



The Sustainable Management of the Service Center for High Tech Industry in Asia

- a Case Study of Mio-Tech



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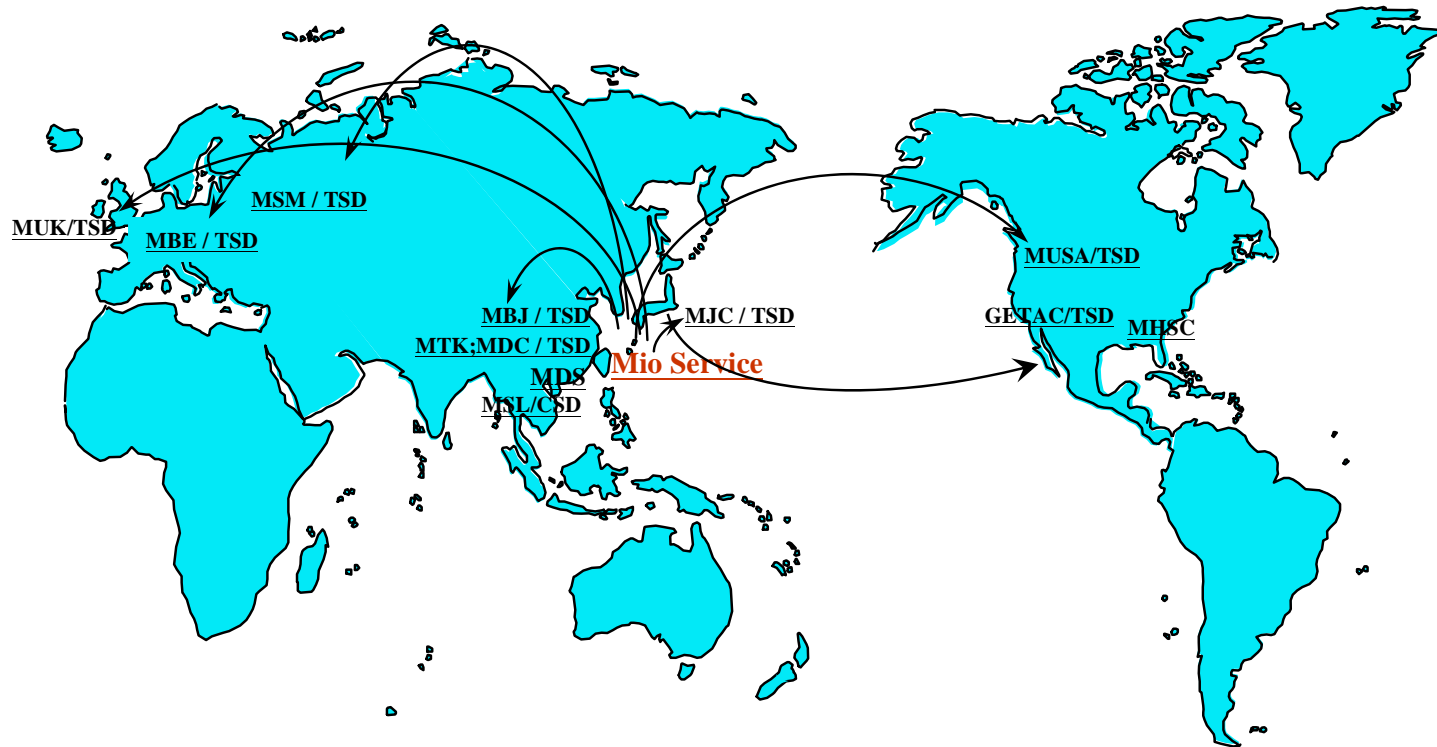
Outline

- 1. Introduction**
- 2. Research background**
- 3. Methodology**
- 4. Empirical Findings**
- 5. Discussion, Implication and Contribution**
- 6. Conclusions**

Introduction

- 1. High-quality products may attract customers, but good service is the prerequisite to establish the long-term relationship between enterprise and customer**
- 2. The analytic capability of data mining is an important issue in CRM**
- 3. The case firm : Mio-TECH**
- 4. Since the product (GPS) is more complicated than general consumer electronics, it is not suitable for outsourcing service**

Mio Technology Limited (Mio-TECH)



Literature Review

- 1. CRM is an important mechanism for enterprise, which business model has evolved from production-centric to customer-oriented approach.**
- 2. CRM Cycle**

1. Knowledge Discovery

Analyze customer information to ensure whether enterprise's marketing strategy is correct or not, and start to make market segmentation and customer prediction. Benefit of this phase will enable marketing personnel to understand the customer behavior patterns and make them to propose better decisions.

2. Market Planning

Define products, plan entire channels, schedule, marketing set planning, assist marketing personnel in analyzing relevant channel preference, event-related inducement, and competitive advantage/disadvantage analysis

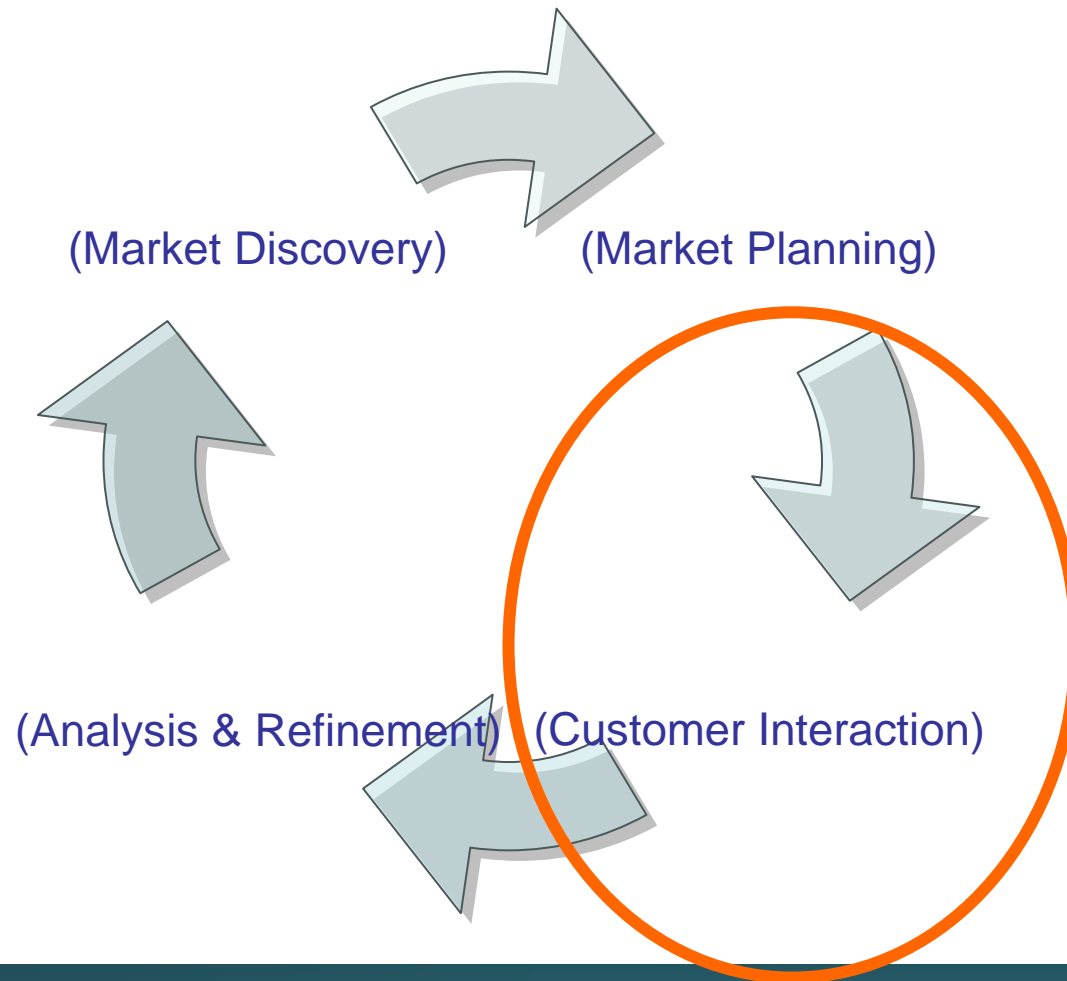
4. Analysis & Refinement

Analyze the difference between the empirical and predicted results and amend the sampling rules from knowledge database to attempt the modification for better realization of the customer expectation in the market

3. Customer Interaction

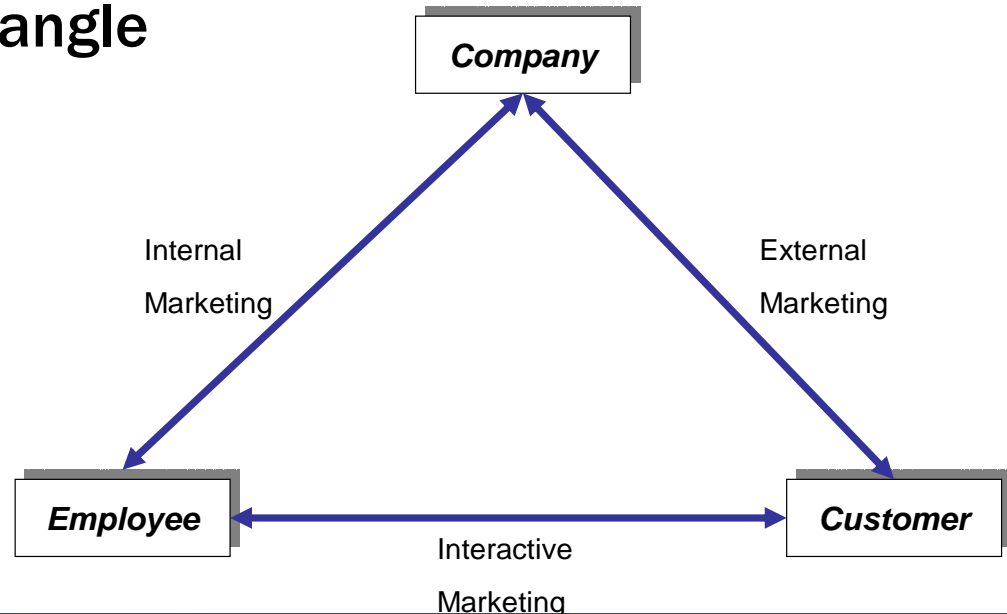
Implement communication channels with business customers, which includes potential buyers, and call center is the interaction window during the contact

Literature Review



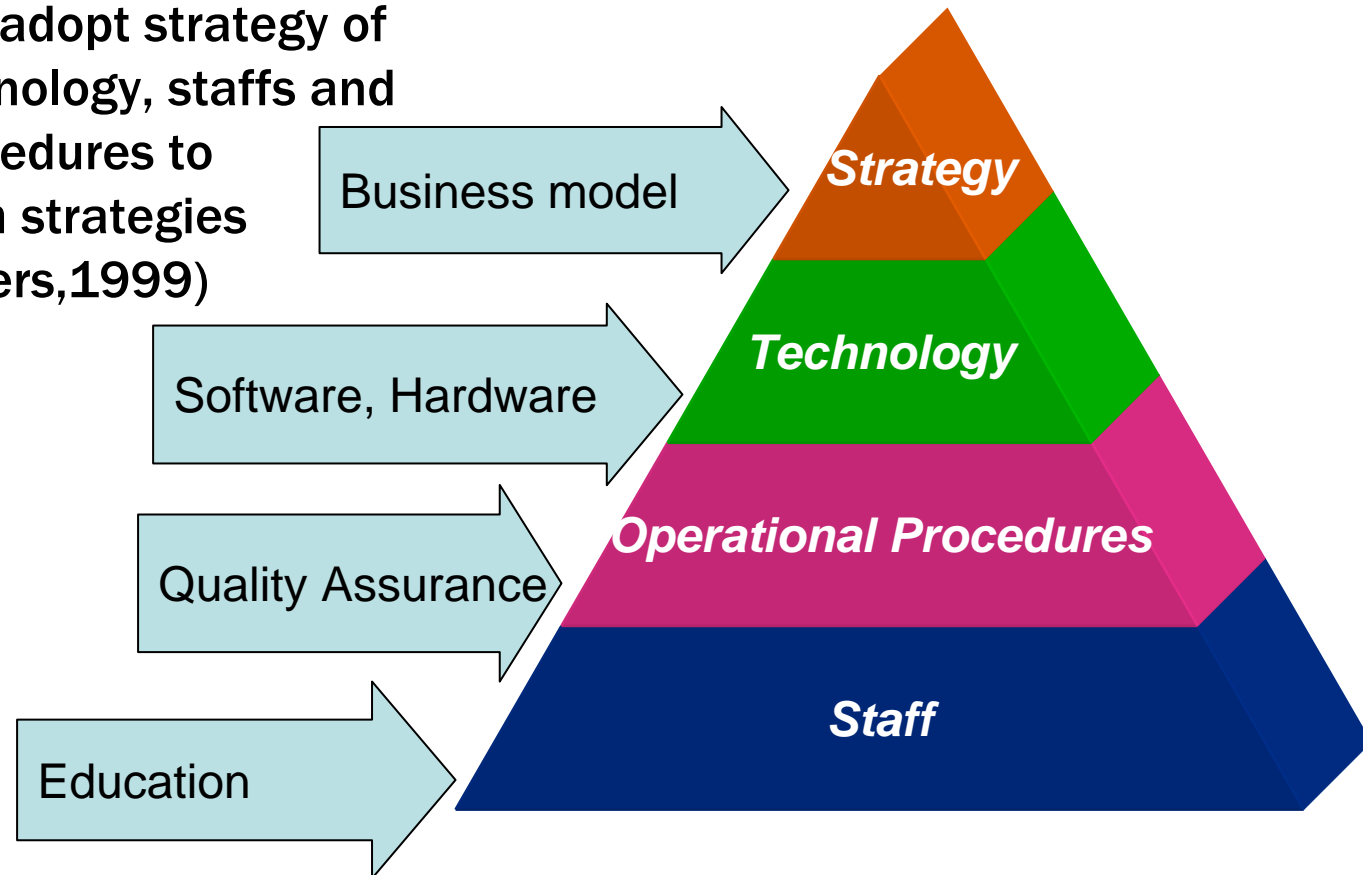
Literature Review

1. Under the pressure of profit-seeking, enterprises' OEM model of earning profits from international manufactures has shifted into the operation of ordnance bench mark (OBM) for the case firm Mio-TECH.
2. Service golden triangle



Methodology

1. CRM needs to adopt strategy of planning, technology, staffs and operating procedures to cooperate with strategies (TruePoint Offers,1999)



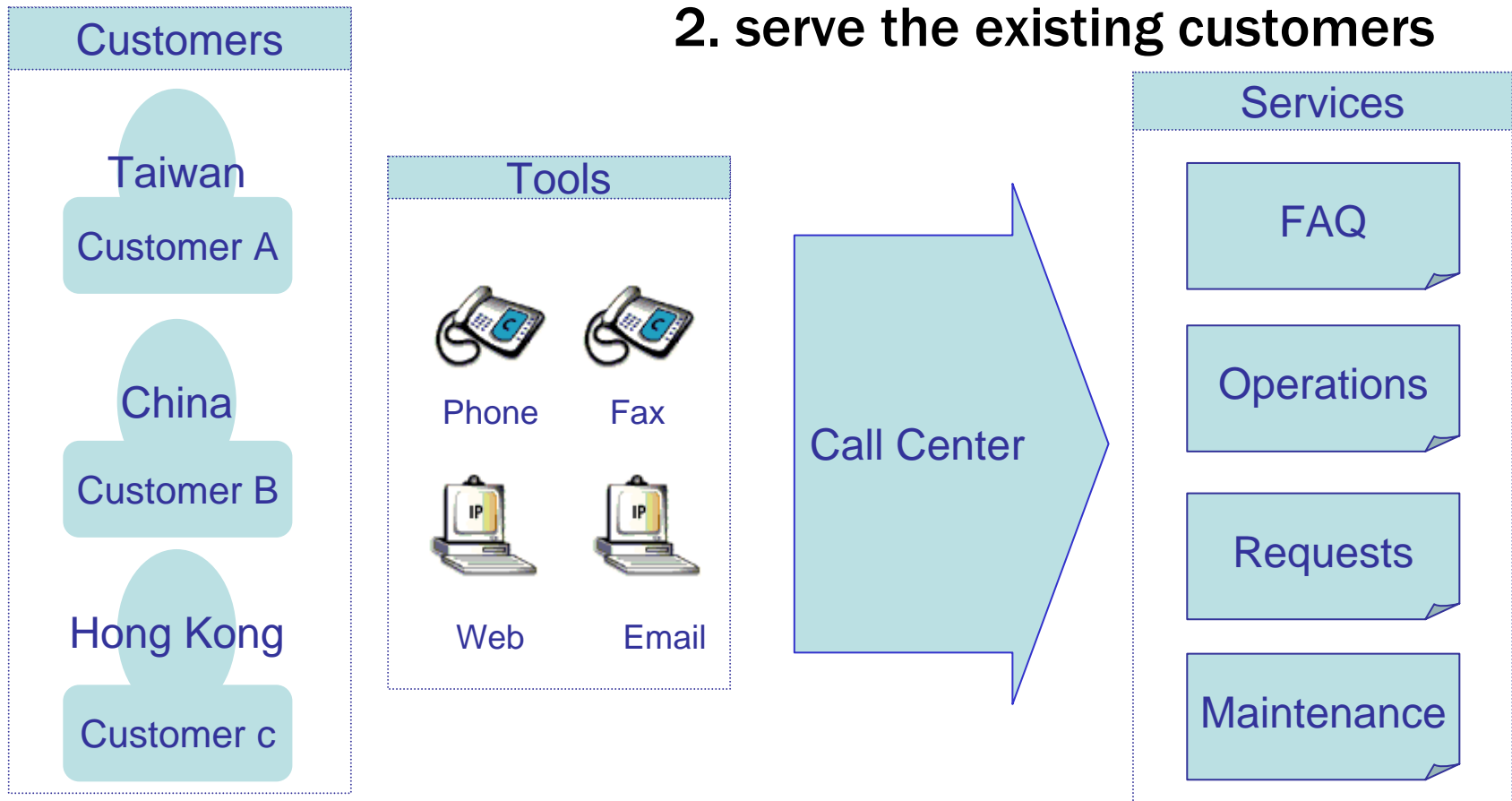
Strategic Facet of Call Center

- ▶ **The “PEPSI” Model :**
 - 1. Corporate Position and Value Proposition.**
 - 2. Experience of Customer Product, Process & Channel**
 - 3. Product, Process & Channel:**
 - 4. Segmentation**
 - 5. Capability of Information: “consumption behavior”**

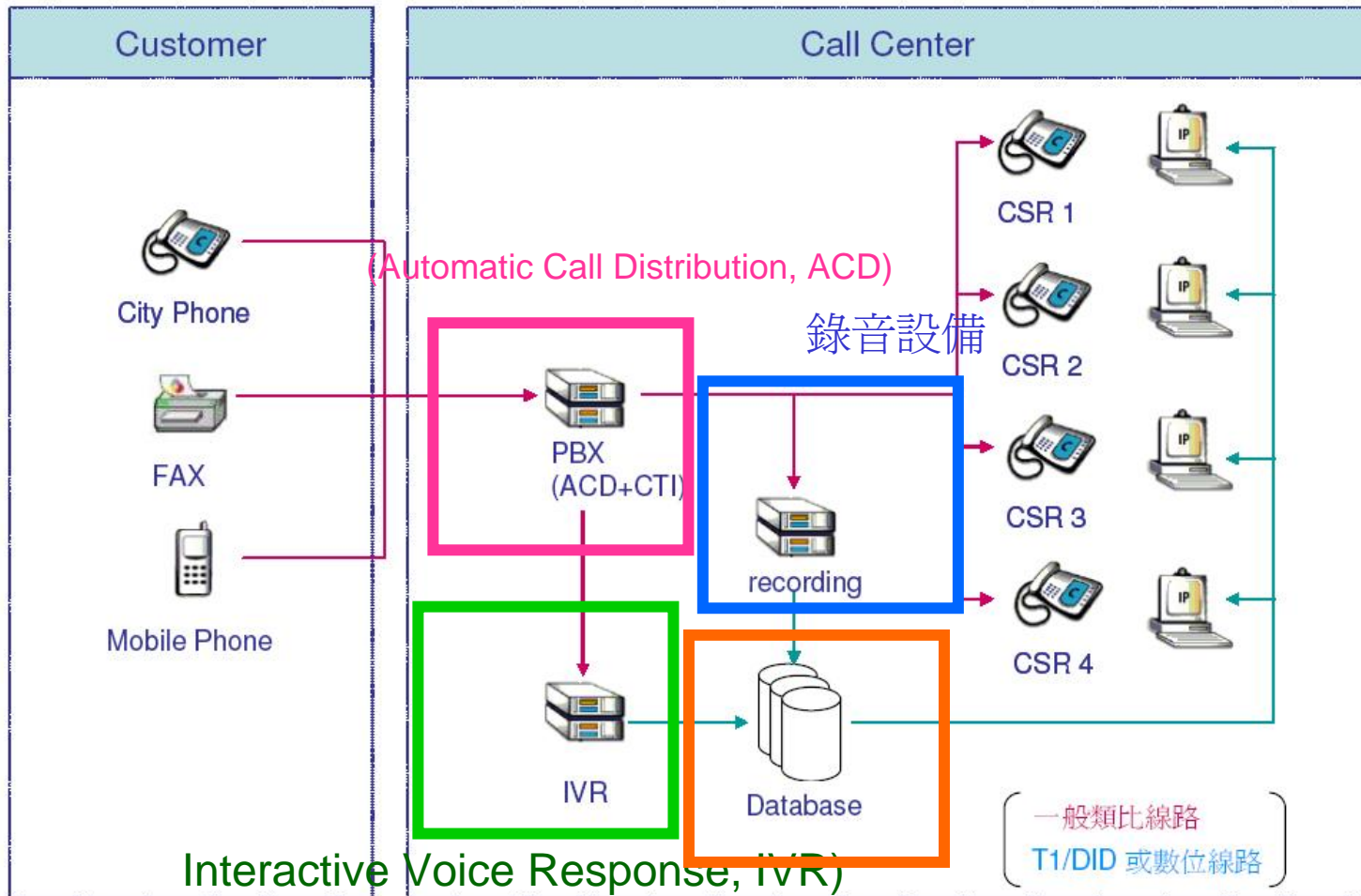
Technologic Facet of Call Center

▶ **Call Center's Task:**

1. Explore the new customers
2. serve the existing customers



Technologic Facet of Call Center



Human Resource Facet of Call Center

1. Human resource (HR) management

Who? Who will call?

What? What's purpose of this call?

Where?

When?

How?

2. Service Level

Experience of Hardware Vendors

Integration Capability of the Software and Hardware

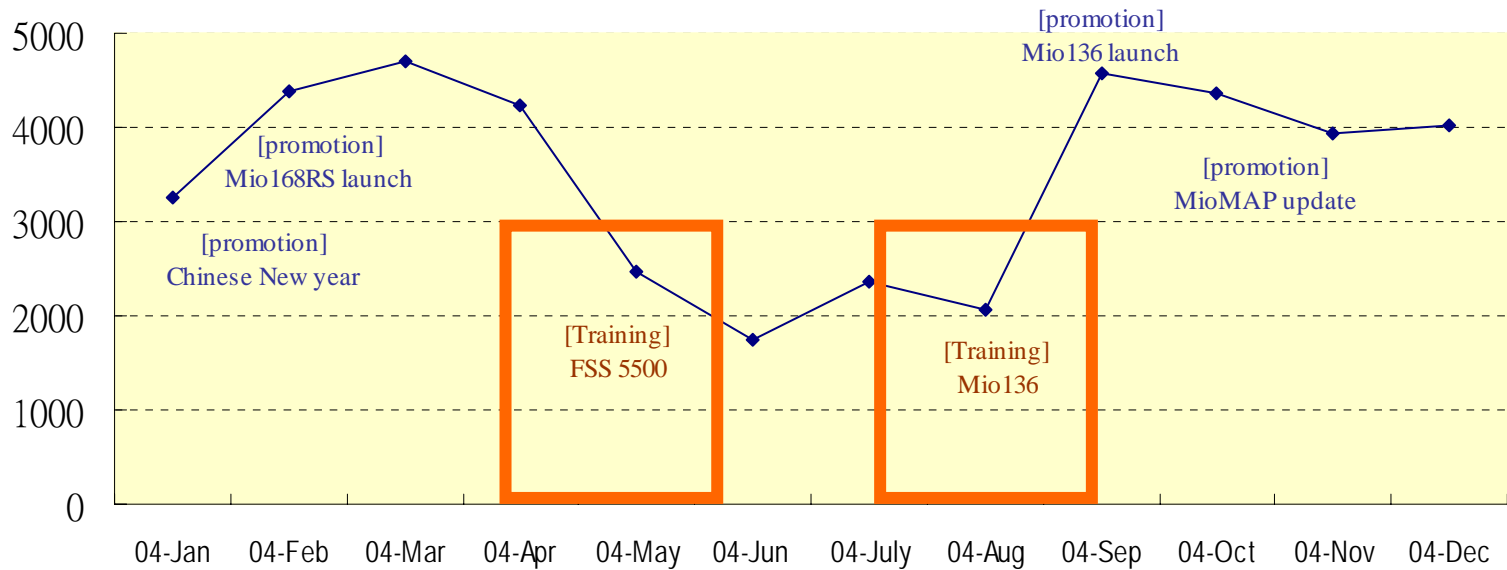
Capability of Troubleshooting

Integral Planning Capability

Staffs

Mio GPS market Q'ty 2004 Jan ~ 2004 Dec
(Region:Taiwan, Model:Mio168,Mio168RS,Mio136)

Answered



Measurement Indicator of Call Center

1. Performance Evaluation

- Average response speed
- Average handle time
- Average abandon rate
- Average waiting time
- Resolving rate per call
- Utility rate per on duty agent
- Average cost of amortization per call
- Average quantity of calls handled by each on-duty Agent

2. Integral Quantified Indicators

Empirical Findings

SWOT ANALYSIS OF THE CASE FIRM

	<p>S Strength</p> <p>S1 Taiwan Car GPS Market Share No. 1</p> <p>S2 Many Agents</p> <p>S3 Developed with hardware venders with excellent QC</p>	<p>W Weakness</p> <p>W1 No exclusive service branch to conduct the rapid promotion and localized activities</p> <p>W2 Long waiting time due to the outsourcing of Maintenance service</p>
<p>O Opportunity</p> <p>O1 High growth of car navigation system</p>	<p>SO: Strike</p> <p>1. Diverse Mio products with completed low to high-end products</p> <p>2. Integrate mobile phone with electronic navigation system</p>	<p>WO: Strategic Alliance</p> <p>1. Vertical link of the collaborative firms engaged in telecommunication, car service and car stereo</p> <p>2. Participating major GPS discussion groups</p>
<p>T Threat</p> <p>T1 Low difference between homogeneous products</p> <p>T2 Potential competitors into the market.</p>	<p>ST: Turning point</p> <p>1. Collection of updated touring information</p> <p>2. Upgrade the hardware with new specification</p> <p>3. Update the latest map information</p>	<p>WT: Defense</p> <p>1. Knowledge data base updated quarterly</p>

Empirical Findings

1. Support Region : TW and CN.

2. Capability :

- Manpower : CSR*20
Tel-sales*5
- Toll free Number*10
- Avg. calls in: 30,000 (Monthly)

3. Max Capability :

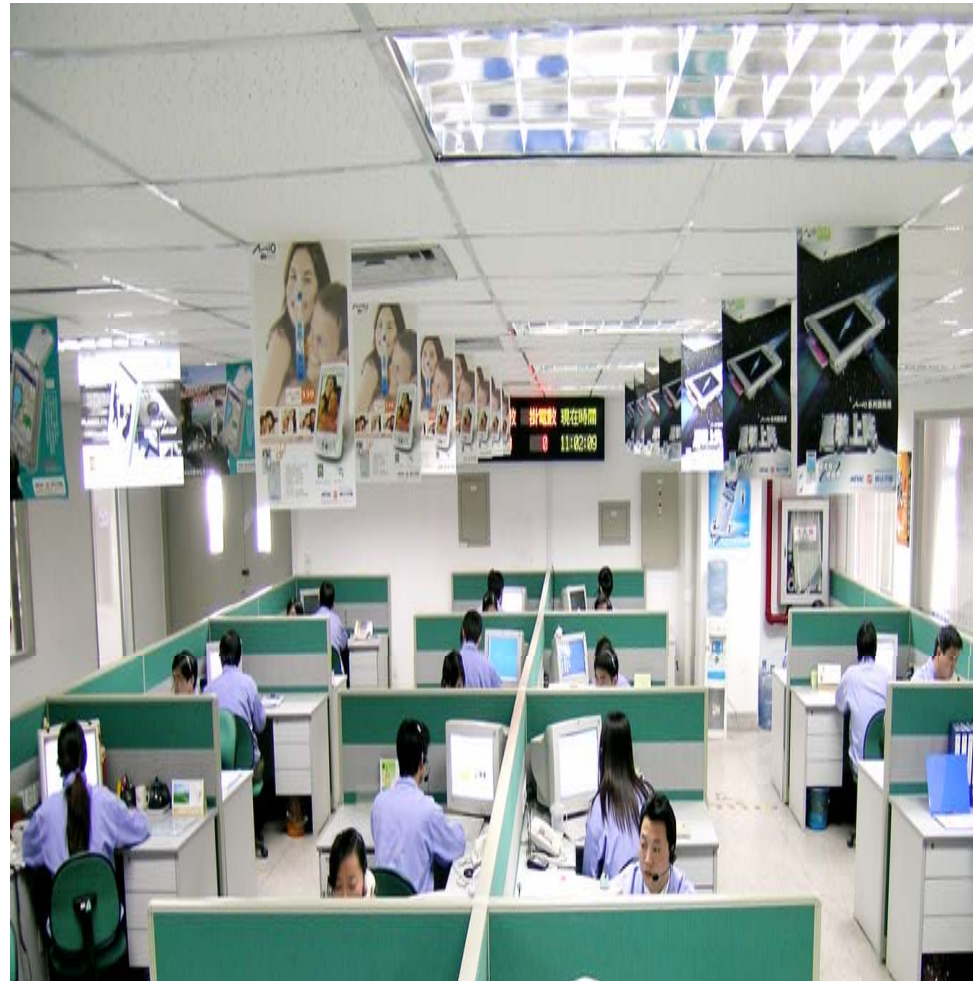
- CSR:50
- Calls in : 75,000 (Monthly)

4. Working hours

8:00 AM ~ 8:00 PM

Marketing Activity

8:00 AM ~ 12:00 PM



Backoffice Analysis

RMA狀態: 全部列表 宅配狀態: 全部列表 NTF狀態: 全部列表 RMA來源: 全部列表 TPM名稱: 全部列表

特殊狀態: 全部列表 所有號碼欄位: Query Back

Dr. Mio接管中心 << 1 2 3 4 5 6 7 8 9 10 >>

客戶名稱	ERMA號碼	單據號碼	機器型號	單據狀態	宅配取件	線上狀態	逾時說明
	ERMA200606130006	CE060613011	MIOA700W	初始化	Check	None	
	ERMA200606130005	CE060613010	MIO168RS	初始化	Check	None	
	ERMA200606130004	None	MIOA700B	異常結案	Check	None	
	ERMA200606130003	CE060613008	MIO168RS	初始化	Check	None	
	ERMA200606130002	CE060613007	MIO168RS	初始化	Check	None	
	ERMA200606130001	CE060613006	MIO169	初始化	Check	None	
	ERMA200606135001	CE060613005	MIO168RS	初始化	Check	None	
	ERMA200606120026	CE060613004	MIO168RS	初始化	Check	None	
	ERMA200606120025	CE060613003	MIOA700W	初始化	Check	None	
	ERMA200606120023	CE060613002	MIOA700B	初始化	Check	None	
	ERMA200606120024	CE060613001	MIO168RS	初始化	Check	None	
	ERMA200606120022	CE060612050	MIO169	宅配取件	Check	None	

Frequently Asked Questions, FAQ)

Mio 169 Top10問題匯總：

1	軟體 (PDA)	導航軟體問題	地圖更新	50
2	軟體 (PDA)	導航軟體問題	軟體使用	32
3	非技術問題 (PDA)	產品維修	產品維修	26
4	軟體 (PDA)	GPS問題	GPS定位	24
5	軟體 (PDA)	導航軟體問題	地圖安裝	18
6	非技術問題 (PDA)	配件購買	配件購買	14
7	軟體 (PDA)	作業系統	娛樂 (MP3,MTV, 視頻播放)	9
8	軟體 (PDA)	導航軟體問題	路徑規劃	8
9	軟體 (PDA)	常規問題	調整屏幕	8
10	軟體 (PDA)	應用軟體	隨附軟體	8

The monitoring mechanism

DCRS_C1 - DameWare Mini Remote Control

File Send View SFT Help

MULTISUNS 播放时间 从 08:00 到 20:00 选定日期 03/09/2005 客户代码 电话号码 搜寻 更换 离开

时间标示 08:00 09:00 10:00 11:00 12:00 13:00 14:00 15:00 16:00

013	117	Coco
014	115	Nicole
015	113	Kady
016	112	Anita
017	120	Water
018	118	Whiter
019	116	White
020	114	Gulling
021	21	David
022	22	David

输入转存资料

已选择转存之档案: 0.00MB
此笔录音档案: 0.08MB
 转存 Wave 格式
请输入转存档名:
DCRS_C101505309090.605

确定 取消

录音时刻	D/T	长度	代码
09:04:07	DT	00010	
09:04:28	DT	00005	
09:05:14	DT	00005	
09:06:05	DT	00004	
09:06:15	DT	00006	
09:06:50	DT	00006	
09:06:58	DT	00072	

转存模式

选择 确定

日期 03/09/2005
时间 09:06:05
分机号码 113
用户姓名 Kady
录音通数 95

动态播放 DTMF 码

0%

Prev. F.B. Play F.F. Next Stop Pause

播音速度 +0%

就 绪

The monitoring mechanism

地址 @ http://10.87.0.101/tmcc/admin/RptCallLog_qm.asp?qdef=2&sYear=@dateRdo=2&sDis=03%2F10%2F2005&eDis=03%2F10%2F2005&dateType=Month&callTypeI
(03/10/2005 00:00:00~03/10/2005 23:59:59)

Daily Report :			
项目	8390-China(350)	Mio-TW(360)	Total/Average
1. Total Calls In	64	109	173
2. Aband>20	0	1	1
3. Calls Answered	62	102	164
4. Calls In(excluding aband<20sec)	64	102	173
5. % Aband	.0 %	.9 %	.6 %
6. Average Waiting (sec)	73	31	52
7. Service Level	95.2%	98.0%	97.0%
8. Agents On Queue	2	4	6
9. Average Calls Per Agent	31.0	25.5	27.3
10. Total Calls Logged	33	33	66
11. % of Total Calls Logged	53.2%	32.4%	40.2%
12. Average Communication (sec)	199	149	168

值机人员接听状况 :		
值机人员	接听数	接听时间
781	22	45 分 12 秒
1980	7	1 小时 3 分 32 秒
3133	22	1 小时 9 分 32 秒
3233	35	1 小时 9 分 34 秒
4892	24	58 分 8 秒
5934	15	36 分 47 秒
6692	8	37 分 50 秒

完毕

Customized Services

登入 登出

Mio™ Digl Walker

My 台灣 首頁 全球網站 語系選擇 chinese

下載中心 常見問題集 線上問題解答 線上急診掛號

On-Line Repair

→ 關鍵字搜尋

線上維修

搜尋

我要修改資料

客戶產品基本資料 - ** 為必選項

客戶姓名: (姓) - (名)

連絡電話: 請務必正確填寫您的電話, 以便宅配人員取件

連絡手機:

郵遞區號: 300

取貨地址: uhbeubviuewbviq

希望取件日期: 2006/6/14

希望送件日期: 2006/6/16

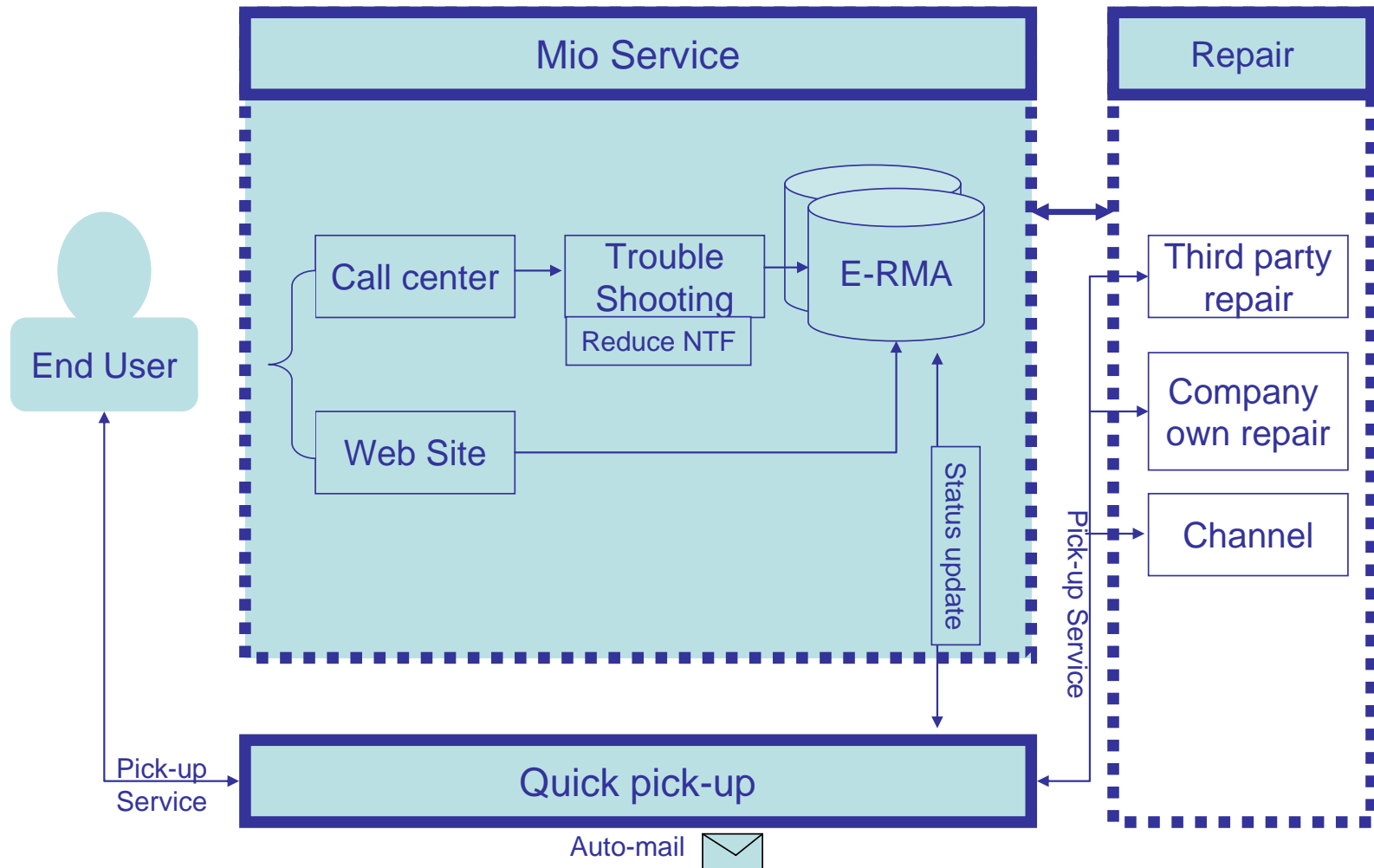
須求等級:

點選後可產生維修產品的序號

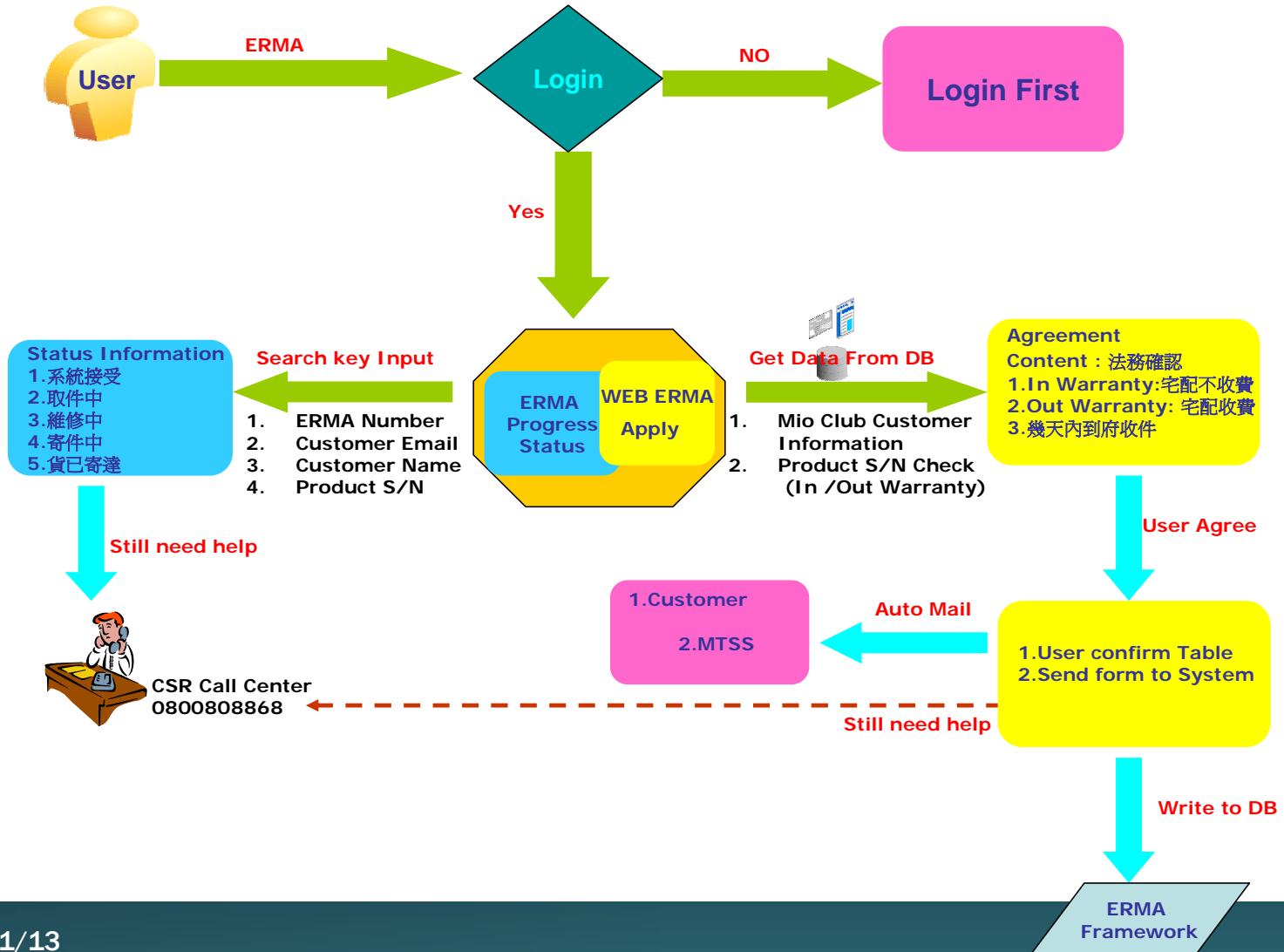
註冊產品: Min8380 Min168

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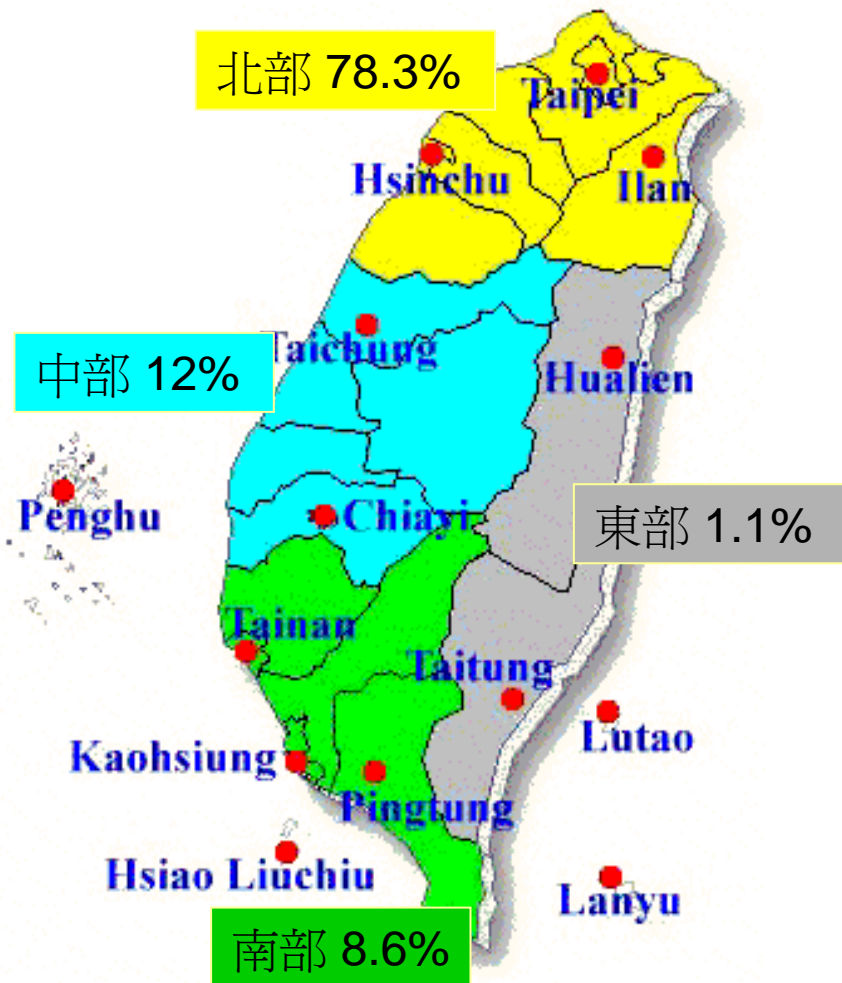
Customized Services



Customized Services



Survey



抽樣母體：個案公司已在網頁登記之既有顧客

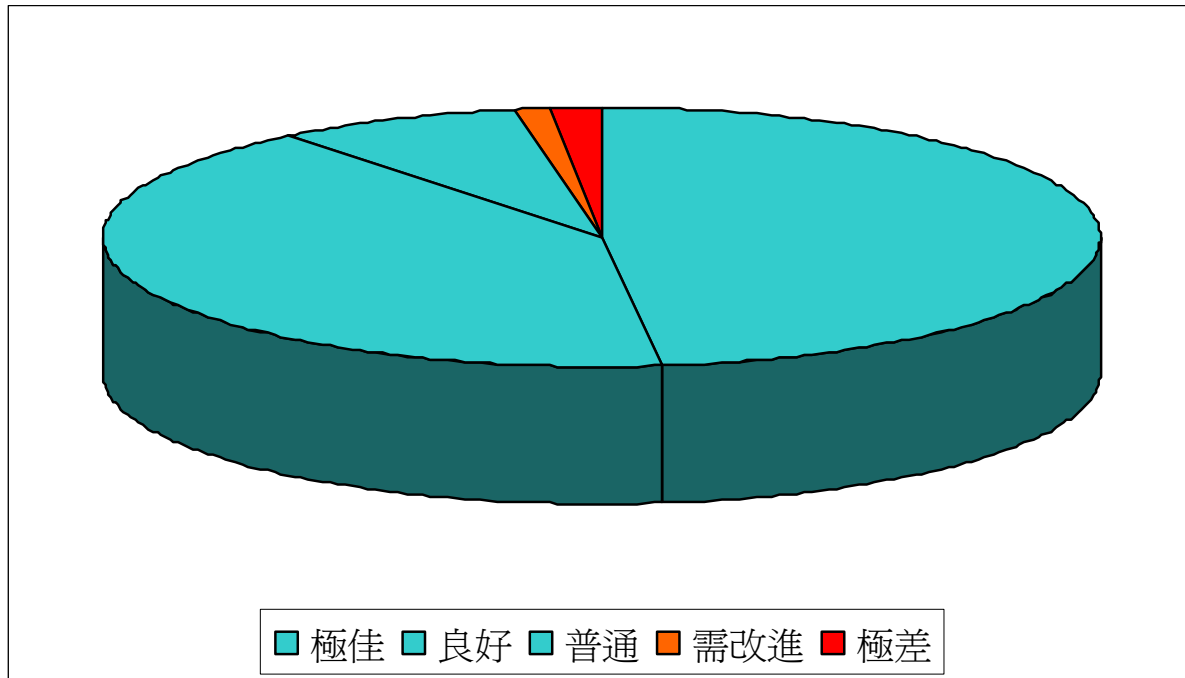
1. 調查地區：台灣地區
2. 調查對象：台灣地區已購買Mio系列產品，並且使用過宅配修的使用者
3. 調查期間：自 2006 年 3 月 1 日至 2006 年 3 月 20 日止
4. 調查工具：Mail Hunter 電子問卷統計工具

問卷設計重點有：

1. 對Mio-TECH整體的滿意度
2. 對Mio-TECH提供"宅配修"的觀感
3. 客戶分析，從何得知宅配修這個服務

- 整理樣本總數 250 人
- 實際受訪人數 175 人
- 性別方面男、女分配為 138/37

Survey



97.2%

	數量	百分比
極佳	84	48.00%
良好	72	41.10%
普通	14	8.00%
需改進	2	1.10%
極差	3	1.70%

Discussion, Implication and Contribution

- ▶ **Mio-TECH's call center has following self-established service indicators:**
 - **Cooperate with enterprise's integral strategy to continuously develop the customized service for products.**
 - **Enhance the satisfaction level of customer service and reach the leading position in the industry.**
 - **Improve the customer service effectively and efficiently control the cost.**
 - **Realize the update of knowledge and skill for all customer service personnel**
 - **Enhance the customer satisfaction and contribute more value to the enterprise.**

Discussion, Implication and Contribution

- ▶ **The Trend in the Service Center**
 - **Centralization**
 - **Customization**
 - **Horizontal Alliances**

Conclusion

- ▶ **To successfully implement CRM into the customized service, the enterprise should set the clear strategy, department support and organization operations. Continuous reviews of the quantified service indicators will help to monitor the customer satisfaction and understand the service personnel quality.**
- ▶ **The technical enhancement, the customer's satisfaction and the corporate strategy have been significantly communicated and strengthen the customer relationship for the case firm.**