A method to measure success dimensions relating to individual stakeholder groups

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Abstract

A new method to measure and identify project success dimensions meriting further investigation is detailed. It considers the conceptualization, diagnosis and understanding of these dimensions to judge the success or failure of a project. The method used an inductive thematic analysis to reveal two major themes: one related to the multiple stakeholders involved in a project and the other to project structure. Further analysis showed three new success dimensions linked directly to the perception of project success: benefit to the stakeholder group, client/customer specific issues and time/cost/quality. Inclusion of these dimensions to measure project success has the potential to allow all stakeholder groups to share the same perception of project success.

1. Introduction

This paper introduces a method that adopts a post-positivist structured approach to recognize gaps in the literature that merit future empirical work. It is a response to the criticisms that project management is practitioner oriented, focusing mainly on technical tools, such as critical path analysis; lacks a rigorous literature base and inadequate scope of coverage (Turner, 2010).

The concept of project management continues to be a subject of conjecture. Turner et al. (2010) claim its roots date from the 1940s and operations research, whereas Kwak and Anbari (2009, p. 440) argue that it came from three management schools: “organizational management theory, operations research and management science applications, and real business practices and their applications”. Bredillet (2010, p. 4) “notes an early interest (1914–1987) in the economic aspects of projects” and later in Information Systems (IS) projects and Information Technology (IT) support. There is, however, some agreement in that project management originated from classical management theory (Kwak and Anbari, 2009; Shenhar and Dvir, 2007; Turner et al., 2010) based on the Taylorian model (Turner et al., 2010).

Classical theorists (Brech, 1953; Fayol, 1949; Gulick and Urwick, 1937; Mooney and Reiley, 1939; Taylor, 1911) focus on an organization’s purpose and formal structure. Consideration is directed at hierarchy, formal roles and responsibilities, the ‘iron triangle’ (time, cost and quality — Barnes, 1969) and tools used within a project. This perspective expects everything to work in a linear sequence using generic tools (e.g. Gantt charts and methodologies) for all project types (e.g. IT, engineering and change management projects). However, Turner et al. (2010) observed the contradictory view that projects are defined as ‘unique’ and therefore need to have specific tools (e.g. PRINCE2, Project Management Body of Knowledge, Managing Successful Programmes, Information Technology Infrastructure Library) that are adapted for individual projects.

The difference between the opposing positions is that one concentrates on the organization and the other either on the people within it or issues concerning involvement, participation...
and engagement. Wateridge (1995) pointed out this difference when examining perceptions of success and asked how a project can be judged successful if the people are not consulted. Furthermore, project management teams are typically temporary in nature and formed out of necessity, meaning that formal rigid rules and responsibilities characteristic of organization structure are not applicable. (Turner, 1999, 2014a, 2014b). For example, a project manager might have no direct responsibility or line control of their team, but is expected to meet project deadlines (Slevin and Pinto, 1987).

In addition to Turner and Zolin (2012) noting that stakeholder perception influences the perceived project outcome as a success, others demonstrated that the time point used to analyze success could change the outcome to perceived failure (Dalcher and Drevin, 2003; Morris, 1997; Turner et al., 2009). For example, the Sydney Opera House, when initially completed would be analyzed as a failed project as it was 14 times over budget (original estimate $7 million, final cost $102 million) and took 15 years to build as opposed to the estimated 4 years (WNW, 2015). However, the public judged it to be a great engineering achievement (Jugdev and Müller, 2005). Heathrow Terminal Five met the objectives to create a main passenger terminal for British Airways flights. The British Airports Authority regarded this as a success as it was completed and handed over to the customer within time, cost and quality constraints. However, British Airways, a different stakeholder group, had minor commissioning issues relating to check-in procedures for oversized baggage, leading to the later public and customer perception that the project was a failure and damage to the reputation of British Airways (Brady and Davies, 2009, 2010a, 2010b; Brady and Maylor, 2010; Savill and Millward, 2009).

It remains frustrating that despite extensive research, there is no single model of project management for any given context that will mitigate the risk of project failure. Most of the numerous measurement methods can be traced back to the ‘diagnostic behavioral instrument’ of Pinto and Slevin (1987) which measures project manager’s perception (Azzopardi, 2015; Davis, 2014; Roberts and Furlonger, 2000). Although this instrument dates back to 1987, it is still widely used, but it does not take account of the various different stakeholder group views that could determine the success or failure of a project.

Whilst it is recognized that Metcalfe and Sastrowardojo (2013) and McKenna and Baume (2015) have put forward methods for different stakeholder groupings, the aim of this study is to offer an instrument that examines multiple stakeholder perception of project success, rather than sole dependence on the project manager view.

1.1. Purpose of the study

Projects are increasingly recognized as critical to an organization’s success (Jonas et al., 2013). Previous research (Davis, 2014) showed that the most cited instrument used to assess project success is the Pinto and Slevin’s (1987) quantitative ‘diagnostic behavioral instrument’. Their instrument has been developed over the years by numerous authors (see Jugdev and Müller, 2005, for a review) to identify significant key dimensions for project success. However there are many ways of determining the success of a project and direct comparison of these dimensions is not always achieved. This paper reviews the methods that have been used to measure project success by different stakeholder groups, so that previously excluded areas can be identified, enabling future empirical research that could be applied to both large scale and SME projects.

1.2. Background

High-profile project failure is regularly reported in the public domain, raising the question of the adequacy of prevailing project management concepts, practices and tools for organizations to predict and achieve consistent successful delivery of projects (Ojiako et al., 2012; Stanleigh, 2006). The Standish Group (2012) survey found that 18% of projects fail and 43% were challenged. In KPMG’s (2013, p. 11) survey, they noted that “project activity is on the increase and so are failure rates” with only 33% of respondents agreeing that their project was completed on budget, 29% on time and 35% to scope, this was compared to the 2010 survey whereby 48% were on budget, 36% on time and 59% to scope.

For this reason, project management is a field where there is focus on the prevention of project failure. The management of projects to counter failure is a growing subject and is defined by an expanding body of professional associations, standards, methodologies and tools. This is reflected in continual upgrades of definitions of tools and methodologies, e.g. PMBoK (PMI, 2013) and PRINCE2 (Office of Government Commerce, 2009), but the upgrading of tools is not shown to be increasing project success. Project failure results in loss of money (Table 1), as well as associated time, loss of reputation and decreased morale of the workforce.

There are many literature reviews, which comprehensively discuss project success (Jugdev and Müller, 2005; Turner and Zolin, 2012), but the definition of success is inconsistent. There is a clear need for an appropriate measurement method that uses proven existing dimensions (success factors and criteria) together with new dimensions of which the impact of different stakeholder group perception is possibly critical (Davis, 2014) to the prevention of project failure. However, the method must be easy to access and use as well as yielding consistent results.

1.3. Stakeholder perception of success

Davis (2014) identified and defined the dimensions of project success and stakeholders found in the literature. A brief summary is given in this section to demonstrate the need for measurement of stakeholder perception. Table 2 summarizes the dimensions of project success identified in the literature. A theme was only cited when two or more stakeholder groups recognized it. The main dimensions, common to the three stakeholder groups were ‘communication’ and ‘time’. Senior management and the project core team both recognized ‘identifying/agreeing objectives/mission’, ‘project manager competencies and focus’, ‘the project delivering the strategic benefits’ and ‘top management support’. The project core team and project recipients both identified,
Examples of project failure (extracted from International Project Leadership Academy, 2015)

<table>
<thead>
<tr>
<th>Organization-project (Country)</th>
<th>Year</th>
<th>Failure reason</th>
<th>Loss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Berlin-Airport Construction (Germany)</td>
<td>Ongoing</td>
<td>“Conceptual design flaws. Lack of quality management. Prioritizing cost and profit margin over quality and government regulations, failure to disclose information openly, withholding relevant information, lack of quality controls (testing the diesel vehicles on actual roads), failure to live up to customer expectations, false advertising.”</td>
<td>$5B Euro</td>
</tr>
<tr>
<td>Volkswagen Group-Vehicle emissions system (Global)</td>
<td>2015</td>
<td>Failure to gain stakeholder support, missing requirements, quality related issues, failure to fully recognize the transformational shift in learning that e-enabled learning represents.</td>
<td>$1.3B</td>
</tr>
<tr>
<td>Los Angeles Unified School District-e-Enabled learning tools (USA)</td>
<td>2015</td>
<td>Lack of quality control, launching the product before it was ready, challenges in defining the requirements fully, ineffectual training.</td>
<td>$214M</td>
</tr>
<tr>
<td>Ontario Ministry of Community and Social Services–Welfare management system (Canada)</td>
<td>2014</td>
<td>Bad assumptions, failure to address details, communications breakdown between organizations. Lack of control over procurements, failure to establish appropriate benchmarks against which to track project progress and vendor performance, failure to engage appropriate Subject Matter Experts during procurements, failure to define and stabilize requirements, under-estimation of complexity, politics.</td>
<td>$15B</td>
</tr>
<tr>
<td>SNCF/RFF-New trains (France)</td>
<td>2014</td>
<td>Underestimation of complexity, ineffective governance structure, hierarchical organization structure in which accurate flows of information were actively blocked, failure to conduct an effective tendering process when selecting the original supplier, lack of contractor oversight, overstating the benefits of the project, the use of a fixed price contract acted as a barrier that discouraged the BBC from getting too deeply involved in the design stages for fear of triggering change requests thereby nullifying the fixed price”.</td>
<td>£100M</td>
</tr>
<tr>
<td>British Home Office-Immigration controls (UK)</td>
<td>2013</td>
<td>£224M</td>
<td></td>
</tr>
<tr>
<td>British Broadcasting Corporation-Digital archive (UK)</td>
<td>2013</td>
<td>Lack of quality management. 5B Euro</td>
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</tbody>
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‘stakeholder satisfaction’, ‘makes use of finished product/acceptance’ and ‘cost/budget’.

Examination of the stakeholder groups highlighted the differences in perception between the three main stakeholders of senior management, project core team and project recipients. One striking observation was that some groups had no success dimensions in common (client and executive, sponsor and owner, sponsor and executive, sponsor and project team, owner and executive, executive and user). These were all linked to senior management (executive, sponsor, owner) pointing to a lack in communication between these groups. The three stakeholder groups identified were investigated to evaluate why perceptions of success dimensions differ and whether any of these differences lead to the high rate of perceived project failure.

These results justified the need to find an appropriate measurement method for empirical research into multiple stakeholder groups’ perceptions of project success. Using such a method would permit organizations to focus on the dimensions that are needed to manage expectations throughout the project for each stakeholder group and consequent successful project delivery.

2. Methods

2.1. Research approach

The research approach used was based on induction and deduction (Saunders et al., 2009). Deduction is “theory–hypothesis–data collection–findings–hypothesis confirmed or rejected–revision of theory” (Bryman and Bell, 2003, p. 11) whereas induction is observation–findings–theory (Collis and Hussey, 2009). Induction takes reality and creates abstract laws, whereas deduction takes abstract information and relates it to reality to make predictions.

This study can be seen as having elements in common with deduction as the reviewed literature draws on a previously developed assessment tool and concepts in multiple environments. However, it has more in common with an inductive approach as themes are identified in the thematic analysis inductively and not based on existing theory. Evidence of the current situation was presented in a previous paper (Davis, 2014) in order to generate an understanding of the nature of the problem to answer the research questions. This was analyzed and interpreted and the results were used to identify themes in the literature.

2.2. Research philosophy

The researcher’s viewpoint did not clearly fall into positivism, interpretivism or realism as a mixed methods approach was adopted, whereby the thematic analysis contained subjective interpretations of meanings and the results offer an instrument to collect objective quantitative facts (Blumberg et al., 2008). Mixed methods are becoming more popular in project management research as a way to collect and analyze data (Basamh et al., 2013; Basu, 2014).

Table 2
Analysis of success dimensions across stakeholder groups

<table>
<thead>
<tr>
<th>Success dimension</th>
<th>Senior management</th>
<th>Project core team</th>
<th>Project recipient</th>
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</thead>
<tbody>
<tr>
<td>Communication</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Time</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Identifying/agreeing objectives/mission</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Project manager competencies and focus</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The project delivering the strategic benefits</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Top management support</td>
<td>x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stakeholder satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes use of finished product/acceptance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cost/budget</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>
By the 1960s positivism was seen as outdated and new theories were needed. The basis that all statements could be empirically metaphysical, analytical and verifiable was questioned. This was revised as statements should be empirically verifiable and logical positivists saw issues that observations were influenced by the observer and therefore the empirical verifiability was inconsequential. Logical positivists moved to be regarded as detached from science focusing on syntax and semantics as opposed to pragmatics. Feyerabend (1962), Kuhn (1962), Lakatos (1970) and Agassi (1975), began concentrating on hypothesis testing and theory building. This was regarded as relevant as it described what was being done. This study disagrees with classical positivism in that knowledge must be observed and value free and that investigation needs to be more subjective.

The assertion that positivists were searching for ‘truth’ led to challenges as to whether positivism was no longer justifiable. As a result, post-positivism emerged with the exploration for ‘warranted assertability’ (Hempel, 1966; Kuhn, 1970; Lakatos, 1970; Laudan, 1977; Popper, 1968, cited in Letourneau and Allen, 1999). Phillips (1992) adds that positivism no longer has a place in modern society as ‘while the world is full of sound and fury, it signifies nothing’. This suggests that human interactions cannot be fully comprehended (Cook and Campbell, 1979; Guba, 1990), but it contends that social processes are relatively predictable and patterned (Phillips, 1987, 1990a, 1992) and can be studied objectively “to facilitate apprehending reality as closely as possible” (Guba and Lincoln, 1994, p. 110). Post-positivists assume three connected points (Letourneau and Allen, 1999):

1. Knowledge about the social world can be attained through studying regularities and causal relationships
2. Regularities and causal relationships are best studied when the researcher is objective
3. Objectivity can be attained though applying a scientific method.

Post-positivists empirically test theories using a scientific method to develop theory. This requires clear definitions and documented empirical investigations (Cook, 1985; Greene, 1990; Phillips, 1990a). Dubin (1978, p. 57) cites that “once these basic features of a theoretical model are set forth, the theorist is in a position to derive conclusions that represent logical and true deductions about the model in operation or the propositions of the model”. The results will provide observations of incidents and will add to general explanations, with logically organized connections to the social world (Forbes et al., 1999; Schumacher and Gortner, 1992). It is noted that total objectivity may not be attained, however, post-positivists assume that the rigor in the system applied outweighs the issues with objectivity (Greene, 1990; Phillips, 1987, 1990a). Subjectivity is taken into account as stakeholders are studied within their organizational contexts (Clark, 1998; Phillips, 1992).

Post-positivism eradicates “the intractable problem of a forced choice between value-laden/qualitative and value-free/quantitative research methods” (Howe, 1985 p. 10; also Lather, 1992; Phillips, 1990b; Smith, 1983; Wildemuth, 1993). The researcher takes the view that qualitative research is essential to provide the rich context to the study (Clark, 1998) before any quantitative analytical methods can be employed. The mixed methods approach adopted in this study aligns with the post-positivist view as the methods selected are based on the research questions (Cook, 1985). By using a combination of methods, post-positivists assert “packages of imperfect methods and theories...minimize constant biases” (Shadish, 1993, p. 18). Letourneau and Allen (1999) discuss Houts et al. (1986) strategies used in post-positivist research. This study is consistent with this, as targeting multiple stakeholder groups probes multiple issues associated with project success dimensions, using qualitative and quantitative methods. The meta-synthesis of qualitative work (Jensen and Allen, 1996), building on Pinto and Slevin’s work aims to minimize bias issues. Finally, industry and academic experts will examine the data set. A disadvantage with the use of mixed methods from a post-positivist view is that it can lead the research to be overtly scrutinized from multiple perspectives (Houts et al., 1986). However, this is dealt with by thorough justification and documentation of the methods selected.

A further issue is when the researcher has difficulty analyzing personal biases (Shadish, 1993), but this can be minimized through a critical multiplist approach.

Critical multiplism is different to triangulation in that it is not merely checking the data using multiple sources, but invites critique and scrutiny. Some literature aligns critical multiplism with relativism and thereby states that all results are seen as valid (Houts et al., 1986; Lutz, 1988; Smith, 1990), therefore reducing the usefulness of the research. Guba (1990) notes that this can be ‘elaborated triangulation’ and therefore minimizes the originality of the research. However, as critical multiplism is derived from post-positivism, this evades the problem through the use of objectivity and open scrutiny. Therefore, the research “are forced to face the demands of reason and evidence” (Phillips, 1990b p. 30). Further, the researcher argues the use of triangulation using multiple sources to criticize the data (academic and industry experts) minimizes personal bias, therefore, adding validity to the research (Denzin, 1970; Kimchi et al., 1991). Critical multiplism is also criticized as it is seen that there is a lack of procedure (Houts et al., 1986), which is countered through a rigorously documented process.

In light of the above discussion, this study adopts a post-positivist philosophy in combination with a critical multiplist view. This not only eradicates the choice between qualitative and quantitative methods, but also means the researcher can attain objectivity when studying the social world through the application of a scientific method and inviting open scrutiny.

2.3. Literature search using Web of Science database and Bibexcel

The detailed methods for analysis have been published in a previous paper by the author. A citation analysis was performed on the data output from Web of Science using Bibexcel within a Windows operating system, to identify key authors from 708 articles. The articles were imported into a qualitative data analysis software package (NVivo) to organize the data and enable the
identification of themes (Fereday and Muir-Cochrane, 2006). Due to previous concerns with literature selection returning 708 results via Web of Science, the author replicated the searches, which identified the key authors in Scopus and Google Scholar databases in 2015 to compare against the Bibexcel citation analysis results. For example, a “project success” keyword search returned 2523 document results in Scopus and 57,500 results in Google Scholar. The number one cited article, with 569 citations in Google Scholar, was Pinto and Slevin (1988a) mirroring the results from Web of Science. Note that Pinto and Slevin (1987) published the same results as in Pinto and Slevin (1988a). Additional searches were done within the “project success” results for each of the key author names identified in the Bibexcel analysis (see Davis, 2014 for details) e.g. Pinto was searched for in the “project success” Scopus results and returned 336 document results and 4150 results in Google Scholar.

3. Results and discussion

3.1. Pinto and Slevin’s (1987) ‘diagnostic behavioral instrument’

Nine recurring methods for measuring project success were determined from the literature examined. Slevin and Pinto first developed the instrument in 1986. They asked participants with recent project involvement to record how they would improve project implementation success and created 10 success factors to form the basis of a questionnaire. The questionnaire was shown to be a statistically valid diagnostic instrument. Slevin and Pinto (1987) build on their Slevin and Pinto (1986) and Pinto and Slevin (1987) work by categorizing the 10 success factors into a strategic (mission, top management support, project schedule/plans factors) and tactical (client consultation, personnel, technical tasks, client acceptance, monitoring and feedback, communication, trouble shooting factors) framework to assess project error (e.g. action is not taken causing a negative impact on the project or the ‘wrong problem is solved’) and offer solutions for a range of project types. Their focus is the project manager, whereas this research focuses on the relationship between senior management, the project core team and project recipient stakeholder groups to achieve a successful project judgment. Further work will be considered to categorize the results into a strategic and tactical framework that examines errors and solutions for each stakeholder group.

3.2. Additional identified measurement methods

An additional eight methods were identified for measuring success. Lim and Mohamed (1999) offered frameworks of macro and micro success based on a literature review of previous construction project studies and unstructured interviews (e.g. discussions over lunch) of 40 project professionals in Kuala Lumpur. There were no details of the questions asked or how these could be tested for reliability. Micro criteria included time, cost, quality, performance and safety and macro criteria encompass these and the actual benefit achieved in the operation phase. The macro view determines whether the end users are satisfied with the overall result, whereas the micro view looks at whether time, cost and quality objectives were met.

The balanced scorecard is a tool to measure whether project goals have been met using four components to give a balanced view of the impact on the organization (financial, internal business processes, learning and growth and customer satisfaction). For example, finances might be down, but are counteracted by an increase in customer satisfaction. This allows stakeholders to apply the instrument to short, medium and long term project objectives and to match them to the organization strategy and set outcomes. The tool requires extensive planning and discussion to agree the criteria in each of the four areas and must refer to organization strategy; it is typically used with detailed accounting methods.

Key performance indicators (KPIs) are identified quantifiable critical success factors to achieve organizational goals/strategy and are therefore a measure of success. For example, the number of customer service queries resolved in a day can be used as a KPI. KPIs tend to become a long term focal point for the organization, but because projects and stakeholders are changeable over time, they should be used in combination with other measures.

Atkinson (1999) created ‘The Square Route’ framework based on a literature review to better understand success criteria. This encompassed four categories to provide a balanced view of success:

1. “cost, quality, time
2. the information system (maintainability, reliability, validity, information quality, use)
3. benefits (organization) (improved efficiency, improved effectiveness, increased profits, strategic goals, organizational learning)
4. benefits (stakeholder community) — satisfied users, social and environmental impact, personal development, professional learning, contractors profits, capital suppliers, content project team, economic impact to surrounding community” (Atkinson, 1999, p. 341).

These dimensions do not take into account scope changes due to differing stakeholder views (Maylor, 2005), nor how the project will fit into current organization operations or culture. Turner (2004, p. 350) discusses four conditions based on the work of two doctoral students for success:

1. “Success criteria should be agreed with the stakeholders before the start of the project and repeatedly at configuration review points throughout the project
2. A collaborative working relationship should be maintained between the project owner (or sponsor) and project manager, with both viewing the project as a partnership
3. The project manager should be empowered with flexibility to deal with unforeseen circumstances as they see best, with the owner giving guidance as to how they think the project should be best achieved
4. The owner should take an interest in the performance of the project”.

This suggests that accountability for project success resides with the owner and their level of engagement should be investigated further. However, no empirical evidence supports the suggested conditions.

Maturity models are tools used to measure an organization's project management maturity and identify areas for performance improvement. They focus on the overall organization maturity and not the individual's perception of success. However, the models are seen as rigid, impractical (Jugdev and Thomas, 2002) and lacking in implementation guidance, e.g., the Capability Maturity Model Integration is over 500 pages. The model also requires an organization's continual sign off (Herbsleb et al., 1997) which can stifle creativity as they strive to maintain high maturity without taking risk.

Shenhar et al. (1997) identified four universal dimensions of success from an empirical study: project efficiency, impact on customers, business and direct success and strategic potential (preparing for the future) (Shenhar et al., 1997). Time and cost were considered as resources and quality as customer satisfaction in contrast to using them as separate entities. They related efficiency to short term turnover and business success and strategic potential to longer term goals, but stated that customer satisfaction was the more important criterion for project success.

Morris and Hough (1987) presented seven influencing forces for project success. These are: the external content (cost, time), external influences, attitudes and support given to the project, set objectives and how these will be achieved, people/leadership/team work, planning/reporting/control systems and roles/responsibilities/contractual relationships.

All the theoretical models and theories presented have similar views of involving elements across the organization, but fail to present the view that the stakeholder perception of success can determine a project's outcome. The micro and macro views and balanced scorecard are concerned with the organization as a whole; KPIs need to be set and used with other measures; square route method, four universal dimensions of success and seven influencing forces, present success dimensions to interpret success; four conditions of success present a theory and maturity models are inflexible, looking at improving the whole organizations maturity. While each has its merits, there is no tool that measures the impact of stakeholder view on project success. This underlines the need for a tool with clear guidelines that provides questions to examine stakeholder perception.

3.3. Success dimensions

Despite subsequent publication of alternative methods to measure project success, it is evident that they can be traced back to the original measurement tool of Pinto and Slevin (1987). Comparison of Pinto and Slevin's instrument with the success dimensions from the additional methods revealed two new main themes: the stakeholders involved in a project and the project structure.

3.3.1. Theme one — stakeholders involved in a project

3.3.1.1. Personnel skills/issues. Top management support was crucial to project success (Jugdev and Müller, 2005). However, this perspective was derived from empirical investigations into the project manager's perception and not from that of top management. This suggests a requirement to conduct empirical work into the perception of top management. Limited articles identified the need for the organization ('corporate perception of project management' — Kerzner, 1987) to understand project management. It was noted that no consideration was given to other organizational departments (e.g. business managers from finance) and how they comprehend project management. The need to select people with an appropriate skill set for a project was recognized (Pinto and Slevin, 1989), and authority being given to the project manager (Turner, 2004), however, the competency (Tishler et al., 1996), experience (Belassi and Tukel, 1996), management skills (Pinto and Slevin, 1988a) and leadership style of the project manager (Müller and Turner, 2007a), lacked research.

3.3.1.2. Client/customer specific related and benefit to stakeholder group issues. The appreciation of a project outcome (Toor and Ogunlana, 2010) was identified in both the 'benefit to stakeholder group' and 'client/customer specific' related issues dimensions. However, no comment was made in areas such as looking at the benefit to customer (Wang and Huang, 2006), end user (Tishler et al., 1996), management (Cooke-Davies, 2002), other stakeholders, client expectations (Jugdev and Müller, 2005) and customer relationship with organization (Tukel and Rom, 2001). A lack of ongoing appreciation during the project life cycle of the benefits of any project by top management was a major theme emerging from the literature. Too often, a project can be deemed peripheral to the core business and other issues perceived as urgent would take priority (Smith-Doerr et al., 2004). Project teams are often seen as temporary and unique, making it difficult to allocate the best resources for a project to succeed (Pinto and Slevin, 1988a, 1989). There are limited studies conducting empirical research regarding; customer acceptance, customer aspiration, the customer relationship with the organization, client appreciation, benefit to owner, and benefits to organization, indicating a need for further empirical work in these areas.

3.3.1.3. Communication. Communication was seen as significant in a project, especially when referring to the client, customer or user involvement (Munns and Bjeirmi, 1996; Pinto and Prescott, 1990; Pinto and Slevin, 1988a, 1988b, 1988c, 1989; Slevin and Pinto, 1986; Tishler et al., 1996; Tukel and Rom, 2001). Communication is apparently effective between the project core team and the project recipient stakeholder groups, but there was limited research examining how communication is conducted between the project manager and line management and those at the corporate level (Cooke-Davies, 2002). This suggests a gap in the literature to examine those at these levels.
3.3.1.4. Satisfaction of a stakeholder with a project. Satisfaction was a significant theme, as there was consensus that stakeholder groups should be satisfied with the project. The most frequently cited groups were the client (Müller and Turner, 2007a), customer (Turner et al., 2009) and end user (Müller and Turner, 2007a, 2007b). The importance placed on the project (perceived value) was identified by all the above stakeholder groups (Barclay and Osei-Bryson, 2009). However, the sponsor and owner views were assumed and not empirically tested. Hence, if their satisfaction was measured, it might contradict the recorded stakeholder view. This indicates that other stakeholder groups such as owner and sponsor should be included when evaluating the success of a project.

3.3.1.5. Meeting expectations. The theme to meet expectations occurred, but only referred to meeting the user requirements, pre-stated objectives/purpose (Jugdev and Müller, 2005) and produced to specification (Toor and Ogunlana, 2010). It is recognized that this theme could be duplicated in the satisfaction theme, but expectations can be met without an end user being satisfied. For example, a new system could be introduced to speed up processes, but may require extensive training to optimize the benefits. Although, the perception of project success by different stakeholder groups was noted (Müller and Turner, 2007a, 2007b), empirical studies have failed to examine the perception of success after project completion. There were limited studies discussing how a project creates new opportunities (Smith-Doerr et al., 2004), thereby exceeding expectations and the consequences when a project outcome does not meet stakeholder expectations and is disappointed (Cooke-Davies, 2002). Furthermore, disappointment can be interpreted as failure in the public domain.

3.3.2. Theme two — project structure

3.3.2.1. Approaches. The most recurring theme was clarity when planning (Bryde and Robinson, 2005). Planning often relied on project manager experience (Kerzner, 1987) and lessons learnt from previous projects, which may or may not have been experienced by the organization. How the project is defined in terms of mission, and vision, agreement of project objectives (Wateridge, 1998) and planning, detailed planning of project implementation (Jugdev and Müller, 2005), including clear stages and deadlines and associated risks (Munns and Bjeirmi, 1996) are of primary importance and are well documented in the literature. Very little research looks at the adequacy of the project management system (lack of monitoring techniques) (Slevin and Pinto, 1986), e.g., how decisions were made, the development of standards, the criteria used to terminate a project, capturing post-project evaluation, how scheduling was set and updating project documents.

3.3.2.2. Time, cost and quality. There was consensus in the literature that perceptions of time, cost, and quality adherence are used to evaluate the success of the project (Atkinson, 1999; Barnes, 1969; Cooke-Davies, 2002; Freeman and Beale, 1992; Jugdev and Müller, 2005; Lim and Mohamed, 1999; Müller and Turner, 2007b; Munns and Bjeirmi, 1996; Pinto and Prescott, 1990; Pinto and Slevin, 1988a, 1988b, 1988c; Slevin and Pinto, 1986; Smith-Doerr et al., 2004; Tishler et al., 1996; Toor and Ogunlana, 2010; Tukel and Rom, 2001; Turner et al., 2009; Wateridge, 1998). Only a limited amount of literature linked the cost issues theme to the need for a project to be commercially profitable (Jugdev and Müller, 2005; Wateridge, 1998). This raises the question whether it is essential to make a profit, even when this is listed as a success dimension, or if meeting the budget is sufficient when the costs are evaluated in the project.

3.3.2.3. Technical aspects of a project. The technical aspects theme identified that a system must perform as required; technical performance, (Belassi and Tukel, 1996), technical specification (Wateridge, 1998), technically valid or feasible (Pinto and Slevin, 1988a, 1988b, 1988c), and hence demands precise dimensions to judge success that will give an unequivocal decision.

3.3.2.4. Organizational characteristics. Areas where little research has been carried out were; how success affected the business, degree of business success (Tishler et al., 1996), whether the project was completed in line with organizational strategy (Toor and Ogunlana, 2010), how the project contributed to the strategic mission (Cleland and Ireland, 2002), goals and vision of the organization (Atkinson, 1999), how the project affects the operational flow of the organization (Wateridge, 1998), how the project would affect the organization in the future (Shenhar and Dvir, 2007) and the organization’s readiness to adapt to the project (Jugdev and Müller, 2005). Similarly, analysis of project success and the future impact on business strategy, mission and vision, the project’s influence on operational issues to minimize disruption and additional financial cost to the business were limited.

3.4. Comparison of themes to Pinto and Slevin (1987)

Table 3 compares the thematic categories identified in the previous sections to the original list from Pinto and Slevin (1987).

10 project success dimensions were identified in the analysis, of which seven are used in Pinto and Slevin’s list. This demonstrates that their factors have been replicated in other studies and are valid measurements of project success. It also highlights a gap in their instrument to measure the benefit to the stakeholder group, client/customer specific issues and time/cost/quality in more detail. Furthermore, Pinto and Slevin’s list mentions top management, personnel, client and key players as stakeholders, identifying the need to specify the reactions of these specific stakeholder groups.

3.5. Developing the ‘diagnostic behavioral instrument’

As stated, Pinto and Slevin’s (1987) ‘diagnostic behavioral instrument’ was developed from in-depth interviews and studies with project managers. Emphasis was applied to the “key factors concerning a project throughout the implementation process”
(Pinto and Slevin, 1997, p. 2). The instrument is aimed at the project manager and team members, encouraging them to take a ‘step back’ to obtain an overview. The name and description of a completed project, including project goals form the initial questions. However, this could imply a narrowing of the views expressed when answering subsequent questions, hence excluding all the respondents’ project experience. The survey is made up of 10 main factors, each consisting of five questions based on a seven-point scale of ‘strongly disagree’, ‘neutral’ and ‘strongly agree’. The factors are:

1. Project mission
2. Top management support
3. Schedule and plans
4. Client consultation
5. Personnel
6. Technical tasks
7. Client acceptance
8. Monitoring and feedback
9. Communication
10. Trouble-shooting

Reviewing this instrument highlighted the fact that some questions would be difficult for project managers and team members to answer fully. For example, the question, “Does upper management TRULY support the development of this project?” (Pinto and Slevin, 1987, p. 22), neither gives guidance to assist an accurate answer, nor facilitates the views directly from upper management. A further example assesses the client’s ideas of strengths and weaknesses of the project without consultation.

3.5.1. Identified missing areas

Gaps have been identified to measure the benefit to the stakeholder group, client/customer specific and time/cost/quality in more detail. These gaps, along with the dimensions from Pinto and Slevin’s instrument, formed interview questions to create an adapted method to investigate perceptions of project success. An example is in Table 4. Future empirical work is proposed to conduct in-depth interviews in which the responses will develop a survey appropriate to measure project success in multiple stakeholder groups. The results of the survey will form the basis of discussion documents to aid in problem-solving through recognition and reconciliation of different stakeholder views to ensure that all stakeholder groups are in agreement, leading to successful project delivery.

3.6. Developments in measuring project success

It is noted that there are similar studies which have examined aspects of project success and the stakeholders involved. However, none of these have examined the senior management, project core team and project recipient stakeholder groups in one empirical study.

Thomson (2011) examines performance metrics in the construction industry based on client judgement. He highlights that a client becomes more aware of their requirements the further into the project they get, but a project sponsor sets the initial requirements. This resulted in the client stating that practitioners did not take into account their needs and a project can be deemed a failure as a result. He examines one ‘refurbishment of office space’ project containing three recipients, two senior management and five project core team members in one organization. He found that practitioner and client stakeholders had conflict in requirements and this required careful consideration. He offers a revised project sponsor role to address client perception of project success in the construction industry. Whilst this study could be considered to offer empirical research into multiple stakeholder groups, emergent issues were concerned with physical aspects, such as computer mounts and relocation logistics. Al-Tmeemy et al. (2011) add that success criteria and categorization models are applicable in the short term to building projects, focusing on how contractors evaluate success, to create their own categories including: “project management success, product success, along with market success” (p. 337).

Nour and Mouakket (2011) present a classification framework of critical success factors for Enterprise Resource Planning (ERP) systems based on stakeholder perspectives. This was constructed from a literature review and categorized the factors into six stakeholders and three phases of the project life cycle. The tool is proposed to help organizations identify critical success factors and the stakeholders impacting on them for better implementation of ERP systems. They emphasize the role of top management, IS managers and ERP users, but did not test the tool nor provide empirical evidence. The framework also provides no guidance or differentiation for dealing with the

Table 3
Comparison of thematic categories to Pinto and Slevin (1987)

<table>
<thead>
<tr>
<th>Thematic analysis category/dimension</th>
<th>Pinto and Slevin (1987) 10 Factor List. Direct Quotes.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel skills/issues</td>
<td>5. Personnel — Recruitment, selection and training of competent personnel</td>
</tr>
<tr>
<td></td>
<td>2. Top management support — Resources, authority and power for implementation</td>
</tr>
<tr>
<td>Benefit to stakeholder group</td>
<td>None explicitly identified</td>
</tr>
<tr>
<td>Client/customer specific</td>
<td>4. Client consultation — Communication with and consultation of all stakeholders</td>
</tr>
<tr>
<td></td>
<td>9. Communication — Provision of timely data to key players</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>7. Client acceptance — Selling of the final product to the end users</td>
</tr>
<tr>
<td>Meeting expectations</td>
<td>7. Client acceptance — Selling of the final product to the end users</td>
</tr>
<tr>
<td>Systems</td>
<td>3. Schedule and plans — Detailed specification of implementation process</td>
</tr>
<tr>
<td></td>
<td>8. Monitoring and feedback — Timely and comprehensive control</td>
</tr>
<tr>
<td></td>
<td>10. Trouble-shooting — Ability to handle unexpected problems</td>
</tr>
<tr>
<td>Time/cost/quality</td>
<td>None explicitly identified</td>
</tr>
<tr>
<td>Technical aspects</td>
<td>6. Technical tasks — Ability of the required technology and expertise</td>
</tr>
<tr>
<td>Organizational characteristics</td>
<td>1. Project mission — Clearly defined goals and direction</td>
</tr>
</tbody>
</table>
distinct stakeholders, even though they stress the importance of their individual perspectives.

Shaul and Tauber (2012) create 15 categories of critical success factors based on previous research for ERP implementation. They conducted a questionnaire asking project core team members and recipients to decide which of their identified factors should be applied to a specific project phase. They do not ask senior management. They conclude that factors affect success criteria they perceive as important. There is growing recognition of the importance of owner and sponsor involvement. Turner and Zolin (2012) and Turner (2014a, 2014b) define the owner and sponsor as separate roles. The owner is the investor, whereby the main contact is at the start of the project, whereas the sponsor is a pre-, during- and post-project role. Turner (2014a, 2014b) stressed that success criteria must be agreed with stakeholders before the project starts and that these conditions all have to be achieved to gain success, but it still does not guarantee success. His approach moves project success away from the project manager to the project owner having responsibility. Again, this reinforces that the project manager should not be the only viewpoint sought, but also those of other stakeholders involved in a project, including the project owner. Turner and Zolin (2012) claim that evaluation of success across multiple stakeholder groups is rarely conducted. They assert that project success and its criteria must encompass “the perceptions of multiple stakeholders” as “inappropriate evaluation of the success criteria of an existing project could misdirect the project’s decision making, de-motivate employees and establish an unproductive organizational culture” (p. 13). This is reiterated in Turner (2014a, 2014b). They do not specify the stage of the project when evaluation takes place, but the implication that the stakeholder view affects decision making indicates that evaluation takes place at more than one time.

Table 4
Example of question development — benefits to stakeholder group theme

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>Question area developed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit to owner</td>
<td>Question: What is considered as a benefit to the owner? Area for discussion: ‘Satisfactory benefits to the owner’ (Jugdev and Müller, 2005; Toor and Ogunlana, 2010; Wateridge, 1998)</td>
</tr>
<tr>
<td>Benefits management</td>
<td>Question: How are benefits managed and delivered? Who is responsible for the benefits management? Area for discussion: “The existence of an effective benefits delivery and management process that involves the mutual co-operation of project management and line management functions” (Cooke-Davies, 2002, p. 188)</td>
</tr>
<tr>
<td>Benefits to organization</td>
<td>Question: What is considered as a benefit to the organization? Area for discussion: “Improved efficiency, improved effectiveness, increased profits, strategic goals, organizational learning, reduced waste” (Atkinson, 1999, p. 341) “benefits to the organization and preparing for the future (e.g., innovating, and developing core competencies)” (Jugdev and Müller, 2005, p. 28) “Project yielded relatively high profit Project opened new markets Project created a new product line Project developed a new technological capability Project improved reputation” (Tischler et al., 1996, p. 154)</td>
</tr>
</tbody>
</table>

McLeod et al. (2012) investigate how project outcomes are subjectively perceived in one IS case study project by senior management and the project core team, but do not consult project recipients. They assert that a project can be perceived as successful by one stakeholder and a failure by another, but the stakeholder who evaluates it provides the final judgement. This echoes the findings by Turner and Zolin (2012) that the importance placed on criteria of project success changes over time dependent on the stakeholder. All stakeholders, apart from one senior manager, evaluated success on time, budget and meeting specifications. Whilst McLeod et al. (2012) state that using time, budget and specifications over simplifies project success, the results confirm their importance. Other criteria included client satisfaction, business and user strategic benefits.

Adinyira et al. (2012) note that success criteria for building projects were clearly defined to measure success from start to finish, but not after. A survey was sent to experienced professionals containing 13 criteria, identified in the literature, specifically targeted to buildings projects, such as ‘cost of individual houses’ and ‘extensive use of local materials’. Time, cost, quality and satisfaction arose as important criteria, which are recurrent in other studies; however, they did not state who the ‘professionals’ were and it was not possible to assess whether they were multiple stakeholders or solely project managers.

Turner and Müller (2012) confirm that that the ‘most famous’ list of success factors is Pinto and Slevin’s (1987) whilst focusing on the necessary skills of a project manager to lead a project. Turner and Zolin (2012) develop a model of forecasting performance indicators for managers to examine how stakeholders perceive success after project deployment. They recognized that projects have various stakeholders and that perception can change over time so the project manager needs to address this. They take it outside the typical project life cycle by examining success months and years after the end of the project, to gain an insight into how success can be viewed after project completion. They interviewed project managers and programme directors and mention the board as being involved after project completion. However, the work does not refer to portfolio directors, nor does it collect empirical data from those at board level. Also, the author questions whether the dimensions they create such as ‘impact on team’ and ‘impact on customer’ can be judged from only asking these two stakeholder groups as opposed to directly asking the team and customers. They showed, for the first time, that stakeholders can have different perceptions of success criteria. Therefore, stakeholders will also have different perceptions of the success dimensions because they will focus on factors related to the criteria they perceive as important.

There is growing recognition of the importance of owner and sponsor involvement. Turner and Zolin (2012) and Turner (2014a, 2014b) define the owner and sponsor as separate roles. The owner is the investor, whereby the main contact is at the start of the project, whereas the sponsor is a pre-, during- and post-project role. Turner (2014a, 2014b) stressed that success criteria must be agreed with stakeholders before the project starts and that these conditions all have to be achieved to gain success, but it still does not guarantee success. His approach moves project success away from the project manager to the project owner having responsibility. Again, this reinforces that the project manager should not be the only viewpoint sought, but also those of other stakeholders involved in a project, including the project owner. Turner and Zolin (2012) claim that evaluation of success across multiple stakeholder groups is rarely conducted. They assert that project success and its criteria must encompass “the perceptions of multiple stakeholders” as “inappropriate evaluation of the success criteria of an existing project could misdirect the project’s decision making, de-motivate employees and establish an unproductive organizational culture” (p. 13). This is reiterated in Turner (2014a, 2014b). They do not specify the stage of the project when evaluation takes place, but the implication that the stakeholder view affects decision making indicates that evaluation takes place at more than one time.
A gap in Turner’s earlier work in this period is that the programme director and portfolio director are not differentiated and these could be within either the senior management or project core team groups. Furthermore, other stakeholders within an organization involved in the project (e.g., business departments such as finance and marketing) have not been mentioned. Therefore, these four groups (board, programme director, portfolio director and other organizational involvement) need to be defined as being included in either another group or additional groups created as they are involved in the project process.

Bryde et al. (2013) created success criteria for construction projects using content analysis of the literature. Their findings were geared to help project managers report cost reduction; they noted control as important and the challenge to engage stakeholders, but omitted to ask both project managers and additional stakeholders their perceptions.

Lech (2013) proposes success criteria from an organizational perspective for ERPs. His mixed methods study, which surveyed sponsors, members of the steering committees and project managers, found that organizations acknowledged criteria, but did not attribute them as ‘determinants of success’ for achieved goals e.g. if a project’s time, cost and quality differed from the plan, this was considered a success in the organization, but would be deemed a failure in the literature. He determined that a project was successful if it met “business/organizational goals (i.e., product success) and functionality/schedule/budget met, or functionality/schedule/budget adjusted for uncertainty (e.g., business change and project planning)” (p. 274).

Basamh et al. (2013) applied Pinto and Slevin’s ‘diagnostic behavioral instrument’ to examine project and change management practices in Government Linked Companies in Malaysia. They found that there was a need for more considerations of human resources and resource allocation. At no point do they define success or present an explanation, critique or basis of selection of only six of the 10 factors from Pinto and Slevin’s instrument. They claim to study critical success factors, but discuss the results in the context of understanding different criteria. This suggested that in 2013, the issue of using the terms ‘factors’ and ‘criteria’ interchangeably without understanding was still prevalent. Their study states they examine multiple stakeholder groups, including project managers, team members, change managers and top managers, but this is contradicted as the survey was only sent to project managers and team members. Further, they do not provide a breakdown of the 30 respondents, meaning that one group could bias the results. As the study was based on a survey, there was no opportunity for elaboration of answers or gap identification in the instrument, therefore, the results are based on the instrument questions and presents no new information.

Basu (2014) conducted a mixed methods approach to examine the role of quality in the ‘iron triangle’. This examined key stakeholders but only through project and programme managers. He found that project quality was defined by achieving customer requirements and “quality of the product (design specifications), the quality of management processes (conformance to specifications) and the quality of the organization (leadership, skills and communication)” (p. 185).

Locatelli et al. (2014) investigated complex projects in terms of time, cost and quality/benefits. They suggest the application of a systems engineering approach to the governance of projects and stakeholder management to enhance performance. Further work was proposed into organization structure and culture for complexity, but they do not consider project success dimensions. This raised the question of how they aim to improve governance without the need to understand stakeholder’s perceptions of governance and success.

Mazur et al. (2014) examine the project manager’s personal attributes and project success. They found that emotional intelligence was related to the strength of relationships with other stakeholders, but again, they did not ask any other stakeholders.

Missonier and Loufrani-Fedida (2014) examine stakeholder analysis and engagement related to Actor-Network Theory in IS projects. This asserts that stakeholders should form alliances to achieve goals. Their empirical work examines ‘actors’ but they do not state who they are. They state the importance of stakeholder involvement, engagement, communication early in the project and development of relationships in projects and attribute failure to ‘inappropriate social interactions’. They offer an approach for project managers to assess stakeholder project networks, but not in the context of success.

Johansen et al. (2014) examined how stakeholders should be managed when setting objectives to achieve project success. Uncertainty, risk and opportunity are discussed in the context of involving stakeholders and senior management. They consider which internal and external stakeholders benefit if change in the project occurs e.g. “Who will benefit if the market conditions become more favorable in the execution period?” (p. 587), but note that the management of opportunities requires senior management involvement, which is problematic. They do not conduct empirical work.

In the author’s previous work in 2014, it was found that current and previous empirical work to measure project success has centered on the project manager’s viewpoint using a questionnaire tool at a single point in the project life cycle e.g., the initiation stage. This is not the same point used by the end user which tends to evaluate the success of a project when it is completed, which raises the question whether the view of the end user has a significant effect on the number of project failures. In this century, there has been a shift towards the inclusion of management of stakeholder expectations, in addition to the project manager view to define project success. There is a focus on stakeholder satisfaction and a move towards examining the project owner’s perception of success. However, the majority of studies concentrated on the project manager’s view of success and not other internal/external stakeholders of an organization (e.g. senior management, business departments such as finance and marketing or the external environment). It concluded that an appropriate measurement method must be found which is valid and easily understood by those who were not directly involved in the project.

Serrador and Turner (2015) examine the relationship between efficiency and overall success. They surveyed 1386 projects, which revealed that there was 60% correlation efficiency between
time, cost and quality and stakeholder satisfaction. In a personal communication with one of the authors, Turner (2015) stated that information was gathered to demonstrate the lack of agreement between stakeholders about the success dimensions, but was not published. He confirmed that the data showed that there were strong differences of opinion between the stakeholders about what the success dimensions were and that the factors each stakeholder recognized as important were related to the criteria they thought were important.

As illustrated, the literature discussed touches on aspects of this research, but this study is still valid as empirical research comparing multiple stakeholder groups (e.g. users and senior managers), taking account of differing points of view to improve mutual understanding, is rare.

4. Conclusions

The overall purpose of this paper was to identify a measurement method to achieve a greater understanding of how senior management, project core team and project recipient stakeholder groups perceive project success, in order to make recommendations about achieving success.

Key findings in the reviewed literature indicated a gap for this study to focus on the different perceptions of project success by different stakeholders. Most published work concentrated on the project manager’s perception of success and not that of other stakeholders. When interpreting success, the analysis revealed a number of pairs (e.g. executive and user) who had no dimensions in common. This suggested a lack of agreement in perception of project success dimensions between stakeholders, highlighting discontinuity between senior management, project core team and project recipient and provided a case for empirical work.

The reviewed literature revealed that the most cited instrument to assess project success was Pinto and Slevin’s (1987) quantitative survey ‘diagnostic behavioral instrument’. An in-depth investigation was undertaken that compared the project success dimensions and data analysis/collection techniques, which were recognized or used in other literature, with those of the ‘diagnostic behavioral instrument’. The results from thematic analysis identified 10 project success dimensions which were split into two main themes related to project success; one referring to the stakeholders involved in a project and the other related to project structure. The 10 dimensions were compared to Pinto and Slevin’s (1987) ‘diagnostic behavioral instrument’, which had also been used as the basis of many subsequent publications. Seven dimensions were the same, but three new dimensions were identified, two in the stakeholder group; benefit to the stakeholder group, client/customer specific issues and the other related to project structure; time/cost/quality. These gaps along with the dimensions from Pinto and Slevin’s instrument formed interview questions, therefore creating an adapted method to investigate perceptions of project success.

The definition of project success from this study goes beyond the technical definitions offered by the reviewed literature. Furthermore, this study addressed a gap in that empirical research comparing multiple stakeholder groups, taking account of differing points of view to improve mutual understanding, was rare. The original contribution to academic knowledge improves the rigor of project management research, which identifies multiple stakeholder groups’ perception of project success dimensions. It was found that all stakeholders do not value all dimensions of equal importance to achieve project success and therefore, relevant dimensions varied between stakeholder groups with different perspectives in the literature.

5. Directions for future research

Future work is proposed to conduct in-depth interviews based on the questions created from the thematic analysis. Examination of the interview responses will enable a survey to be designed that is appropriate for a range of stakeholders as well as the project manager. It is proposed that the survey results will create discussion documents to aid in formally recognizing the important dimensions for project success. These will be valuable because they create an opportunity for stakeholders to stay dynamically engaged, collaborate, capture and manage expectations to monitor possible changing priorities of different stakeholders of success dimensions. The documents will also aid in identification of individual stakeholder issues, as opposed to overall project issues and will also identify stakeholders who may cause difficulties with opposing views. These will create a focus on what success dimensions the organization needs to concentrate on throughout the project for each stakeholder group. This provides organizations with the knowledge necessary for effective problem-solving to structure and reconcile different stakeholder views to ensure that all stakeholder groups are in agreement, to aid in successful project delivery.

It is recognized that the literature reviewed in this study is specifically limited to project management literature which identified areas for development linked to stakeholder groups. It is acknowledged that future work could combine the results with stakeholder management literature in mainstream management theory and other emerging conceptualizations of projects as networks, power relations, responsibility, globalization, instability, corporate social responsibility and changing forms of work organization.

It is a noted limitation of this study that project success dimensions could be analyzed in a typical four stage project life cycle which could affect the results. However, future work is recommended to apply and compare this work to other notable models such as Morris (1997) ‘management of projects’ paradigms. This will encompass the four stages in a wider setting, including front-end and institutional management and would add new aspects to the implications for success dimensions in a larger context.

Finally, this study provides a set of articles. It provides the ‘what’ (the success dimensions and stakeholders perception of these), the ‘who’ (the identified stakeholders) and the ‘when’ (reviewing the success dimensions literature over time) (Davis, 2014). This article answers the ‘how’ (through a review of the current methods used to measure project success dimensions). Future articles will address the ‘why’ (empirical research to create and validate a proposed method to establish why the selected dimensions are recognized as important by the different
stakeholder groups) and the ‘where’ (by empirically studying stakeholders in both public and private organizations). The ‘so what’ aims to achieve a greater understanding of how project success dimensions can be measured, to facilitate a shared stakeholder view of project success, as a successful project inspires motivation, improves communication, better team working and an increase in productivity.

References


Turner, R., 2015. Re: Project success and stakeholders [Email sent to Kate Davis, 11th March 2015].


