ABSTRACT

The study seeks to empirically apply multiple performance evaluation techniques, including traditional approach to assess the performance of government projects. Studies have shown that while there is an increase in improved project management methods, tools and techniques, including performance evaluation techniques, organizations including governments are still relying on outdated or insufficient tools. We posit that the increased application of alternative approaches to highlight the important dimensions of the project process can help to address this issue. With the increased application of newer techniques over time, stakeholders can be equipped to better identify sources of failures and successes and improve the management of projects. This is crucial for IT projects and government projects that are consistently perceived as underperforming. The research employs a single project from the aviation industry in the Caribbean to apply the perspectives of the Barclay’s Project Performance Scorecard and Delone & McLean’s IS Success Model measurements, and triple constraints method to evaluate project performance and report on the findings.

Keywords

Project Performance, Government projects, Project Performance scorecard, IS success model, Caribbean

INTRODUCTION

Government projects are the key drivers for national development. This is particularly important for developing countries such as those in the Caribbean, since strong governance structures are required to enhance the achievement of development goals. To achieve this mandate, the projects are derived to ensure economic growth or to meet social development goals (Jo & Barry, 2008). It is therefore critical to not only have successful performance of these projects but an assessment process that facilitate suitable measurement perspectives that are reflective of the realities of these complex projects. The success criteria of large-scale public projects are an important aspect of public project management. To systematically define the success criteria of large-scale public projects and achieving the balance of interests of stakeholders will help to properly determine the performance of the project (Wenjuan & Lei, 2011).

Purpose of the study

The aim of this study is to examine the performance of government IT projects outside of the traditional approach. The study utilizes the traditional approach (the tripe constraint or iron triangle method) as the baseline, the Barclay’s Project Performance Scorecard and Delone & McLean’s IS Success Model measurements, and triple constraints method to evaluate project performance and report on the findings.
Performance Scorecard (Barclay, 2008) and Delone & McLean’s IS Success Model (Delone & McLean 1992; 2003) to evaluate the performance of a government project in Jamaica. Despite the emergence of alternative performance evaluation methods and other project management (PM) techniques, anecdotal evidence and literature (e.g. Raz, 2002) revealed that companies and government still rely on the traditional approach view to determine the success or failure of their projects. Government projects tend to have multi-layered complexities and requires robust set of criteria to match the characteristics of project dimensions and government projects. A single case study of a government project from aviation industry in the Caribbean is used to achieve the aims of the study.

**Problem/opportunity statement**

Statistics have shown that governments have experienced challenges with cost overruns and resource wastage in the management of their projects. This is further exacerbated by the challenges in managing technology projects. Technology projects are complex, and everything from a lack of funds, to a lack of staffing, to a lack of time and focus can be blamed for failures (McCormick, 2005). The problem that often arises with developing countries is that there is frequently a mismatch between the current and future systems, due to the large gap in the physical, cultural, economic, and various other contexts between the designers and the place it is being implemented (Heeks, 2002).

Project management standards and techniques are used too little in government projects. Raz (2002) observed that project management tools and techniques, such as those related to risk management tools have been developed to improve project success however have been used too little in industry and many still wonder how helpful they are (Raz 2002). This underline the misalignment between academia and industry that can be addressed with increased application of emerging alternative performance evaluation tools and techniques. This is even more crucial with the limitations associated with the traditional approach (Barclay, 2008; Collins et al, 2004).

Paucity of research that addresses the application of alternative measurements to government IT projects. Further, while academic studies that focus on developing economies are growing, the Caribbean is currently under-represented and under-reported. Experiences and lessons from projects in the region can inform the project management knowledge base and help to define more effective strategies for managing and evaluating projects including government projects in the region.

**Research significance**

We posit that using alternative approaches can help to highlight source of deficiencies in the management of government projects, and inform strategies for improved project performance over time. The research provides relevance to both practitioner and academic perspectives. As indicated earlier, it is hoped that this study will extend the academic discourse in performance evaluation projects in various contexts including government and developing economies. The opportunity to inform dimensions for additional alternative measurements perspectives can be obtained from this study. Government and industry practitioners can use the results to implement suitable up-to-date policies and procedures on the management and evaluation of diverse projects.

The rest of the discussion is organized as follows: a review of the literature establishing the research background; discussion on the case study methodology highlighting the appropriateness of the methodology to the achievement of the research objectives; a discussion on the preliminary findings; and concluding remarks including follow-up research to complete the study are made.

**REVIEW OF LITERATURE**

**Government projects in developing economies**

In order to implement projects, many developing countries, depend largely on foreign investment, which leads to the country becoming further overburdened with huge debt (Fan, 2010). Jamaica’s debt in 2011, for example was 125% of GDP. Other developing economies debt status paints a similar picture. Governmental agencies and programs are authorized and appropriated for by legislatures composed of elected representatives of the people. Those agencies and programs are, in theory, based exclusively on public purposes for which taxpayer financing is justified. However, due to the nature of the political process, their success criteria are less well defined (Hodsoll, 1998). Unclear success criteria have implications for the effectiveness of performance evaluation.
Apolot, Alinaitwe & Tindiwensi’s (2011) study of the Uganda Public Sector found that the five most important causes of delays in these projects were: change of work scope; delayed payments; poor monitoring and control; high cost of capital; political instability/insecurity. In Jamaica, the Office of the Contractor General of Jamaica (OCG) is responsible for monitoring of all Government projects. The monitoring is in accordance with the guideline set out in the Government procurement System. Sinclair (2009) states, over the last 10 years, the Government's procurement system has undergone extensive modernization and reform to make it more efficient and transparent. During this time, the Government established and strengthened the National Contracts Commission (NCC) and the Procurement Appeals Board (PAB), as well as revised and reissued its handbook of Public Sector Procurement Procedures. The OCG reported a massive $1.2 billion in cost overruns for 15 of the 410 government contracts the oversight body monitored in 2011 (Jamaica Gleaner 2012). The OCG further states that if the total for overruns on all government projects were to be captured and added, the resulting amount may be very frightening. Further, ministers of government have expressed concerns about the persistent cost overrun and schedule delays for these projects. Substantial bureaucratic red-tape and delays are sometimes blamed as a principal contributor to some of these persistent issues.

**Project performance evaluation**

*Traditional Approach*

The traditional project management success criteria of time, cost and quality still has a strong hold within the project management community (Collins & Baccarini, 2004). For example, a survey of 150 Australian project managers on the subject of project success criteria and analysis of the data found two distinct views. Those that perceived project success solely in terms of the traditional project objectives of time, cost and quality; and those that considered success in terms of these objectives and the effectiveness of the project's product (Collins & Baccarini, 2004). Barclay (2008) also revealed that the industry continues to place high reliance on this approach in determining the outcome of their projects, and is further supported anecdotal evidence from Jamaica.

Despite the prominence of the traditional approach to measure success, studies have highlighted its shortcomings. Many people found that these criteria are too limited for measuring project broadly. For these triple criteria assumption precondition is that project has the same efficiency. In the reality, some projects do realize three triple measurements but still fail in the end. Some project is over budget and schedule, but it brings customers value in the long run (Niu, Lechler, & Jiang, 2010).

As a consequence studies have designed alternative approaches and sought to examine the efficacy of multiple approaches. Many of the alternative approaches have been influenced by Technology Acceptance Model and IS Success (Delone & McLean, 2003).

*DeLone and McLean IS Success Model*

The measurement of Information System (IS) success or effectiveness is critical to our understanding of the value and efficacy of IS management actions and IS investments (DeLone & McLean, 2003). Therefore IS success is a multidimensional and interdependent construct and essential to study the interrelationships among, or to control for, those dimensions. Delone et al (2003) states that the creation of the model is driven by a process understanding of IS and their impacts. This process model has just three components: the creation of a system, the use of the system, and the consequences of this system use. Each of these steps is a necessary, but not sufficient, condition for the resultant outcome(s). For instance, without system use, there can be no consequences or benefits. However, with system use, even extensive use which is inappropriate or ill-informed, there may also be no benefits.

The model contains a robust indicator of the success of information systems by inclusion of six dimensions for considerations in the determination IS success. The model was later refined to reflect system quality, information quality, service quality, use, user satisfaction and net benefits (DeLone and McLean, 2003), figure 1.
Bradford, et al.  Evaluating the performance of government IT projects


Project Performance Scorecard (PPS) provides an integrated framework for measuring project performance (Barclay, 2008). This is achieved through the integration of multiple perspectives of performance measurement, including IS Success model (Delone & McLean, 1992) and the Balanced Scorecard (Kaplan & Norton, 1999). This approach provides a cogent perspective as it accounts for the complexity and dynamism of projects. PPS seeks to theorize a perspective that span the realms of the project processes while taking into consideration the expectations of all the stakeholders. Based on the context, each dimension may play greater importance. PPS includes six dimensions that interact and influence its counterpart, for example the stakeholder requirements may include quality and usability items. The dimensions are:

- **Project Process perspective** considers key project processes, including triple constraints criteria. The key project management knowledge areas are assessed to measure the extent that they were adopted throughout the project.
- **Stakeholder perspective** measures stakeholders’ expectations and objectives. It is essential that project managers obtain consensus from all stakeholders on the criteria for success (Wateridge, 1998). Based on the nature of the projects stakeholders may differ.
- **Benefit perspective** considers the gains or advantages garnered throughout the project process. This involves measures indicating the financial and non-financial performance of the project outcome. Such an assessment may be over a period of time as the results may not be seen immediately.
- **Learning and Innovation perspective** considers the project learning from the perspective of the project organization and/or client organization. Tiwana (1999) suggests that organization may face additional expenditure and challenges through repeated mistakes. Therefore, it is important to manage learning and knowledge in such a way to have it accessible for the current project and future projects.
- **Quality perspective** considers the characteristics of the project and project outcome. Depending on the nature of the project, environmental context and the stakeholders’ requirements particular variables may be more applicable than others.
- **Use perspective** considers the project outcome, i.e. the use and usability of the project outcome.

RESEARCH METHODOLOGY

Case study is a “systematic inquiry into an event or a set of related events which aims to describe and explain the phenomenon of interest” (Bromley, 1990). Similarly, Yin (1994, 2003) defined case study as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident. The use of the case study approach was also influenced by its suitability in providing enhanced understanding to organizational contexts and IT-related innovations (Darke, Shanks, Broadbent, 1998). Multiple studies have advocated the use of this methodology for investigating real-life events, including organizational and managerial processes (Darke et al., 1998; Yin, 2003). The definitions imply that case studies use real life situations or scenarios against some established methodology to achieve the objective(s) of the research.

A single case study is used to achieve the objectives of this research, i.e. to evaluate the performance of government projects and determine what techniques are used to evaluate performance. Single case study approach has been used successfully in other studies (e.g. Barclay & Osei-Bryson, 2010; Flynn & Du, 2011). Some of the benefits of a single case study approach...
are that it enables detailed explanation and corroboration of phenomena, uncovers novel areas for research and discourse and provide key findings in defined contexts (Barclay, 2010).

Project Case Selection and Background

According to Yin (2003), case selection should not rest entirely on convenience or ease of accessibility to the site but instead should incorporate specific rationale. The aviation project chosen fit within the guidelines and can facilitate our research goal.

The case study is applied to an organization in the aviation industry located in the Jamaica, a part of the English-speaking Caribbean. It regulates Air Navigation and all matters relating to safety and security in aviation industry within Jamaica. Some of the functions of this agency are as follows: ensuring the safe and orderly conduct of all aviation activities in the country Jamaica and those conducted overseas by its country’s Jamaican Operators; ensuring the safe and orderly conduct of all aviation activities in Jamaica and those conducted overseas by Jamaican Operators; and cooperating with other agencies in the facilitation, provision and regulation of a reliable and safe Air Transport System. As part of its mandate, multiple projects with varying degree of complexities and technology components are attempted on an annual basis. The organization operates both as a regulator and service provider for Airline line industry in its Airspace. Its operations are also governed by international standards, which are recommendation of the International Civil Aviation Organization (ICAO).

Research Process

The case study methodology was applied in coherent process that spanned collect, analysis, application of alternative methods of performance, comparative assessment and interpretation of findings, figure 2. The study is currently in the data collection and analysis phase to determine the findings from the application of evaluation methods.

Data Collection

Initial correspondences were sent to the head of the organization outlining the type of project documents needed for analysis, such as project plans, documented communications and project close out reports. These documents were used to detail and design the set of questions to be answered by stakeholders across different groups/roles. The questionnaires were designed to capture the definition and derivation of project success and failures based on the measurement models being used. Structured and semi-structured interviews are also part of the strategy to derive information on and about the project and the stakeholders’ perspectives, table 1. Based on interviews with project stakeholders and review of project documentation information on the project was gathered.

<table>
<thead>
<tr>
<th>Sample Questions</th>
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</thead>
<tbody>
<tr>
<td>1. Who was the project manager? And was there a project team for the project?</td>
</tr>
<tr>
<td>2. How was your project funded</td>
</tr>
<tr>
<td>3. Do you believe the current traditional approach to evaluate your project is</td>
</tr>
<tr>
<td>sufficient or complete?</td>
</tr>
<tr>
<td>4. Why is the project important?</td>
</tr>
<tr>
<td>5. What are some of the challenges experienced during the project?</td>
</tr>
<tr>
<td>6. What was the method(s) and criteria used to determine the success of the project?</td>
</tr>
</tbody>
</table>
Sample Questions

7. Were there any areas you found difficult to measure using the current method? If so, what areas were these?

8. Were the criteria for success established before the project commenced?

9. What are your views on the dimensions of Project Performance Scorecard to evaluate your project? Any additional areas relevant to your project not considered?

10. What are your views on the dimensions of IS Success Model to evaluate your project? Any additional areas relevant to your project not considered?

11. What are some of the organizational improvement made as a result of this project implementation?

12. What were methods used to document the project life cycle and lessons learned?

13. Are other project personnel able to access these records for future references?

14. Do the alternative methods help your analysis of your project performance evaluation? If so, explain how.

Table 1. Sample of questions used in study

The participants were carefully selected to obtain a wide cross-section of project perspectives and to indicate their criteria for success. Eight (8) participants were interviewed that represented multiple stakeholder roles, table 2. The Director General, akin to a chief executive office was the project sponsor. The Deputy Director General was the owner of the project. The IS Administration was the project manager assigned. The project team involved the Quality Assurance Manager (Project Quality Officer), Technicians (end users). The interviews and discussions lasted for approximately thirty (30) minutes on average. The discussion segment was mainly used to explain the alternative evaluation models to the participants.

<table>
<thead>
<tr>
<th>Participants’ Role</th>
<th>Number of Persons</th>
</tr>
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<tbody>
<tr>
<td>Project Sponsor</td>
<td>1</td>
</tr>
<tr>
<td>Project Owner</td>
<td>1</td>
</tr>
<tr>
<td>Project Manager</td>
<td>1</td>
</tr>
<tr>
<td>Project Team</td>
<td>3</td>
</tr>
<tr>
<td>End user</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 2. Participants in the study

Data Analysis

The case study was conducted to qualitatively and quantitatively assess the success criteria of the selected project. The analysis was based on the project documentation, results of questionnaires, and interview notes. As indicated in figure 2, an iterative process of analysis and collection was employed to assure research quality and validity. The underlying objective was to evaluate the single project using three different models of success evaluation, i.e. the traditional approach, PPS and IS Success Model. The results of research are shared in the section below.

Research Validity

Research validity in the context of this research is viewed from the perspectives of internal validity, external validity, construct validity and reliability. Validity can be described as how accurately the account represents participants’ realities of the social phenomena and is credible to them (Creswell & Miller, 2000; Schwandt, 1997).

External validity is sometimes referred to as generalizability, means the extent to which causal inferences reported in one study can be applied to different populations, setting, treatments and outcomes (Thomson et al. 2012). Since the study is a single case, caution will be drawn on its generalizability, however it is intended to inform other similar studies over time. Internal validity considers questions such as “Do the findings of the study make sense? Are they credible to the people we study and to our readers? Do we have an authentic portrait of what we were looking at?” (Meijer, Verloop & Beijaard , 2002;
Miles & Huberman, 1994). Analysis of academic literature on issues in government projects, developing country contexts, developments performance evaluation were used as a basis to motivate the study and answer the questions. Construct Validity was attained through the use of secondary and primary sources of evidence combined with an iterative process of collection and analysis. Reliability was achieved through the maintenance of a case study database, clear chain of evidence, anonymity of participants and the use of multiple sources of evidence, i.e. multiple stakeholders of the aviation project.

**FINDINGS & DISCUSSION**

**Project (AFTN) background**

Aeronautical Fixed Telecommunication Network (AFTN) Switch Upgrade Project involved several phases to accomplish the goal of upgrading the AFTN and Air Traffic Services Message Handling System (AMHS) systems to meet international standards for flight plans. The second phase of the project involves the implementation of the Switch, which will be handed over by the supplier after the objectives have been met and accepted by the customer. Maintenance of the switch will be done by the customer’s subsidiary Aeronautical Telecommunication LTD (Aerotel), a government company. The project milestone document showed provision for factory acceptance test (FAT), site acceptance test (SAT), technical and end user training. The traditional measurement approach was used by the team to determine project success: adherence to time, cost and project scope, and was deemed a success. The project was deemed important because of the need to meet international obligations. Failure to carry out this project would have resulted in the organization failing to communicate flight plans with international and local aviation partners, therefore having serious implication for safety of the airline industry.

The project team consisted of a typical functional matrix project group as the team had to perform their regular duties and report to their supervisors during their involvement in this project. The project was schedule to be managed over nine (9) months with an allocated budget of US$296,000.00. The end date for the project was critical as November 14, 2012 was the cut off period for the Old Flight Plan format. Failure to achieve this date would prevent flight plan communication with the rest of the airline industry. To contract a supplier, the Jamaican government’s strict procurement guideline had to be followed.

The stakeholders spanned a wide cross section of entities and groups. The aviation customer is a government organization and so all applicable government regulations are of importance thus making multiple government ministries major stakeholders in the project. The Meteorological Office makes weather information available to the users. The facilities of the Civil Aviation Training Institute were used to conduct training. Another government department maintains the system. Additionally, the Air Traffic Service Providers, supplier, project team and air travelers made up the network of stakeholders.

<table>
<thead>
<tr>
<th>Area</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project name</td>
<td>Aeronautical Fixed Telecommunication Network (AFTN) Switch Upgrade</td>
</tr>
<tr>
<td>Project duration</td>
<td>March 2012 – November 2012, 9 months</td>
</tr>
<tr>
<td>Budget estimate</td>
<td>US$296,000.00 (Funded Internally)</td>
</tr>
<tr>
<td>Project scope</td>
<td>Phase 1: To contract the services of a contractor to upgrade the Aeronautical Fixed Telecommunication Network (AFTN) to new messaging standards and upgrade to the Air Traffic Services Message Handling System (AMHS) in an effort to meet international standards for flight plans</td>
</tr>
<tr>
<td></td>
<td>Phase 2: Procurement, installation, and testing of the Switch to facilitate use, and training of technical and end-users.</td>
</tr>
<tr>
<td>Project organization</td>
<td>Functional matrix project group</td>
</tr>
<tr>
<td>Project team</td>
<td>12 members consisting of sponsor, technical team and operational team</td>
</tr>
<tr>
<td>Stakeholder groups</td>
<td>Project sponsor, project owner, project team members, government agencies and ministries, contractor, end users, air travelers.</td>
</tr>
</tbody>
</table>
General issues in the AFTN project

The project was faced with several challenges as highlighted by the stakeholders. Some of these were the general lack of organizational cohesiveness and issues of non-payment of supplier as cited by the project owner; managing tight timelines due to external pressures such as international obligation; scope creep; lack of sufficient information supplied by end-user; meeting government regulations; and occurrence of natural disaster i.e. Hurricane Sandy. Interestingly, several stakeholders expressed that the traditional approach did not facilitate tracking of the challenges. However, this instead underlined the lack of a disciplined approach to project management practices, particularly the quality management area rather than an issue with the specific measurement technique.

The general findings indicated a lack of structure in the tracking and monitoring of the project in general particularly in the knowledge areas outside of time and cost. This was particularly evident on the analysis of the project process dimension of PPS. The team member with some formal project management training shared that he was brought into the project relatively “late” and stated that “if I was on the project from the start I would have pointed out these areas and asked that we follow them”.

Application of the performance evaluation methods

Project Performance Scorecard

The re-evaluation of the project was done using the dimensions of the PPS (table 3) and showed that while important activities occurred in the project they were not tracked, thus elements were not considered or were taken for granted therefore missing the opportunity for project learning. For example the identification and monitoring of risks factors of the project were not formally considered, therefore upon the occurrence of Hurricane Sandy, the response strategies employed to overcome its impact were not formally documented. The method was able to formally identify project objectives that would be useful to monitor the achievement of these objectives throughout the project. The re-evaluation highlighted that the project did meet its critical objectives but missed opportunities, especially in the learning and innovation dimension of PPS.

<table>
<thead>
<tr>
<th>PPS Dimensions</th>
<th>Summary of General Project Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Process</td>
<td>• Timely delivery of system&lt;br&gt;• Within budgeted cost&lt;br&gt;• Identification of key project resources including contractor&lt;br&gt;• Procurement of network equipment&lt;br&gt;• Adherence to government procurement guidelines&lt;br&gt;• Identification and management of risks&lt;br&gt;• Timely communication to stakeholders</td>
</tr>
<tr>
<td>Stakeholder: Sponsor</td>
<td>• Meet agreed system quality objectives (e.g. completeness, accuracy)&lt;br&gt;• Achieve International standards and expectations</td>
</tr>
<tr>
<td>Stakeholder: Owner</td>
<td>• Met agreed system quality objectives (e.g. completeness, accuracy)&lt;br&gt;• Achieve International standards and expectations&lt;br&gt;• Maintain organizational cohesiveness</td>
</tr>
<tr>
<td>Stakeholder: Project Team</td>
<td>• Harmony among project team members&lt;br&gt;• Clear chain of command</td>
</tr>
</tbody>
</table>
PPS Dimensions | Summary of General Project Objectives
--- | ---
Stakeholder: End-user | • Clear project guidelines to follow
• Elimination of past failures
Learning & Innovation | • Develop team building expertise
• Improved understanding of the project process
• Improved knowledge and sharing related to new system
• Improved understanding of government’s procurement guidelines
• Improved knowledge and sharing of international standards relating to flight plan
Benefit | • Implementation of system
• Improved levels of efficiency at individual and organizational levels
Quality | • Achieve business and technical requirements
• Achieve project requirements
User | • Acceptance and use
• Ease of use
• Training in system use

Table 3. Project Performance Scorecard view of upgraded AFTN project

Delone and Mclean IS Success Model

The assessment of the project using the IS Success Model is shown in table 4. Similarities were found in some areas when the IS Success Model was applied which can be explained by the fact it is used to derive the PPS. The observation was primarily focused on the evaluation of the system artifact (the project outcome) and its acceptance by the users.

<table>
<thead>
<tr>
<th>IS Success Dimension</th>
<th>Project Objectives</th>
</tr>
</thead>
</table>
| System Quality | • Eliminate previous equipment failures
• Installation of Switch
• Elimination of all critical errors during testing |
| Use | • Acceptance of system by users
• Increased functionality
• Reduce in error rate and user complaints |
| Net Benefits: Individual Impact | • A user friendly interface
• Increased functionality |
| Net Benefits: Organizational Impact | • Adherence to international standards relating to flight plans
• Adherence to government procurement guidelines |

Table 4. IS Success view of upgraded AFTN project

Summary assessment of the models

There was a general positive reaction to the evaluation models. A team member concluded that it was “good to look at different perspectives” in analyzing project performance and the alternative approaches were “useful to determine project benefits and user satisfaction”. Interestingly, despite the general negative perception of inadequacy of the traditional approach, all the participants felt it was able to determine or measure the success of the project. However, some limitations were identified. For example, the technical end user stated that “the traditional model was unable to measure the end user happiness” since the stakeholders’ perspective was not taken into consideration. This sentiment was supported by the end user who stated that the model did not facilitate formal capture of problems encountered by the end user. The viewpoint may seem contradictory however it may point to the culture of success perspective still being viewed by some practitioners in a very limited light.
The PPS obtain positive reviews from the stakeholders as they felt it was more complete than the current standard used by them, including the traditional approach. The project owner noted it provides additional perspective to assess the project that was not generally considered by the project team. Similarly, a project team member remarked that the PPS perspective “looks at the bigger picture”. The sponsor further stated “the model was forward looking and individuals who are aware of this model should begin to make the change in organizational culture”. The sponsor noted that there was not an awareness of PPS in the organization, which suggest a need for closer alignment between practice and academia along with finding strategies to share new emerging techniques with industry practitioners. Since the principles of the IS Success Model were primarily embedded within the PPS, the stakeholders did not find any unique distinctions to compare it against the other models. In essence it was generally perceived to consider more dimensions than the traditional approach.

CONCLUSION

The research utilized multiple performance evaluation techniques, namely the traditional approach, Project Performance Scorecard (PPS) (Barclay, 2008) and IS Success Model (DeLone & McLean 1992; 2003) to assess a single government project in Jamaica. The study was motivated by the persistent use of the traditional approach to evaluate project performance despite the growing pool of alternative techniques in the literature. We argue, that this type of study helps to strengthen the linkages between the academic and practice communities and inform them of developments such as alternative new project measurement models. The application of these techniques is important to determine suitability of techniques in different contexts; to understand the implications of evaluation beyond the traditional methods that fit with the complexity and realities of projects; and inform practitioners of best practices for organizational adoption. The study also underlined the importance of a quality measurement system, since it is through the measurement lens that the project is viewed and opportunity for learning and growth can be determined. It is important to state that the single project studied cannot be regarded as a sample for government projects and so the findings may not a true representation of government projects. Additionally, the research has some limitations particularly in the explanation of the project objectives and the identification of suitable measures. These issues will be addressed in future works. Therefore, additional research will be necessary for additional success and failed projects to have a reasonable understanding of the criteria used by government organization and to assess the adequacy of these criteria.

REFERENCES