

A Study to Build the Competencies of Front-Line Employees' Counter Operations Based on Delphi Technique

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ABSTRACT

The study aims to structure the front-line employees' competencies for counter operations and its purpose is to provide reference for orientation before the on-job training. The research of Anderson and Krathwohl (2001) was used as the foundation to clarify the competencies and the related literatures were collected to form the structure index. Eight experts were invited to carry out the Delphi technique 3 rounds in order to affirm the competencies for counter operations.

The competencies for counter operations are divided into five dimensions, i.e. 1) to understand the conceptual knowledge of counter operations; 2) to understand the procedural knowledge of counter operations; 3) to cultivate a good attitude of employees; 4) employees should be familiar with the process of account settlement, sales and service, and 5) employees should be familiar with the operation system of cash register. Each dimension is classified into 6~9 evaluation items. The approved evaluation items can be used as reference for editing the on-job training programs and teaching strategies.

Keywords: Competencies, front-line employee, counter operations

INTRODUCTION

In 2011, the nominal GDP in the service industry was approx 9.4 trillion New Taiwan Dollar, which is about 68.71% of the entire GDP in Taiwan. The average number of employees was about 6.275 million, i.e. 58.6% of the total employees. The service industry has become the key factor in economic activity. Retail business is one of the types of operation in the service industry. Due to the increase of consumers with high demands and knowledge requirements, as well as the short lifespan of product in recent years, the retail market is facing a more competitive challenge. According to Zeithaml, Berry & Parasuraman (1996) and Woodruff (1997), the need for qualified employees in retail sales is enlarged. Most of the front-line employees are working in retail business. They are responsible for moving commodities from warehouse to the shelves and displaying them. They also have to replenish the stock of merchandise, do the packaging, issue receipts, etc. When necessary, they ought to explain the function, feature, quality and price of commodities. Their duties are to keep a good relation with consumers and maintain the image of enterprise. Consequently, familiarity with counter operations influences consumers' image on stores.

The discussions on front-line employees' qualifications mainly focused on the industries of banking and hospitality in the past literatures (Valachis et al., 2008; Värlander and Julien, 2010; Masoud and Hmeidani, 2013). Only a few researches about retail business were studied on the counter operations. Rentz et al. (2002) proposed a three-fold scale to measure selling skill. Each dimension includes five items, including: interpersonal skills, salesmanship skills

and technical knowledge. Wachner et al. (2009) have proven that these dimensions impact sales performance. Kotni (2011) also mentioned the 3 items of Key Performance Index (KPI) in retail service: 1. providing product information; 2. providing information on current offers; 3. attending to customer complaints. Nevertheless, there were discussions on selling skill or retail service, but the capability evaluation for front-line employee's counter operations is still missing. The study therefore structured the front-line employees' competencies for counter operations in order to provide reference for orientation before the on-job training.

LITERATURE REVIEW

The store personnel are in charge of moving commodities from warehouse to the shelves and displaying them. They also have to replenish the stock of merchandise, do the packaging, issue receipts, etc. If it is needed, they ought to explain the function, feature, quality and price of commodities. Their duties are to keep a good relationship with consumers and maintain the image of enterprise. The classification of technique characteristics includes: perception skill, reflection skill, problem-solving skill, creation skill, etc. Psychomotor knowledge cannot be fully understood through oral language, but by practice and training.

Chang et al. (2011) used Flash software to produce the e-learning material for training the new employees working in convenience stores. They have to learn the process of checking receipts, account settlement, food heating, etc. The researcher suggested that future studies should use a database to record how the trainees try to solve problems; user behavior can be a reference for trainers. Lee (2006) had taken the personnel responsible for aquatic products sold in fresh grocery stores as an example for operation training, and used the digital learning platform to conduct a survey distributed to employees working at Taiwan Fresh Supermarket and Save & Safe Hypermarket in Central Taiwan, respectively. System evaluation and suggestions were resulted. The research structured the courses of operation knowledge for aquatic products, including: replenishment of stock of merchandise, checking receipts, defrost/cut/unfrozen process, commodities display, management, etc. The multimedia design courses had attracted trainees' interest and, if the learning target and subject is logical and easily understood in 15 to 45 minute units, trainees can adopt the content without problems. Ku (2012) studied the key factor analysis for the introduction of cloud learning in the retail industry based on the Analytic Hierarchy Process (AHP), he believed that enterprises can structure training programs in the cloud learning courses and the cloud web service platform can provide training and education to employees and satisfy their multiple demands.

Due to the advanced technology of multimedia and boost of internet bandwidth, numerous successful cases of integrating IT into teaching can be found. Yet, there were not many successful cases of integrating IT into store service training (Yen, 2011). There are some rooms for researchers to consider further studies.

METHODOLOGY

Questionnaire Structure

The competencies mentioned by Bloom (1956) and Anderson and Krathwohl (2001) was used as the study foundation. The objective level includes the front-line employees' competencies for counter operations. And there are three indexes in the first level, i.e. cognitive domain, affective domain and psychomotor domain.

Based on service skill mentioned by Su (2011) for front-line employees and data on Level C Technician Competency Test, the second level about front-line employees' competencies for counter operations was made; five dimensions are the basis of developing the questionnaires of Delphi technique.

Delphi Technique

The Delphi technique is a structured communication method applying a round of questionnaires focused on certain subjects. Some experts are invited to provide their anonymous opinions in writing. After answering questions in several rounds, the collected summary can determine the results of the research. While conducting this kind of survey, no interaction is required, and the encryption and professional autonomy can be maintained. Revisions or arguments raised in the previous viewpoints can be offered and effective communication achieved. Meanwhile, the results will not be influenced by the authority (Murry& Hammons, 1995). The Delphi technique not only can avoid the defect of insufficient qualitative research, but possesses the scientific and systematic requirements of quantitative research. The Delphi technique is applicable for research issues related to high uncertainty, complexity and controversy so that common viewpoints of experts can aid in determining solutions.

The front-line employees' competencies for counter operations in this study are structured and the Delphi technique is used for collecting the opinions of experts and scholars so that consistent viewpoints or appropriate determinations can be achieved.

The criteria of selecting experts and scholars in this paper include: (1) managers responsible for store business or administration; (2) trainers for employees and (3) academic researchers related to the study. Eight experts and scholars were chosen: one store manager and one supervisor, two trainers, two academic researchers and two exam markers who acquired Level B & C Technician Competency Test, respectively.

Questionnaire Survey Procedure

The first written questionnaires were distributed to eight interviewees from Nov. 10 to Nov. 30, 2013, and the response rate was 100%. After summarizing their opinions, correcting the content of competencies and affirming the suitability, the second questionnaires were distributed from Dec. 15 to Dec. 30, 2013. Based on the reference of average content of suitability and revision of the updated competencies content, the scores were given. The third content affirmation was made between Jan. 2 and Jan. 10, 2014. A Likert scale was applied to measure the questionnaires: "1" very unsuitable; "2" unsuitable; "3" neutral; "4" suitable; and "5" very suitable.

RESEARCH RESULTS

After summarizing the three questionnaires, the resulting five dimensions achieved consistent viewpoints. The five dimensions are entitled as: cognitive domain 1 (to understand the conceptual knowledge of counter operations); cognitive domain 2 (to understand the procedural knowledge of counter operations); affective domain (to cultivate a good attitude of employees); psychomotor domain 1 (employees should be familiar with the process of account settlement, sales and service) and psychomotor domain 2 (employees should be familiar with the operation system of cash register). The mean and std. of each item's scores of each dimension are described in the following tables. The mean of item over 4.50 is considered as suitable item.

There are consistent dimensions in the three questionnaires. Some scholars did not think the item No. 5 was suitable in this round and believed that it is an item of back-line operation. Because the study objects are front-line operation, suggesting this item should be deleted.

Table 1. Mean and std. of cognitive domain 1

No.	Question Items	1st Result		2nd Result		Final Affirmed Determination
		Mean	Std.	Mean	Std.	
1	Understand the management of replenishing the stock of merchandise, sales and inventory of retail business (including logistics)	4.50	0.76	4.88	0.35	Suitable
2	Understand the combination meaning of commodity and category, and carry out related management	4.50	0.76	4.88	0.35	Suitable
3	Understand how to implement promotion and respond/cooperate to attain achievements	4.63	0.52	4.88	0.35	Suitable
4	Understand effect on commodities display, key point of display and planning of moving principle	4.50	1.07	4.63	0.74	Suitable
5	Understand principle of procurement and replenishment of stock of merchandise, manage inventory and ordering system	3.00	1.50	3.25	1.21	Should be deleted
6	Understand the Standard Operation Procedure (SOP) in stores and improve service quality	4.75	0.46	4.88	0.35	Suitable
7	Understand the real need and principles of consumers, realize customer satisfaction and obtain feedback test	4.63	0.74	4.88	0.35	Suitable
8	Understand and check the work items all the time and complete reports on shift changes	4.75	0.46	4.75	0.46	Suitable
9*	Understand how to analyze or predict turnover	--	--	5.00	0.00	Suitable

* new item for the 2nd round

Table 2. Mean and std. of cognitive domain 2

No.	Question Items	1st result		2nd result		Final Affirmed Determination
		Mean	Std.	Mean	Std.	
1	Carry out order system (receipt and check) and implement the POS display process accurately	4.75	0.46	5.00	0.00	Suitable
2	Carry out replenishment of stock of merchandise and random procurement, as well as implement POS display process accurately	4.75	0.46	4.88	0.35	Suitable
3	Carry out SOP accurately and complete reports on shift changes	4.75	0.46	4.75	0.46	Suitable
4	Understand how to operate the electronic cash register and carry out the electronic order system accurately	4.50	0.76	4.75	0.46	Suitable
5	Practice courtesy in interpersonal communication and implement customer satisfaction service	4.88	0.35	4.88	0.35	Suitable
6	Implement store safety management and be familiar with risk management process	4.88	0.35	4.88	0.35	Suitable
7	Obtain customer satisfaction and feedback tests, and improve service management	4.13	0.99	4.75	0.46	Suitable

* new item for the 2nd round

Experts suggested that two items should be added in the 2nd round so that a consistent viewpoint could be achieved.

Table 3. Mean and std. of affective domain

No.	Question Items	1st Result		2nd Result		Final Affirmed Determination
		Mean	Std.	Mean	Std.	
1	Conduct appropriate interaction with consumers	4.75	0.46	4.88	0.35	Suitable
2	Respect the feelings of consumers with courtesy	4.75	0.46	4.75	0.46	Suitable
3	Understand the feelings of impatience	4.75	0.46	4.88	0.35	Suitable
4	Care for the rights of consumers; actively introduce on-sale commodities	4.75	0.46	4.88	0.35	Suitable
5	Understand the demand of consumers and provide service right away	5.00	0	5.00	0	Suitable
6	Be patient and courteous to consumers who have bad attitudes	4.88	0.35	5.00	0	Suitable
7	Interact with consumers with a smile and courtesy	5.00	0	5.00	0	Suitable

Table 4. Mean and std. of psychomotor domain 1

No.	Question Items	1st Result		2nd Result		Final Affirmed Determination
		Mean	Std.	Mean	Std.	
1	Be familiar with account settlement operation and be able to complete cashier process correctly and promptly	5.00	0.00	5.00	0.00	Suitable
2	Be patient to deal with customers' complaints	4.88	0.35	5.00	0.00	Suitable
3	Be familiar with commodities display and able to help consumers to find products promptly	4.88	0.35	5.00	0.00	Suitable
4	Be familiar with food heating process; if certain food cannot be heated by microwave, tell customer patiently	4.75	0.46	4.88	0.35	Suitable
5	Be familiar with the receipt change process of the cash register, and be able to complete the operation promptly	4.88	0.35	5.00	0.00	Suitable
6	Provide prompt and outstanding service to satisfy consumers' needs when the store is busy.	4.88	0.35	5.00	0.00	Suitable

Scholars have consistent viewpoints in this dimension. However, a few experts believe that “food heating” is unsuitable in this round.

Table 5. Mean and std. of psychomotor domain 2

No.	Question Items	1st Result		2nd Result		Final Affirmed Determination
		Mean	Std.	Mean	Std.	
1	Be familiar with account settlement and issue receipt by using the electronic cash register, and be able to complete the cashier process correctly and promptly	4.88	0.35	5.00	0.00	Suitable
2	Be familiar with electronic orders and inventory system, and be able to complete the process correctly	4.75	0.46	4.88	0.35	Suitable
3	Be familiar with the rules of commodities return and exchange, and be able to complete the process by using the electronic cash register	5.00	0.00	5.00	0.00	Suitable
4	Be familiar with rules of shift report changes and be able to complete the process by using the electronic cash register	5.00	0.00	5.00	0.00	Suitable
5	Be familiar with rules of replenishing merchandise stock and able to complete the process by using the electronic cash register	4.88	0.35	4.88	0.35	Suitable

6	Be familiar with the commodities pick-up process which is orders via net procurement, and be able to conduct inventory management as well as order cancellation by using the electronic cash register	4.75	0.46	4.88	0.35	Suitable
7	Be familiar with collecting points of sales, and be able to complete the process based on age, profession and social status of consumers to give them gifts.	4.45	0.46	4.88	0.35	Suitable

Scholars have consistent viewpoints in this dimension. However, some have different perspectives for Item 7.

CONCLUSIONS

The research of Anderson and Krathwohl (2001) was referred to and three domains, i.e. cognitive, affective and psychomotor were the study basis to structure front-line employees' competencies for counter operations. Eight experts were invited to affirm the competencies for counter operations by using the Delphi technique. The competencies was divided into 5 dimensions: 1. cognitive domain 1: to understand the conceptual knowledge of counter operations; 2. cognitive domain 2: to understand the procedural knowledge of counter operations; 3. affective domain: to cultivate a good attitude of employees; 4. psychomotor domain 1: employees should be familiar with the process of account settlement, sales and service and 5. psychomotor domain 2: employees should be familiar with the operation system of cash register. Each dimension is classified into several evaluation items. After summarizing the data for three rounds, consistent viewpoints were acquired. Finally, 37 evaluation items were proposed.

The developed front-line employees' competencies for counter operations by the researcher can be used as reference for editing the on-job training material and teaching strategies. The suggested 37 competencies can be used as reference for e-learning material to train new employees working in convenience stores.

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