## A Correlation Analysis Concerning Customer Satisfaction and Business System

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### **Research Object**

This research aims to explore a specific feature of the organization with a strong competitive advantage by analyzing the cause of escalation rate at the call center on the basis that customer satisfaction is a strong driver for the competitive advantage.

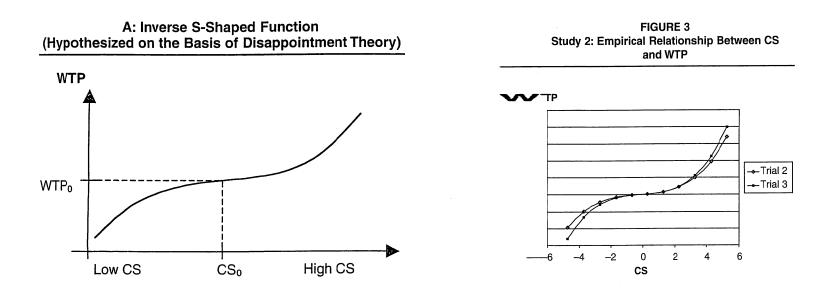
On the basis that the escalation rate at the call center is a substitute indicator of the overall customer satisfaction

Identify factors that cause difference of the escalation rate among call centers in terms of the concept of 'Business System'. Identify what would most affect the escalation rate at the call center? What kind of business activity has a strong relation with the call center activity? Suggest some propositions about features of organizations with a strong competitive advantage throughout the result of &

Key word: Business system, Customer satisfaction, Call Center

# **Background Information**

### CS is really important for the Organization?



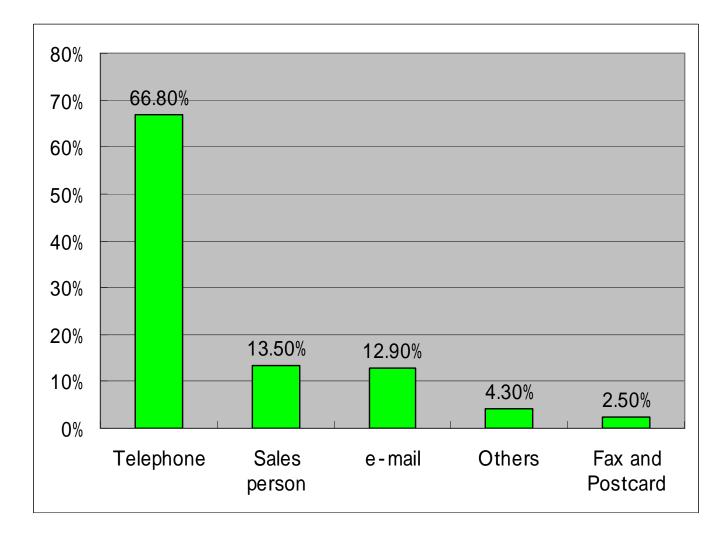
1. There is a positive relationship between CS and WTP.

2. The functional structure between CS and WTP has an inverse Sshaped form.

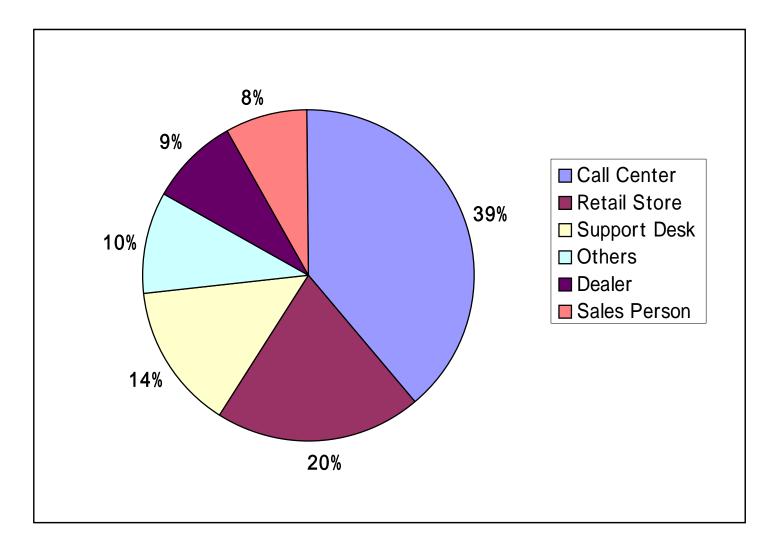
3. The relationship between CS and WTP becomes stronger as CS judgment moves from transaction-specific to cumulative.

Sources: Customers Really Pay More? A Study of the Relationship Between Customers and Satisfaction and Willing to Pay?, Christian Homburg, Nicole Koschate, & Wayne D.Hoyer, Journal of Marketing. Vol.69,84-96,April 2005.

### What Is the Most Used Tool to Contact the organization?

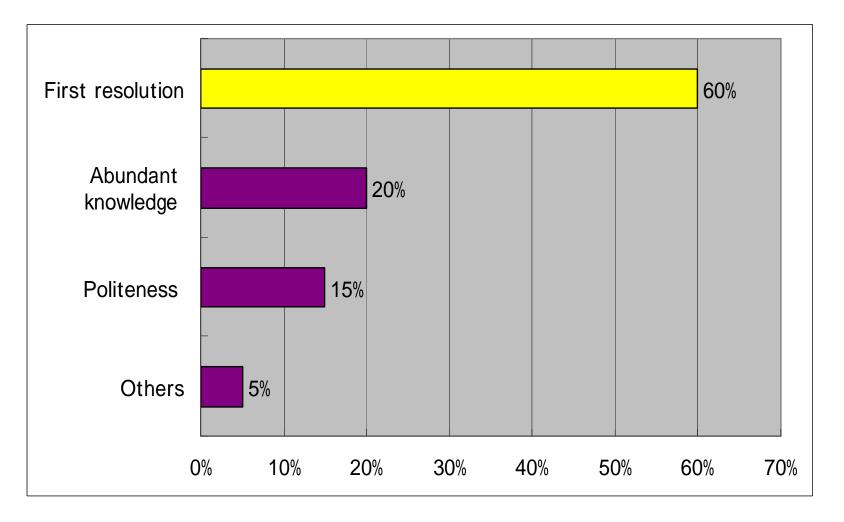


### Where do Customers Contact First?

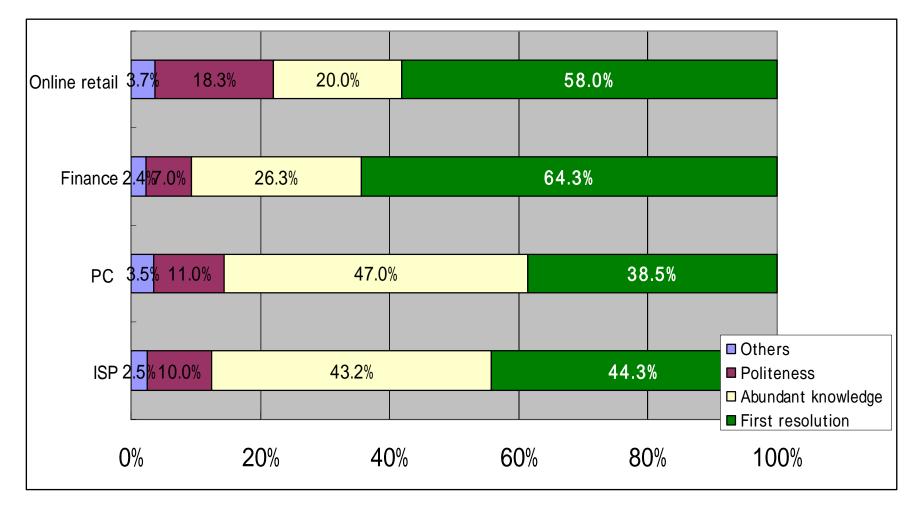


## What do Customers Expect the Call Center?

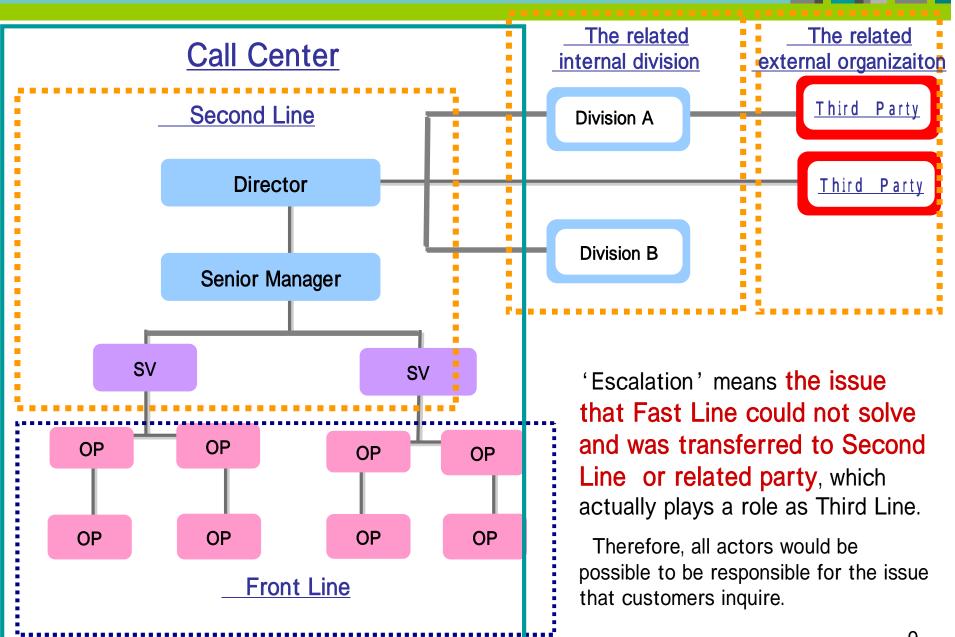
### Overall



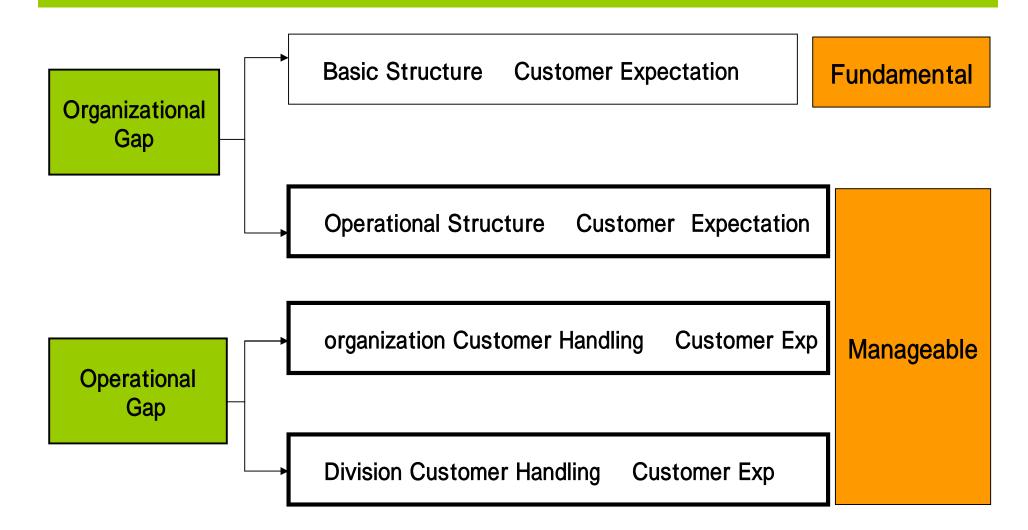
### Classification by industry



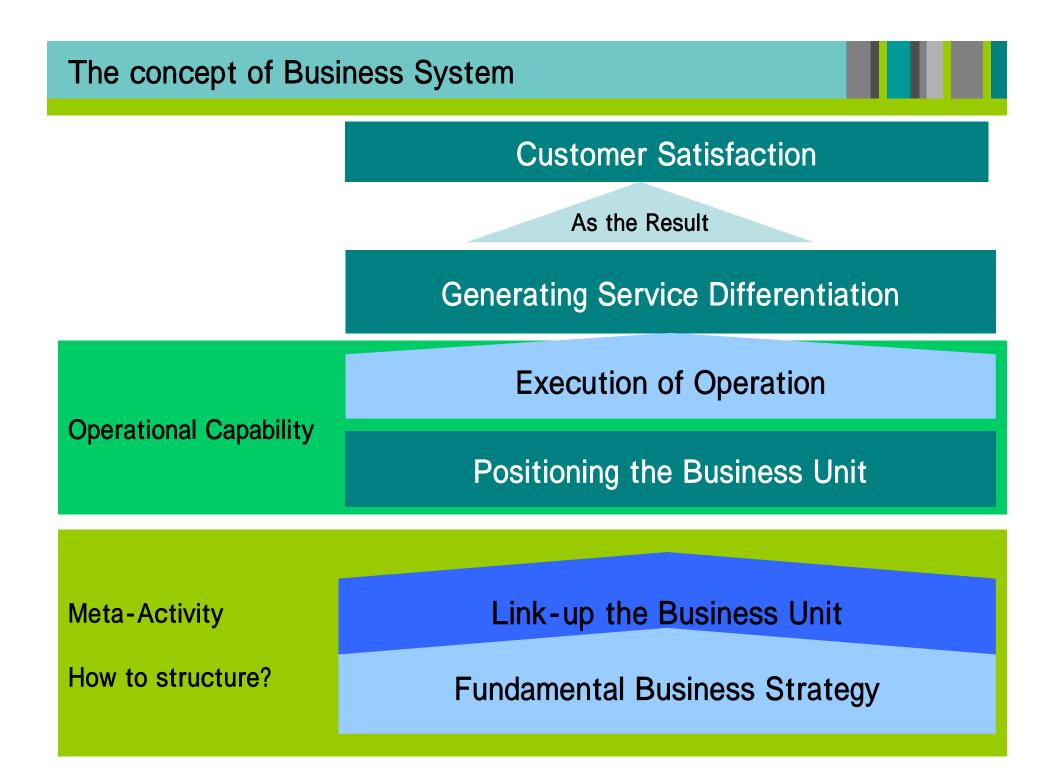
### What is the 'Escalation Rate' at the Call Center?



### What would cause 'Escalation'?



## The Concept of 'Business System'



### Our concept of 'Call Center Satisfaction' Call Center satisfaction should be generated by the company as a whole. The impression that Customer handling policy operators provide to or rule that is determined by business structure customer Contact Training Quality IT Design Channel Policy method Control position Call Center Operation The operation of internal division related to call center operation Third party operation related to call center operation

### **Background Summary**

For the customer, the telephone is a primary tool to contact with the organization and the call center is a primary channel.

From this fact, it is possible to assume that most of customer's opinion or needs might be mostly handled at the call center.

Therefore, the customer would be strongly influenced by the way of customer handling at the call center. However, the part of customer handling at the call center would be constrained by the company as a whole because all activities in the company should be interdependent under the mechanism called as a ' **Business System**'.

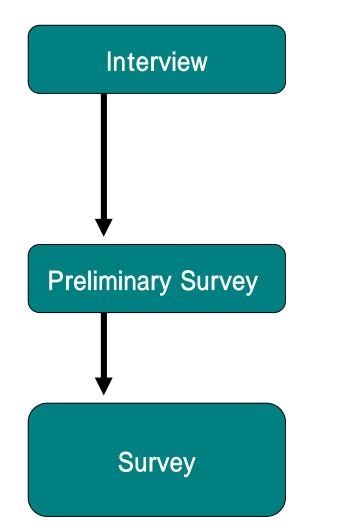
As we mentioned earlier, we assume that the level of business system is determined by the level of business architecture and that of business operation. Therefore, call center satisfaction would be varied by the level of company's business system.

From the reason above, by comparing the escalation rate and detailed factors to cause escalation among call centers, it might lead some propositions about a specific feature of the company with a strong competitive advantage.

## **Our Research**

### **Research Arrangement**

To make questionnaires be valid for this analysis, we did some advance preparation for survey as the process below.



Interviewed some employees who work for one outsourcing agency.

We selected staffs who are responsible for managing call center operation. Total number is 17 people.

From this interview, we realized the core issue as for call center satisfaction, organized our concept again and made questionnaires for survey.

With questionnaires that we planned, we asked call center staff to answer those questions and asked them to suggest some points that they are confused to answer.

We reorganized our questionnaires along with their suggestion.

### Survey Outline

#### Respondents

Subjects: Selected call center by Industry

Call center staff that are employed by one outsourcing agency
and are engaged in operation management work.

Securities	2 General & 1 Internet-based brokerage firm			
Bank	1Commercial Bank & 1Credit Union &			
	2 Internet-based Bank			
Life Insurance	2 Domestic & 1 Foreign-owned			
Non Life Insurance	2 Domestic & 1 Direct			
ISP	4 Domestic ISP			
Manufacturing	2 for B to C sales & 1 for B to B & 1 Direct Sales			

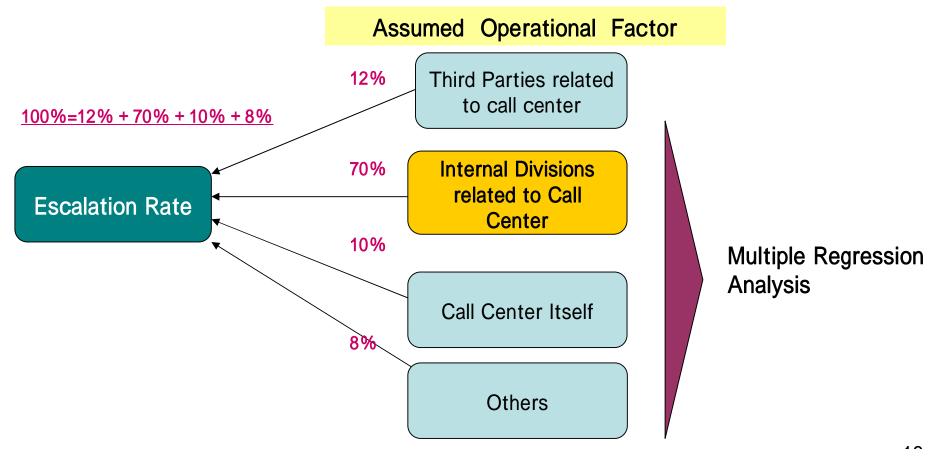


Collected 5 samples per call center.

Total number was 125 and deleted some of them.

Finally, 105 samples were used.

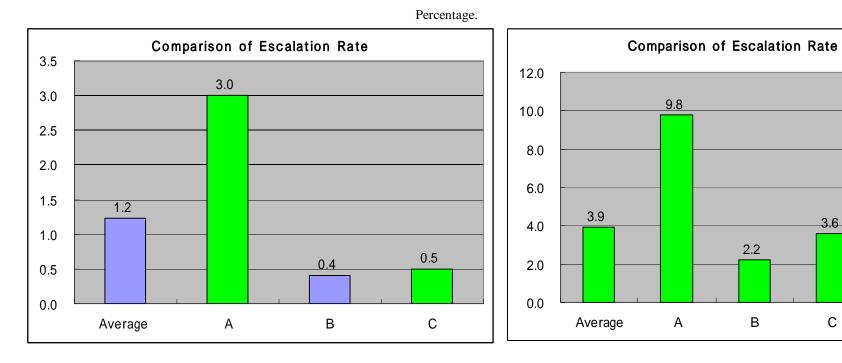
Independent variable	Escalation rate	The number of issues transfer from operators ratio to the total number of handled issues at the call
		center.



Escalation Rate= + Third Party Factor Ads + Internal Division Factor Ads + Call Center Factor Ads + Others Ads +

### **Reference Data**

#### Life Insurance



#### **Internet Service Provider**

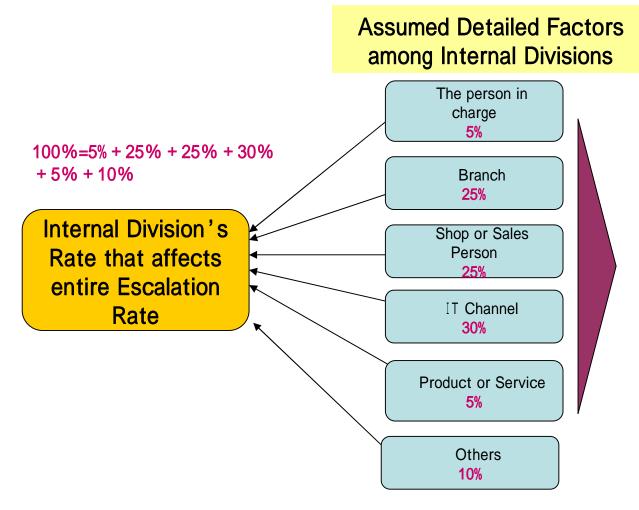
Percentage.

0.5

D

As the result of regression analyst, we figured out that internal organization division's activity is positively correlated with call center operation.

From this result, we again asked subjects to classify assumed detail factor of organization division operation as the rate of that as 100%..



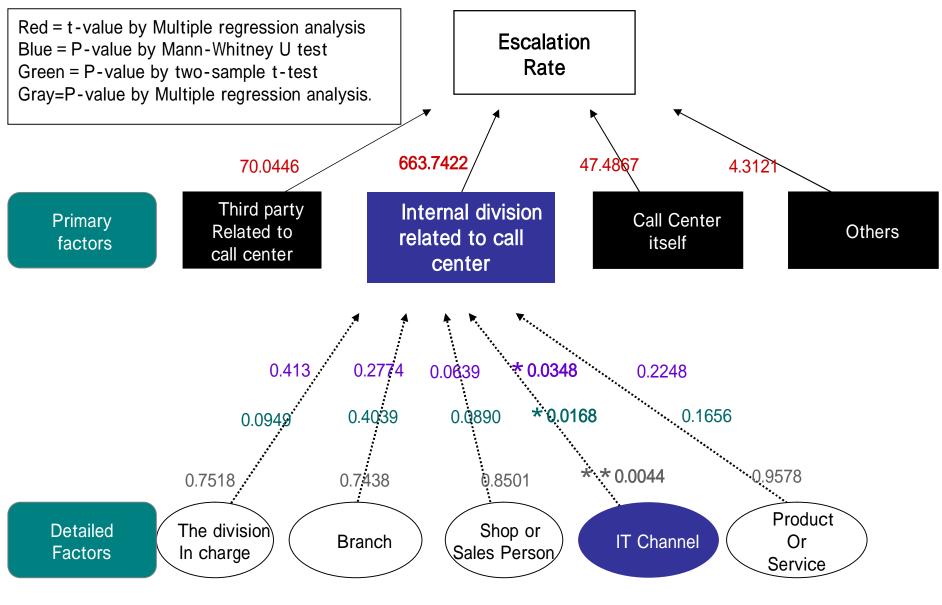
Compare the call center group that have high escalation ration with the call center group that doesn't high ration with t-test We also compared with the call center with a high escalation rate and the call center with a low escalation rate. We employed examined with t-test and Mann-Whitney U test.

From the result of this analysis, we could find some operational differences between the call center with a high escalation rate and the one with a low escalation rate.

Research Question was five scale (1=very unlikely to 5=very likely) and asked subjects to mark depend on his opinion.

Does your c	call center clear	y set the	role and	the respo	onsibility	with other of	divisions or eternal cor	npanie
Very	y unlikely 1 -	D	epend on	the situa	tion		Very likely	
	1 -	2	-	3.	-	4 -	5	
If you chose	e 4 or 5 at the q		,				e setting role or respon	

### **Overall Result**



\*<0.05;\*\*<0.01

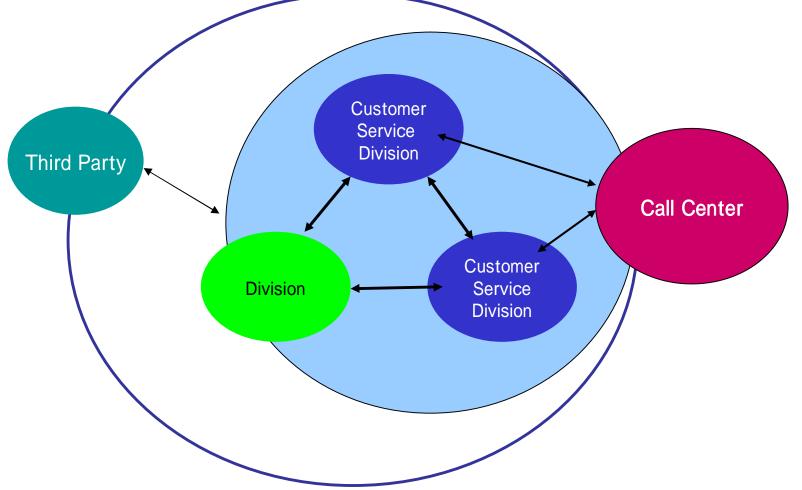
Choice	t-test figure	Mann-Whitney U test figure
Degree of execution along with role-sharing	0.0149 *	0.0065 * *
Degree of information sharing	0.0921	0.1417
Degree of usage the shared information	0.0449 *	0.0346 *
Setting objective performance target	0.0358 *	0.1689
Degree of activity to improve performance	0.2654	0.4725

\*<0.05;\*\*<0.01

# Discussion

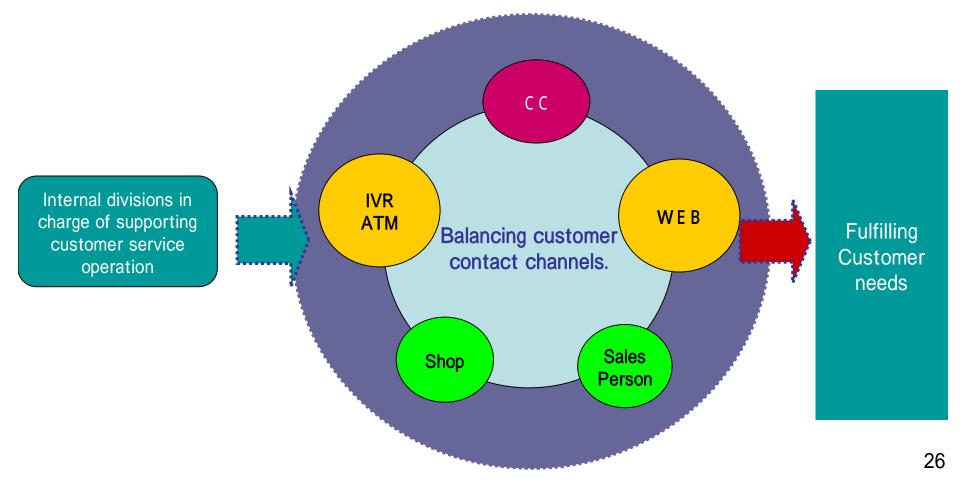
### **Proposition 1**

The degree of a coordinated level among internal divisions at the organization affects the call center performance that is an escalation rate on this research. On this research ' The call center performance' was measured by an escalation rate, which is a substitute for the customer satisfaction.



### **Propositions2**

Of organization divisions related to call center operation, IT Channel strongly influences Call Center performance. As this reason, we assume that call center and IT complement each other as Non-appearance channel for customer.



### **Propositons3**

One feature is linked to the degree of role-sharing. The call center with a low escalation rate was more organized about the role sharing with other internal divisions as well as their role-sharing at the call center. In addition to this, the degree of actual execution along with role-sharing was carried out higher than the call center with a high escalation rate.

Differences	The type of capability	
	Organizational capability	Operational Capability
Degree of role- sharing		
Degree of execution along with role - sharing		
Degree of using information shared with other internal divisions.		

• The level of coordination among business units has a strong impact on the customer satisfaction at the call center.

•IT-channel, which is a communication channel based on IT, tends to be related to the call center stranger than other business activities.

• The role sharing and the usage of information was significantly different at the call center with a low escalation rate. From this findings, we could lead some important indications that the level of Business System may have strong influence on the performance of the company as a whole.

As our research limitation, we have to conceptualize more clearly about a more comprehensive model of the determinations of customer satisfaction and have to expand our research object in a wider field.

