

## **DATA COMPUTATION ON THE PROVISION OF SERVICES BY A PUBLIC GOVERNMENT AGENCY - AN EXAMPLE OF A COAST GUARD TEAM**

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### **ABSTRACT**

The responsibilities of the Coast Guard Administration of the Executive Yuan include law enforcement, marine affairs and maritime services. The Administration provides a variety of measures for public convenience, based upon the principle of "People First". Efforts are made to follow administrative policy while paying attention to service quality, so that the public can experience the value of customer-first services. This study reports on the work procedures of the Administration in relation to "service of the people", and provides recommendations based upon theory and current practices aimed at reshaping values and practices.

**KEYWORDS:** Administrative Policy, While Paying, Service Quality

### **INTRODUCTION**

For a long time, Taiwan's coastal defenses were handled by several arms of government, the Ministry of the Interior, the Ministry of Defense and the Ministry of Finance. The confusion caused by shared responsibilities has caused much trouble, and to solve this fundamental problem, in March 18<sup>th</sup>, 1999, the National Security Council proposed the establishment of a dedicated coastal patrol institution. The "Coastal Guard Administration" was formally established on January 28<sup>th</sup>, 2000 for law enforcement specifically, coastal and maritime affairs. The founding of the Coastal Patrol Directorate General and patrol agencies and teams in several regions marked the beginning of a new era in our country's maritime affairs and coastal defense.

### **RESEARCH PROCESS AND FRAMEWORK**

#### **Research Process**

This study will examine the theory behind the reforms of the Coastal Guard Administration by the Executive Yuan. The theoretical basis is reviewed first in order to understand its impact on current practices. The impact of changes on current strategies and practices is then analyzed in order to provide recommendations for improvement in future.

#### **Research Framework**

The research framework is divided into three parts: The first describes the necessity of establishing a people-friendly and dynamic public organization. The second explains the content of the existing customer-oriented government service and the convenience of having a single point-of-contact that provides services to the people. The third provides a description of related support practices and measures made in response to the ever-changing needs of society. The main discussion is focused on the provision of people-friendly services, support measures having one single point-of-contact and actual practice.

## **CONTENT AND DISCUSSIONS**

### **The Necessity of Establishing a People-Friendly and Dynamic Public Organization**

After taking office on September 1st, 1997, Minister Hsiao announced the intention to promote government restructuring and his hope that the introduction of the value of enterprise management could build a more streamlined, flexible, innovative and resilient government, improve administrative efficiency and strengthen the country's competitiveness while improving the well-being of the people (Chung-Yi Lin, 2009).

## **PEOPLE-ORIENTED SERVICES AND THE CONVENIENCE OF HAVING ONE POINT-OF-CONTACT FOR THE USER**

### **The Value of Customer-Oriented Service**

Serving the public is one of the government's responsibilities. In many countries and in academic circles, government bodies are viewed as a part of the service industry aimed at serving the people. Thus becoming more customer-oriented has been the goal of administrative reform in many countries. A government earns trust and recognition from its populace when it is able to make the general public realize how it and its policies give priority to the people.

### **The Convenience of Having a Single Point-of-Contact for Service:**

Having a single point-of-contact so that all kinds of paperwork can be submitted in one place allows people to enjoy the government service environment (Kuo-Ming Wang, 2000).

## **PROVISION OF VALUE-ADDED SERVICE BY THE COAST GUARD ADMINISTRATION**

### **Provision of a Warm Service Oriented Environment**

The service offered at counters and areas set up by the coast guard agencies is meant integrate the cultural ethos of the local communities and provide a comfortable, bright and clean environment where the people can feel welcome.

### **Evaluation of Questionnaire Robustness and Reliability Using SPSS**

In order to evaluate the level of public satisfaction with the Coast Guard Administration, questionnaires are created and the SPSS software package used to analyze their stability and reliability.

## **INTEGRATION OF SERVICE COUNTERS AND SERVICES ACROSS AREAS AND FOR DIFFERENT GOVERNMENT AGENCIES**

### **Promotion of Full-Featured and Single Point-of-Contact Service**

The Coast Guard Administration has set up counters at every service location and phone numbers to process call-in reports by the public. Appropriate measures are taken together with the related government agencies to handle all issues in order to safeguard lives and property during emergency rescues and crime fighting.

### **The Quantity of Service Counters Needed To Meet Public Demand**

To implement services that cater to fishermen, every service counter has staff on duty 24 hours a day and the single point-of-contact simplifies the process of case reporting and port entry and exit applications. Personnel proactively handle a variety of services for professional fishermen and the general public.

**The Promotion of Integrated Services across Different Areas and Various Government Agencies and Actual Performance**

Active promotion of online applications, including incident reporting, clearance of inbound and outbound fishing vessels, security inspections for various government agencies, schools, and organizations and the general public, the patrol of coastal control areas, acceptance of reports submitted for outbound going yachts, security inspection of inbound and outbound fishing craft, as well as outbound recreational craft for fishing and diving, as well as handling the applications from foreign vessels for asylum, both inbound and outbound. The single points-of-contact provide full-featured services.

**ROBUSTNESS, STABILITY AND QUESTIONNAIRE RELIABILITY**

**Questionnaire Analysis - Factor Analysis**

- **KMO and Bartlett's test of sphericity**

Before conducting factor analysis, the Kaiser-Meyer-Olkin (KMO) test for sampling adequacy and Bartlett's test of sphericity are used to determine whether the data are suitable for factor analysis. The results show that KMO=0.712. A value greater than 0.7 indicates that there are many common factors and that factor analysis is appropriate. In addition the Bartlett test result showed a value of 172.255 with a significance <=0.00, and the p values were less than 1%, meaning that the data sampling was appropriate and suitable for factor analysis.

**Table 1**

KMO and Bartlett Test Results		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.712
Bartlett's Test of Sphericity		172.255
Approximate Chi-Square		
	df	45
	Significance	.000

**Total Variance Explained**

H. Kaiser proposed using the variance explained (eigenvalue) of 1 as the selection criteria for automatically determining how many factors should be reduced. This is the most commonly used method. The table shows that 10 variables are deducted to become 4 and these 4 factors can explain the variance. Within the 4, the first can explain 34.732% of the total variance; the second explains 14.152% and so on. These 4 factors can explain 72.176% of the total variance, meaning that the factor at the front is more important.

Component	Total Variance Explained								
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Cruce Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1 <sup>st</sup>	3.473	34.732	34.732	3.473	34.732	34.732	2.280	22.799	22.799
2 <sup>nd</sup>	1.415	14.152	48.884	1.415	14.152	48.884	1.915	19.152	41.950
3 <sup>rd</sup>	1.235	12.357	61.241	1.236	12.357	61.241	1.628	16.283	58.233
4 <sup>th</sup>	1.094	10.935	72.176	1.094	10.935	72.176	1.394	13.943	72.176
5 <sup>th</sup>	.697	6.966	79.143						
6 <sup>th</sup>	.656	6.561	85.704						
7 <sup>th</sup>	.478	4.778	90.483						
8 <sup>th</sup>	.402	4.024	94.507						
9 <sup>th</sup>	.312	3.121	97.628						
10 <sup>th</sup>	.237	2.372	100.000						

Method to capture: Principal component analysis

**Figure 1**

The 10 variables that explain the variance are service attitudes, cleanliness of uniform, manners on the phone, speed of replies, case handling, cleanliness of environment, layout, equipment labeling, information pamphlets, and overall satisfaction.

## QUESTIONNAIRE ANALYSIS - RELIABILITY ANALYSIS

The reliability test most commonly used is the alpha reliability coefficient test. It is believed that if the coefficient is greater than 0.9, the reliability is good. If the coefficient is between 0.8 and 0.9, the reliability is acceptable. If it is between 0.7 and 0.8, some items need revision. If the coefficient is less than 0.7, some items need to be discarded (Information Blog, 2003).

As can be seen in the table below, the Cronbach's  $\alpha$  of the 10 items is 0.83, meaning that the reliability is appropriate for analysis.

**Table 2**

Reliability Data	
Cronbach's Alpha	Items
0.836	10

## SUMMARY

SPSS is used for the alpha reliability test, so that our study is based on a quantitative analysis, producing a more objective assessment of our questionnaire (Information Blog, 2003).

## Future Directions

The work of serving the people is endless, and government agencies should be people-oriented and think about how to solve problems from the perspective of the people they serve. Future directions need to incorporate innovative thinking, expand service and maintain sincerity, efficiency and empathy. The four principle values of touching people's heart, customer first, creative service and improving efficiency will be integrated with the duties of the Administration so that people can enjoy a better quality and a more satisfying government service.

## CONCLUSIONS

The goal of the Coast Guard Administration is to serve the populace. The Administration should follow administrative policy for organizational restructuring while paying attention to the service quality, so that the fishermen and other users can experience the value of customer-first services.

## RECOMMENDATIONS

### High-Quality Service to the People Should Be the Main Focus

All policy implementation of the Administration should have a people-friendly and convenience to the people focus, so that personnel can work better to cater to the needs of the general public and professional fishermen.

**Reinforcing the Advocacy of the Administration's Services**

Service items, information pamphlets, service guides and a variety of reading materials should be offered to describe the Administration's services, processes and responses to general inquiries in a way that is easy to understand and to raise public awareness.

**Pay Attention to the Manners of Service Staff and Reinforce Staff Training**

The effectiveness of serving the people and service quality depend on how seriously government agencies treat this issue and the extent to which staff members participate. Through education and training, customer-oriented values will be internalized within every employee along with the professional skills and processes needed to improve the service efficiency.

**Job Change of Service Personnel**

Most frontline staff comes from those serving their mandatory military service. Thus policy implementation is usually ineffective due to the lack of training of the personnel, their unfamiliarity with the service processes and applications.

**Establish Standard Operating Procedures to Allow the Populace to Voice Their Issues and Concerns**

Establish standard operating procedures that place value upon public opinion and common issues and procedures to handle those issues quickly and appropriately.

**Provide Services That are Easy to Read about, to Understand and to Use**

Provide the people with services and general inquiry information in sources that are easy to read, to understand and to use. Improve service transparency.

**Listen to Public Opinion through Various Channels**

Listen to public opinion and respond proactively to find effectively solutions to their problems. This can be done through service seminars, use of opinion boxes, message boards and so on, in order to strengthen interaction and ties with fishermen and public groups.

**Expand Service Locations**

Many frontline service locations are in the rural areas, outlying islands and places where transportation and access are not convenient. The Administration should promote the expansion of service locations so as to effectively connect resources to provide the people with the most substantial and effective assistance and service.

**Establish a Response Measure for Major Public Opinions**

Pay attention to media reports and establish verification channels and response measures. Take the perspective of risk management to control damage. Establish a robust response mechanism for online opinion, to improve the capability to respond to major public opinion crises. For important issues, take initiatives to refer to the service strategy.

### Establish a Distance Video Service

The development of information applications is today's trend and digital information flow plays a role as information provider without boundaries. To improve administrative efficiency in remote areas, use the existing VVLink video system and arrange the corresponding frontline service stations so that people can use video conferencing when processing or applying for documents or making inquiries.

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