CHAPTER 5

CONCLUSION AND RECOMMENDATIONS

This chapter summarizes the findings and draws conclusions on the analysis and results of the data of the present study. Based on the two major research objectives, the chapter first summarizes on those contractor-related factors found to be critical to project management success; then on strength of influence of those contractor-related factors found to be critical, on project management success. Limitations to the present study are highlighted. Conclusions are then drawn and recommendations made. Lastly further research studies are suggested.

5.1 Conclusion

The first research objective was to identify the most critical contractor-related factors influencing project management success. Based on the criticality analysis on the RII and mean score range (> 4.25 – 5 considered “most significant”) the following were found to be most critical contractor-related factors:

1. Contractor’s cash flow management ($\mu = 4.77$, RII = 2.48) during the construction phase of the building project; in terms of in-coming and out-going cash flow.
2. Main contractor’s experience ($\mu = 4.74$, RII = 2.47). The number of years the building contractor has worked in the construction industry.
3. Contractor’s site management ($\mu = 4.72$, RII = 2.45) in terms how the building contractor plans organizes, monitor and control the movements, storage or placement of laborers, equipment and materials on a building site.
4. Coordination with consultants ($\mu = 4.64$, RII = 2.41) on the building project.
5. Contractor’s quality control management ($\mu = 4.59$, RII = 2.39); form set quality standards to the deliverables.
6. Coordination with fellow contractors ($\mu = 4.44$, $RII = 2.31$) on the building project.

The next research objective was to establish the strength of influence of the critical contractor-related factors on project management success criteria of cost, time and quality. Based on the analysis of structural coefficient (influence) found in the accepted SEM model in which; the range $> 0.30$ were considered ‘strong’; the range $0.10 – 0.29$ were considered ‘moderate’; $0.05 - 0.09$ were considered ‘weak’; and the range $< 0.05$ were considered ‘very weak’; the following factors were found to exert the strongest influence on project management success;

1. Contractor’s overall management skills exerted a very strong-positive influence ($\gamma = 0.697$ & $\gamma = 0.388$) on time and quality outcomes of the building construction project respectively.

2. Contractor’s experience exerted a moderately strong-positive influence ($\gamma = 0.244$) on quality outcome of the building construction project.

The hypotheses which were represented by the structural paths have been summarized in Table 4.19. Despite minimum sample size obtained on the Hypothesis (a) and (b) were partially and moderately supported respectively; while Hypothesis (c) was not.

It can be concluded that in order to significantly increase chances of successfully managed building construction projects in Malawi, building contractors need to continuously equip themselves with project management skills in such areas like cash flow, site and quality control management.
Table 4.19 Research Hypothesis Summary

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description of the Structural Path in the Model</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a)</td>
<td>“The large number of years of contractor experience the contractors’ possess has got strong positive influence on the project management success (cost, time and quality)”.</td>
<td>Partially supported</td>
</tr>
<tr>
<td>(b)</td>
<td>“High qualities of contractors’ overall management skills have a strong positive influence on project management success (cost, time and quality)”.</td>
<td>Moderately supported</td>
</tr>
<tr>
<td>(c)</td>
<td>“Close contractors’ coordination with construction team on the project has a positive influence on project management success (cost, time, quality)”.</td>
<td>Not supported</td>
</tr>
</tbody>
</table>

(Source: Primary Data)

5.2 Recommendations

These project management skills could be acquired through periodic seminars, refresher and short courses administered by professional consultants in the field of construction project management through regulatory body, NCIC. It is also recommended that NCIC, needs to be empowered through well established policies and government support in order for these efforts to be legitimate and effective. On the other hand, hiring competent personnel in field in construction project management could be one of alternatives to fill up the deficiencies in project management skills in these building construction companies. On the long term plan, these management skills could be acquired from introduction of courses like construction project management in the University of Malawi or technical colleges which are not offered at the moment.

5.3 Limitations of the Study

The current study was limited in the number of samples obtained from the survey of 38 building construction companies who participated in the research survey. Only the minimum required was obtained which contributed to some discrepancies in the some findings.
Another limitation was in the methods used in data collection exercise. Due to the fact that data was collected through telephones and email contacts there could have been some possibilities of biasness in response. Further to that since the respondents of the research were asked to rate the variables on the 3 successful building construction projects of their choice, this might also increased leaness towards more favorable responses.

Lastly, the present study was limited in the way respondent interpreted project management success. Most respondents viewed it on a macro-viewpoint of project success rather than the micro-viewpoint. It was evidenced that most respondent classified building construction as successful even if they finished above budget or schedule. This discrepancy in interpretation can be owed to the thin line which separates overall project success and project management success. It is suggested that further research makes a clearer distinctions between the two categories of project success when conducting a survey.

5.4 Further Research

The further research should look at ways to promote or mitigate the effects of these most critical contractor-related factors on project management success. It is hereby suggested that the further research could also take into account other project management success criteria like ‘disputes’ over and above the traditional criteria of cost, time and quality which are mostly are always conflict.