Post-war Reconstruction: Developing Project Quality Management Plans

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ABSTRACT: Countries emerge from social, economic and ethnic conflict under differing and distinctive conditions that attract various financial, human and material resources, as well as policy advice. If it is grounded in the nuances of working in a complex environment, the application of ‘Project Quality Management’ to enhance project planning and implementation practices for the reconstruction of infrastructure will be useful to governments and professional organisations charged with improving post-conflict situations. Drawing on Kosovo as an example of conflict-impacted communities in their transition to sustainable peace and development, the study examined the processes of designing, planning and implementing reconstruction and development of infrastructure projects to ensure positive outcomes.

Keywords: Implementation, strategy, strategy process, strategic decision-making, strategy and culture, strategy formulation

1. CHALLENGES FOR POST-WAR PROJECT PLANNING AND IMPLEMENTATION

Post-conflict reconstruction, more so than any other development trajectory, must be underpinned by institutions capable of facilitating the transition from war to sustainable peace. While “every post-conflict country is unique and no single formula can respond to all reconstruction needs” (Kreimer et al., 1998, p. 9), reconstruction must lay the groundwork for the physical, social and economic recovery of communities by adopting a comprehensive, well-sequenced and flexible approach. A project covers a wide range of operations and the ‘qualities’ of the project requirement should be stated upfront to contribute to the social and economic development. How does stating them do this? I think it is more likely that stating them helps identify the need and ensure milestones can be identified during the reconstruction process.

1.1 Design and Implementation

Project planning and design must be informed by the accurate analysis of the post-conflict environment and driven by local conditions. Sound preparation, execution and monitoring are vital for efficient and effective use of donor funds to help ensure that resources are utilised for their intended purpose and, more importantly, to achieve long-term goals (Diallo & Thuiller, 2005). Repairing war-damaged infrastructure in order to reactivate the local economy is a challenge for all post-conflict countries (Schwartz & Halkyard, 2006). Physical infrastructure in post-conflict society includes
rehabilitation and reconstruction of schools, airports, markets and hospitals; building homes, roads and bridges; restoring water, telecommunications, fuel and electricity supplies; recruiting committed personnel; and providing all the necessary training for operations and maintenance (Anderlini & El-Bushra, 2004). “Each post-conflict society is unique in its needs and thus the reconstruction project must be tailored accordingly … a successful post-conflict rebuilding project is one which sets effective foundations for democracy, economic prosperity, peace and justice to take root in societies in transition” (Edomwonyi, 2003, p. 43). The success of a project depends on how effectively the organisation plans the major project phases, activities and milestones. The process not only allows, but requires, constant review throughout the project life cycle (Wolfe & Swanberg, 1994). In this context, multiple donors with varying priorities are funders of projects. Ineffective management practices and corruption can be minimised if transparency is improved, and demand for greater accountability can be established by financial management practices which monitor actual expenditure (Lindberg & Orjuela, 2011; Sohail & Cavill, 2008).

To strengthen civil society’s infrastructure projects, organisations should have a detailed work plan with specific and measurable goals and objectives (Mugisha & Berg, 2008). It should be recognised that post-conflict societies undergo rapid changes and, for effective management of change, it is particularly important to establish control of the limited available resources to plan and implement reconstruction activities (De Coning, 2009). To a great extent, much of the infrastructure in Post conflict reconstruction (PCR) regions suffers from low quality design or sub-standard construction (Barrett, 2008). Often project designs are implemented without taking into account local conditions, needs and capacities. Many projects have failed before completion due to the non-involvement of stakeholders or, when implemented, they were inappropriate to address community needs. Civil participation in the initial stages of planning and design of the project is usually very minimal, and this makes the project output less relevant to its intended beneficiaries. Selecting the proper process is critical for success where the beneficiaries make effective use of project outcomes. Participation in the selection process by locals will minimise negative sociological impacts among the vulnerable and disadvantaged sections of communities (Cliffe et al., 2003; Sonuga, Aliboh & Oloke, 2002).
1.2 Developing Quality Standards for Development Projects (Managing Quality)

Ensuring the quality of a project involves managing the processes and activities of the performing organisation. In turn, this establishes quality policies, objectives and responsibilities so that the project will satisfy the needs for which it was undertaken (PMBOK, 2008). If the implementing agencies are to achieve project efficiency, then careful consideration of project quality management processes needs to be formulated and adapted to cope with uncertainty. A project needs to be monitored on an ongoing basis to ensure that it is progressing according to the plan. In practice, not all civil society organisations or agencies draw up a quality plan to define how quality can be achieved for reconstruction and development projects in a post-conflict society. At the same time, a lack of expertise and limited resources constrain procedures to assure quality and control. Therefore, irrespective of the size and complexity of the project, the quality plan should include how the organisation intends to handle disputes, documentation requirements, reporting and review procedures, beneficiary liaisons and so forth. In an environment characterised by scarcity of resources, the project team should monitor the changing needs of the situation on a continuous basis. This may require periodic updating and modification of the project (Figure 1 in Appendix 3 provides an example of quality plan content). In this context, creating feedback mechanisms may provide insights into what is actually required and what is non-essential in the planning and implementation of later projects or a similar project in another location (Gleichmann et al., 2005; Turner, 1999). The extent of the need for broader quality planning for infrastructure projects cannot be understated. Efforts to improve post-conflict project quality need to be measured to demonstrate whether the projects are of benefit the local community and the society at large.

2. RESEARCH METHODOLOGY

In the study, the complex challenges of planning and implementing post-conflict reconstruction projects in Kosovo were examined from a number of perspectives that included the historical aspect and current political, social and economic factors that contributed greatly to development effectiveness.
2.1 Study Design and Sampling

Operating as an independent and sovereign state, Kosovo has faced decades of political and cultural repression that has hindered significant social and economic development. Kosovo’s recent history has been dominated by the Post-conflict Reconstruction ‘developmental’ phase with international donors financing major construction and engineering projects. A combined quantitative/qualitative study was used to examine the complexities of planning and implementing large infrastructure projects, to establish whether the projects addressed some of the problems facing post-conflict societies, to assess how effectively they could be implemented in actual communities and to explore what could be learnt from the projects to widen their application to other post-conflict situations. A total of 420 respondents were involved in the study process, as follows: key informants (4), pilot test (12), semi-structured interviews (36), Project Manager (PM) Survey (231), Chief of Mission (CoM) survey (117) and focus group (20).

In this study, a case study approach was used as the method of data collection. Conducted in Kosovo, the exploratory study was designed to identify how well the infrastructure reconstruction projects had been established, planned, organised, executed and controlled by multilateral agencies in the post-conflict society. Analysis of project attributes was aimed at identifying the areas of project strength and weakness but, more importantly, it also focused on identifying differences of opinion within reconstruction project teams. Interactive methods were established to gather high quality data to investigate the post-conflict reconstruction projects within social, physical and governance contexts.

2.2 Selection and Recruitment of Participants

It was determined to select as participants for the study persons from within NGOs, government agencies and other national/international agencies that had played a role in infrastructure reconstruction projects within the previous four years; viz., from 2004 to 2008. Access to potential participants for the study was through the European Agency for Reconstruction (EAR) whose main responsibility was to identify, prepare and implement reconstruction projects in Kosovo (EAR, 2009). A purposive sampling technique was used to recruit the participants; i.e., the method whereby the
researcher chooses participants because of their insight and experience in the research topic (Cooper & Schindler, 2008; McMillan, 2004). Snowball sampling was used to identify additional participants who could provide information on practice-based personnel during the process (Cooper & Schindler, 2008). A formal approach was made to the CoM of international and local reconstruction and development agencies in Kosovo. Each CoM was given an opportunity to complete the survey questionnaire and to take part in the interview. The CoM also provided the names of personnel working on their project/s.

3 RESEARCH FINDINGS AND DISCUSSIONS

3.1 Quantitative Analysis

Questionnaires, being commonly used in management research (Moorman & Podsakoff, 1992), can be an effective means of gathering comparable information and making decisions when dealing with a wide range of complex information from organisations and individuals. Table 1 (See Appendix 1) provides summary statistics on project quality management responses regarding project delivery. The influence of the project quality management style factors on project delivery that measures the specific variables from the point of view of PMs/Engineers was examined.

3.1.1 The project team identified what quality standards were relevant to the project.

Project organisations and the planning team should ensure compliance with all applicable local laws and design measurable quality standards essential for long-term sustainability (Musoni, 2004). PMs from different infrastructure projects varied in their responses; only a little more than half of the respondents (54.4 percent) reported having developed quality standards relevant to the project (39 percent said ‘largely’, and 15.4 percent said ‘great deal’). Given the large-scale number of activities and projects involved, 34.2 percent of the respondents reported that they had ‘somewhat’ identified quality standards relevant to the project. It must also be noted that 10.1 percent of the respondents said the project team did ‘little’ to identify quality standards (X̄=3.57, M=4.00 and Mode=4).
3.1.2 The projects consistently met the technical performance specifications.

Post-conflict infrastructure projects are critical for sustainable development in societies and should meet the technical requirements that are safe, reliable, sustainable, dependable, maintainable and measurable (Musoni, 2004). As far as most of the infrastructure projects’ technical needs are concerned, 66.2 percent of the respondents reported that they were efficient, reliable and safe (51.3 percent of the respondents said ‘largely’, 14.9 percent said ‘great deal’). In fulfilling the requirements of technical operations, 28.5 percent of the respondents said their projects were only ‘somewhat’ able to meet the required technical standards (X̄ =3.75, M=4.00 and Mode=4).

3.1.3 There were standardised checklists to ensure consistency in frequently performed activities.

Changes happen more frequently in a post-conflict environment and similar projects are implemented across many areas. To ensure quality control and that operations are executed as planned, a checklist is used to assess the activities performed in the implementation process (Natsios, 2005). In relation to making certain that operating procedures are applied as planned, only 51.5 percent of respondents believed that the organisations used standardised checklists to ensure consistency and quality (35.7 percent of the respondents said ‘largely’, and 15.8 percent said ‘great deal’). 31.7 percent of the respondents said ‘somewhat’ and 14.5 percent of the respondents said their projects had ‘little’ in the way of standardised checklists to review activities performed (X̄ =3.48, M=4.00 and Mode=4).

3.1.4 There were procedures for formal reviews to learn from project failures and/or successes.

There is a need to discuss project reviews and their impact on the success or failure of projects. These reviews can increase the chances of success of similar activities or projects. When asked to indicate if there were procedures for formal reviews, fewer than half of the respondents (48.5 percent) confirmed having formal review procedures (33.5 percent said ‘largely’, 15 percent said ‘great deal’). With respect to the opportunity to review the success or otherwise of the project, 31.3 percent reported ‘somewhat’ and almost 15.4 percent believed that there was very ‘little’ in the way of formal review procedures and inspections (X̄ =3.38, M=3 and Mode=4).
3.1.5 Planned project practices were compared with other projects in order to generate ideas for improvement.

Where resources are limited, multilateral agencies need individuals and teams to connect and to harvest lessons learned to inform future project planning and implementation (Schindler & Eppler, 2003). In comparing the general opinion of the respondents with actual practice, only 47.8 percent thought that project teams compared the lessons learned from different aid organisations for projects that were concurrently implemented to see possibilities for improvement (32.9 percent said ‘largely’, 14.9 percent said ‘great deal’). Responses to the sections of the questionnaire dealing with enhancing project quality and generating examples of good practice showed that 34.6 percent said ‘somewhat’, and 16.7 percent were reported to have done ‘little’ to compare their project with other projects within the area of operation (X̄ =3.44, M=3.00 and Mode=3).

3.1.6 The organisation reported to other agencies the results of inspections that addressed any area of non-conformance.

Donors and development agencies struggling for quality need to strengthen monitoring mechanisms and report on any evidence of major non-conformities with other agencies (Watt & Regehr, 2008). In recognising the need to strengthen the reconstruction effort to enhance the quality, only 54.9 percent of the respondents said participating agencies reported to other agencies abnormal activities that hinder positive outcomes (35.7 percent confirmed ‘largely’, 19.2 percent alleged ‘great deal’). Though adequate monitoring and interagency reporting requirements are critical for project success, 23 percent of the respondents reported ‘somewhat’, and 17.9 percent assumed ‘little’ was done to ensure there was a reporting mechanism for development agencies to function collectively (X̄ =3.48, M=4.00 and Mode=4).

3.1.7 The organisation had a procedure for taking corrective actions for problems encountered during the project cycle.

Organisations uncover issues, concerns and challenges during project planning and implementation. In response to the quality assurance of having a procedure for taking corrective actions, a bare majority of 54.8 percent of the respondents believed the organisation did have a mechanism for addressing issues that arose and showed support for continuing the project (33.8 percent said ‘largely’ and 21 percent said ‘great deal’). Nearly 34.2 percent of the respondents
reported that they ‘somewhat’ effectively managed the issues that arise during the planning and execution phases of a project ($X = 3.63, M=4, Mode=3$).

3.1.8 The organisation had procedures for maintaining the quality records at each project phase.

Post-conflict agencies must establish periodic audits and control mechanisms, and document ‘lessons learned’ records for each phase of the project. Just over 60.1 percent of respondents said that, in an attempt to measure standards, the organisation established and maintained records for monitoring project progress (35 percent of the respondents said ‘largely’, 25.1 percent said ‘great deal’). As a quality measure for the projects implemented, 29.1 percent of respondents believed that the organisations had ‘somewhat’ referenced standards and procedures to control and maintain quality records for the project ($X = 3.73, M=4.00$ and $Mode=4$).

3.1.9 The organisation specified skills training with economic development initiative for the project team.

While every aid organisation may have hidden agendas, projects in a post-conflict society should contribute to sound economic expansion and social development of the community (Hass, 2006). Through organisational development programs, only 46.3 percent of respondents considered they had received skills training (32.9 percent of the respondents said ‘largely’, 13.4 percent said ‘great deal’). To understand and respond to the challenges of social, economic and political reconstruction, an almost similar number of respondents reported ‘somewhat’ (31.9 percent), and 15 percent reported they had received ‘little’ contribution to their skills and capacity building program with focus on economic development initiative ($X = 3.32, M=3.00$ and $Mode=4$).

3.1.10 Project progress was monitored and the delivery process and project outcomes were evaluated.

Project implementation in the post-conflict environment should be monitored intensively to evaluate the progress, ensure quality and timely progress, and to report on the findings (Rummel-Shapiro, 2004). More than half (61.5%) of the respondents agreed that project outcomes were evaluated and that the progress of the project was being monitored (34.4 percent of the respondents said ‘largely’, and 27.1 percent confirmed ‘great deal’). Primarily concerned with the delivery process,
29.9 percent believed the project’s progress, outcomes, and impact on the beneficiaries were ‘somewhat’ being monitored by each participating organisation ($X = 3.80$, $M = 4.00$ and Mode $= 4$).

### 3.2 Principal Component Analysis

Principal Component Analysis (PCA) was used on each section of questions that focussed on the planning, execution and management of projects to determine the internal structure of the scales. The cut-off point used was an eigenvalue of at least 1.0 and it provided a meaningful lower limit for determination of factors (Hattie, 1985; Kaiser, 1960). A PCA analysis (see Table 2 in Appendix 2) performed on the statements in project quality management resulted in two factors with an eigenvalue greater than 1, accounting for 55% of the variance in the data.

#### 3.2.1 Factor 1: Importance of quality control

An environment which has serious difficulties and constraints of time and resources, often outside the control of a project team, can encourage the project team to abandon quality control measures. In order to maintain the level of quality for each project element, the PM should establish controls and periodically evaluate overall performance to ensure the project meets applicable technical standards. It is also important for the organisation to perform periodic audits, provide team members with performance appraisals and document post-project reviews as part of an effective management process. Feedback and suggestions for improvement are critical so that planned work practices can be compared with other projects. This, in turn, will generate ideas to enhance post-conflict project management practices.

#### 3.2.2 Factor 2: Procedures for maintaining project updates

In determining which acceptable qualities of standards are relevant to a project, the organisation should develop procedures and maintain quality records for future reference. Also, the project team should measure the quality of work executed in the different phases and perform quality assurance activities continuously to ensure project objectives are being achieved. It is also a good practice for the organisation to highlight discrepancies and communicate with other agencies about areas of non-conformance within the area of operation. To promote people’s ownership of economic development
initiatives, the PM should identify further skills and training needs with a social and economic development focus for the team and specifically provide training to the local community.

3.3 Qualitative Findings

When responding to the evaluation of post-conflict reconstruction peace building project processes the respondents’ key variables were cost, community participation and quality. Literature on post-conflict studies strongly recommended the necessity of ‘buy-in’ from the local community towards development projects. The respondents also noted that, in a post-conflict environment, constraints of time and cost overruns associated with the project do not contribute to stability. Respondents experienced with the way in which projects are designed, noted that the local and international agencies are more concerned with various financial challenges throughout the project cycle. Respondents have said that many agencies underestimate the time and cost of the project, which gives rise to specific challenges during the implementation phase. Respondents also mentioned that, given the environment of instability, donors and international agencies are more concerned with the dollar aggregates than other aspects of the projects. Respondents also referred to a number of quality issues within the design element of the process, especially as decisions are made more complex by involving a number of stakeholders. In Kosovo, PMs had not drawn up a quality plan for the construction operations’ product or services, nor were any provisions made for unexpected problems with a design element or the process.

Respondents also noted also that although the project quality in a post-conflict society is an important variable, few organisations actually are focussed on the final quality of the project. Many PMs are aware of the importance of quality on the outcome of the project, but stated categorically that because quality is not related to funding, it is not possible for the organisation to state proposed quality criteria in their application. Despite the challenges of reconstruction in a post-conflict and fragile environment, respondents revealed that in only a small number of organisations’ projects is the quality performance of all operations overseen to ensure that administrative functions are undertaken.
Respondents indicated that organisations do not have the required skills and trained resources to monitor and evaluate projects as well as assess the quality of their operations. They considered that most project staff had limited understanding of quality assurance methods, and mentioned the importance of training in quality management for engineers and field staff. Four variables were mentioned as necessary to ensure quality; having responsibilities for the selection and management of contractors, defined roles and responsibilities for the selection of materials, having critical path charts and developing project management reporting structures. Also, there was mention of developing a quality plan for the project along with the project proposal submitted to the donor. Similarly, respondents mentioned that organisations often implement more than one project at a given time; thus, control of projects was improved by having reporting strategies with stakeholders about the project’s progress and by reporting of evaluation outcomes that needed special mention.

4. CONCLUSION

Worldwide there are 37 countries - primarily in Asia, Africa, Middle East, and the Balkans and beyond - involved in conflict or in the process of post-conflict reconstruction and long-term
development (Voetsch, 2005). Addison and McGillivray (2004, p. 353) drew the conclusion that “if projects are well designed, well targeted, and well implemented … they can restore badly needed infrastructure, and can win broad-based local support for peace and reconstruction processes”. However, managing post-conflict projects in Kosovo has proven far more challenging to the international organisations and the local communities. Project planning and design must be informed by the accurate analysis of the post-conflict environment driven by local conditions. Sound preparation, execution and monitoring are vital for efficient and effective use of donor funds to help ensure that resources are utilised for the intended purpose and, more importantly, to achieve long-term goals.

In looking forward, the challenges of rebuilding post-conflict societies and project implementation of reconstruction projects that develop the overall economic independence of these conflict societies are likely to increase. Post-conflict countries in transition present both complex challenges and opportunities in relation to project planning and implementation. It is possible that project teams may not adequately address these aspects or may not analyse substantially the quality outcome of project deliverables. It is recommended that project management teams outline project quality outcomes early and have reliable and measurable indicators in the planning stages to contribute to the completion of more specific deliverables within the time frame.

In general, the requirements for skills training for the implementation team and technical specifications for the project, should be outlined in the planning phase and should have detailed and measurable goals to ascertain its progress. Emphasis should be placed on documenting project records, reporting progress and project findings. The PM should document the progress on project activities and compare them against the planned schedule. Formal reviews must be conducted and periodic progress reports should specifically address areas of non-conformance operating within the framework. These reports may result in operational changes being identified in the plan and the organisation should share lessons of operational practices and procedures with other agencies operating in the area to avoid future non-conformance.
REFERENCES


Table 1: Responses to project quality management variables

<table>
<thead>
<tr>
<th>Project Quality Management</th>
<th>Frequency</th>
<th>Valid %</th>
<th>Not at all</th>
<th>Little</th>
<th>Somewhat</th>
<th>Largely</th>
<th>Great deal</th>
<th>Unsure</th>
<th>Total</th>
</tr>
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<td>The project team identified what quality standards were relevant to the project.</td>
<td>Frequency</td>
<td>3</td>
<td>23</td>
<td>78</td>
<td>89</td>
<td>35</td>
<td>2</td>
<td>2</td>
<td>230</td>
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<tr>
<td></td>
<td>Valid %</td>
<td>1.3</td>
<td>10.1</td>
<td>34.2</td>
<td>39.0</td>
<td>15.4</td>
<td>100.0</td>
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<tr>
<td>The projects consistently met the technical performance specifications.</td>
<td>Frequency</td>
<td>2</td>
<td>10</td>
<td>65</td>
<td>117</td>
<td>34</td>
<td>3</td>
<td>5</td>
<td>231</td>
</tr>
<tr>
<td></td>
<td>Valid %</td>
<td>.9</td>
<td>4.4</td>
<td>28.5</td>
<td>51.3</td>
<td>14.9</td>
<td>100.0</td>
<td></td>
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<tr>
<td>There were standardised checklists to ensure consistency in frequently performed activities.</td>
<td>Frequency</td>
<td>5</td>
<td>32</td>
<td>70</td>
<td>79</td>
<td>35</td>
<td>5</td>
<td>2</td>
<td>226</td>
</tr>
<tr>
<td></td>
<td>Valid %</td>
<td>2.3</td>
<td>14.5</td>
<td>31.7</td>
<td>35.7</td>
<td>15.8</td>
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<tr>
<td>There were procedures for formal reviews to learn from project failures and/or successes.</td>
<td>Frequency</td>
<td>11</td>
<td>35</td>
<td>71</td>
<td>76</td>
<td>34</td>
<td>1</td>
<td>2</td>
<td>228</td>
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<tr>
<td></td>
<td>Valid %</td>
<td>4.8</td>
<td>15.4</td>
<td>31.3</td>
<td>33.5</td>
<td>15.0</td>
<td>100.0</td>
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<tr>
<td>Planned project practices were compared with other projects in order to generate ideas for improvement.</td>
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<td>38</td>
<td>79</td>
<td>75</td>
<td>34</td>
<td>2</td>
<td>2</td>
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<tr>
<td></td>
<td>Valid %</td>
<td>.9</td>
<td>16.7</td>
<td>34.6</td>
<td>32.9</td>
<td>14.9</td>
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<td>The organisation reported to other agencies the results of inspections that addressed any area of non-conformance.</td>
<td>Frequency</td>
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<td>76</td>
<td>41</td>
<td>18</td>
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<tr>
<td></td>
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<td>23.0</td>
<td>35.7</td>
<td>19.2</td>
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<td>The organisation had a procedure for taking corrective actions for problems encountered during the project cycle.</td>
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<td>75</td>
<td>74</td>
<td>46</td>
<td>10</td>
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<tr>
<td></td>
<td>Valid %</td>
<td>1.8</td>
<td>9.2</td>
<td>34.2</td>
<td>33.8</td>
<td>21.0</td>
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<td>The organisation had procedures for maintaining the Quality Records at each project phase.</td>
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<td>20</td>
<td>65</td>
<td>78</td>
<td>56</td>
<td>6</td>
<td></td>
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<tr>
<td></td>
<td>Valid %</td>
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<td>9.0</td>
<td>29.1</td>
<td>35.0</td>
<td>25.1</td>
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<td>The organisation specified skills training with economic development initiative for the project team.</td>
<td>Frequency</td>
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<td>69</td>
<td>71</td>
<td>29</td>
<td>11</td>
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<td>227</td>
</tr>
<tr>
<td></td>
<td>Valid %</td>
<td>6.0</td>
<td>15.8</td>
<td>31.9</td>
<td>32.9</td>
<td>13.4</td>
<td>100.0</td>
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<tr>
<td>Project progress was monitored and the delivery process and project outcomes were evaluated.</td>
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<td>76</td>
<td>60</td>
<td>6</td>
<td>2</td>
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<td>227</td>
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<tr>
<td></td>
<td>Valid %</td>
<td>8.6</td>
<td>29.9</td>
<td>34.4</td>
<td>27.1</td>
<td>100.0</td>
<td>17</td>
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### APPENDIX 2

#### Table 2: Varimax rotated factor matrix for project quality management

<table>
<thead>
<tr>
<th>Project Quality Management</th>
<th>Factor 1</th>
<th>Factor 2</th>
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<tr>
<td>The projects consistently met the technical performance specifications.</td>
<td>.794</td>
<td>.007</td>
</tr>
<tr>
<td>The project team identified what quality standards were relevant to the project.</td>
<td>.757</td>
<td>.167</td>
</tr>
<tr>
<td>There were procedures for formal reviews to learn from project failures and/or successes.</td>
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</tr>
<tr>
<td>There were standardised checklists to ensure consistency in frequently performed activities.</td>
<td>.618</td>
<td>.407</td>
</tr>
<tr>
<td>Planned project practices were compared with other projects in order to generate ideas for improvement.</td>
<td>.584</td>
<td>.392</td>
</tr>
<tr>
<td>Project progress was monitored and the delivery process and project outcomes were evaluated.</td>
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<td>.453</td>
</tr>
<tr>
<td>The organisation specified skills training with economic development initiative for the project team.</td>
<td>.307</td>
<td>.613</td>
</tr>
<tr>
<td>The organisation had procedures for maintaining the Quality Records at each project phase.</td>
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<td>.762</td>
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<td>The organisation had a procedure for taking corrective actions for problems encountered during the project cycle.</td>
<td>.175</td>
<td>.828</td>
</tr>
<tr>
<td>The organisation reported to other agencies the results of inspections that addressed any area of non-conformance.</td>
<td>.082</td>
<td>.675</td>
</tr>
</tbody>
</table>
APPENDIX 3

Figure 1: Management Quality Pyramid