

What gets measured gets done

Successfully leading profitable business change in the Oil and Gas Project Work Environment in Nigeria

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Abstract

Given the compelling array of benefits that can be derived from the application of earned value management system (EVMS), it is of great concern that this methodology is not practiced as much as it should be in modern day project management practice in the construction and oil and gas industry in Nigeria.

In this paper, the writer argues that the potential lurking in the conscientious application of EVMS in curbing corruption in the construction and oil and gas industry cannot be overlooked by serious minded profit oriented project management practitioners and business owners whose activities revolve around project management in Nigeria.

The vast collection of abandoned projects that adorn the landscape of the construction industry environment speaks volumes. The onus lies on the practitioners themselves to help reduce, if not entirely eliminate, this phenomenon by adding to their arsenal the judicious use of the earned value management system.

Key words: Earned Value Management, Earned Value, Projects; Earned Schedule

Introduction

It is tough to figure out where you are heading if you do not have a good idea of where you are. The statement 'what gets measured gets done' has been described as the 'soundest management advice' of all times (Peters, 1986:1). I agree with this statement. "What gets measured gets done" is a popular saying used to highlight the importance of performance measurement in the work environment. Performance measurements through the use of metrics in businesses around the world are often referred to as Key Performance Indicators (KPIs). Key performance indicators, according to Bernard Marr, are the 'vital navigation instruments used by managers to understand whether their business is on a successful voyage or whether it is veering off the prosperous path' (Marr, 2012: XXV).

The essence of measurement

Metrics are used as indispensable evaluation tools in performance management framework and business intelligence strategy, in various perspectives including financial, customer, sales and marketing, operational processes and supply chain, employee and corporate social responsibility perspectives.

It is true that whatever cannot be measured cannot be controlled, and whatever cannot be controlled cannot be managed. Especially is this true in the work environment and more so in the oil and gas project work environment in Nigeria. There is no gain saying that this is the very essence of why it is necessary to measure performance in all perspectives as required in the world of business today. It is important to note, though, that measurement is not an end in itself. The measured value should be a goal to achieving an objective.

The mention of the word 'control' may send shivers through the spine of some people. For such individuals, the word control connotes domination or headstrong authority. Far from it, control is all about gathering information to be able to measure, monitor and adjust the progress toward a particular set of goals that have been set and agreed upon by all stakeholders. It is about being able to take action sooner so the business will still be on target to reaching its goals.

To help better explain this concept of control, a few examples may suffice. Take the quality of the products and process as examples. Measuring the quality of the product will help to ensure that the products are meeting specifications of the customers. If they are not, control has to be instituted to ensure compliance otherwise the business will lose money for products that cannot be sold. In a similar vein, measuring the quality of the process will help to ensure that plans are conforming to guidelines, being completed as anticipated and the business needs the process is serving are still justifiable.

There has been renewed emphasis on the qualitative aspects of business in recent times in areas such as on people, customer satisfaction and so on (Peters, 1986:1). The reason for this trend, perhaps, is likely not unconnected to the lack of success in the application of the very essence of quantitative measurement of business performance.

Several success factors are required to fully benefit from a quantitative approach to business performance measurement. The following factors, although not exhaustive, can be considered as necessary for a successful implementation of a business performance measurement system.

The business plan

The business plan should be the primary guide for coordinating and controlling of business performance. The business plan should be the baseline, to begin with, against which progress can be compared or measured. The goals encompassing the tasks and budgets should be treated like milestones for business coordination and control. This is based on the assumption that the work plans and schedules incorporated all stakeholders' requirements and deliverables.

Monitoring and updating the business plan should be consistently carried out as it must reflect the current status for it to be relevant and meaningful to all concerned. A closely related factor is quality communication. This is key to business control. The objective is to keep people informed as to whether the business is on track and to get them involved. The form of transmitting information should be considered as well. Variety they say is the spice of life. As such, both formal and informal mode of communication should be adopted.

Some may argue that not everything can be measured in a business setting. That may not be exactly right. Most things as it relates to business performance in a modern world today are measurable. Let us look at the areas of customer, innovation, people and leadership as examples for a moment. In the customer arena, a quantitative measure of customer satisfaction is possible and has provided a better lead indicator of future organizational health than profitability or market share change to many organizations (Peters, 1986:1).

Measurements like listening to the customer for a specified percentage of total time in a given period, calling customer a number of times in a week, participating in a specified number of joint problem-resolving sessions with customers and so on are metrics that tie-in well with the customer satisfaction index metric.

In the innovation arena, adding a specified number of differentiators to a product or service are measurable. These could include speed of delivery of service, cycle-time for product development and so on.

For people, tying incentive compensation to customer satisfaction index is a measurable metric. Others include profit sharing (bonuses), quality and productivity based incentive compensation. Eliminating blockades to enhanced performance like some rules and regulations, lengthy manuals by a percentage are measurable people oriented metrics (Peters, 1986:2).

The leadership commitment to customer satisfaction can be linked to the amount of time spent in joint problem-solving sessions with the customer, the number of calls made to the customers each week, the amount of time managing by wandering around, say 40

per cent of the time are measureable indices of quality leadership (Peters, 1986:2). Interestingly, the process of assigning measures to business aspects of interest to the manager is equally measureable! The oil and gas project work environment in Nigeria stand to benefit greatly from an improved attention by business leaders to the axiom – “what gets measured gets done.” Indeed, what gets measured gets done.

Lessons for Project Leaders

Granted, projects exist in order to end after achieving the desired deliverables thus its environment is quite different from what obtains in the larger organization – the so called ‘permanent organization’ – which strives for continuous improvement. This difference, sometimes overlooked by project leaders, is nonetheless not trivial and thus by the very nature of projects, the use of appropriate metrics to capture performance measure cannot be stressed enough.

A project is a major goal composed of interrelated activities with distinct start and finish dates that has been planned to guzzle resources and requiring funding and information for management decisions (Ward, 1999).

As projects deviate from the plan, so do the schedules change. The plan becomes outdated if we do not measure how we are doing against the project plan. Unless the project team is mindful of what is going on, they will constantly be in a reactive mode. Effective progress measurement helps to identify the variances to the plan early enough to either alleviate the impact or take advantage of the prospect (Buntrock, 2003).

Earned Value Management

In project management practice, a widely acclaimed means of evaluating efficiency, effectiveness and results is the earned value management system (EVMS). Earned value management (EVM) techniques are used to gauge the extent to which the program is achieving its strategic goals and objectives.

According to AACE (2014), EVM ‘integrates scope, schedule, and cost along with budget and performance measurement within a project framework’ and is used as ‘a method for project progress measurement analysis and control that combines work scope, schedule, and resource evaluation to enable objective comparison of the planned schedule of the project to the work completed along with its actual costs’ (AACEI, 2014:2). The Project Management Institute (PMI) in the PMBOK (2013:217) defines EVM as a ‘methodology that combines scope, schedule, and resource measurements to assess project performance and progress.’

Application of EVM

EVM can be employed in its simplest form on all projects, large or small, cost type, fixed-price, no matter the type of contract (Fleming and Koppelman, 2002).

The EVM concept is a 'sound management approach that once incorporated on any type of program, whether research and development, construction, production' or any other, 'provides all levels of management with early visibility into cost and schedule problems' (Humphreys and Associates, online).

Simply put, EVM stipulate that all completed work is measured against the current control estimate - budgeted plus ratified changes. This approach gives assurance that the work is measured and not the time, cost or resources spent. As a result, measurement is based on quantities. It is this value earned toward the project that constitutes the basis for communication and control. An equally valuable metrics is the Earned Schedule (ES) which is an extension to EVM. The ES idea, simply put, is to identify the time at which the amount of earned value accrued should have been earned. By determining this time, time-based indicators can be formulated to provide schedule variance and performance efficiency management information thus reinforcing the predictive ability of schedule indicators (Lipke, 2014). Project leaders now realize, from experience, that time can be controlled by controlling risk and cost can be controlled by controlling scope.

Benefits of applying EVM

Earned value methods create room for the gathering of objective information. By performing all analysis on the basis of what has been earned, the accuracy in forecasting end dates improves drastically. This is so because it allows current performance trends to be considered. Project upheavals can be seen ahead of time and corrective actions can be taken to put them out. Realistic goals can be set, and the business owner would have the right information before him, so the facts are flawless and terse (Buntrock, 2003).

Combined with an effort driven by schedule, the performance data derived from an earned value measurement system can quickly quantify the efforts necessary to mitigate schedule impacts. Poor performance in one area can sway another. By being able to translate performance trends into effort, cost and schedule, impacts can be quickly assessed. Only when we have a complete assessment can a remediation plan be developed.

Conclusion

Earned value can be based on a variety of commodities. Making it ideal for gathering data in a variety of methods, and converting it back to the plan. Earned value can be reported in terms of money, work hours, volume, weight, area and length.

It is important to realize that progress is not percent money spent or percent work hours or percent time spent. Rather, it is the actual percent of work that has physically been completed based on original quantities. In other words, one must be able to physically see what work has actually been completed. This is the best part, and herein resides the panacea for eliminating corruption that is endemic in project execution in the oil and gas industry, and indeed any industry in Nigeria.

Indeed, what gets measured gets done, and with EVMS, done right and transparently.

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