IMPROVE OIL COMPANY COMPETITIVENESS BY ALIGNING COMPANY PERFORMANCE MANAGEMENT WITH SERVICE STRATEGY FROM WELL SERVICES COMPANY

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Abstract.

Petroleum business is a highly risk business that requires high capital and high supporting technology. This business is highly depends to their business partner (well services company) support in providing excellent services to discover new field and to exploit existing field, converting oil reserves into production. Performance management system through Balanced Scorecard (BSC) helps Oil Company to establishing structure, system and processes towards Operational Excellence (OE). However, in operation level, sometimes many companies fail at implementing its strategy due to lack of alignment, communication and reviews of current strategy especially with business partner who's outside of organization. Business partners tied in with company through a service level agreement which sometimes doesn't utilized in optimum approach. This service level provided need to be aligned with company goals cascaded into operation level. A synergy between company and business partners by developing set strategies, mutual scorecard, key performance indicator & quarterly Service Level Agreement (SLA) assessment and feedback is essential. It will contribute to achieve company vision to be a world class oil company.

The objective of this paper is to share and deliver recommendation for company performance evaluation of PT.ABC, a multinational oil company, on operation management level with business partner strategy to deliver more oil production in safe operation. Review of service level agreement results and set of change mutual strategies from company and business partner based on feedback and lessons learned result. The study is conducted by comparing company performance on operation level, before and after strategic alignment in 2013. Analyze cascaded company strategy maps and balanced scorecards with services strategic from business partner. How company and business partner can create and deliver more value.

Keywords: Corporate Performance Management, Business Partner, Key Performance Indicator (KPI), Service Level Agreement (SLA), Operation Excellence (OE).

Introduction

High demand of energy from emerging market and economic recovery process in United States has brought oil price back above 100 USD/bbl post economic crisis on 2008. This condition gives benefit to oil and gas companies to generate more profit. As oil price increase, oil Companies willing to invest more in exploration, acquire new asset (reserves) and in technologies to exploit reserves into oil production. This causing cost of production increase significant due to high demand of oil services worldwide. In oil and gas industries, it's a common that an oil & gas company use third parties (well services company) to support their operation. Special equipment like hoist, rig and coil tubing unit as equipment to maintenance oil well is provided by well services company and it's an obligation for Oil Company to manage this extra resources to ensure their activities align with business strategy in order to achieve company goals.

PT. ABC is a multinational oil company which has been operating for more than 60 years in Indonesia with company vision "to be most admired global energy company for its people, partnership and performance. PT. ABC manages 6000 oil producer wells with their own complexity. As the resources grow and change of external condition (economic, politic, safety & environment regulation) this company change its organization structure in 2013. The purpose of re-organization is to focusing each department on the ground-up design of their business processes execute a competitive strategy based on Operational Excellence.

Focus on operational excellence means each department focusing on cost leadership, streamline operations and reduce cost. Previous organization contain 3 different teams manage 3 different area reservoir. This approach taken due to each reservoir has different characteristic and complexity in rock and fluid properties and hence need to be managed separately. This causing there are similar processes exists on each team for new project development, find opportunity and execute well program.

Measuring process becomes an issue to conduct an evaluation: does the process in find opportunity in A better than B or C? Since it's not an apple to apple to compare 3 different reservoir conditions and evaluate its performance.

In 2013 Company re-organize its structure based on its function. Manager asset eliminate department based on area operation and form 2 new department; Asset Development Team which its function develop new project, drilling new wells and Asset Optimization Team which its function to manage current asset of oil producer wells. Asset Optimization team split based on job function; AO-Drainage which its function finding opportunities and generate well program and AO-Work over working to ensure all well program submitted by AO-Drainage can be execute faster, cheaper and safe.

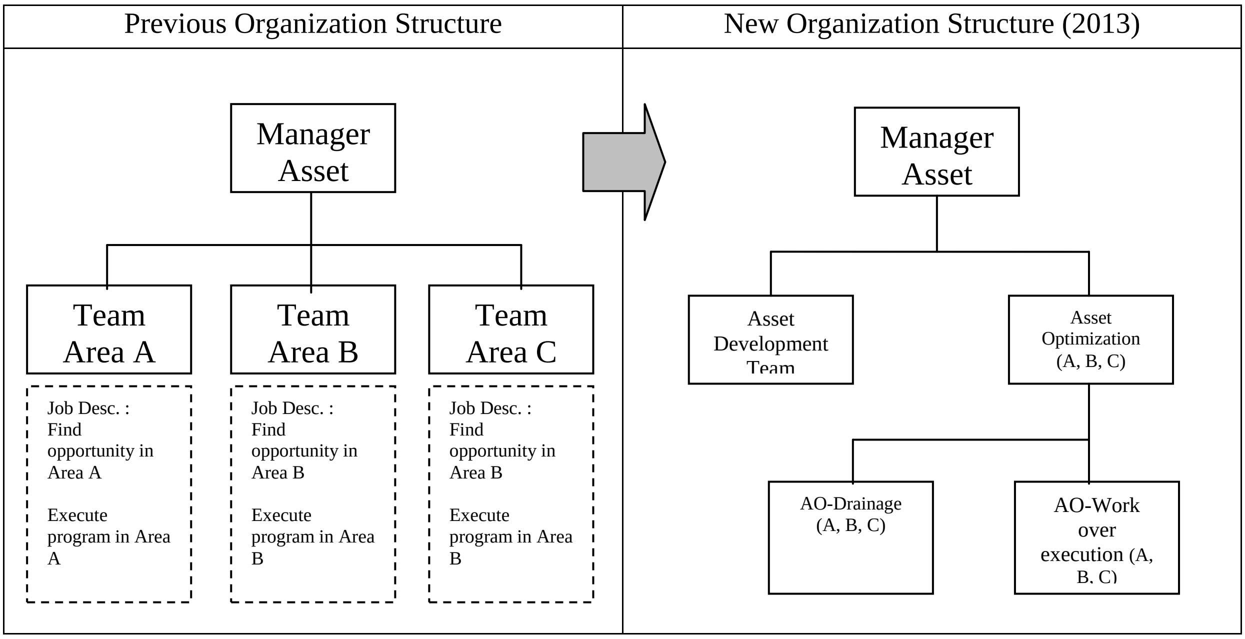

Figure 1 New organization chart

Table 1 Job function and Metric Performance

Team	Job Description	Performance Metrics
Asset Development Team	Develop new project of drilling new wells. Adding new reserves from delineation well project	- Health, Safety and Environment (0,0,0) no record of incident - Project Cost - Project Milestone - Oil Production of new wells
Asset Optimization-Drainage	Optimize current asset (Oil Reserves), speed up converting into production by finding opportunities for increasing oil production and generate well program.	- Health, Safety and Environment (0,0,0) no record of incident - Number of opportunities captured - Number of programs created - Oil gain from program created

Asset Optimization-Work over	Optimize current asset (Oil Reserves), speed up program execution	- Health, Safety and Environment (0,0,0) no record of incident - Job cycle time - Cost

New organization significantly improves company efficiency to converting reserves into oil production. However there still a missing links how company align its business strategy to its business partner's services strategy. Asset Development Team and Asset Optimization are under internal organization where company strategy and performance metric can be cascaded down for every department but this hasn't cascaded down to business partner. Business partner as well services company need to be involved in order to create more value and not just as supporting actor. Service Level Agreement is a good media to communicate company strategy and what company expectation as customer to business partner. This paper describes how company should align its performance management system with service strategy from well services company.

Conceptual Framework

Performance Management System

There are many framework of performance management system; one that many companies use is Balance Score Card. Balanced scorecard (BSC) is a concept for measuring whether the operational activities of a company in a smaller scale in line with the larger objectives in terms of vision and strategy. BSC was first developed and used in the company Analog Devices in 1987. The BSC helps provide a more holistic view of a company which in turn will help the organization to act on long-term goals with not just focus on financial outcomes but also human issues. Strategic management system helps managers to focus on performance metrics while balancing financial objectives with customer perspectives, processes, and employees.

In 1992, Robert S. Kaplan and David P. Norton began publicizing balanced scorecard through a series of journal articles and the book The Balanced Scorecard in 1996. Since the introduction of the original concept, the BSC has become a fertile ground for the development of theory and research. Balanced Scorecard helps organizations to deal with two fundamental problems: measuring the performance of the organization to effectively and successfully implement strategies. Traditionally, the measurement of the business revolves around the financial aspects, which then brings a lot of criticism. Financial measures are not consistent with the current business environment, has a weak predictive power, resulting in the emergence of functional silos, inhibiting long-term thinking, and not necessarily be relevant for most levels of the organization. Implement strategies effectively become problems. There are at least four barrier implementations on organizational strategy: a vision barrier, the barrier, limiting resources, and limiting management.

The Balanced Scorecard provides organizational elements required to move from the paradigm of 'purely financial' towards a new model in which the results of scorecards becomes a starting point for reviewing, questioning, and learning about strategies. Balanced Scorecard translates vision and strategy into a coherent set of measures in four balanced perspectives.

Service Level Agreement

Service Level Agreement (SLA) is a written contract between a provider of a service and the customer of the service. The purpose of the SLA is to establish measurable targets of performance with the objective of achieving a common understanding of the nature of and level of service required. SLA is instrument of Service Level Management, the disciplined, proactive methodology and procedures used to ensure that adequate levels of service are delivered to all users in accordance with business priorities and at acceptable cost. There are three basic types of SLAs-in-house, external and internal. The differences among the types refer to the parties involved in the definition of the SLA. The first and most common type of SLA is an in-house service level agreement. An in-house SLA is an agreement negotiated between an in-house service provider, such as an IT department, and an in-house client or department, such as marketing, finance or production. The second most common SLA is an external SLA, which is an SLA between an external service provider (third party) and an organization. Finally, an internal SLA is used by a service provider to measure the performance of the groups within its own organization.

SLA in oil & gas companies involve legal agreements between the two entities Oil Company and well service company. SLA is usually composed of several parts that define the responsibilities of the parties, where such services and provide warranty work, which is part of the SLA guarantees has level of expectations. SLA may be present level of availability, ease of service, performance, operations or level of specification for the service itself. In addition, Service Level Agreements will determine the ideal target, as well as the minimum acceptable.

Both parties (Oil Company and well services company) should define who exactly will perform this vital exercise of measuring and how SLA will be done. When recording the metrics, it is important to take the objective metrics (the numbers) as well as the subjective metrics (such as the perception of the end user group), which can be quite different from the hard figures and statistics, into account. Furthermore, non-performance clauses define what happens if the service provider does not meet the SLA objectives as stated (warnings, corrective actions, financial penalties, escalation procedures). Optional services (e.g., additional service components that are not normally provided at the time of agreement) already can be included, and reporting and administrative procedures (e.g., roles, responsibilities, communication procedures and frequency of meeting) are to be defined. Review/update procedures and processes should be included to enable the identification and proper implementation of any change required (e.g., other indicators, new technological evolutions, new organizational or service requirements and change in organizational strategy). Regular revisions to the SLA are a key factor for success, since organizations and their services are dynamic by nature. Finally, formal approvals should be included in the SLA.

A balanced SLA is a compromise between the needs, expectations and requirements of the organization (user group) and the service provision capabilities and promises of the service provider. At the same time, it must protect the service provider by limiting liability, identifying responsibilities and rationally managing user expectations.

Methodology

The study conducts through a series of observation on framework of performance management system in asset team of PT.ABC. Observation also conducted for well services company operation and review current SLA practices. Specific data of BSC, SLA and performance metric used are not presented due to information protection policy applied by PT.ABC. Hence this study only focuses on how to deliver more value through aligning current BSC and SLA, what kind of performance metric required to achieve win-win solution for both entities.

Research Finding

Comparison and review of both system (BSC & SLA) is essential in order to align both system and create more value. BSC is framework of performance measurement system while SLA is agreement of service. Purpose of BSC is to enable Organization bridging the gap between strategies. It’s combination of a strategic tool, management methodology and a measurement system. SLA, in other hand, is purely a measurement system of services. BSC has broader perspective, consist of 4 perspectives: Financial, Customer, Internal Business Process and Learning and Growth while SLA merely focuses on 2 perspectives: financial and customer. This gap on internal business process and learning growth should be managed on SLA in order to achieve company business strategy target. Detail comparison of balanced scorecard and service level agreement is presented on table 2.

SLA as performance measurement tools has a specific metric, usually in term of minimum services. The current well services operation and SLA performance metric that related to asset optimization team performance is presented on table 3.

Table 2. Comparison of Balanced Scorecard and Service Level Agreement

	Balanced Scorecard	**Service Level Agreement**
Description	Framework Performance measurement	Performance measurement tool
Purpose	Enables organizations to bridge the gap between strategy and actions, engage a broader range of users in organizational planning, reflects the most important aspects of the business, and respond immediately to progress, feedback and changing business conditions. It's a combination of: - a strategic tool - a management methodology - a measurement system	Clarify and manage internal services delivery between Service Provider and Service Receiver. It's purely a measurement system of services
Long term goal	Achieve company business strategy target as stated in company vision	upgrade service delivery performance and cut costs
Perspective	4 perspectives - Financial - Customer - Internal Business Process - Learning and Growth	Focus on 2 perspectives - Financial - Customer

Table 3 Current well services operation and SLA performance metric of PT.ABC, Asset optimization

Type of Service	**Number of Service Provider**	**Description of Service**	**SLA performance metric**
Oil Rig	3	Provide services of mobile unit of Rig (machine to drill a well bore and install sub surface well accessories i.e pump, packer, tubing etc.)	- Zero incident & near miss - downtime - Score on customer satisfactory survey
Hoist	3	Provide services of mobile unit of hoist (machine to install sub surface well accessories i.e pump, packer, tubing etc.). It is similar with oil rig with smaller unit size and lifting capability	- Zero incident & near miss - Downtime - Response time - Score on customer satisfactory survey
Coil tubing unit	2	Provide service of coil tubing unit, a self-contained multi-use machine that can do almost anything that a conventional service rig does, usually used for chemical injection purpose to increase oil well productivity	- Zero incident & near miss - Additional benefit accrued from service provided - Response time - Score on customer satisfactory survey
Wire line Services	2	Provide service of wire line, a cabling technology used by operators of oil and gas wells to lower equipment or measurement devices into the well for the purposes of well.intervention, reservoir evaluation, and pipe recovery	- Zero incident & near miss - Downtime - Response time - Score on customer satisfactory survey

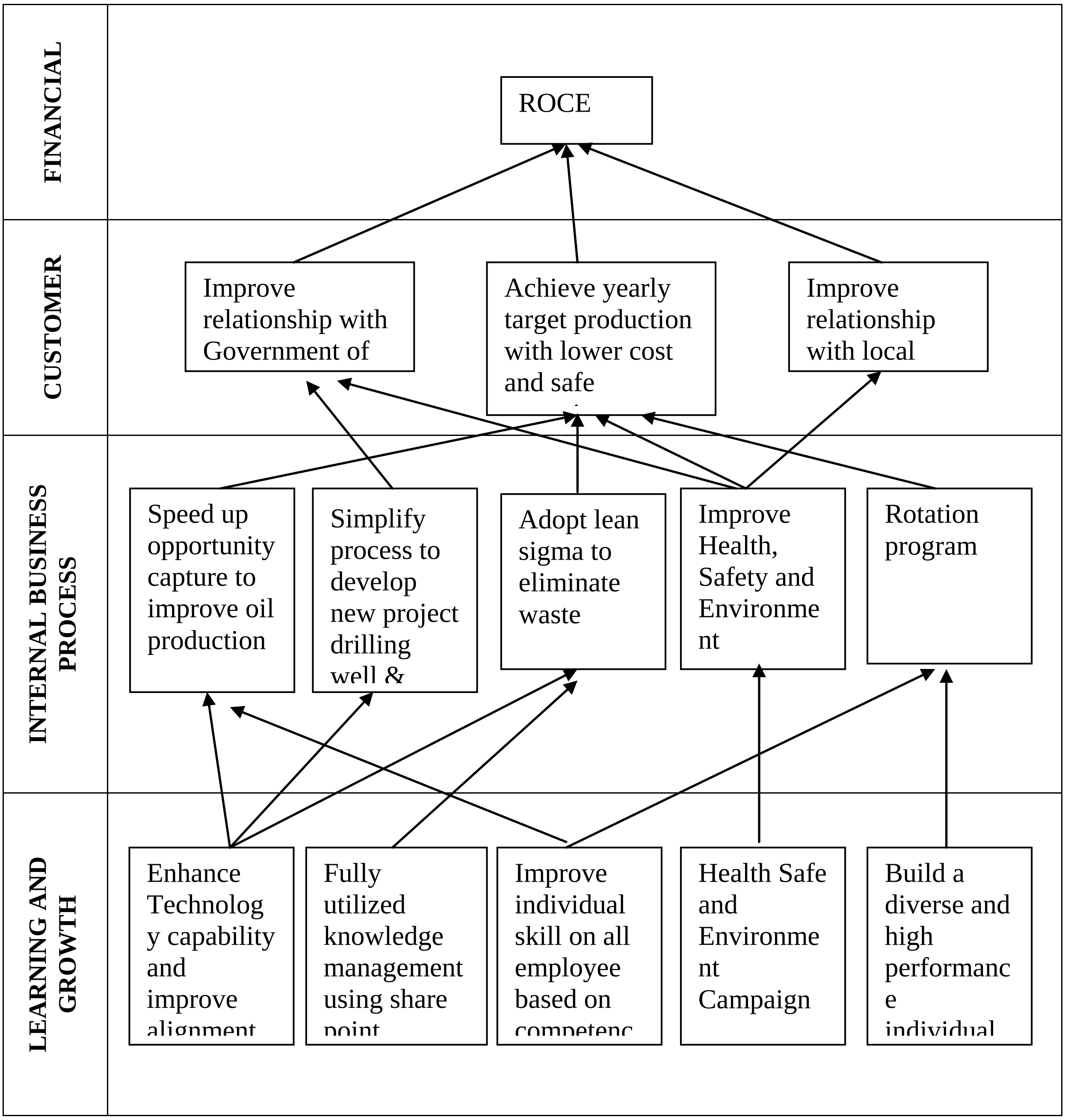

Figure 2 Linkage Model on Balanced Scorecard in PT.ABC

PT. ABC on its operation has it unique strategy to achieve its vision to be global energy company admired by its people, partnership and performance. Its business strategy is to develop leading integrated position in growth areas of the world. The enabling strategies are focusing on: invest in people, leverage technology and build organizational capability. This framework can be easily translated into balance scorecard strategy in financial perspective, as a company with high performance result will expect high ROCE (Return on Capital Expenditure). This financial perspective can’t be achieved without stakeholder engagement, consist of government as regulator and production sharing partner and local community. Internal business process for asset optimization team consists of optimization process to speed up opportunity capture until well program execution to improve oil production. Learning and growth perspective is match with enabling strategies of PT. ABC on invest in people and leverage technology. Detail on how variable in each perspective connected is presented on Figure 2.

Recommendation

Cascading BSC into Key Performance Index (KPI) can be a solution in order to align corporate BSC and service provider's SLA. Thus due to BSC has a more emphasis on strategies while KPI has a more operational view than BSC and can be comparable with SLA. From service provider perspective, SLAs are about minimal, expected and agreed quality of a service provided to a customer; and KPIs from company perspective are about desired operation efficiency and organization goals. There are similarities for both performance measures tools with only differences on level of services agreed. Both parties should work together to set mutual performance metric that can create value. This process can be conducted though Kaizen, brainstorming, share of business strategy from company, what is company want to aim in the next 3, 6, 12 months and what service company can provide to help company achieve this goal. Alignment of BSC, KPI & SLA is presented on Figure 3.

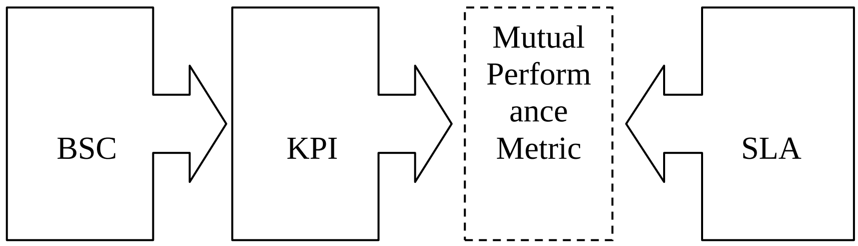

Figure 3 BSC, KPI, SLA alignment

KPIs help organizations define their performance parameters and see that they are being achieved satisfactorily. KPIs have to align with the overall goals of the company. KPIs should be selected carefully. They should be quantifiable and actionable. In the oil industry, costs are primarily related to finding, development and exploration activities. Revenues come from the sale of oil and gas. Therefore, production costs, oil exploration costs, finding and development costs can be used as the primary performance indicators.

Internal process perspective helps in finding out the efficiency of an organization-s internal processes and operations. Amount of oil spills, flaring, natural gas processing as per the standards and the efficiency of use of energy at plants and refineries can act as appropriate measures for finding out the said performance. A very important factor in deciding the success of a business is its customers. It is necessary that the business is seen in a positive light by the customers it serves. It can be easily achieved by the image it portrays by taking initiatives to reduce the number of fatalities and injuries of its staff and striving to maintain good relations with its business partners.

Another major pointer to an oil company-s performance can be its environmental initiatives. KPIs to measure it can include the company-s initiatives to reduce oil spilled and emission from flare gas or gas from producer well. Companies involved in carrying out Oil production are to make huge investments in buying and installing heavy equipments. Also, a workforce of equally competent people has to be prepared to utilize those devices appropriately and beneficially. Add on to this, the requirement of complying with the legal norms of the state in the field of Oil procurement.

Such aspects bring in enough complications in the Oil production sector to make it necessary for introducing a monitoring tool. This makes up for an immediate need to construct a 'performance management tool'. One such answer can be Balanced Scorecard i.e. BSC. This device via the KPIs (Key Performance Indicators) engraved on it provide a means to evaluate the processes of Oil digging on the basis of a number of factors 'that count'. To decide for the metrics that will actually reflect the movements of Oil industry, a detailed analytical study needs to be done. After getting over with this job, regular following of these indicators should be done to keep the operations within control and correct wherever things go haywire.

Performance management and incentives need to be aligned to the operating model. For example, many upstream and midstream organizations have recently moved from an asset-based model to a functional matrix. Unfortunately, few have recognized the need to realign performance indicators and incentives to the new set of accountabilities. Functions now play a key role in driving day-to-day operations, with asset leaders still accountable and measured on bottom-line performance. A performance management system must do more than provide the right information in the right decision-making forums. It must also have an incentive scheme that fosters the correct behaviours and enables effective decision making

Experiences found that companies that outsource eventually become dissatisfied with SLA as a means of managing the outsourcer. Balanced scorecard proves more effective than simple SLA primarily because the outsourcing company can drive behaviour with BSC and, eventually, receive the desired service behaviours from the outsourcer

Table 3 Mutual performance metric, adopting BSC to SLA

Variable	**Mutual Performance metric**	**Business partner contribution**	**Benefit for business partner**
LEARNING AND GROWTH			
Enhance Technology capability and improve alignment	1 new initiative or technology implementation /year.	Share new technology in well services in quarter basis.	Introduce new services or product for customer, diversify product.
Fully utilized knowledge management using share point	5 journal/ month	Share journal of new technologies to improve oil production.	Acquired lessons learned related with reservoir and operational issue on specific fieldl. Potential to introduce new services for customer.
Improve individual skill on all employee based on competency metric	N/A	N/A	N/A
Health Safe and Environment Campaign	0 MVC 0 TRI 0 TDAW	Take part on in-house HES training. Always follow company HES regulation .	Reduce likelihood of safety & environment incident which may.
Build a diverse and high individual and team performance	N/A	N/A	N/A
INTERNAL BUSINESS PROCESS			
Speed up opportunity capture to improve oil production	Develop 20 programs/ month	Prepare program proposal in time. Ensure all unit of well services ready prior execution.	Increase business partner earning through amount of services provided.
Simplify process to develop new project drilling well & execution program	Speed up execution. i.e : 2 days/job for hoist. 3 hours/job for stimulation job.	Involve in developing SOP or program for new drilling well & other work over and well services activities.	Hoist/rig or CTU work more efficient. Reduce uncertainties of cancelled job.
Adopt lean sigma to	5 lean sigma/ yr	Involve in company	Increase unit utility and

eliminate waste	with potential benefit from COPQ ~ 30 MM USD.	lean sigma project as resources, give advice and feedback to improve productivity through Kaizen.	reduce downtime. Increase business partner revenue.
Improve Health, Safety and Environment Awareness	0 MVC 0 TRI 0 TDAW	Ensure all operation within safety design.	Reduce likelihood of safety & environment incident which may.
Rotation program	N/A	N/A	N/A

MVC = Motor Vehicle Crash
TRI = Total Recordable Injury
TDAW = Total Days Away from Work

Keys to success

There are 4 important key to success for a company in order to be able aligning corporate performance measurement system and service level agreement from business partner:

- **Trust**
  Trust is a basic necessity for 2 or more entities when working together. Oil Company and its business partner is 2 different entities that should be able continue creating value within contract period. Paradigm of zero sum game during negotiating SLA or performance metric should be avoided and applying integrative negotiating creating bigger pie. Business partner should be convinced that using mutual performance metric will provide benefit for them.

- **Strong executive sponsorship**
  Performance management system requires collaboration across a broad spectrum of company activities for successful implementation. Unless an adequately high level of active sponsorship is acquired for the effort, collaboration will be difficult.

- **Create strong linkage between performance measures and strategic goal**
  Global, enterprise-wide goals remain empty rhetoric unless they are translated into specific performance expectations. Performance measures should be able to cross traditional organizational boundaries. Performance measures and goals of this sort can foster cooperation between departments and business units by making them mutually dependent on each other for their own success.

- **Incentives**
  Reinforce this cooperation with compensation and bonus schemes that reward it. Employees respond better to being mutually accountable if they receive positive benefits from cooperating effectively, and not just negative consequences if they do not.

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