

Application of Analysis of Competency Value on the Recruitment of Salesman

Yongbo Guo, Weihua Liu, Xinmin Zhang

College of Industrial and Commercial Administration, Tianjin Polytechnic University

Tianjin, 300387, China

E-mail: xiaoguomail@163.com

Abstract

Good salesman can save cost and bring about more profit for enterprise, so enterprise must pay attention to the recruitment of salesman. This article applies analysis of competency value to the recruitment of salesman by the combination between competency and value engineering, thus provides a new train of thought for salesman management.

Keywords: Salesman, Value, Competency

1. Foreword

The selection of salesman has very important significance management regarding the entire salesman management process. A good enterprise will put the time in selecting and training the suitable staff in advance, but not good enterprise will waste time in dealing with incompetent staff afterwards. Although the latter saves the massive manpower, resources and financial resource than the former in the process of selection, the negative impact afterwards has far exceeded the cost that the former put in the selection. This paper is aware that the selection of salesman is important for the salesman management, so I would like to identify the true "value" salesman to enterprise through analysis of salesman competency value.

2. Analysis of salesman competency value

The so-called analysis of salesman competency value is refers to value engineering analysis based on salesman competency model. It takes salesman as the object of study, takes the key element of competency model as the function index, and conducts the analytical study to the salesman value according to the analysis step of value engineering. And value engineering also calls value analysis, which is an applied science combining technology with economy. It refers to functional analysis to product or service through the collective intelligence and the organized activity, and causes the goal realizes the essential function of product or service reliably by the lowest total cost (life cycle cost), thus enhances the value of product or service. Its main content is to study how to produce a necessary function by the least people, financial resource, material resource and time, and the product conforms to the user' need. Its main idea is to enhance the value of object through analyzing function and expense of the designated object. The relationship among value, function and cost relational table is expressed:

$$V(\text{value}) = F(\text{function}) / C(\text{cost})$$

The following this article will carry on the analysis to the salesman value according to the research steps of value engineering:

2.1 Function analysis

Salesman function (F) can be understood as the ability that salesman can provide effectiveness for enterprise, namely competency. The so-called competency is the potential, long-lasting behavioral characteristics owned by individuals, which lead to excellent performance in the workplace (including knowledge, skill, ability and characteristics and so on) ([Chinese] Xiao Zhengming, & [English] Mark Cook, 2003, p.68-72). In order to obtain the key element of competency, post analysis to the salesman is needed. Post analysis the essential and foundational work in human resources management. It is mainly to understand comprehensively the characteristic, the procedure and the method of work about the post of salesman. The traditional post analysis pays more attention on the component elements of post. But post analysis based on the value engineering proposed in this article takes value engineering as the basic framework and determines the requests of post competency and core competency of organization through the analysis of two aspects about key characteristic of excellent salesman and organization variable. It is the method of job analysis guided by staff and has stronger work performance forecasting (Brenda J. Lister, & Andree Mercier, 1996, p.5-6). In fact, here the process of post analysis is the process to establish competency model. Its steps specifically are: (1) determining the object that need construct competency model; (2)

collecting this kind of staffs' working condition, and analyzing the job specification and the performance standards of jobs and so on; (3) choosing research sample (select outstanding staff and common staff in certain proportion); (4) adopting the questionnaire of essential behavior event interview (BEI), group discussion as well as expert judgment and so on to carry on the interview analysis to the object of study, collecting and reorganizing each kind of data; (5) counting each kind of competency index and carrying on the gradation, the description to each kind of target and defining weight; (6) constructing competency model of each kind of staff (Chen Wansi, 2004). We can obtain salesman competency model of Corporation A according to its actual situation. As shown in table 1:

Table 1. Salesman competency model of Corporation A

No.	Key element	definition
1	ability of dealing with pressure	Can maintain the original work standards Under the pressure, regardless of facing what kind of arduous task or social pressure.
2	ability of collecting and dealing with information	Find out and insight into the situation, judge the certain potential opportunities of future, summarize information systematically, search multi-channel information, as well as feel the action of external information personally.
3	ability of communication	An ability to listen to other people pouring out correctly, to understand their feelings, requirements and perspectives, and to make the appropriate response.
4	ability of using OFFICE	The duty of work needs to grasp OFFICE tool
5	work language	Language skill needs to be grasped during the work
6	team work	Refer to fully cooperate with other people, to become a part of team to work together rather than work separately or compete with each other.
7	customer service	Help, serve other people and satisfy their requirements regardless of internal or external customers
8	initiative	In the situation of the absence of anybody requirements, the ultra work is out of expectation and pay the endeavor of the original need level. These pays can improve and increase the benefit as well as avoid the occurrence of problems or create a new opportunity.

After establishment of competency model, take key elements of competency as function index in the functional analysis, then carry on sorting to these indexes, namely function appraisal. The so-called function appraisal is to carry on the contrast to the function importance. In order to make the appraisal process scientific, this article chooses the analytic hierarchy process (AHP) (Huang Haoran, Yu Shouhua, Yang Dantong, & Dong Shaoxian, 2006, p59-61). Then initially draw up comparison value among different functions according to the actual situation, and the determination of value adopts the method of nine level scale (Beijing Value Engineering Academic Society, 2004, p.50-51), namely important degree between one function and another function is expressed by 1,2,38,9 and their reciprocal. If the comparison results between element i and element j are expressed by a_{ij} in the matrix, then

element i is important as well as element j, which can be expressed as $a_{ij} = 1$;

element i is a little more important than element j, which can be expressed as $a_{ij} = 3$;

element i is obviously more important than element j, which can be expressed as $a_{ij} = 5$;

element i is strongly more important than element j, which can be expressed as $a_{ij} = 7$;

element i is extremely more important than element j, which can be expressed as $a_{ij} = 9$;

The medians of the above adjacent judgments are 2,4,6,8

Corporation A carries on the above appraisal according to the analytic hierarchy process, and obtains the following importance judgment matrix of function F, as shown in Table 2:

Table 2. Importance judgment matrix of function F

F	f1	f2	f3	f4	f5	f6	f7	f8
f1		1/3	1/5	3	2	1/6	1/4	1/2
f2	3	1	1/3	5	4	1/4	1/2	2
f3	5	3	1	7	6	1/2	2	4

f4	1/3	1/5	1/7	1	1/2	1/8	1/6	1/4
f5	1/2	1/4	1/6	2	1	1/7	1/5	1/3
f6	6	4	2	8	7	1	3	5
f7	4	2	1/2	6	5	1/3	1	3
f8	2	1/2	1/4	4	3	1/5	1/3	1

Normalize each column of the above judgment matrix:

$$\begin{bmatrix} 0.0458 & 0.0283 & 0.0436 & 0.0833 & 0.0702 & 0.0613 & 0.0336 & 0.0311 \\ 0.1374 & 0.0849 & 0.0725 & 0.1389 & 0.1404 & 0.0920 & 0.0671 & 0.1244 \\ 0.2290 & 0.2546 & 0.2177 & 0.1944 & 0.2105 & 0.1839 & 0.2685 & 0.2487 \\ 0.0153 & 0.0169 & 0.0311 & 0.0278 & 0.0175 & 0.0450 & 0.0224 & 0.0155 \\ 0.0229 & 0.0212 & 0.0363 & 0.0556 & 0.0351 & 0.0526 & 0.0268 & 0.0207 \\ 0.2748 & 0.3395 & 0.4355 & 0.2222 & 0.2456 & 0.3679 & 0.4027 & 0.3109 \\ 0.1832 & 0.1697 & 0.1089 & 0.1667 & 0.1754 & 0.1226 & 0.1342 & 0.1865 \\ 0.0916 & 0.0849 & 0.0544 & 0.1111 & 0.1053 & 0.0736 & 0.0447 & 0.0622 \end{bmatrix}$$

Then add each row according to $W_i = \sum_{j=1}^n b_{ij}$, we can obtain:

$$W_1=0.3972, W_2=0.8576, W_3=1.8073, W_4=0.1915, \\ W_5=0.2712, W_6=2.5991, W_7=1.2472, W_8=0.6278$$

Normalize $W = [0.3972 \ 0.8576 \ 1.8037 \ 0.1915 \ 0.2712 \ 2.5991 \ 1.2472 \ 0.6278]^T$, we can obtain:

$W = [0.0497 \ 0.1072 \ 0.226 \ 0.0239 \ 0.0339 \ 0.3249 \ 0.1559 \ 0.0785]^T$, that is importance index of each function.

But there may be the “deviation” in the judgment of many factors, so consistent testing to the above matrix is needed.

Through testing, $CR < 0.10$ shows the consistency of the above matrix can be accepted; otherwise we need to appraise each function again. Corporation A can take 0.0497, 0.1072, 0.226, 0.0239, 0.0339, 0.3249, 0.1559, 0.0785 as the importance index of f1, f2, …, f8.

2.2 Cost analysis

Before carrying on the cost analysis, two concepts need to be differentiated first: Target cost and current function cost. The so-called target cost refers to the lowest expense of realizing the functions and the current function cost refers to the expense which occurs actually of realizing the functions. Here the determination of current function cost is discussed. First of all, it should be clear that the cost analysis mentioned here is not the cost analysis of the salesman’s specific post, but the cost analysis aiming at the selection of salesman. It is different from common cost analysis. The common cost analysis is aimed at the definite post and has no relationship with individual basically. But the cost analysis introduced now is aimed to specific applicants. As we all know, because of the difference between the ability and the quality of people, therefore all applicants can not be treated as the same cost in the recruitment. For enterprises, salesman who is suit for post and has relevant ability is much easier to participate in sales work as soon as possible and can give play to role quickly. Training and other additional costs are relatively low in such staffs. On the other hand, if salesmen of different abilities are recruited by the same wages, it is obvious that people who are suit for post and have relevant ability can sell more products and the staffs who have inferior abilities sale relatively few products. So the manpower cost that needs undertaking by sales of unit product is different, that is, the unit product cost of sales of strong ability is low, and the unit product cost of sales of inferior ability is high. Therefore, this paper will introduce capacity coefficient. The so-called capacity coefficient refers to the ratio between the actual performance scores and standard performance scores of salesman. Assume the standard performance scores of salesman to be 70 points. In the process of recruitment, if certain quality of applicant is higher than this standard, the appraisal score is given to appropriate scores more than 70 points according to basis situation; when certain quality of applicant cannot achieve this standard, the appraisal score is given to appropriate scores less than 70 points according to disparity. Then the ratio between this result and 70 points may be regarded as capacity coefficient of this applicant on this aspect of ability. Then the ratio between the proportion of target function cost of the post relative to total cost is the coefficient of current function cost of this applicant on this aspect of ability.

$$\text{coefficient of current function cost} = \frac{\text{proportion of function cost}}{\text{capacity coefficient}}$$

In the process of recruitment and selection, recruiters are required to fill out various forms information objectively and fairly to the full, and then summarize the each appraisal table of applicant from all recruiters and obtain the information of this applicant. Below is a Competency Ration Table about three applicants in the process of recruitment of Company A, which is shown in table 3:

Table 3. Competency Ration Table (CRT)

name	ability of dealing with pressure	ability of collecting and dealing with information	ability of communication	Basic knowledge	Work language	Team work	Customer service	initiative	order	opinion
zhang	70	80	90	65	85	85	80	60	2	reexamine
wang	65	70	75	85	80	70	60	65	3	reexamine
li	95	90	85	90	95	85	80	85	1	reexamine

Take applicant zhang for an example, and calculate his coefficient of current function cost, as shown in table 4:

Table 4. Cost analysis of applicant zhang

cost function	proportion of function cost relative to total cost	Score of interview	coefficient of current function cost
ability of dealing with pressure	5%	70	0.05
ability of collecting and dealing with information	10%	80	0.0875
ability of communication	20%	90	0.156
ability of using OFFICE	3%	65	0.323
Work language	4%	85	0.035
Team work	35%	85	0.303
Customer service	15%	80	0.1313
initiative	8%	60	0.933

2.3 Value analysis

After obtaining the coefficient of function importance and the coefficient of function cost, then the analysis to the value of applicant is carried on. The so-called value of applicant is a relative number, referring to the ration between performance quality function of applicant (referring to knowledge, skills, abilities, qualifications and record of service, experience, attitude and so on which applicants posses and post require) and human resource cost (referring to the pays according to the value that the applicant manifest actually in specific environment and condition).

$$\text{value of applicant} = \frac{\text{performance quality function}}{\text{human resource cost}} = \frac{\text{coefficient of function}}{\text{coefficient of cost}}$$

Through grading to each quality of applicant, function appraisal and cost analysis are carried on according to the method introduced above, and value coefficient is calculated according to function importance coefficient and cost coefficient calculated.

When value coefficient $V < 1$, it shows the qualities and abilities of applicant are low relative to the salary which this company provides. At this time the applicant should not be employed;

When value coefficient $V > 1$, it shows the qualities and abilities of applicant are high relative to the salary which this company provides. In this kind of situation, if not enhancing the salary for the applicant, the applicant is very easy to leave his job, but raising the wages will increase the cost. So this kind of situation should be given careful consideration;

When value coefficient $V = 1$, it shows the qualities and abilities of applicant are in accordance with the salary which this company provides. At this time, the staffs are most likely to remain the best work potency on this post, achieve the superiorly efficiency, and also obtains the ideal repayment, which is in an ideal state of equilibrium. At this time

the applicant should be employed.

Take applicant Zhang for example, calculate his current function cost coefficient, and then calculate the value of applicant. Relevant data can be seen in Table 5:

Table 5. Value analysis of applicant zhang

function \ cost	coefficient of current function cost	coefficient of function importance	personnel value of applicant
ability of dealing with pressure	0.05	0.0497	0.994
ability of collecting and dealing with information	0.0875	0.1072	1.225
ability of communication	0.156	0.226	1.449
ability of using OFFICE	0.323	0.0239	0.740
Work language	0.035	0.0339	0.967
Team work	0.303	0.3294	1.088
Customer service	0.1313	0.1559	1.187
initiative	0.933	0.0785	0.841

Seeing from table 5 that value of applicant zhang respectively is: 0.994, 1.225, 1.449, 0.740, 0.967, 1.088, 1.187, 0.841. Seeing from the data, the majority of his each function value is more than 1, only the ability of using OFFICE and initiative are relatively weak, and these two factors are not particularly important factor. Therefore, applicant zhang may be considered to more appropriate for this work. The same method can also be used in value analysis of applicant wang and applicant li. It shows that after analysis: the value of applicant wang respectively is: 0.906, 0.753, 0.658, 1.025, 1.137, 0.653, 0.739, 0.864, 0.913. The most data of value of applicant wang is less than 1 discovering from data, only the minority reaches the standard, and applicant wang does not achieve requirement of ability comparatively important to this post. So the applicant can be considered not suitable for this post. The analytical result of applicant Li is also worth paying attention, and his analytical results of value are as follows: 1.532, 1.421, 1.066, 1.372, 1.333, 1.009, 0.975, 1.374. The value of applicant is very high discovering from the data, and his each value of index is almost greater than 1. So we can be sure he is a very good person, and he will be competent in this post with ease. But if he will be long-term in the post should also similarly be considered. So recruiters must do fully investigation about this regard during the retest. If the applicant is willing to sign long-term contracts or the company may consider promotion in the future, under these circumstances, we may consider enroll this applicant. If not the case, the company should give careful consideration.

3. Brief summary

The above is the application of value engineering in the selection of salesman. The process may be relatively more complicated compared to other methods. But the staffs recruited by this method are all staffs of truly having value to company, which can reduce the rate of salesman turnover to a great extent, reduce staffs' training expense, thus reduce the cost and improve performances rather than waste time and financial resource in dealing with incompetent staffs afterwards.

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