting was held on the theme that was assigned to Mr. A. I attended this meeting as a member of the TQC Promotion Office. Mr. A made a report on service work. Mr. B tries to draw out Mr. A's view regarding how to rotate PDCA cycle, However, Mr. A gives only partial answers and so it is difficult to get a whole picture. Mr. B began to get angry. Mr. A who is confident is taking the attitude that Mr. B's understanding is insufficient. Since Mr. B's superior was also attending, he spoke. "I understand that A is doing good work, but your method of reporting is not that good. And the fact that it is not good means that B's method of supervision is bad also. Since I want to see what A is doing to be handed over to his successor, I want you to figure out how to sort it out without speinding that much time. I would like to ask the TQC Promotion Office to provide guidance if there is a good method." Mr. A appeared to get back to his normal state of mind, and appeared to be willing to sort it out.

After the meeting, Messrs. A and B came over to me, and I introduced the methods of relational chart and the method of PDPC. I prepared cards that can be posted up easily, and used these to trace the history of Mr. A's sales activity up to now. Changes and information related to the outside environment were entered into cards of a different color, and the items were sorted out on a relational diagram. From that relational diagram, I asked how the data items were interpreted, and how response measures were implemented, and organized and sorted out the flow of activities according to the PDPC method. Even though it was a followup tracing, it became clear that there was a brilliant flow of logic here. Mr. B gave a high praise to Mr. A's work. Communication began to take place. Now, Mr. A walks around with those cards in the place of his notebook. He uses them to record what he did when he went on business trips, as well as each piece of useful information that he comes across. After returning to office, he posts these cards up to the larger sheets so that the flow of developments and activity become clear to see, and then makes a report to his superior B. These are concise, brief reports that are not at all time consuming, and after gaining some appropriate advice from the superior, he goes out to his business trip with good feeling.

At this company, we have a large number of examples like this. The TQC Promotion Office gets into different areas, and always think about the burden placed upon each department, and promote QC type approach of thinking in close linkage with the specific work. However, this is made possible based upon the premise that the top person (of respective areas) provides the kind of leadership which pays adequate attention to motivation.

(from the article printed in *Total Quality Control*, Vol. 40, No. 6, p. 56)

(Continued from Page 3.)

Conclusion

Fundamentals for fostering salesforces have been summarized as the abovementioned. It seems that the performance of a salesforces has so far been considered to be independent on his individual abilities, and has not been adequately analyzed scientifically. However, as is clear with quality control principles, results are the accumulations of factors, and a good process brings forth a good result.

Fostering salesforces should therefore be promoted with a firm confidence that analyzing the process of achieving a high-performance sale and implementing the principles induced from the analysis will certainly result in improved rate of purchase orders and increased gross profit.

(from the article printed in *Total Quality Control*, Vol. 39, No. 4, pp. 8 – 11)

1989 DEMING PRIZE WINNERS

DEMING PRIZE (FOR INDIVIDUAL PERSON)

Dr. Hitoshi KUME
Professor, Dept. of Reaction Chemistry
Faculty of Engineering, The University of Tokyo

DEMING APPLICATION PRIZE

Aisin Sinwa Co., Ltd.
Mr. Ietoshi Sada, President
M.P: Molding/Casting for Automobile Parts
Employee: 800

Itoki Kosakusho Co., Ltd.
Mr. Kyoji Kageyama, President
M.P: Facility and Units for Clerical Work
Employee: 800

Toto Ltd.
Mr. Yoshine Koga, President
M.P: Sanitary fixture and units
Employee: 8,600

NEC Tohoku, Ltd.
Mr. Hisaei Hikuchi, President
M.P: Switchboard, Relay, Communication Units
Employee: 1,700

Maeda Corporation
Mr. Kenji Maeda, President
M.P: General Construction
Employee: 4,400

(NOTE) M.P. means Main Product.

DEMING APPLICATION PRIZE FOR OVERSEAS

Florida Power & Light Company
Mr. John J. Hudiburg, Chairman Emeritus
M.P: Electric Power
Employee: 15,100

DEMING APPLICATION PRIZE FOR SMALL & MEDIUM SIZE ENTERPRIZE

Ahresty Corporation
Mr. Katsuhiko Takahashi, President
M.P: Die casting Products
Employee: 500

Toyooki Kogyo Co., Ltd.
Mr. Masao Sato, President
M.P: Oil & Air Compressor, Engineering Machine
Employee: 800

AWARD FOR FACTORY BY DEMING PRIZE COMMITTEE

Chofu Kita Plant, Iron & Steel Div., Kobe Steel, Ltd.
Mr. Kazuhide Takaishi, Plant Manager
M.P: Stainless Steel Products
Employee: 410

Main Plant, Maeta Concrete Industry Ltd.
Mr. Takashi Takeda, Plant Manager
M.P: Pile and Hume concrete pipe
Employee: 240

NIKKEI QUALITY CONTROL LITERATURE AWARD

1. ○ Estimation of the Change Point from Cumulative Sum Tests, *Rep. Stat. Appl. Res., JUSE,* Vol. 33, No. 4, pp. 1–14, 1986.
   ○ Estimation of the Amount of Shift Using Cumulative Sum Tests, *Rep. Stat. Appl. Res., JUSE,* Vol. 35, No. 3, pp. 1–14, 1988.
   ○ "Some Comments on Average Run Length (ARL)" (in Japanese), *Quality,* Vol. 19, No. 1, 1989.
   Takeshi NISHINA, Nagoya Institute of Technology
2. *"An Assessment of Consumer Products From the standpoint of User",*
   Masao AKIBA, Takao ENKAWA, The Nikkan Kogyo Shinbun, Ltd., 1986.
3. *"Jikken Keikakuho Mondoshu (Design of Experiment- Q & A)"* (in Japanese),
   QC Research Group of Fuji Zerox Corporation, Japan Standard Association, 1989.
4. *"Quality Control and Production Engineering of Software",*
   Tadashi YOSHIZAWA, et alli., Japan Standards Association, 1988.
5. "Reducing 'spot bari' of center pilar of autobody",
   B-Maintenance Alpha Circle, Body Sect., Manufacturing Div., Nagakusa Plant, Toyoda Automatic Loom Works, Ltd., *QC Circle,* No. 321, (1989), Union of Japanese Scientists and Engineers.

USEFUL STATISTICAL TECHNIQUES FOR MANAGERS

Dr. Tadashi YOSHIZAWA,
Professor, Tsukuba University

1. Prologue

In recent years, managers of departments or sections are required to have capabilities as those of corporate executives. It is growingly recognized that managers need to be change their pattern of management from coordinator type to entrepreneur type, and that they should have visions and the ability of formulating strategy. Managers should also have insights for consumer needs and market trends, should be capable of forming conceptions and executing plans, and should have a wide scope of visions to adapt themselves to the age of internationalization and advanced information systems.

Statistic procedure is one of the most important means for configuring the fundamentals of quality control. It has been proved that statistic techniques are a useful tool in quality control and in corporate management. Nevertheless, it is of great significance to review the statistic techniques with a new spirit, in order to match the growingly severe management environment and the conditions required for managers.

In quality control practice, statistic techniques are so far considered to be used for the control based on data and facts, and for solving problems, the statistic techniques have been utilized in the identification of current status by compiling and summarizing data and also in the location of true factors by analyzing data. Although here we say "with a new spirit," these fundamentals will never be renewed in the future.

Then, what will change, or what should be changed?

2. Reconsideration for data collection and accumulation methods

The first consideration is how to issue of collecting and accumulating data as required information. A common excuse so far heard is "we are collecting data, but they are not fully utilized". This is an excuse for such a criticism that data are hardly retrieved, or it is difficult to indicate how the status is aggravated and to analyze the situation behind the data. They seem to confess that they do not know how to analyze the data obtained. However, in reality, such data that can be easy to collect, measure or quantified are recorded, but those really needed are not preserved. For example, such data that serve as factor to explain results were often unavailable.

We are in the age in which data and information as such are valuable. It should be well noted that when we talk about statistic techniques, we tend to place an excessive stress on the techniques of data analysis, but what we need is to fully study the methods for data collection and accumulation.

3. For analyzing market and customer needs

Secondly, it should noted that the objectives and occasion of utilizing statistic techniques would be moved forward to the development of individuals' skills such as aforementioned broadening of vision, and determination and forecasting of market trends, development of schemes for various projects and basic corporate planning. In other words, statistic techniques will be predominantly used for problem solving of future issues, rather than retrospective problem solving such as factor analysis of past problems. Consequently, there is a need for developing new techniques for such a new trend.

Historically, the application of statistics to quality control was began with the theory of testing by sampling and control chart theory in process control. Since then, so-called state-of-the-art statistic techniques such as multivariate analysis in process analysis and experiment scheduling method in quality analysis have been employed. Above all, the utilization of QC7 tools and seven management tools in QC destined for daily efforts of workers in the shopfloor for quality improvement has been remarkable.

4. Verification of analysis results

Another the 3rd important matter is to find out what can be concluded from obtained data. Further, it is more significant to evaluate the conclusion how it is plausible. Without this evaluation, the results would lack of persuasive power and the manager himself cannot be confident in the results. A manager in the new era should perform the following:

> "Accumulate his experience in terms of data, enhance his sensitivity with data analysis, and build up confidence through statistic techniques."

5. What kinds of techniques are available?

Quality control is considered to be so greedy that the saying "Use a man on his feet, even if he is your father." well applies, and recommends anything useful to be exploited. Consequently, there have been a number of different tools for statistics employed in the practice of quality control. We may boldly classify them into the following categories:

– Statistic techniques for collecting data and information: (Techniques for accumulating experience in terms of data)

Cause and effect diagram: a method to ensure the exhaustive enumeration of factors (causes) affecting final characteristics (results)

Design of experiment: a method to plan an efficient experiment to shorten the time required for development

Sampling method: a method to improve the quality of data by eliminating any biases in collected data

– Data analysis techniques (Techniques for bringing up intuition to sensitivity)

Histogram (mean and distribution): a method to distinguish ordinary data from deviated data

Distribution diagram (interrelation and regression): a method to detect relationships and express relationships

Stratification: a method to classify (stratify) and assists the analysis of the cause for distribution

Investigating data analysis: a method for locating evidence suggested by the data

Multivariate analysis: A group of techniques used for the clarification of the statistical relationships between characteristics and factors involved in a complicated manner, and for assisting future trend forecasting. Many techniques such as regression analysis and prime constituent analysis and so on.

– Techniques for assisting statistical presumption (a method to turn guts into confidence by means of statistical skills)

Statistical estimation and inspection: the basic method for statistical presumption

Verifying data analysis: a method to evaluate the certainty of evidence

6. High quality data are the prerequisites

In quality control, president's diagnosis and QC diagnosis are often conducted. Their main purpose is to accurately identify the actual status of an enterprise by directly inspecting shopfloors and listening to men in charge of actual services. In the case of QC diagnosis, it is often found that the handling of data themselves is not properly performed, rather than discussing the inadequacy in utilizing statistic techniques such as data analysis. "High-quality data" such as those precisely representing current status are indeed the prerequisite for utilizing statistic techniques.

(from the article printed in *Total Quality Control*, Vol. 39, No. 7, pp 80 – 88)

JUSE 19TH QUALITY CONTROL STUDY TEAM VISITED EUROPE

Quality Circle Study Team which had total of 35 participants including the team leader Dr. Kenji Kurogane, counsellor of JUSE, had visited 6 European countries during the term of September 17th to October 1st.

This large-sized team, composed of Directors and Managers from 31 excellent companies in Japanese TQC field, had first attend the 33rd EOQC Conference held in Vienna, Austria and then visited the following five companies to learn the actual state of TQC Implementation in European companies. They made a great contribution to international relations in each countries through exchanging their experiences and ideas.

The companies which had accepted our visit are as follows. We would like to send our sincere appreciation to their hospitality extended to the team.

ROBERT BOSCH GMBH (West Germany)
RENAULT AUTOMOBILES (France)
ABB ASIA BROWN BOVERI LTD. (Switzerland)
OLIVETTI CORP. (Italy)
RANK XEROX LTD. (United Kingdom)

JUSE INTERNATIONAL SEMINAR ON TQC
Held in October – Tokyo

JUSE International Seminar on TQC, followed to that of last year 1988, was held, this year, for Senior Management starting from October 16th and ended at 21st which was total 6 days at Hotel Century Hyatt as a seminar venue.

We had the participants of total number 46 from 10 countries and half of the them were from the United States. Other 9 countries were Australia, Canada, Germany, Hong Kong, India, Indonesia, Korea, Malaysia and United Kingdom.

On the Case Study, the participants had a alternative of Komatsu Works or Yaskawa Electric Manufacturing which are both past Deming Prize winners. At the Group Discussion, participants were divided into 4 groups and had an enthusiastic opinion exchange.

Ladies in the front row are interpreters

SPECIAL SEMINAR FOR INDIAN TOP MANAGEMENT
in Tokyo provided by JUSE

From 4th through 9th of last September, JUSE held 6-day "TQC" Seminar for Indian Top Management at Century Hyatt Hotel in Shinjuku, Tokyo.

This seminar took place under the request of Confederation of Engineering Industry (CEI), New Delhi, India and total 16 persons from 16 companies including Dr. J. J. Irani, President of Tata Iron & Steel Co. had joined the seminar.

Their enthusiasm showned at the 6-day packed training seminar which contains one day case study at plant visit had also inspired the admiration of Indian Ambassador.

ICQCC 1990 Tokyo

INTERNATIONAL CONVENTION ON QC CIRCLE

October 24th to 26th

CALL FOR PAPERS

All papers offered for presentation would preferably be related to the following subjects.

1. Case reports implemented in the workshop by QC Circles.
2. Reports on the promotion of QC Circle Activities.
   - A) Characteristics and problems of QC Circle promotion.
   - B) Education and Training of the QC Circle facilitators, leaders and members.
   - C) Nationwide review on the QC Circle Activities.
   - D) QC Circle Activities based on Company-Wide QC.

250 words English abstract with the Application Form (given in this circular) should be submitted to the ICQCC '90-Tokyo Programming Committee not later than January 31, 1990.

All authors will be advised by February 28, 1990 if their papers have been accepted or not. The final papers, written in Japanese or English in the typing format paper provided by the secretariat, should be submitted by July 31, 1990.

Speakers (one person for one presentation) will be entitled to a 50% reduction of the registration fee.

ICQCC '90 Tokyo Program Comm.
Union of Japanese Scientists and Engineers
5-10-11 Sendagaya, Shibuya-ku, Tokyo 151 JAPAN