

Aligning Project Success with Organizational Strategy within a Project-Based Organization¹

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Abstract

Whereas organizations that are not project based make their income mainly through production, project-based organizations derive their income from projects. In companies where the primary business consists of performing projects for clients, it is projects that generate both revenue and profits (Rietiker, 2013). Moreover, for a project-based organization, strategic success equates primarily with financial success derived from project execution, not from the project deliverable.

This obviously means that finding reliable ways of measuring project success is a key consideration in project-based organizations. However, if all we are measuring is the traditional variables of time, cost, and scope, then the assessment of project management we come up with will address only tactical (operational) value – not strategic value. (For an elaboration of this truth, see Jugdev and Muller, 2005.)

For a project-based organization, project execution is an essential area that differentiates it from its direct competitors. The problem faced by most project-based organizations is that they do not have a consolidated project performance management system in place; and thus rely mainly on financial KPI's to determine project success.

The improvement of performance in project management has to be supported by goals and objectives that are aligned with the strategic intent of the organization. Supportive of the organization's strategy, therefore, is the development of a Project Scorecard that considers factors in addition to financial KPI's, including intangible ones.

This paper discusses research, undertaken within a project-based organization, which was used to develop a Project Scorecard based on the Balanced Scorecard methodology developed by Robert Kaplan and David Norton.

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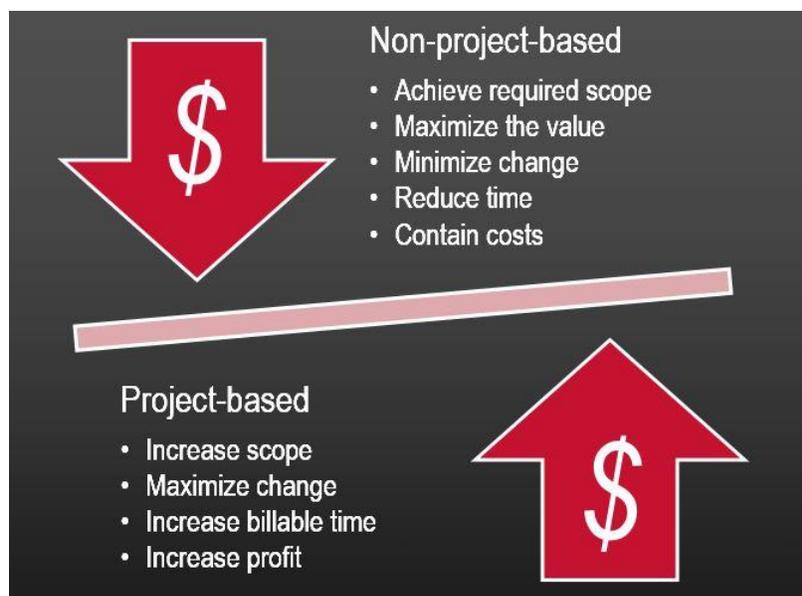
Defining project-based organizational project success

Achieving the parameters of the triple constraint of schedule ('time'), cost, and scope is the accepted classical definition of project success (Kerzner, 2013). For organizations that earn their income mainly through production that is not project based, this is appropriate and adequate. For project-based organizations that make their income by executing projects on behalf of clients, however, project and organizational success equates to financial success (i.e. maximizing the profit and invoiced amounts).

This concept of project success is entirely contradictory to the accepted definition in place until recently. From day one, project managers are taught that the triple constraint and controlling schedule, cost, and scope represent an ideal objective for every project. Thus the need to distinguish between project success for non-project-based organizations and project success for project-based organizations.

At this point, we need to ask: if project success is not based on the triple constraint, then what are the definitions of project success for a project-based organization where financial success is the objective?

Figure 1: Comparison of organizational project objectives



It can be seen from the diagram above that the objectives of a project-based organization are often the opposite of those of the non-project-based organization.

Let us look at the example of a project-based organization that executes a project on behalf of a customer who has stipulated that the project must be operational within 12 months, and should cost no more than \$1 million. The project manager increases the project scope, with change orders of \$250,000, and takes one and a half years to complete the job. He exceeds his margin target of 35% by achieving a margin of 40%. For the project-based organization, this is a highly successful project if we base our assessment purely on financial KPI's. For the customer, however, the project has failed to deliver in

terms of two primary success factors: budget and time. The project assessment, based as it is on traditional measures of success, fails to take into account whether the project fully met its intended purpose. As far as this project-based organization is concerned, the issue of purpose is of concern only from the perspective of customer satisfaction. The organization also has no interest beyond the completion of the project and, in general, does not benefit from the operation of the deliverable.

One can argue that if project-based organizations rely mainly on financial KPI's as an indicator of success, this can result in an entirely inadequate view of reality, one that in fact impedes both project success and organizational success.

If the project-based organization has adopted a purely short-term, one-dimensional view of project success based only on project financial KPI's, can it really consider the project a success? If a project has not delivered an adequate level of customer satisfaction, has the organization not compromised achieving its long-term organizational success? What are the implications of ignoring other, less tangible factors such as customer satisfaction, internal process or capability improvements? Or of considering these factors in isolation from the rest?

Moreover, what additional factors should be considered as indicators of project success? And once we have defined these factors, how should we measure and integrate them in our assessment of project success?

The problem for project-based organizations

Deming (2014) has stated that running a company based on visible figures only is one of the 'deadly management diseases', and this view certainly applies to project-based organizations. Relying purely on financial KPI's can result in a lack of understanding of the critical success factors contributing to the organization's strategy; and in an inability to link goals, measures, targets or initiatives to organizational strategy. It is therefore critical for the project-based organization to define project success in terms of measurable criteria other than, and in addition to, its financial goals. Not considering alternative KPI's affects the organization's strategy in a number of ways:

1. Middle management, which is tasked with formulating and implementing strategy, lacks an understanding of which KPI's are critical to the success of the strategy. This happens because the methods used do not deliver the type and depth of information that would enable a full comprehension of the critical success factors.
2. Executive management is unable to determine the underperforming sectors. Because the performance-measuring mechanisms currently used provide only a one-dimensional view, there is a lack of understanding of the cause-and-effect relationships between key performance variables. This one-dimensional view escalates the problem of not being able to identify under-performance. An understanding of the KPI's, and of their interactions with one another, is needed if the goal of effective project management and execution is to be realised.

3. If an appropriate approach is not devised, then at the operational level project managers are unable to benchmark their performance or improve the successful delivery of the projects under their control. Project execution is an essential area in differentiating a project-based organization from its direct competitors. The organization will be unable to meet its strategic objectives if it is unable to improve performance in project management and execution. Moreover, its project managers will be unable to improve performance using only the current, uncoordinated performance measurements.
4. Another weakness of the non-integrated KPI approach is that it provides a limited view of whether or not the organization is meeting its strategic objectives; and that it fails to offer a clear picture of the underlying critical factors. In these circumstances, the organization's managers will have no option but to employ an uncoordinated approach to decision-making, as they lack the mechanisms that would allow them to determine whether the organization is, in fact, achieving its strategic objectives.

The result of this ineffective approach, therefore, is that the organization is unable to link its goals, measures, targets or initiatives to its strategy. Without an integrated approach to calculating both tangible and intangible factors, the organization **will not be able to improve project delivery and will have difficulty in achieving its strategic objectives**. It needs to address this problem in order to be able to improve project delivery and deliver projects that fully meet the requirements of its customers.

Having done this, a project-based organization will then be able to provide a mechanism for the **prioritizing of improvement initiatives**. If an appropriate scorecard can be assigned to those relevant aspects that reflect its objectives, measures, targets, and initiatives, the organization will be able to align its various activities to conform with its general strategic plan.

In summary, the problem is that without a consolidated measure of project success (a project-performance management system), the organization has only a one-dimensional view of its ability to perform. Furthermore, the authors of this presentation believe that there is competitive advantage to be gained from an approach where other, non-financial factors are included as measurements of project success.

Project-based organizational strategy

For *any* organization – not only project-based organizations – the ineffective translation of strategy will almost always prove to be a severe constraint in providing the conditions for success. It is also likely to be accompanied by a misalignment between the operational goals and objectives if the project-based organization relies only on financial KPI's to determine project success. It is therefore critical for the organization to clarify its mission and vision; define its organizational strategy; and communicate that strategy to the managers responsible for its implementation through a set of strategy-aligned KPI's.

A methodology that can be used in pursuing this wished-for alignment is **strategy mapping**.

Robert Kaplan (2004) describes a strategy map as a visual representation of an organization's strategy. Together with David Norton (2004), he developed a strategy map for the business arena. According to the two authors, they had decided to use the method of a strategy map for three main reasons:

- to link processes to desired outcomes;
- to evaluate, measure, and improve the processes most critical to success; and
- to target investments in human, informational, and organizational capital.

A strategy map thus aligns an organization's processes, its people, and its information technology, in order to deliver improved performance.

The process flow begins by clarifying an organization's vision at the executive level. Once consensus has been obtained at this level, the strategy can be communicated to the organization as a whole, and linked to its operational goals. When this has been achieved, departmental managers can set targets, allocate resources and establish milestones. Implementing the plans means moving to a phase of monitoring that provides feedback as to whether the organization is achieving its stated vision.

So what are the strategies that should be employed by project-based organizations?

Examining the vision statements of a number of project-based organizations a common theme soon emerges, with the following examples being typical:

"Built on successfully delivering projects in a safe, efficient, and economical manner."

"Uphold our global reputation for undisputed excellence in design and project delivery."

"To be the preferred global provider of technical, project, and operational support services to our customers."

"Use our proven project-management methodology to help reduce project risk."

These statements share the common theme of achieving excellence in project execution and delivery, and do so because project execution is an essential area of operation through which an organization can differentiate itself from its direct competitors. Furthermore, two things:

1. Achieving excellence in project execution provides the basis for improved profitability and competitiveness; and
2. In order to achieve this excellence in project management, it is essential that the organizational vision be translated, ultimately, into the definition of the operational goals.

In broad outline, these are the concepts and advantages that Kaplan and Norton proposed:

- Developing a project-performance management system based on metrics that are aligned with the strategy can provide the platform an organization needs to achieve excellence in project execution and delivery.
- Creating alignment with the strategic goals of the organization will change the way projects are executed, by identifying operational project goals other than those focused on financial metrics.
- Extending the organization's reliance on financial KPI's to a broader array of KPI's has what can be claimed to be a "cause-and-effect" result on the success of individual projects and thereby on the success of the organization as a whole.

Developing the project scorecard

Developing the project scorecard typically means understanding two issues, and determinedly addressing them:

1. That the organization does not have a consolidated measure of project success (a project-performance management system); and
2. That it is necessary to develop a scorecard that is aligned with the organization's strategy (i.e. with the creation of project excellence).

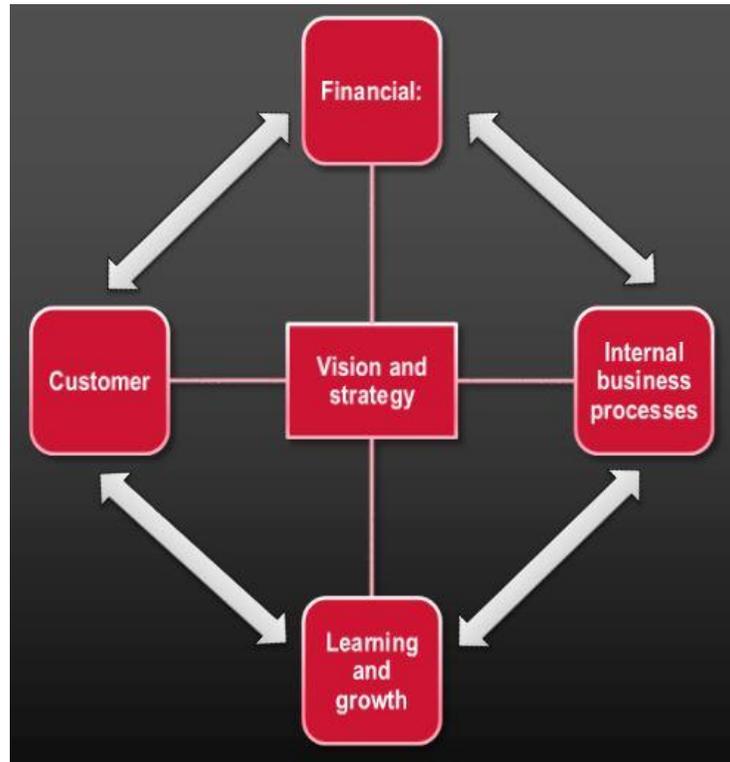
Kaplan and Norton (1996) developed the Balanced Scorecard (BSC) as an effective mechanism to (a) support organizational strategy, and (b) translate a company's vision and strategy into a coherent set of performance measures.

In the opinion of the authors of this paper, the BSC is an ideal mechanism for developing a Project Scorecard. Firstly, it assigns equal weight to all critical aspects in the management and execution of a project. Secondly, because the BSC is focused on information relating to the implementation of a strategy, its application supports the achievement of organizational strategy.

The four perspectives of the BSC are:

1. financial measures
2. customers view
3. internal business processes
4. knowledge, learning and growth

Figure 2: The Balanced Scorecard



Source: Kaplan and Norton (1996/2007)

Thus the BSC provides a measurable and understandable framework, and the result is that the overall organizational strategy becomes achievable. A project-performance system based on a BSC potentially transforms an organization's strategic plan into goals and objectives that not only provide performance measurements, but also enable individual project managers to align their projects' objectives with the strategic intent of the organization. Stated another way, the use of a BSC removes the traditional sole focus on financial KPI's and motivates project managers to consider the strategy of excellence in project execution.

Norrie and Walker (in 2004), and later Keyes (in 2011) suggested that, by creating a better link between project vision and business strategy, a BSC framework could improve the ways in which an organization develops its project goals and objectives. Currently, most project-based organizations do not have a consolidated measurement of project success that includes non-financial metrics.

As already stated, if we remain with traditional financial metrics in assessing project performance, our ability to assess what is truly going on in the organization will be severely limited. On the other hand, an assessment system based on adding strategic non-financial measures of performance to the existing traditional financial metrics will achieve a more "balanced" perspective of project success.

Only once a consolidated view of project success is achieved can an organization benchmark and monitor its performance, and identify opportunities for continual improvement.

This presentation discusses qualitative research that was conducted within a project-based organization with the intention of developing a Project Scorecard that could provide insights into the cause-and-effect relationships between four key aspects:

1. knowledge, learning and growth
2. business processes
3. customer satisfaction
4. financial success

These will be discussed in a lot more detail just a little further on.

Because it was exploring cause-and-effect relationships, the research chose to use qualitative research rather than quantitative research. Qualitative research focuses on gathering mainly verbal data (rather than measurements) and allows one to test (a) cause-and-effect relationships between various components, and (b) the strength of such relationships.

The research, therefore, was structured to determine, firstly, the relationships among the components that would comprise the Project Scorecard, and, secondly, the importance and potential weighting of each component.

Project Scorecard perspectives

Applying a Balanced Scorecard approach in creating a Project Scorecard relies on the cause-and-effect relationships between the following aspects:

1. knowledge, learning, and growth
2. business processes
3. customers' view of the organization
4. financial achievement

In the context of developing a Project Scorecard, these can be elaborated on as follows:

Knowledge, learning, and growth. This perspective addresses project-management capability and competency; and obviously requires investment in skills development in order to create the foundation of successful project delivery.

Business processes. In executing a project, the accepted business processes followed are those of the Project Management Institute's Project Management Body of Knowledge (PMBOK). Certainly for project-based organizations, implementing PMBOK project methodology creates a higher level of success in project delivery.

Customers' view of the organisation. Our research identified three potential metrics to include in the Project Scorecard being developed: (a) customer satisfaction, (b) customer loyalty, and (c) customer lifetime value.

Financial achievement. Ultimately, and even though we have made a strong case for intangible factors as valid and valuable indicators of project success, the financial perspective remains the primary indicator of success for any project-based organization.

Knowledge, learning, and growth

The Project Management Institute (PMI) (2007) considers that competent project managers consistently apply their project-management knowledge and personal behaviors to increase the likelihood of delivering projects that meet stakeholders' requirements and contribute to project success. When focusing on delivering a project, project managers bring together their knowledge, skills, personal characteristics, and attitudes. For a project-based organization, therefore, the assessment and development of project managers' competency are significant in achieving the goal of delivering project excellence.

The authors of this paper propose that the PMI's Project Manager Competency Model (PMCM) be utilized as an assessment tool in forming the Project Scorecard, since it reflects the cause-and-effect relationship between skill and project success, and identifies specific KPI's. For a project-based organization to be successful in delivering projects, its project managers should in fact rate highly on the PMCM assessment.

The primary purpose of the model is to establish a methodology and roadmap for developing and/or acquiring project-management talent, and for building individual and organizational competency in this area. The PMCM model is well suited to contributing to the formation of the KPI's relevant to the development of the Project Scorecard, as it focuses on providing a structured assessment and career-development path through three aspects: (a) training, (b) mentoring, and (c) on-the-job experience.

The assessment of project managers can be a significant source of data for the Project Scorecard. Of value as a stand-alone tool, it is even more useful when incorporated into the Project Scorecard. The model also complements the Project Scorecard in defining and developing the competency of project managers. It can also be used to determine the level of project manager required for a particular project.

The research identified three particular aspects that contribute to the competency and capability of a project manager: (a) experience, (b) soft skills, and (c) domain expertise. The combination of these three factors results in a cause-and-effect relationship between competency and capability, and, ultimately, in project success.

Also pinpointed by the research was the fact that project managers' on-the-job experience was an important contributory factor in project success – much more so than formal certification. Formal

qualifications were not necessarily a significant factor in achieving project success. Therefore, although it is necessary to include certification in the Project Scorecard, its weighting is not necessarily significant.

Formal training, therefore, should not be a requirement for the position of project manager to the extent that project-based organizations should refrain from hiring a project manager unless he or she has PMP certification. The lack of formal certification should also not limit a project manager's progression within a company.

Thus, by indicating that PMP certification was not particularly important in the creation of project success, the research findings contradicted the widespread perception of PMP certification as a meaningful indicator of competency. What made for greater effectiveness in a project-management role, however, were interpersonal skills and the outlining of interpersonal behaviors. Besides a natural ability for project management, it was without doubt competence in soft skills such as communication, leadership, the ability to motivate a team, and interpersonal communication that contributed to project success and could be used as relevant metrics in the Project Scorecard.

The research also indicated that knowledge of the industry or domain expertise contributed to the effectiveness of the project manager and, ultimately, to project success. Although opinions gathered from our research differ on the requirement for domain expertise, the research yielded a general perception that project managers were more successful when managing projects in which they drew on their own industry-specific background knowledge.

This revealed that there were potentially three KPI's that could form part of the Project Scorecard: (a) domain expertise, (b) technical expertise, and (c) project-management skills. It may be necessary to adjust the weighting of each of these in the Project Scorecard, depending on the particular requirements of a project – for instance its individual value, size, complexity, industry or technology.

In developing the Project Scorecard model, therefore, one needs to be aware that one may need to adjust the weightings of the various aspects and perspectives – a single, generic model may not always be possible.

In addition to these potential KPI's, significant factors identified concerning the development of project managers were (a) training, and (b) mentorship. Training provides understanding of, and consistency in, project processes. At a functional (project-management) level, and based on the Project Management Book of Knowledge (PMBOK), this consistency of execution was also indicated as being a key factor in project success.

Business processes

In support of the strategy of creating project excellence and developing KPI's from this perspective, one has to consider whether PMBOK methodology is consistently and effectively implemented, especially as this will contribute to the cause-and-effect relationship that results in project success. Compliance to

PMBOK contributes to project success primarily because it provides a framework, or a methodology, within which to conduct projects; and thereby offers the project manager a particular level of consistency and guidance. Furthermore, the policies and procedures, and the theoretical elements, of project management provide the platform which organizations need to execute larger projects successfully.

The effective application of PMBOK reveals a crucial aspect for our consideration: although PMBOK contributes to successful projects, we cannot assume that adherence to it is the only criterion for success. At the same time, understanding the intent of the business processes provided by PMBOK determines effectiveness, and will ultimately be the differentiating factor. One can argue, therefore, that there are cause-and-effect relationships between the importance of experience and the natural abilities we identified when we looked at the knowledge, learning, and growth perspective earlier on.

In summary, therefore, PMBOK compliance and PMBOK effectiveness can be used to derive aspects of the Project Scorecard.

Customer

The importance of customer satisfaction to a project-based organization was apparent from the research.

Moreover, specific additional tangible factors were identified, and were shown to contribute to customer satisfaction by delivering exactly what had been promised – within budget and on schedule.

Nevertheless, although this research considered other factors besides those of scope, cost, and schedule – in other words, those of the classic triple constraint – these three criteria retained their validity in measuring project success.

Most project-based organizations already focus on customer satisfaction. It is their measurement of this important aspect that is at issue. In the main, customer-satisfaction measurement seems to be one or all of the following: (a) ineffective, (b) hard to evidence, or (c) used in isolation from other key aspects of the business.

The lack of analysis and feedback around customer satisfaction may indicate various things. Firstly, it may be an indicator of difficulty in obtaining valid customer feedback. Secondly, the organization concerned may hold the opinion that customer satisfaction surveys are not particularly useful in obtaining meaningful data. Thirdly, it may happen that the data obtained is not being used as it should be – to drive improvement.

The perception that data relating to customer-satisfaction surveys lacks significance has to be a consideration when incorporating customer satisfaction in the development of a Project Scorecard. In this context, customer loyalty (repeat business) is often a more realistic indicator of success than is customer satisfaction.

Related aspects of customer loyalty are (a) customer lifetime value (CLV), and (b) customer profitability (CP). Although they are considered to be strategic drivers of success, they are seldom measured. The importance of CLV and CP is in providing indirect benefits.

An interesting cause-and-effect relationship revealed by our research was that of customer satisfaction and financial success at the corporate level. This relationship has significant impact on company reputation, brand image, and share price. It also raises the interesting concept of the cause-and-effect relationship between how well the organization is seen to be delivering projects in the industry, and the effect that this perception has on the organization's share price. So although customer satisfaction has a cause-and-effect relationship on an individual-project basis, it can be viewed as having *additional* cause-and-effect relationships at a corporate level. This indicates that organizations are more successful when intangible factors such as customer satisfaction, loyalty, and lifetime value are used to determine measures of success; and potentially less competitive if only tangible (financial) KPI's are used to measure project success.

The most significant cause-and-effect relationship identified by the research was that between customer satisfaction and project financial success. Most of the project managers interviewed rated achieving customer satisfaction as being more important than financial success. The logic behind this was that project success cannot be achieved without customer satisfaction.

The following were noted as potential metrics to be incorporated into the Project Scorecard:

1. customer satisfaction
2. customer loyalty (repeat business)
3. customer lifetime value

Financial

One cannot consider that a project has been successful for a project-based organization if that organization has not achieved financial success through the project. Currently, financial success is considered to be a project's main measurement of achievement because financial metrics are arguably the most easily measurable and quantifiable metrics to obtain.

Determining success for a project-based organization based on financial success is certainly valid, but the analysis has identified that this factor cannot be taken in isolation. Measuring only the financial KPI's is limiting, and they should never be used as the only indicator of project success. The research indicated that a Project Scorecard required the inclusion of non-financial indicators.

The recognized financial KPI's (margin, revenue, and cash flow) were then identified for inclusion in the Project Scorecard.

The Project Scorecard model

In order to be able to start developing the Project Scorecard, a number of assumptions were made. The process started by defining the objectives of each KPI; the measurements to be used; the descriptions; and the units. The second step was to define the sources: internal documents/reports; external documents/reports; individual studies; programs; databases; and other sources. The third step will be to define how the measurements are to be derived and reported; the calculations that are required; and the assumptions in the calculation and the availability of the data. Following these steps, it will be possible to create the KPI structure.

The research indicated that highly technical projects require project managers who possess the skills needed for effective project management; and that more experienced project managers deliver a higher level of project performance. The Scorecard requires the inclusion of domain and technical expertise, and project-management skills of the knowledge, learning and growth Project Scorecard perspective. Furthermore, training and mentorship were aspects identified by the research as factors that contribute to the learning and growth perspectives.

Every project is required to be executed according to well-defined project criteria and a methodology based on the PMBOK standards. The Project Scorecard will include a measurement of PMBOK compliance and effectiveness as factors in creating project success.

Customer-satisfaction surveys map out customers' experience. Organizational project delivery and the engagement of the client are vital in deriving the crucial data required for continuous improvement. After implementation of the Balanced Scoreboard, the organization will evaluate the improvement achieved in consumer satisfaction.

Three customer metrics are required for incorporation into the Balanced Scorecard as a measure of project success:

1. customer profitability (historical profits)
2. customer lifetime value (potential future revenue)
3. customer equity (the sum of the lifetime value of a customer)

The analysis also indicated the presence of a cause-and-effect relationship between the quality of project execution, and organizational reputation and image at a corporate level. In order to include this concept into the Project Scorecard, the share price and dividend are suggested as suitable measurements. Although these could be considered financial metrics since they reflect the customer's view of the organization, here they are included under customer perspective.

The critical factor in determining project success is project margin, as project margin is vital in determining any improvements that result from the implementation of the Balanced Scorecard approach. The data obtained enable project managers to analyze the change in the method of

measuring performance, and optimization and adjustments to the elements of the Project Scorecard are predicted.

The two other metrics to be included relate purely to project performance. They are risk management (contingency use) and scope increase (through change orders). Both are tangible factors that are accepted as standard goals for any project-based organization.

Table 1: The Project Scorecard

		Measurement	Description of measurement
Knowledge, learning, and growth	Training	Project-management knowledge training	The number of hours spent training, measured by performance assessment.
	Mentorship	Project-management knowledge mentorship	The number of hours spent mentoring, measured by performance assessment.
	Domain knowledge	Assessment	Assessment score of effectiveness as determined by a pre-post-project review.
	Technical knowledge	Assessment	Assessment score of effectiveness as determined by a post-project review.
	Project-management skills	Assessment	Assessment score of effectiveness as determined by a post-project review.
Business process	Compliance	Quality gate reviews	Inversely proportional to the number of non-compliances registered.
	Effectiveness	Peer review	Assessment score of effectiveness as determined by a post-project review.
Customer	Customer satisfaction	Customer-satisfaction survey	Looks at the end-user's view of the project, based on on-time and on budget, and also on scope, quality, and responsiveness.

		Measurement	Description of measurement
	Customer lifetime value (future)	Prediction of the net profit attributed to the future relationship with a customer	The dollar value of a customer relationship, based on the present value of the projected future cash flows from the customer relationship.
	Customer profitability (historical)	The profit the organization has made from serving a customer	The dollar value of a customer relationship, based on the past value of margin on an annualized basis.
	Corporate share price	The confidence and trust investors have in the organization	The dollar value of a customer relationship, based on the past value of margin on an annualized basis. Provides an indication of the amount of past repeat business.
	Corporate annual dividend	Indicates earnings potential	Annual dividend.
Financial	Margin	Baselined to as-sold margin	Percentage increase/decrease.
	Revenue	Project revenue	The dollar value of the project on an annual basis.
	Risk management	Contingency	Percentage of contingency used during project.
	Scope increase	The increase in project revenue from project baseline value.	Percentage increase in scope.

Conclusion

There is a clear difference between the ways in which production-based organizations and project-based organizations view project success. In fact, the approaches can be described as (a) being opposites, and (b) contradicting the accepted definitions of organizational success.

When project-based organizations rely heavily on the financial KPI's of individual project to determine project success, they are ignoring critical aspects that affect competitiveness and profitability. It is just as necessary for a project-based organization to determine the non-financial intangible factors that have cause-and-effect relationships with both project and organizational success. Relying only on financial KPI's is inadequate, and cannot guarantee that the operational goals and objectives of an organization are being either defined or achieved.

Since the strategy of project-based organizations is to achieve excellence in project execution, the research reviewed in this paper was specifically related to the strategic intent of creating project excellence within a project-based organization. The research indicated that the implementation of a Project Scorecard can provide significant benefits to a project-based organization by

- changing the way projects are currently executed;
- enabling the organization to determine a consolidated view of project-success factors; and
- determining whether they are delivering according to their strategy.

Although the Balanced Scorecard has been applied extensively as an organizational tool, it has not been applied widely in the project environment, hence the importance of the research being discussed here.

The research conducted led the authors to reach a number of key conclusions:

Firstly, adjusting the focus away from solely tangible financial factors to a multi-dimensional view of project success is capable of providing significant improvements in the execution of projects. By providing an integrated measurement of project success, the Balanced Scorecard will allow the organization to focus more readily on all the factors that contribute to project success.

Secondly, a Project Scorecard based on the Balanced Scorecard methodology will provide improvements in competitiveness. If financial KPI's on their own are used as a measure of success, and if customer satisfaction and customer value are ignored, the organization's competitiveness cannot be fully actualized and will in fact be diminished.

Thirdly, introducing a performance-measurement approach to assessing project success will provide significant competitive advantage to the organization by providing benefits beyond the individual project. These are long-term customer value; enhanced reputation; and shareholder value.

Fourthly, a Project Scorecard can provide an organization with the opportunity to develop the model into a practical and valuable strategic tool. This tool can be used to evaluate past and current project performance, thereby enhancing the organization's chances of achieving increased profitability; higher levels of customer satisfaction; improved project execution; and better skills and professionalism among employees.

In conclusion, the research has allowed us to claim, as we are doing today, that moving the focus away from the goal of project financial success and towards the aim of improvement in project execution does foster the achievement of long-term organizational success.

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