# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>INNER FIRST PAGE</td>
<td>i</td>
</tr>
<tr>
<td>DECLARATION BY SCHOLAR</td>
<td>vii</td>
</tr>
<tr>
<td>SUPERVISOR'S CERTIFICATE</td>
<td>ix</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENT</td>
<td>x</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>xii</td>
</tr>
<tr>
<td>LIST OF ACRONYMS &amp; ABBREVIATIONS</td>
<td>xiii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>xiv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>xvi</td>
</tr>
</tbody>
</table>

## CHAPTER 1

1. INTRODUCTION AND RESEARCH DESIGN                                   1
   1.1. BASIC INTRODUCTION                                              1
   1.2. NEED FOR THE STUDY                                              4
   1.3. CONCEPTUAL MODEL OF RESEARCH                                    5
   1.4. OBJECTIVES OF THE STUDY                                         7
   1.5. RESEARCH QUESTIONS                                              8
   1.6. RESEARCH METHODOLOGY                                            9
   1.7. SIGNIFICANCE OF THE STUDY                                       10
   1.8. SCOPE OF THE STUDY                                              10
   1.9. ORGANIZATION OF THESIS                                          11
   1.10. CONCLUDING REMARKS                                              13

## CHAPTER 2

2. LITERATURE REVIEW                                                   14
   2.1. INTRODUCTION                                                    14
3.6.3. PART III: PROPOSITION OF A REGRESSION MODEL  51  
3.6.4. PART IV: VALIDATION OF THE PROPOSED MODEL  52  
3.7. FORMULATION OF HYPOTHESES  52  
3.8. CONCLUDING REMARKS  54  

CHAPTER 4  

4. ANALYSIS AND FINDINGS  55  
4.1. INTRODUCTION  55  
4.2. SECTION I  55  
   4.2.1. IDENTIFICATION AND RANKING OF SOFTWARE RISKS:  
          A GLOBAL PERSPECTIVE  55  
   4.2.2. IDENTIFICATION OF SOFTWARE RISKS: THE INDIAN  
          PERSPECTIVE  59  
          4.2.2.1. PERSONAL PROFILE OF THE RESPONDENTS  60  
          4.2.2.2. PROFILE OF THE LAST EXECUTED PROJECT  
          HANDLED BY THE RESPONDENTS  63  
          4.2.2.3. IDENTIFICATION OF RISK DIMENSIONS  65  
          4.2.2.4. COMPARISON OF RISK FACTORS ACROSS  
          VARIOUS PERSONAL AND PROJECT  
          CHARACTERISTICS  74  
4.3. SECTION II  80  
   4.3.1. IDENTIFICATION OF ORGANIZATIONAL CLIMATE  
          DIMENSIONS  80  
   4.3.2. COMPARISON OF ORGANIZATIONAL CLIMATE  
          FACTORS ACROSS VARIOUS PERSONAL AND PROJECT  
          CHARACTERISTICS  89  
4.4. SECTION III  94  
   4.4.1. MEAN AND STANDARD DEVIATIONS OF THE RISK,  
          ORGANIZATIONAL CLIMATE DIMENSIONS AND  
          SUCCESS OF THE SOFTWARE PROJECT  

AND ITS THREE CONSTRUCTS.

4.4.1.1. PROJECT SPECIFIC RISK DIMENSIONS

4.4.1.2. ORGANIZATIONAL CLIMATE DIMENSIONS

4.4.1.3. OVERALL SUCCESS AND THE THREE PERFORMANCE CONSTRUCTS

4.4.2. CORRELATES OF SOFTWARE RISK ORGANIZATIONAL CLIMATE DIMENSIONS WITH THE SUCCESS OF THE SOFTWARE PROJECT

4.4.3. CORRELATES OF SOFTWARE RISK AND ORGANIZATIONAL CLIMATE DIMENSIONS WITH THE THREE PERFORMANCE CONSTRUCTS

4.4.4. CORRELATES AND IMPACT ASSESSMENT OF ORGANIZATIONAL CLIMATE DIMENSIONS AND DEMOGRAPHICS ON THE SOFTWARE RISK DIMENSIONS

4.5. SECTION IV

4.5.1. REGRESSION MODEL FOR PREDICTING THE AFFECT OF ORGANIZATIONAL CLIMATE DIMENSIONS AND DEMOGRAPHIC CHARACTERISTICS ON THE SOFTWARE RISK DIMENSIONS

4.5.1.1. SRS VARIABILITY RISK

4.5.1.2. TEAM COMPOSITION RISK

4.5.1.3. CONTROL PROCESSES RISK

4.5.1.4. DEPENDABILITY RISK

4.5.2. REGRESSION MODEL FOR PREDICTING THE OVERALL SUCCESS OF THE PROJECT

4.5.3. REGRESSION MODEL FOR PREDICTING THE THREE SUCCESS PERFORMANCE CONSTRUCTS

4.5.3.1. BUDGET PERFORMANCE

4.5.3.2. SCHEDULE PERFORMANCE

4.5.3.3. QUALITY PERFORMANCE

4.6. CONCLUDING REMARKS
CHAPTER 5

5. VALIDATION OF WORK USING CASE STUDY 131

5.1. INTRODUCTION 131

5.2. CASE I – UPGRADATION OF IPTV SOFTWARE PLATFORM 131
  5.2.1. OVERVIEW OF THE SOFTWARE PROJECT 131
  5.2.2. TECHNICAL AND FUNCTIONAL ISSUES 133
  5.2.3. TEAM ISSUES 135
  5.2.4. OUTCOME OF THE CASE 136

5.3. CASE II – TRIBEGAGA 136
  5.3.1. OVERVIEW OF THE SOFTWARE PROJECT 136
  5.3.2. TECHNICAL AND FUNCTIONAL CHALLENGES 138
  5.3.3. TEAM CHALLENGES 139
  5.3.4. OUTCOME OF THE CASE 141

5.4 CASE III - LIVE STREAMING TECHNOLOGY – WMS (WINDOWS MEDIA SERVICES) 142
  5.4.1 OVERVIEW OF THE PROJECT 142
  5.4.2 SUCCESS FACTORS 143
  5.4.3 OUTCOME OF THE CASE 144

5.5 CASE IV – OUTSOURCING FINANCE DEPARTMENT OF ZIPHER PHARMACEUTICALS LTD 144
  5.5.1 OVERVIEW OF THE PROJECT 144
  5.5.2 SUCCESS FACTORS 146
  5.5.3 OUTCOME OF THE CASE 147

5.6 LESSONS LEARNED 147

5.7 CONCLUDING REMARKS 149

CHAPTER 6

6 CONCLUSION AND FURTHER RESEARCH 150

6.1 INTRODUCTION 150
6.2 RESEARCH METHODOLOGY 151
6.3 OBJECTIVES OF THE STUDY 151

6.3.1 OBJECTIVE 1: TO IDENTIFY AND RANK THE RISKS IN SOFTWARE DEVELOPMENT PROJECTS BASED ON SECONDARY DATA. 152

6.3.2 OBJECTIVE 2: TO EXPLORE AND ANALYZE THE DIMENSIONS OF PROJECT SPECIFIC RISKS BASED ON PRIMARY DATA. 153

6.3.3 OBJECTIVE 3: TO IDENTIFY AND EXPLORE THE DIMENSIONS OF ORGANIZATION CLIMATE FACTORS PRESENT IN THE INDIAN SOFTWARE COMPANIES 154

6.3.4 OBJECTIVE 4. TO DEVELOP A REGRESSION MODEL FOR INVESTIGATING THE EFFECT OF THE ORGANIZATIONAL CLIMATE DIMENSIONS AND DEMOGRAPHIC CHARACTERISTICS ON THE PROJECT SPECIFIC RISK DIMENSIONS. 156

6.3.5 OBJECTIVES 5: TO DEVELOP A REGRESSION MODEL FOR INVESTIGATING THE IMPACT OF SOFTWARE RISKS AND ORGANIZATIONAL CLIMATE DIMENSIONS ON THE OVERALL SUCCESS AND THE THREE PERFORMANCE CONSTRUCTS OF THE SOFTWARE PROJECTS IN INDIA. 157

6.3.6 OBJECTIVE 6. TO CRITICALLY EVALUATE THE CAUSES OF FAILURE AND SUCCESS OF REAL LIFE PROJECTS THROUGH CASE STUDIES. 159

6.4 COMPARISON WITH THE PREVIOUS STUDIES 161
6.5 IMPLICATIONS OF THE STUDY 162
6.6 LIMITATIONS AND SCOPE FOR FURTHER RESEARCH 167