ABSTRACT

Soft System Methodology is a method that can find out, compare with the ideal system and solve the problem in a soft system, unpredictable and Unstructured system. The hospital system (patient service mechanism specially) is a soft system, so many human activities involve. So for finding and solving the problems of the hospital, it can use soft system methodology.

The research result (as some advice) can be used by hospital management to improve the patient service mechanism (or hospital system globally). The advice can be global advice such as train the new employee and hire the professional staffs, or the advice can be IT advice such as set up the Hospital Information System, start from the front-office up to back-office. All of advice based on the case faced by the hospital, in this case ABC hospital, Type C Hospital, in Kaurawang.

Key Words:

Soft System Methodology, Patient Service Mechanism, Hospital Information System
TABLE OF CONTENTS

Title Page .......................................................... i
Approval Sheet .................................................... iii
Acknowledgement ................................................... iv
Abstract ............................................................ v
Table of Contents ................................................... vi
List of Figures ....................................................... ix
List of Tables ....................................................... xi
List of Appendices ................................................ xii

CHAPTER

1. INTRODUCTION ....................................................... 1
   1.1 Background ................................................... 1
   1.2 Problem Identification ........................................ 2
   1.3 Problem Scope ................................................ 3
   1.4 Problem Formulations .......................................... 3
   1.5 Objectives and Benefits of the Research .................... 4

2. THEORITICAL FOUNDATION ...................................... 6
   2.1 Controlling Definition ....................................... 6
   2.2 Patient Service Mechanism Definition ..................... 7
      2.2.1 Patient .................................................... 7
2.2.2 Service ......................................................... 7
2.2.3 Hospital ....................................................... 8
  2.2.3.1 Hospital Definition .................................... 8
  2.2.3.2 Types of Hospitals .................................... 9
  2.2.3.3 Hospital Activities Value Chain ...................... 10
2.3 Soft Systems Methodology Definition ......................... 12
  2.3.1 System ..................................................... 12
  2.3.2 Soft Systems .............................................. 15
  2.3.3 Soft System Methodology ................................. 16
  2.3.4 Stages of the Soft Systems Methodology ................ 17
3. METHODOLOGY .................................................. 23
  3.1 Research Object ............................................. 23
  3.2 Research Method ............................................ 23
  3.3 Research Procedure ........................................ 23
  3.4 Data Collecting Technique ................................. 24
4. ANALYSIS AND RESEARCH RESULT .......................... 26
  4.1 The Overview Model of the Enterprise .................... 26
  4.2 Organization Structure .................................... 26
  4.3 Types of Patients .......................................... 32
  4.4 The Rich Picture Explanation ............................. 33
    4.4.1 Types of Hospital Rooms ............................. 33
    4.4.2 Situation in Registration Area ....................... 35
4.4.3 Situation in Polyclinic, Laboratory and ICU Area .................. 35
4.4.4 Situation in Hospitalized Patient Room Area ..................... 36
4.4.5 The Problem Situation ............................................. 37
4.5 Root Definition and CATWOE Method ............................... 44
4.6 SWOT Analysis ......................................................... 45
4.6.1 ABC Hospital Strength ............................................. 45
4.6.2 ABC Hospital Weakness ........................................... 46
4.6.3 ABC Hospital Threat ............................................... 49
4.6.4 ABC Hospital Opportunity ......................................... 49
4.7 Conceptual Model ....................................................... 50
4.7.1 The Customers or Patients Model .................................. 51
4.7.2 The Actors Model .................................................... 63
4.7.3 The Ideal Model ...................................................... 70
4.8 Comparison ............................................................. 77
4.9 Feasible and Desirable Changes ....................................... 82
4.10 Possible Action for Solving the Problem ............................ 87
5. CONCLUSION AND RECOMMENDATION ............................. 90
5.1 Conclusions ........................................................... 90
5.2 Recommendations ...................................................... 92
6. REFERENCES .............................................................. 93
7. BIBLIOGRAPHY .......................................................... 95
8. RESUME ................................................................. 144
# List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Hospital Value Chain</td>
<td>12</td>
</tr>
<tr>
<td>2.2</td>
<td>System</td>
<td>13</td>
</tr>
<tr>
<td>2.3</td>
<td>System and Sub-system</td>
<td>14</td>
</tr>
<tr>
<td>2.4</td>
<td>Simplistic Conceptual Model</td>
<td>20</td>
</tr>
<tr>
<td>2.5</td>
<td>Comparing Model and Reality</td>
<td>21</td>
</tr>
<tr>
<td>2.6</td>
<td>Seven Stages of SSM</td>
<td>22</td>
</tr>
<tr>
<td>3.1</td>
<td>Research Procedure</td>
<td>24</td>
</tr>
<tr>
<td>4.1</td>
<td>Organization Structure</td>
<td>31</td>
</tr>
<tr>
<td>4.2</td>
<td>Hospital Room Lay-out</td>
<td>37</td>
</tr>
<tr>
<td>4.3</td>
<td>Rich Picture</td>
<td>43</td>
</tr>
<tr>
<td>4.4</td>
<td>Model of Hospital General Activity</td>
<td>50</td>
</tr>
<tr>
<td>4.5</td>
<td>Patients (Customers) Activity Model</td>
<td>51</td>
</tr>
<tr>
<td>4.6</td>
<td>Model of Patients Activity in ICU Area</td>
<td>54</td>
</tr>
<tr>
<td>4.7</td>
<td>Model of Waiting in List Activity in Registration Area</td>
<td>55</td>
</tr>
<tr>
<td>4.8</td>
<td>Model of Registration Activity in Registration Area</td>
<td>56</td>
</tr>
<tr>
<td>4.9</td>
<td>Model of Paying Activity in Payment Area</td>
<td>57</td>
</tr>
<tr>
<td>4.10</td>
<td>Model of Waiting in List in Polyclinic Area</td>
<td>59</td>
</tr>
<tr>
<td>4.11</td>
<td>Model of Getting Doctor’s Service in Polyclinic Area</td>
<td>60</td>
</tr>
</tbody>
</table>
Figure 4.12 Model of Getting Hospitalized-Patient Service .................. 62
Figure 4.13 Model of Patient Activity in Dispensary Area .................. 63
Figure 4.14 Model of Actors Activity ............................................. 64
Figure 4.15 Model of Actors in Registration Activity ......................... 65
Figure 4.16 Model of Actors in Payment Area ................................. 66
Figure 4.17 Model of Actors in Polyclinic Area ............................... 67
Figure 4.18 Model of Actors in Hospitalized-Patient Area .................. 69
Figure 4.19 Model of Actors in Dispensary Area .............................. 70
Figure 4.20 Model of New Concept ............................................... 71
Figure 4.21 Model of Registration New Concept ............................... 73
Figure 4.22 Model of Polyclinic Service New Concept ....................... 74
Figure 4.23 Model of Hospitalized-Patient Service New Concept ............ 76
Figure 4.24 Conceptual Model ..................................................... 77
**LIST OF TABLES**

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 4.1</td>
<td>Problem</td>
<td>42</td>
</tr>
<tr>
<td>Table 4.2</td>
<td>ABC Hospital’s Strength</td>
<td>45</td>
</tr>
<tr>
<td>Table 4.3</td>
<td>ABC Hospital’s Weakness</td>
<td>47</td>
</tr>
<tr>
<td>Table 4.4</td>
<td>Table of Comparison</td>
<td>80</td>
</tr>
<tr>
<td>Table 4.5</td>
<td>Feasible and Desirable Changes</td>
<td>87</td>
</tr>
<tr>
<td>Table 4.6</td>
<td>Possible Action</td>
<td>88</td>
</tr>
</tbody>
</table>
LIST OF APPENDICES

Appendix A  Questionnaire of Survey ................................................. 96
Appendix B  Result of Survey ................................................................. 120