Chapter 4: Research Results

4.1 Customer Satisfaction Survey Results

The summary of the customer satisfaction survey results for Celcom is included in Annex 4 (19 pages).

From these findings, Lucent will be able to assess which satisfier needs to be improved to increase customer satisfaction for the forthcoming survey and how to maintain its current market share in this competitive environment of the telecommunications industry.

The calculated Customer Value Added (CVA) and Customer Satisfaction Average (CSA) scores for this survey are 0.77 and 5.0 respectively (see page 98). Based on the CVA score, it can be surmised that the customer is dissatisfied with Lucent as a whole since the CVA is less than 1.0. This therefore, means that Celcom feels Lucent has given inferior service value compared to their other vendors. Looking at it positively, this is an opportunity for Lucent to improve and to attain best-in-class standard. Lucent must act on the survey findings to improve on the weak areas identified in order to have a better score in the next survey.

It should be noted here that the results may be skewed by incomplete questionnaires, choice of respondents and survey methodology. A more detailed discussion on this is given in Chapter 5.
4.2 Market Quality Profile Report

In order to generate the market quality profile report (Annex 5 - 3 pages) for analysis, the value score was entered into the customer satisfaction database. The ratio of the thirteen (13) attributes or satisfiers that were measured is given in Attachment 2. Out of these thirteen (13) satisfiers, only three (3) satisfier scored above 1, namely Project Management, Billing and Ordering. This means that the customer is satisfied with these three (3) satisfiers. The other ten (10) satisfiers have ratio scores ranging from 0.64 to 0.92. The lowest satisfier belongs to the Engineering category with a ratio value of 0.64. This therefore means that the Celcom is not happy with the Engineering services provided by Lucent to their GSM network in Malaysia.

An in-depth analysis of the comments given in the Engineering section revealed that Celcom felt left out of the entire engineering process. Their participation was not sought and Lucent's engineers did all the Radio Frequency engineering work. Based on the comments provided by Celcom, their other vendor, i.e., Ericcson, invited Celcom's involvement in the Engineering jobs to be carried out. Lucent needs to learn to engage Celcom more in future, for all the tasks that they are doing for Celcom in order to get their feedback from the beginning till the end of the project.

Another issue highlighted was the lack of experience of Lucent's engineers. This situation is unavoidable as new engineers were recruited with the rapid expansion of the GSM division. Lucent needs to provide adequate training for these engineers before sending them out to the field to face the customer. It is obvious that existing training programme is insufficient since the customer has clearly indicated that they wanted more experienced or knowledgeable engineers.
The Engineering division in Lucent needs to look into this matter and work with Celcom to come up with the appropriate plan to ensure that Celcom is happy with the Engineering job provided by Lucent for future work assignments. So far, a lead personnel has been identified within the Action Plan committee in Lucent, and he is responsible for formulating an action plan for Celcom.

The next lowest ratio is for Repair and User Documentation attributes. Both score a ratio of only 0.71. For repair, the problem is due to the fact that faulty equipment is not repaired locally but is sent to either Germany or to the United States, depending on where the equipment is manufactured. This causes long delays waiting for the equipment to be returned to Malaysia.

Lucent should look into the possibility of getting the factories in Germany and the United States to transfer technology on the repair process to local service engineers so that they are able to repair the faulty equipment here. Other than reducing turnaround time, this should also cut down on repair costs as labour cost here is much cheaper compared to the two developed countries. However, such a step needs investment in the form of a repair centre and also training for local Lucent staff to do the repair. Given that the customer is already not satisfied with the current situation, Lucent's management should give this option some serious thought, both as a means to improve customer satisfaction as well as a cost cutting measure.

Another problem is that Lucent does not keep Celcom informed on the status of the repair. This is currently being looked into by Lucent. The Logistics Manager is working closely together with Celcom personnel to formulate and implement a proper action plan. Hopefully, this will gain Lucent a higher score in the next survey.

Based on comments given on user documentation, all the documents are handed over to Celcom's regional offices. The Headquarters in Kuala Lumpur
is not given any copies and this makes it difficult for the Headquarters staff should they need to refer to them. As stated in the comments, there is a lot of information in the documents and the respondents do not know how to use them effectively to get access to the information. This indicates a lack of hands-on-training for Celcom field personnel on the usage of the documents.

4.3 Action Plan Record

Based on the findings of the survey on market quality profiles, Lucent set up an Improvement Process Committee. As the name implies, the committee has been given the task of improving the current process or attributes measured in the survey. By improving the process, it is hoped that customer satisfaction will increase. One of the first task was to identify task owners, who will work closely with Celcom to analyse and understand better the relevant issues brought up by the survey, and to implement improvement plans.

The committee consists of decision-makers or their representatives from departments that contribute to the attributes surveyed. They comprise of the following personnel: Account Manager, Regional Technical Director, Installation Manager, Celcom Program Director. Project Manager, Optimisation Manager. Technical Director, Customer Technical Support Director, Logistic Manager and Contract Manager.

All the above personnel or their representatives are expected to work on the issues raised by Celcom and work out an action plan with the customer to implement the improvements needed. The committee is to meet regularly to formulate the action plan and to submit a report to Celcom on actions that Lucent are planning to implement with a time schedule for implementation.
An action plan record (Annex 6 - 16 pages) of what needs to be improved and how it is to be carried out has been designed, incorporating the schedule for performance to be measured and monitored.

As stated above, an Improvement Process Committee has been set up to look into issues that are unsatisfactory to Celcom. This committee and the lead persons are to work together with Celcom to achieve improvement. However in practise, the running of the committee and the commitment of some of its members leave much to be desired. Some committee members are not fully committed to the action plan to be carried out. Their plans lack practical details required for effective implementation. Some members do not bother to identify the action plans that were associated with them and others gave only very brief statements of how their plans were to be implemented.

As an example, on documentation, it was planned to provide users with documentation on CD-ROM. However, no one bothered to ask if the customers have CD-ROM equipment to read the documents in the first place. And if they did, in what format will the documentation be? If these documents need to be referred to by the field personnel at site, can it be done? Obviously, a hard copy should also be made available for such situation. This showed that the task owner who acted on the issues did not work out the plan with the client to see what was needed to satisfy them in a practical way. Just by giving documentation in CD-ROM as requested by the customer does not in itself improve customer satisfaction. The person who requested it is probably from the Headquarters and has access to CD-ROM readers. That person may not want to store the hard copy of the documentation in the office and he does not need to refer to them often. Field personnel however, need to refer to their documentation frequently and in locations which do not have CD-ROM readers. A hard copy would definitely be a boon to them. This example underscores the need to look for a comprehensive solution for the customer rather than just reacting to their comments. Such a solution can
only be found by getting to know all their documentation needs and then finding a solution that fulfil those needs.

Since the survey was conducted in July '97, no formal report has been submitted to Celcom. This is partly due to lack of time and that no one was solely responsible for managing the whole process. The previous customer satisfaction manager had gone back to Nuremberg, Germany as she was only on temporarily assignment to Malaysia to help set up the initial customer satisfaction survey for Celcom.

Given such lackidial attitude by the committee and Lucent's management, it is doubtful that the improvement plans will ever be implemented successfully.

4.4 Weaknesses of the survey

During the course of the survey, several weaknesses became apparent.

4.4.1 Incomplete Survey Response

Attached is a summary on the number of respondents who responded to the questionnaire.
### Table 2: No. Of Respondents Who Responded

<table>
<thead>
<tr>
<th>No.</th>
<th>Attributes</th>
<th>No. of Respondents Who Answered the Questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Business Relationship</td>
<td>12/14 86%</td>
</tr>
<tr>
<td>2.</td>
<td>Product Quality</td>
<td>11/14 76%</td>
</tr>
<tr>
<td>3.</td>
<td>Engineering</td>
<td>7/14 50%</td>
</tr>
<tr>
<td>4.</td>
<td>Delivery</td>
<td>8/14 57%</td>
</tr>
<tr>
<td>5.</td>
<td>Installation And Commissioning</td>
<td>10/14 71%</td>
</tr>
<tr>
<td>6.</td>
<td>Network Optimisation And Acceptance</td>
<td>8/14 57%</td>
</tr>
<tr>
<td>7.</td>
<td>User Documentation</td>
<td>10/14 71%</td>
</tr>
<tr>
<td>8.</td>
<td>Training</td>
<td>9/14 64%</td>
</tr>
<tr>
<td>9.</td>
<td>Technical Support</td>
<td>8/14 57%</td>
</tr>
<tr>
<td>10.</td>
<td>Repair</td>
<td>6/14 43%</td>
</tr>
<tr>
<td>11.</td>
<td>Project Management</td>
<td>8/14 57%</td>
</tr>
<tr>
<td>12.</td>
<td>Sales/Account Management</td>
<td>4/14 28%</td>
</tr>
<tr>
<td>13.</td>
<td>Ordering</td>
<td>5/14 36%</td>
</tr>
<tr>
<td>14.</td>
<td>Billing</td>
<td>5/14 36%</td>
</tr>
</tbody>
</table>

It is noted that all the respondents did not complete the questionnaire fully. Some sections, e.g. Sales/Account Management had a response rate of only 28%, while other sections fared slightly better. It may be surmised that the respondents either did not fully understand the questionnaire or they felt it is not in their duty to answer and give comments on questions which touched on areas that they were not responsible for.

This is confirmed by the fact that questions related to repair were answered mostly by those involved in the installation of equipment. The respondents who answered the Sales/Account Management section were those who had
access to Sales personnel. Similarly, for the Ordering and Billing, most of the respondents are in the Headquarters of Celcom (3 out of 5 respondents) as they are the people who take care of billing and ordering of the equipment for the GSM Project nation-wide.

It was observed during the survey that some of the respondents did not want to be interviewed, instead they preferred to answer the questionnaire at their own convenience. As there was no one to give any clarifications, they may not fully understand what was being asked. This may also help explain why the response rate is so low.

From the above and further analysis of the survey results, we can thus surmise that the respondents (employees of Celcom) are only concerned with their respective job functions and do not know the process for the whole scope of work required in the GSM project. Out of fourteen (14) respondents only one respondent was able to answer thirteen (13) out of the fourteen (14) statements about product/service attributes. From this, one could interpret that this respondent is the person who has knowledge of the GSM project.

Besides answering questions by putting in the score value, the respondents also gave comments which were very useful for Lucent to take corrective actions and to understand the customer (Celcom) better.

From the results, one can deduced that the management and control of the GSM project for Celcom are located in the Headquarters. Their regional offices only carry out the job assigned to them and report back to the Headquarters for decision making.
It can also be concluded from the above results that the majority of the respondents selected understand the practical and technical aspects of the GSM project but not the management aspects. The end result is that the questionnaires were not fully answered and this makes meaningful analysis of the results very difficult.